

November 29, 2018

The Honorable Jeb Hensarling
Chairman, House Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

Re: Update on the Municipal Securities Rulemaking Board's Operations, Initiatives and Activities

Dear Chairman Hensarling,

I am responding to your letter dated November 6, 2018 requesting an update on the Municipal Securities Rulemaking Board's (MSRB) operations, initiatives and activities, including the status of the MSRB's initiatives regarding (1) market data, (2) the incorporation of stakeholder feedback, and (3) the review of its rules to ensure they are efficient, clear and reflect the market of today.

Created by Congress in 1975 and overseen by Congress and the U.S. Securities and Exchange Commission (SEC), the MSRB regulates the \$3.9 trillion municipal securities market, composed of approximately one million bonds outstanding and 40,000 daily trades of \$11 billion in par value. As authorized by the Securities Exchange Act of 1934, the MSRB protects municipal securities investors, state and local government issuers, other municipal entities, obligated persons and the public interest. The MSRB promotes a fair and efficient municipal market through rules for dealers and municipal advisors; the collection and dissemination of market data and information; and market leadership, outreach and education. While this letter focuses primarily on the status of the three initiatives you identify in your request, a forward-looking FY 2019 Executive Budget Summary which further details the MSRB's priorities and budgetary considerations is available [here](#) and at Appendix A.

I. Market Data

The collection and dissemination of market data and information is a significant aspect of the MSRB's operations, with the MSRB providing municipal market investors, issuers and professionals with market transparency through its Electronic Municipal Market Access (EMMA®) website. EMMA is the official repository for information on municipal bonds, offering free public access to primary market information, ongoing disclosures from issuers, trade information and other market related information and analytical tools. With respect to the primary market in which a bond is first offered, EMMA provides access to the issuer's official statement describing the attributes of the bond and the financial condition of the issuer. Throughout the life of the bond, issuers post continuing disclosures to EMMA, including annual financial statements, changes in financial condition that may affect repayment of the bond, and other information. In addition to the documents available on EMMA, the website serves as the official source of trade data, including prices and yields for trades in the primary market and in the secondary market, when those bonds are made available for resale by their initial investor. Such trades generally

are reported to the MSRB within 15 minutes of the time of trade. Finally, EMMA provides information and tools that permit users to research and analyze the market.

Since 2016, the MSRB has integrated a number of new tools and resources on EMMA, including:

- Partnering with third-party providers to provide free public access to municipal market yield curves and indices, including daily yield curves from Bloomberg, IHS Markit and MBIS, along with historical index data for five different indices from Standard & Poor's.
- Providing a state-by-state view of trading in the primary and secondary markets and a list of the top 20 most actively traded securities and issues by par amount or number of trades.
- Offering market-wide statistics for trading activity, new issuance levels and metrics of continuing disclosure submissions.
- Posting a calendar listing upcoming municipal bond issuances scheduled for sale to investors as well as pricing of recently sold issuances.

A complete overview of MSRB market transparency systems and EMMA's evolution and upgrades since its inception is included [here](#) and at Appendix B.

In 2018, the MSRB completed the first phase of a three-phase initiative to enhance EMMA's navigation and usability. The MSRB solicited comments and conducted focus groups to gather market feedback, particularly on EMMA's navigation and search features. The first phase was aimed at retail investors and includes streamlined navigation from the EMMA homepage, integrated investor education resources, and an improved presentation of information about individual securities. The second phase, to be completed in 2019, will assist municipal securities issuers and other users who are posting disclosures to EMMA through a redesigned portal with easier navigation and access to tools on EMMA. The goals of this second phase include improving the quality of indexing data for disclosure documents, integrating relevant tools and resources for issuers throughout the submission process and improving the submission interface. The third planned phase is focused on improvements to EMMA's search functionality and tools for professionals, academics and other EMMA users.

The goal of providing for enhancements to EMMA was identified as part of a multi-year MSRB strategic plan that was completed last year. A related goal of the strategic plan is to optimize the use and dissemination of market data to further support market transparency and inform regulation. To fulfill this goal, the MSRB is currently engaged in a comprehensive review of the data and technologies underlying EMMA itself for the benefit of all market stakeholders and the public. For example, issuer disclosures for investors, such as financial statements and descriptions of bond attributes, are typically submitted to the MSRB in a PDF format that is not readily machine-readable. Structuring data so that it is machine-readable has potential value to the market and its participants such that data can be quickly analyzed across numerous bonds and associated disclosures. To explore the potential of structured data, this year, the MSRB will be creating a database of political contribution information submitted by dealers and municipal advisors it regulates in a structured-data format.

In addition, the MSRB is investigating the possibility of structuring other data about municipal bonds that could help retail investors as well as professionals analyze the health of issuers and attributes of bonds. To begin the study, the MSRB is developing a proof of concept that leverages cloud computing to analyze certain unstructured data it receives. This proof of concept ultimately will help to inform the MSRB about the potential use of technology to advance the MSRB's market transparency systems.

The MSRB is also engaged in monitoring developments in data nationally and globally. For example, since 2017, the MSRB has been an observer member for the Global Legal Entity Identifier Foundation Regulatory Oversight Committee, which is working to coordinate a worldwide framework to assign legal entity identifiers (LEIs) to legally distinct entities engaged in financial transactions.

II. Stakeholder Feedback

The MSRB integrates input from market stakeholders and the public in its rulemaking processes, transparency initiatives, and its education and outreach initiatives. As a self-regulatory organization that listens to market participants and the public to inform actions that address potential harms and needs in the marketplace, the MSRB is committed to both formal and informal means of soliciting stakeholder input and maintaining a dialogue with market experts. The examples below describe how the MSRB is responsive to input from formalized groups of external experts, public comments and outreach. Detailed information about how public comment is integrated into the MSRB's rulemaking process is available [here](#) and at Appendix C.

In October, the MSRB formed three advisory groups – a Retail Investor Advisory Group composed of investors, retail brokers and others who interface with the retail investor; a Municipal Fund Securities Group to address market practices applicable to 529 savings plans and ABL programs; and a Compliance Advisory Group that will continue work the group began in 2017 to develop resources that help firms comply with MSRB rules. The MSRB anticipates that the expertise of these groups will inform the Board's work in rulemaking, regulatory guidance, market practices, transparency and education and outreach.

In efforts to engage stakeholders on a broader set of topics, the MSRB has planned numerous town hall events for 2019 in conjunction with industry gatherings across the country as a follow-up to three 2018 town hall events that helped the MSRB to explain and gather feedback on rules, market advisories and compliance materials. In addition to specialized town hall events, the MSRB maintains a consistent presence at industry meetings through panels and other speaking opportunities; hosts in-person events focused on education regarding specific rulemakings with opportunities for regulated entities to engage in a dialogue with regulatory attorneys; and provides free webinars to educate stakeholders regarding its rules and programs. The MSRB was able to reach over 3500 participants through 14 webinars in FY 2018 and over 3000 participants through 13 webinars in FY 2017. Also, the MSRB held a series of online compliance workshops in FY 2018 regarding recent rulemakings and rule changes, hosting nearly 1700 regulated entities and stakeholders in six workshops.

The MSRB regularly engages stakeholders to determine what rules could merit a review resulting in an update, supplementary guidance or deletion. For example, in November 2017, the MSRB requested and received comments regarding how it could assist dealers in complying with its rules, including through stakeholder engagement, compliance resources, web and email communications, and examination support. As part of this request, the MSRB requested and received feedback on the rules and topic areas that should be prioritized when developing interpretive guidance or other compliance information. This feedback, together with the work of the Compliance Advisory Group, has resulted in the development of more than 30 new compliance resources for broker-dealers and municipal advisors. The MSRB also

utilizes meetings at industry events to specifically solicit views on rules that should be reviewed or updated.

The MSRB is also responsive to stakeholder feedback from comments received through the formal rulemaking process. For example, in 2017, the MSRB issued two requests for comment on draft rule amendments to Rule G-34, clarifying obligations of municipal securities dealers to obtain Committee on Uniform Securities Identification Procedures numbers (CUSIPs) for new issue securities sold in private placement transactions, including direct purchases, and requiring all municipal advisors to obtain CUSIP numbers when they are engaged for competitive sales. As a result of a careful review of the merits of the comments received, the proposed rule filed for approval with the SEC in August 2017 included a principles-based exception recommended by commenters.

In some cases, comments received cause the MSRB not to pursue rulemaking or to pursue alternative avenues to address concerns. For example, as a result of questions and considerations raised by commenters, the MSRB withdrew a proposed rule change related to handling of transactions below the issuer-established minimum denomination and instead published the findings of its extensive research and engagement with stakeholders about this topic in March 2018.

Beyond rulemaking, many EMMA enhancements are the result of comments, study, focus groups and input from market participants. In a specific recent example, the MSRB responded to feedback suggesting that an EMMA feature permitting users to sign up for email notifications of new disclosures of information regarding a given municipal security were not comprehensive enough. In response, the MSRB delivered an enhanced email design providing more descriptive information about the security and the trade activity or newly filed disclosure documents that triggered the alert, and the ability to further tailor the contents of the notification to the specific needs of subscribers.

III. Practices and Policies for Rule Review Prior to, During and Following Rulemaking

As highlighted in the examples above, the MSRB continually emphasizes regulatory efficiency, and as a self-regulatory organization, it maintains consistent outreach to stakeholders to gather data and information about market practices. Your letter inquires about the MSRB's rule review; in providing that update, I first would like to describe the deliberation and review that occurs prior to, during and following the promulgation of MSRB rules. Specifically, the MSRB follows a diligent process for the conception, development, finalization and retrospective review of its rules. Prior to developing a possible rule change, the MSRB weighs the effectiveness of potential alternatives to a rule. These include education, outreach, the development of compliance tools, enhanced professional qualifications, more informed enforcement, new transparency products and interpretive guidance. If the MSRB arrives at a decision to consider a rule, economic analysis is fully integrated into the establishment of a rule.

Rules that have been finalized following public comment and SEC approval are consistently reviewed and modernized, streamlined or harmonized with those of other regulators to limit unnecessary burdens on regulated entities. Finally, the MSRB provides the resources and education that regulated entities may need to successfully comply with the rules and that agencies working to enforce MSRB rules can consider in order to ensure the rules are working as intended. The examples below highlight

the MSRB's economic analysis, retrospective rule review and development of compliance tools that are all part of its holistic approach to rule review.

A. Economic Analysis

Economic analysis is a key aspect of the MSRB's process for evaluating its options for rulemaking. Since 2013, the MSRB has applied an economic analysis policy that incorporates the principles of the SEC staff's guidance on economic analysis for purposes of SEC rulemaking. The policy is applied to rule proposals other than changes that would qualify for immediate effectiveness upon filing with the SEC, such as certain administrative rules. Consistent with the SEC staff guidance, the MSRB policy identifies four elements of effective regulatory economic analysis:

- 1) Identifying the need for a proposed rule change (addition, amendment or deletion) and explaining how the rule change will meet that need;
- 2) Articulating a baseline against which to measure the likely economic impact of the proposed rule change;
- 3) Identifying and evaluating alternative regulatory approaches; and
- 4) Assessing the benefits and costs, both quantitative and qualitative, of the proposed rule change and the main reasonable alternative regulatory approaches.

The MSRB applies economic analysis at the earliest possible stages of its rulemaking process to influence the choice, design, and development of policy options before a specific regulatory course has been determined. If a rulemaking is desired, economic analysis is integrated from a rule's conception through finalization to ensure that relevant available data is sought and considered in the Board's deliberations.

- Prior to the initial release to the public of a specific rulemaking proposal, economic analysis is used to assist in the evaluation of potential policy options. This pre-proposal stage includes a high-level discussion of the major economic consequences resulting from the regulatory alternatives. In some cases, the MSRB chooses to publish a concept release to gather relevant qualitative and quantitative information from the public on the merits of undertaking rulemaking and on potential alternative approaches to addressing the issue.
- Economic information gathered in the pre-proposal phase is incorporated in a rule proposal that is subject to public comment. The economic analysis for the rule proposal captures potential tradeoffs resulting from the rule, a comparison to alternative rule formulations, and a cost-benefit analysis that includes relevant academic or industry studies as well as any relevant empirical evidence available to the MSRB. Commenters are asked to identify or provide evidence that may inform the MSRB about the economic consequences of the rule change, and MSRB staff carefully considers economic arguments, data or relevant studies included or cited in comment letters.
- In conjunction with the filing of a proposed rule change with the SEC, the economic analysis included in the SEC filing is revised as appropriate, to address any new information obtained during the public comment period with respect to reasonable alternatives to the rule, economic

arguments about the economic effects of the proposed rule, additional relevant studies, and any new data provided or identified and obtained by the MSRB.

At each stage of analysis, if data are not available, costs and benefits cannot reasonably be quantified, or quantification is impracticable, an explanation of that determination is included in the analysis, and a qualitative analysis is provided that highlights the strengths and limitations of the analysis. In addition to applying economic analysis, the MSRB promotes regulatory efficiency by seeking to harmonize its rules, where appropriate, with rules of other organizations that apply to broker-dealer conduct.

B. Retrospective Rule Review Initiatives and Outcomes Since 2016

Importantly, the MSRB rulebook is not static once a rule is finalized. The MSRB proactively evaluates its existing rules and proposes amendments as appropriate as part of an ongoing commitment to retrospective rule review. Since the MSRB last testified before the House Financial Services Committee in 2016,¹ the MSRB has identified additional rules that merit updates or streamlining, or improved consistency with rules of other regulators. For example, to improve the ability of investors and issuers to understand the steps to take if they have a complaint about their municipal finance professional, the MSRB extended and modernized its customer complaint rule, Rule G-10. The amended rule, which became effective in 2017, now applies to both municipal advisors and municipal securities dealers and has increased focus on investor and client education. In addition, to promote regulatory efficiency, the rule is more closely aligned with the requirements of other regulators.

In another example, in 2016, the MSRB amended Rule G-12 regarding close-out procedures for failed municipal securities transactions to facilitate efficient broker-dealer operations by generally compressing the timing to initiate and complete an inter-dealer close-out from 90 calendar days to 10. The MSRB also updated its uniform practice rules in support of the securities industry's transition to a shortened two-day settlement cycle ("T+2") in September 2017. In addition that year, to promote a uniform standard and reduce confusion and risk to investors regarding customer account transfers, the MSRB amended Rule G-26 to better harmonize the rule with the customer account transfer rules of other self-regulatory organizations.

Among the various avenues for identifying rules that can benefit from modernization, the MSRB recently published a concept proposal to solicit input on MSRB primary offering practice rules to ensure that the rules continue to account for changes in how municipal securities are underwritten and sold. A concept proposal is an important way for the MSRB to determine whether there are in fact issues to be addressed that can be followed by proposed rule changes or alternative approaches such as providing guidance. Given the feedback received from the concept proposal, in July 2018, the MSRB requested comment on draft amendments to Rule G-11 on syndicate practices and disclosure of information related to primary offerings.

In 2018, the MSRB requested comments on draft MSRB Rule G-36 which would re-establish a standalone rule to generally govern discretionary transactions in customer accounts by dealers and individuals other

¹ [Testimony of Lynnette Kelly. "Examining the Agenda of Regulators, Self-Regulatory Organizations and Standards Setters for Accounting, Auditing and Municipal Securities." September 22, 2016.](#)

than dealers in order to provide consistency with similar rules of other regulators, and streamline rules relating to discretionary transactions in customer accounts. Also in 2018, the MSRB requested comments on 2012 interpretive guidance on the application of MSRB Rule G-17 regarding the duties underwriters owe to issuers under their fair-dealing obligation. As a result of comments on the guidance, the MSRB published for public comment amendments to streamline the guidance in a manner that does not compromise its intent to protect issuers.

Under its FY 2019 operating plan, the MSRB is maintaining its commitment to a retrospective rule review based on clarity, outcomes, developments in technology and economic impact, among other principles. The MSRB will support regulatory efficiency by ensuring that municipal securities regulations—and interpretive guidance – are appropriately tailored, function efficiently and are consistent with those of other regulators, when appropriate.

C. Compliance

As part of its commitment to prudent regulation, the MSRB considers which rules could benefit from compliance guides and tools to educate regulated entities. For example, the successful implementation of the MSRB’s comprehensive new set of rules for municipal advisors, promulgated pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, has entailed significant MSRB outreach to firms that do not have previous experience with regulatory requirements or with being examined by the SEC to ensure compliance with rules. Through webinars, meetings and the work of the MSRB’s Compliance Advisory Group, mentioned above, the MSRB has provided needed compliance aids and education regarding its rules to this group of newly regulated entities.

In 2017, the MSRB established a long-term strategic goal to increase its commitment to developing guidance and resources that assist and support regulated entities’ ability to comply with standards of conduct and develop effective compliance systems. Supporting this goal, the MSRB recently launched a comprehensive online “[Compliance Center](#)” at MSRB.org. Through this platform, the MSRB has delivered compliance workshops; webinars for CPE credit; frequently asked questions; case studies; checklists for written supervisory procedures and compliance policies and many additional resources. The Compliance Center also provides links to innovative on-line courses called [MuniEdPro](#)[®] that offer an affordable way for regulated entities, issuers and investors to learn how MSRB rules apply in real-world scenarios. A complete progress report regarding the MSRB’s expanded compliance support is available [here](#) and at Appendix D.

MSRB compliance resources are labeled so that regulated entities and agencies that enforce MSRB rules can clearly understand that the materials do not create new regulatory standards, nor can they be used in examination or enforcement. Such resources include:

- Compliance advisories that may optionally be considered when firms assess policies and procedures and supervisory systems;
- Compliance resources that highlight existing rule provisions; and
- Regulatory reminders of existing regulatory responsibilities.

MSRB interpretive guidance that clarifies the application of principles of an MSRB rule or provides more prescriptive information about obligations is another type of compliance resource. Given that it creates

new regulatory standards where the interpretation is not reasonably implied by an existing rule, such guidance is filed with the SEC for public comment, review and approval.

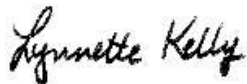
In addition to ensuring regulated entities can access compliance resources, the MSRB is actively working to increase assistance provided to FINRA, the SEC and banking regulators in their examination of MSRB-regulated entities with the goal of consistent interpretation of rules and alignment of enforcement activities that promote regulatory certainty.

IV. Conclusion

The MSRB's consistent and comprehensive rule review, active stakeholder engagement, enhanced focus on compliance materials and efforts to continually improve EMMA and its market data are significant aspects of fulfilling its mission to protect municipal securities investors, issuers and the public interest. The MSRB takes a holistic approach to review of its rules including considering alternatives to rulemaking prior to proposing a rule; the integration of economic analysis at each stage of rulemaking; the integration of stakeholder feedback in its rulemaking through many avenues; the retrospective review of rules to determine how they should be deleted, modernized, streamlined or harmonized with those of other regulators; and providing appropriate tools to help firms understand and comply with its rules.

MSRB Board Members, Director of Government Relations Susan Collet and I are available to answer questions regarding the MSRB's operations as a regulator, rulemaking or compliance initiatives, stakeholder engagement and market data, and to address questions about the municipal securities market. Please do not hesitate to contact MSRB staff at 202-838-1500 with any questions or concerns, or to arrange a meeting.

Sincerely,

A handwritten signature in black ink that reads "Lynnette Kelly". The signature is written in a cursive, flowing style.

Lynnette Kelly
President and CEO

Appendix A: FY 2019 Executive Budget Summary



Municipal Securities Rulemaking Board

Executive Budget Summary

For the Fiscal Year Beginning October 1, 2018

Gary Hall, Chair of the Board of Directors

Lynnette Kelly, President and Chief Executive Officer



Contents

4 Fiscal Year 2019 Budget

6 Revenues

8 Expenses

13 Reserves

14 Financial Transparency

ABOUT THE MSRB

The MSRB protects investors, state and local governments and other municipal entities, and the public interest by promoting a fair and efficient municipal securities market. The MSRB fulfills this mission by regulating the municipal securities firms, banks and municipal advisors that engage in municipal securities and advisory activities. To further protect market participants, the MSRB provides market transparency through its [Electronic Municipal Market Access \(EMMA®\) website](#), the official repository for information on all municipal bonds. The MSRB also serves as an objective resource on the municipal market, conducts extensive education and outreach to market stakeholders, and provides market leadership on key issues. The MSRB is a Congressionally-chartered, self-regulatory organization governed by a 21-member board of directors that has a majority of public members, in addition to representatives of regulated entities. The MSRB is subject to oversight by the Securities and Exchange Commission.



Dear Municipal Market Stakeholders,

As I begin my chairmanship of the Municipal Securities Rulemaking Board, I am pleased to present the executive budget summary for the fiscal year that begins October 1, 2018. This document supports our continued commitment to public accountability and responsible financial management.

The nation's \$3.8 trillion municipal securities market operates for the benefit of millions of investors and

tens of thousands of state and local governments and other municipal entities. It is the role of the MSRB to regulate financial intermediaries and provide essential market transparency services to protect market participants and ensure a fair, open and efficient municipal securities market.

As a Congressionally mandated self-regulatory organization with a public purpose, the main programs funded by our budget are making rules and providing guidance, maintaining the key information repository to disseminate trade reports and bond disclosures, coordinating with examining and enforcement authorities, and facilitating market protections and regulatory compliance through education and the provision of compliance tools. To do all this, the MSRB must maintain its financial health and sustainability to operate without interruption under all market conditions.

As a fourth-year member of the MSRB Board of Directors and former chair of its Finance Committee, I am deeply steeped in the organization's finances and the rigor with which they are managed. I also fully understand the concerns of regulated entities about the level of our financial reserves and can assure you that the Board and management are taking proactive steps to responsibly reduce current reserves while ensuring the annual budget is adequate to meet our regulatory responsibilities.

Given the transition the industry is experiencing following the recent federal tax reform, the Board kept the MSRB's FY 2019 expense budget flat with last year. On the revenue side, we expect a reduction in underwriting revenue this year

compared to last year due to lower budgeted bond volume. Because of this budgeted revenue reduction as well as an expected decrease in fine revenue, the FY 2019 budget reflects an operating deficit of \$1.7 million, which will be funded with reserves.

The Board approved a temporary reduction in the assessment rates of underwriting, transaction and technology fees associated with market activity during the first three months of the MSRB's fiscal year. This temporary fee relief is estimated to increase the operating deficit by an additional \$2.6 million and thus further reduce reserves, advancing our goal of fair and equitable fees across regulated entities. Taken together, the reserve-funded operating deficit and the temporary fee reduction will result in the total FY 2019 budget deficit of \$4.3 million.

The third important step in our management of reserves is to make a strategic investment of \$5 million, taken from reserves, to position the MSRB's information technology infrastructure for the future. The investment will fund exploration and potential transition to cloud computing, if after analysis we determine such a transition would serve the MSRB's long-term interests to support and operate resilient and secure information technology infrastructure and data systems. If we determine that transitioning to cloud computing does not meet our long-term needs, the unspent designated funds will be returned to organizational reserves.

We believe that each of these carefully calibrated steps is responsive to industry concerns while preserving the organization's financial stability. We are committed to ensuring a fair and equitable assessment of fees as we carry out our statutory mission.

Prudent and appropriate financial management of the MSRB cannot be achieved without continued dialogue with all stakeholders and we welcome ongoing feedback and comments from regulated entities, investors, issuers, obligated persons and the public.

Sincerely yours,

 A handwritten signature in black ink, appearing to read "Gary Hall". The signature is fluid and cursive.

Gary Hall

Fiscal Year 2019 Budget

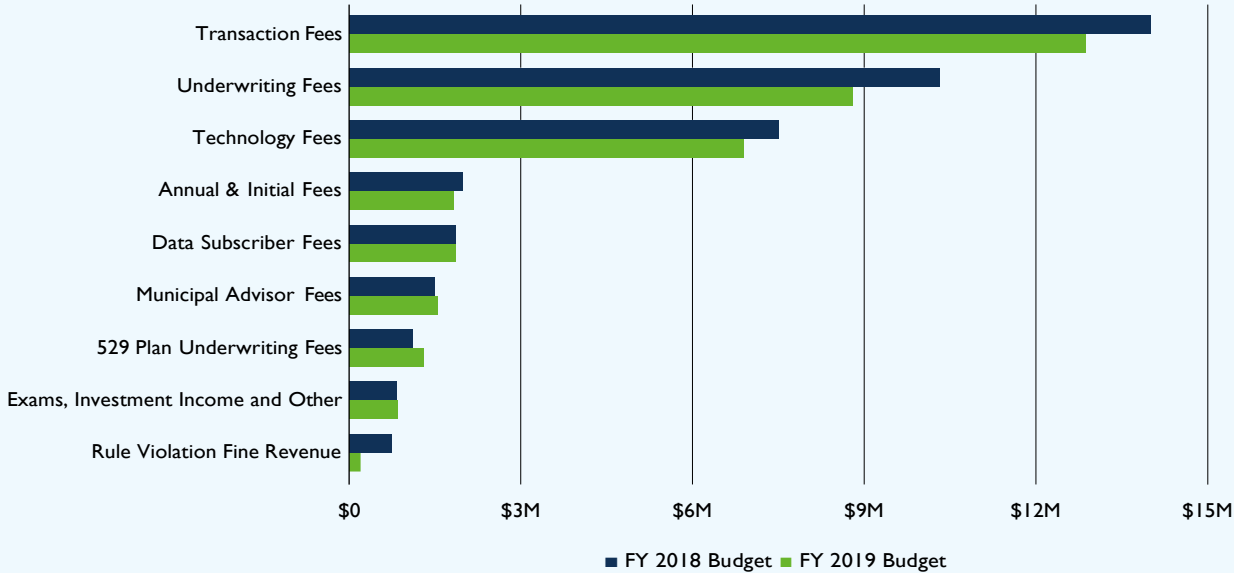
The MSRB's annual budget funds all statutory responsibilities of the organization and allocates related expenses. The annual budget is constructed in lockstep with the organization's strategic and annual operating plan objectives. The budget is designed to fund priorities as identified and overseen by the Board of Directors to effectively regulate the municipal securities market. This year, the budget projects an operating deficit of \$1.7 million and includes a \$2.6 million

Revenue	FY 2018 Budget	FY 2019 Budget
Revenue		
Fee Revenue		
Underwriting Fees (FY 2019 net of \$829,000 fee decrease)	\$10,312,500	\$8,796,000
Transaction Fees (FY 2019 net of \$1,141,000 fee decrease)	14,000,000	12,859,000
Technology Fees (FY 2019 net of \$614,000 fee decrease)	7,500,000	6,886,000
Municipal Advisor Fees	1,500,000	1,550,000
Annual Fees	1,950,000	1,800,000
Initial Fees	25,000	30,000
Professional Qualifications Exam Fees	330,000	330,000
529 Plan Underwriting Fees	1,100,000	1,300,000
MuniEdPro® Fees	25,000	50,000
Data Subscriber Fees	1,864,000	1,864,000
	Total Fee Revenue	\$38,606,500
		\$35,465,000
Other Income		
Rule Violation Fine Revenue	750,000	200,000
Investment Income	468,000	468,000
	Total Revenue	\$39,824,500
		\$36,133,000
Expenses		
Market Transparency and IT Operations*	\$15,825,125	\$16,604,310
Market Regulation and Professional Qualifications	6,613,332	6,462,634
Market Structure and Operational Support*	6,001,176	4,957,123
Board and Executive Leadership	4,279,121	4,331,764
Finance, Risk and Administration	4,048,240	4,084,087
External Affairs	3,718,167	4,034,523
	Total Expenses	\$40,485,161
		\$40,474,441
Net Change in Assets (Operating Deficit)	(\$660,661)	(\$4,341,441)

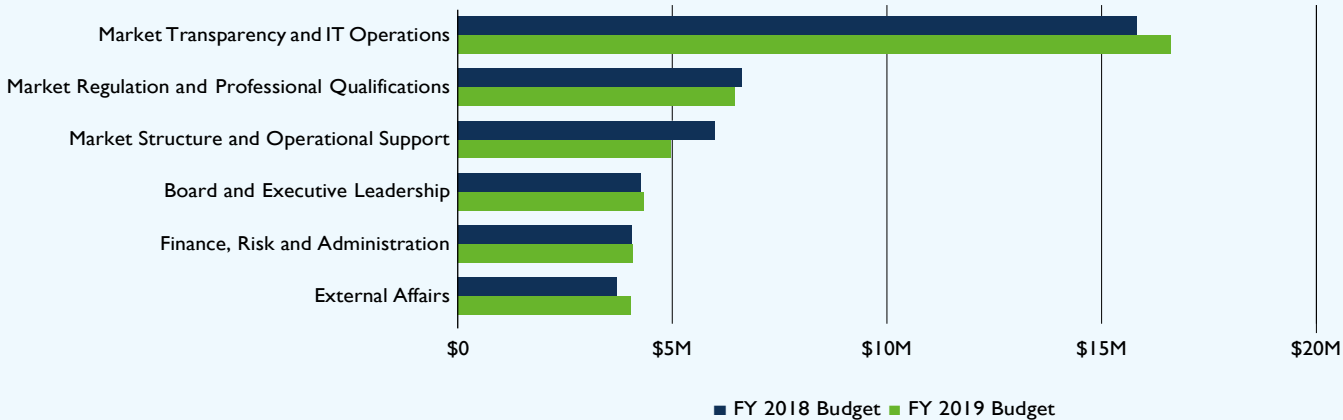
* Reclassified prior year to conform with FY 2019 presentation reflecting current organizational structure.

temporary reduction in three key fees assessed on regulated entities to further support a fair and balanced fee structure — resulting in a total budget deficit of \$4.3 million. The budget also includes a \$5 million designation of organizational reserves to fund exploration and potential transition to cloud computing if it is determined such a transition would serve the MSRB’s long-term interests to support and operate resilient and secure information technology (IT) infrastructure and data systems.

BUDGETED REVENUE: FY 2018 BUDGET VS. FY 2019 BUDGET



BUDGETED EXPENSES: FY 2018 BUDGET VS. FY 2019 BUDGET*



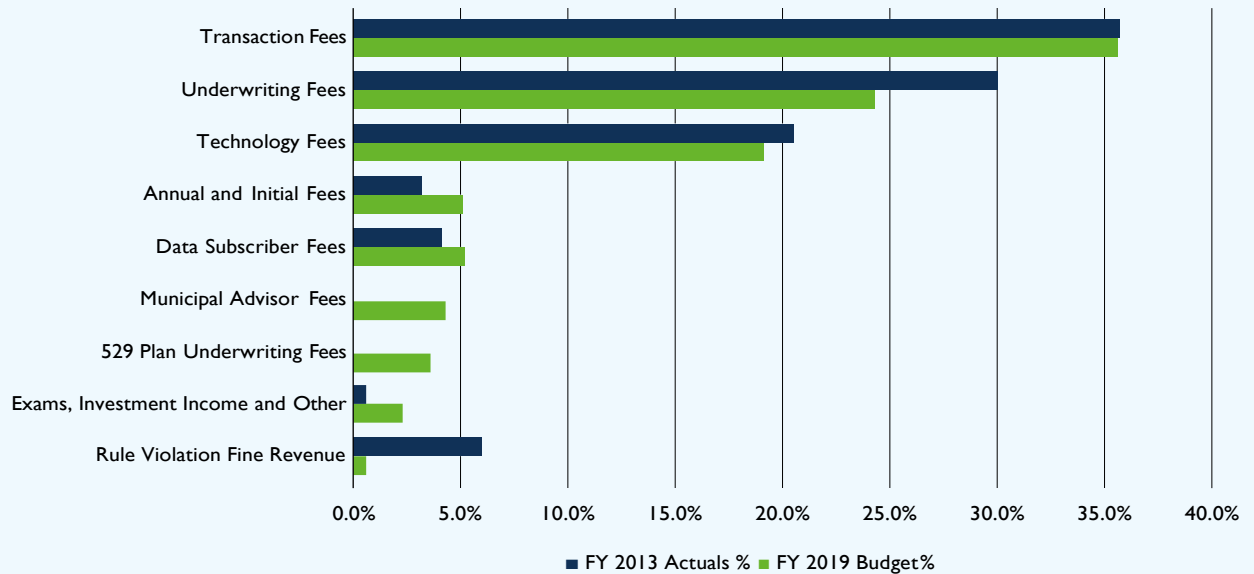
* Expenses presented by activity.

Revenues

FY 2019 revenues are budgeted at \$36.1 million, a reduction of \$3.7 million from the prior year, primarily due to the \$2.6 million fee reduction as well as a budgeted decrease in bond volume and fine revenue. By design, the MSRB’s budgeted revenue sources have expanded over the past seven years, yet most of the organization’s revenue — 79% in FY 2019 — remains drawn from municipal underwriting and trading activity, which rises or falls based on market activity. Brokers, dealers and municipal securities dealers pay the MSRB an underwriting fee for municipal securities purchased from an issuer as part of a primary offering. These same entities pay the MSRB a transaction fee for municipal securities sales and a per-transaction technology fee. The MSRB also collects other fees that fund operations (*see Fee Rates table on page 7*).

In FY 2018, based on the MSRB’s continuing efforts to ensure all regulated entities pay their fair share of fees and fund their cost of being regulated, a 529 plan underwriting fee was introduced. Underwriters to 529 college savings plans now pay an annual underwriting fee on total aggregate plan assets. This fee is expected to generate \$1.3 million in FY 2019. Also last year, the annual per-professional fee assessed on municipal advisors was increased to \$500 from \$300 and is budgeted to generate almost \$1.6 million in FY 2019. Though incremental steps, these changes continued the MSRB’s diversification of revenue and have helped to reduce the percentage of total revenue generated from underwriting, transaction and technology fees to 79% in FY 2019 from 86% in FY 2013. The MSRB is committed to continuing to diversify its revenue sources.

REVENUE DIVERSIFICATION BY % CONTRIBUTION: FY 2013 ACTUALS VS. FY 2019 BUDGET



FEE RATES (FY 2019)

Type of Fee	Rate	Rate During Temporary Decrease (based on activity during first three months of FY 2019)
Underwriting Fee	\$0.0275 per \$1,000 par	\$0.0185 per \$1,000 par
Transaction Fee	\$0.01 per \$1,000 par	\$0.0067 per \$1,000 par
Technology Fee	\$1.00 per trade	\$0.67 per trade
Municipal Advisor Fee	\$500 per professional	
Annual Fee	\$1,000 per firm	
Initial Fee	\$1,000 per firm	
Professional Qualification Exam Fee	\$150 per exam	
529 Plan Underwriting Fee	\$0.005 per \$1,000 in plan assets	

Industry Assessments

Assessments paid by dealer and municipal advisor firms vary greatly in their proportionate financial contribution to total annual assessments. The table below illustrates the range of total financial fee assessments paid by firms in FY 2017 (the most recently available audited results) by percentage of fees paid and by number of registrants. Seven percent of registrant firms pay 92% of MSRB's annual assessments, while the remaining 93% of firms pay 8%. These percentages underscore why the MSRB is so strongly committed to ensuring that all regulated entities that benefit from a well-functioning market made possible by the MSRB's oversight and substantial technology investments contribute fairly to those costs.

DISTRIBUTION OF FEE ASSESSMENTS*

Total Annual Assessment Ranges	% of Annual Assessments Paid	# of FY 2017 Registrant Firms in Tier
\$1,000,001+	55%	11
\$500,001–\$1,000,000	15%	7
\$100,001–\$500,000	13%	23
\$10,001–\$100,000	9%	102
\$5,001–\$10,000	1%	75
\$2,501–\$5,000	1%	146
\$1,001–\$2,500	4%	913
\$0 to \$1,000	2%	694
Total	100%	1,971

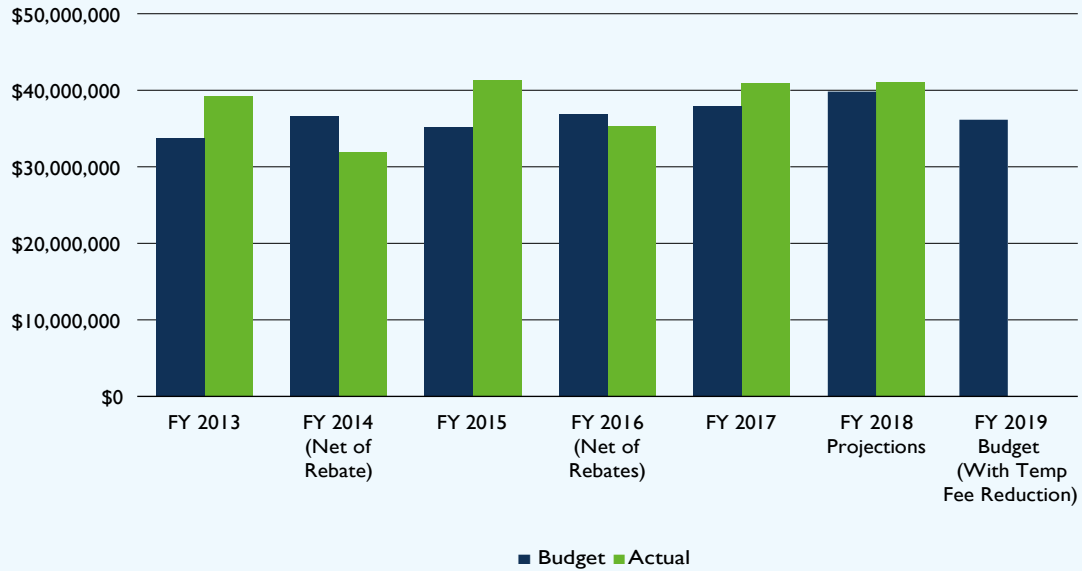
* The most recently available audited results (FY 2017).

Budgeting for Revenue

Based on annual input from Board members and market data, the MSRB strives to make reasonable predictions when budgeting for revenue. Accurately predicting bond volume for budgeting purposes remains challenging given economic factors, alternative sources of capital for issuers and other unknowns. The MSRB has historically been conservative when budgeting revenue, and for several years, actual market activity resulted in higher-than-expected revenues. Recognizing the previous, perhaps overly conservative approach to budgeting revenue, the

FY 2019 budget includes expected trading volume at the high-end of historical levels — which is where FY 2018 actuals have been trending — as the MSRB seeks to narrow the gap between budget and actual results. However, given that the long-term impact of 2018 federal tax reform is still unknown, FY 2019 budgeted bond volume is set at \$350 billion, a \$25 billion reduction from the prior year. Uncertainty regarding bond volume is higher than normal in this post-tax reform environment. The MSRB’s FY 2019 revenue budget is less conservative than prior years and should not materially grow organizational reserves, if at all.

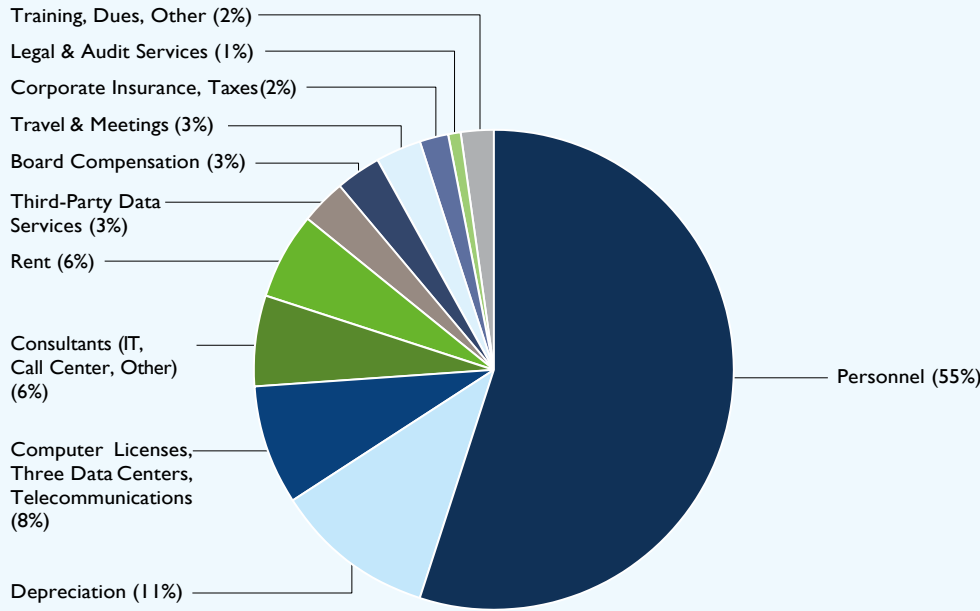
HISTORICAL REVENUES: BUDGET VS. ACTUAL



Expenses

FY 2019 expenses are budgeted at \$40.5 million, flat compared with the prior year. The MSRB’s mission requires investment in people and technology to develop rules and market transparency systems that ensure market integrity. The MSRB’s FY 2019 budget aligns with these statutorily mandated activities and with strategic goals established by the Board in FY 2017 as part of its strategic planning cycle.

FY 2019 BUDGETED EXPENSES: \$40,474,441*



* Expenses presented by account.

Expenses by Activity

While “rulemaking” is part of the MSRB’s name, providing market transparency — and funding the technology and the professionals required to support it — is the organization’s largest expense. The MSRB’s market transparency systems, including the Electronic Municipal Market Access (EMMA®) website and the Real-Time Transaction Reporting System (RTRS), collectively receive, process and disseminate market-critical data and documents relied on by the municipal securities market 24 hours a day, seven days a week.

AT-A-GLANCE: MSRB MARKET TRANSPARENCY SYSTEMS

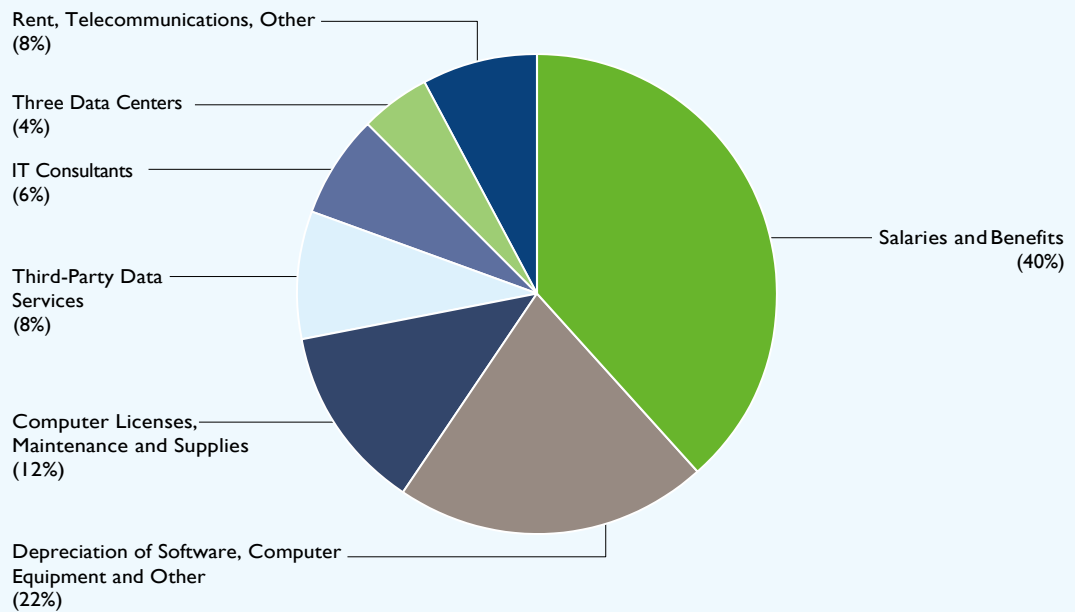
System	Average Approximate Volume
EMMA	2,918,000 page views per month
Real-Time Transaction Reporting System (RTRS)	38,600 trade reports per day
Short-Term Obligation Rate Transparency (SHORT)	33,300 data and documents per month
Primary Market	1,040 documents per month
Continuing Disclosure	12,400 documents per month
Political Contributions	600 filings per quarter
Regulator Web	190 visitors per month

Regulators charged with enforcing MSRB rules — the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), the Federal Reserve System and the Office of the Comptroller of the Currency — and other federal agencies, such as the Internal Revenue Service, the U.S. Department of Treasury and the Federal Deposit Insurance Corporation (FDIC), also depend on the MSRB’s ability to provide seamless access to real-time trade data and disclosure documents to support their work and analysis.

Market Transparency and IT Operations

In FY 2019, the MSRB’s 54 market transparency and IT staff are focused on projects addressing the effectiveness and resiliency of the MSRB’s transparency systems, which play a critical role in the organization’s ability to support a transparent municipal market. This year, an exploration of cloud computing and “big data” will help position the MSRB’s technology infrastructure for the future and potentially facilitate additional analytical market research and market monitoring. Developing a cloud-migration business case and architecting a cloud-based prototype analytics platform over the next year will help the MSRB determine whether it can gain additional market insight from the vast amounts of unstructured market data it collects. Other important market transparency and IT projects this year include converting political contribution information submitted by dealers and municipal advisors from a document format to a structured-data format, and improving the disclosure submission process on the EMMA website for municipal securities issuers. The submission improvements are responsive to stakeholder feedback gathered through focus groups and other engagement. Goals of this project include improving the quality of indexing data for disclosure documents, integrating relevant tools and resources for issuers throughout the submission process and improving submission interface.

FY 2019 MARKET TRANSPARENCY AND IT OPERATIONS BUDGET ALLOCATION



Market Regulation and Professional Qualifications

Expenses for the MSRB’s market regulation and professional qualifications staff represent the second-largest segment of the budget. Nineteen staff are responsible for ensuring that MSRB rules and professional qualifications exams are up-to-date, effective and reflective of current market practices. In FY 2019, market regulation staff are engaged in a retrospective rule review that includes analyzing MSRB rules for their clarity and outcomes, as well as implications of technology and market changes. Regulatory staff include key professionals charged with developing and maintaining the MSRB’s professional qualification program for municipal securities dealers and municipal advisors, including, this year, the development of a principal-level qualification examination for municipal advisors. Staff attorneys also create compliance aids

and provide assistance to other securities regulators that examine for and enforce MSRB rules. This year, MSRB enforcement support professionals will increase assistance to other regulators with the goal of consistent interpretation of rules and alignment of enforcement activities that promote regulatory certainty. Market regulation staff also act as a resource for all Board and regulatory advisory groups as they evaluate possible rule changes and improvements.

Market Structure and Operational Support

The MSRB's market structure and operational support area, with 24 staff members, is a key component of the annual budget. This group conducts initiatives related to market structure and market transparency, including economic analysis and research related to regulatory and transparency projects such as producing data-driven reports on the impact of mark-up disclosure and market considerations for pre-trade price transparency. Economic analysis informs the regulatory approach to addressing an identified need for rulemaking and evaluates the cost of the regulation against the benefit to the market. The market structure group oversees strategic development of the EMMA website and analyzes data collected by the MSRB market transparency systems. Operational support staff are the primary interface with market participants that require assistance in using market transparency systems and handle an average of 1,740 inquiries per month. Optimizing market data to further support market transparency and inform regulation is part of the MSRB's strategic plan. Therefore, this year's budget includes investment in a comprehensive analysis of relevant market data to maximize its availability, utility and quality for the benefit of all market stakeholders and the public.

Board and Executive Leadership

The MSRB is overseen by a Board of Directors, which exercises oversight of the operation and administration of the organization. The MSRB is managed by an Executive Leadership team of five staff members who also support the 21-member Board. The Board consists of a majority of public members as well as members representing regulated entities, including municipal advisors, broker-dealers and banks. The Board meets in person four times a year, makes policy decisions and authorizes rulemaking and market transparency initiatives. Board committees — Audit and Risk, Finance, Nominating and Governance, and Technology — perform work at the direction of the Board, and the Steering Committee assists in the administration of Board responsibilities and implementation of Board policy decisions.

Finance, Risk and Administration

Day-to-day financial, risk, facilities and human capital management are essential internal functions conducted by 17 professional staff who ensure appropriate spending and staffing as well as rigorous application of internal operational controls. Financial management staff this year are engaged in an ongoing evaluation of the MSRB data subscription pricing model, reserves analysis and continued focus on revenue diversification.

Board Creates Technology Committee

In FY 2019, the MSRB Board of Directors created a Technology Committee to assist it in fulfilling its oversight responsibility relating to the MSRB's technology strategy, significant technology initiatives, and operations and technology risks. The committee will guide MSRB staff in the development, evolution and advancement of the MSRB's long-term technology strategy established in July 2018. The committee also is responsible for monitoring and evaluating developments, as well as existing and future trends, in technology that may affect the MSRB's strategic direction.

External Affairs

Numerous staff at the MSRB engage and communicate with external stakeholders, and a core group of 12 is responsible for managing and supporting these activities. The MSRB’s outreach, communications and other external affairs staff oversee MSRB events, training, education and related activities, including regular interaction with Capitol Hill and development of the MSRB’s MuniEdPro® courses. In FY 2019, the MSRB will host listening sessions with stakeholders and conduct Town Hall meetings around the country to solicit industry feedback, and develop a podcast series on compliance issues and developments in the market.

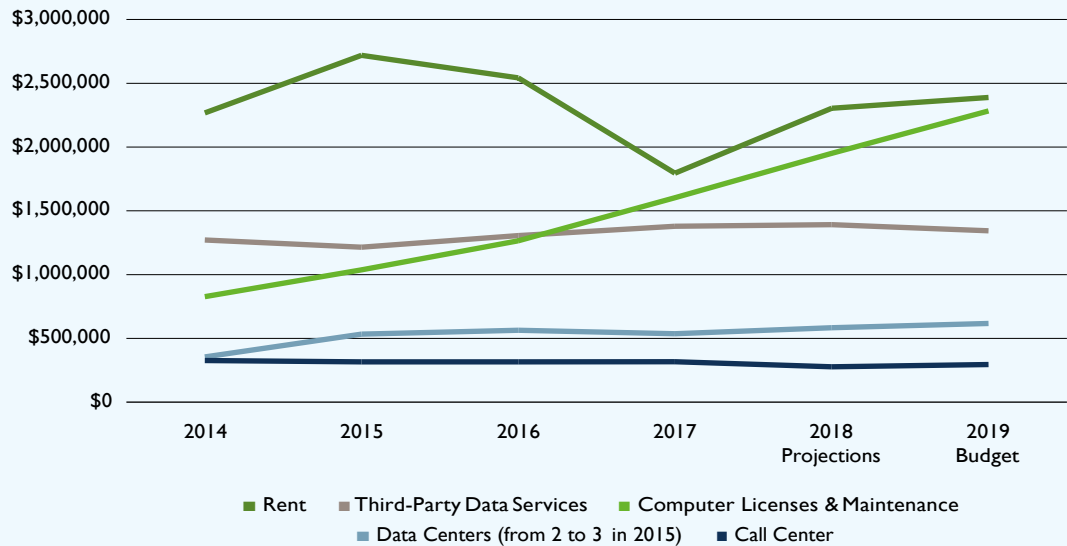
Controlling Expenses

The MSRB has a deeply rooted culture of controlling operational costs. Expenses historically and consistently come in under budgeted levels. As a result, the MSRB in FY 2019 is reducing consulting funds in the budget and capitalizing on technological efficiencies that allow for the absorption of increases in personnel and operating expenses. As a result, the MSRB is delivering a flat expense budget compared to the prior year.

Personnel is the largest single component of the MSRB’s expense budget, and management is controlling this expense by reducing headcount to 131 positions, a reduction of three positions from the prior year. A compensation strategy guides the organization’s recruitment and retention efforts. This strategy also establishes the MSRB pay-for-performance and comprehensive, total-rewards approach to compensation.

The MSRB’s careful financial oversight is evident in the management of key expense areas. The expense trends graph below shows continually rising technology costs as the organization strives to enhance transparency, maintain systems integrity and security, and cultivate and leverage data. Rent expense dropped following the 2015 move to Washington, DC from Alexandria, Virginia because of lease incentives and has since returned to more typical levels.

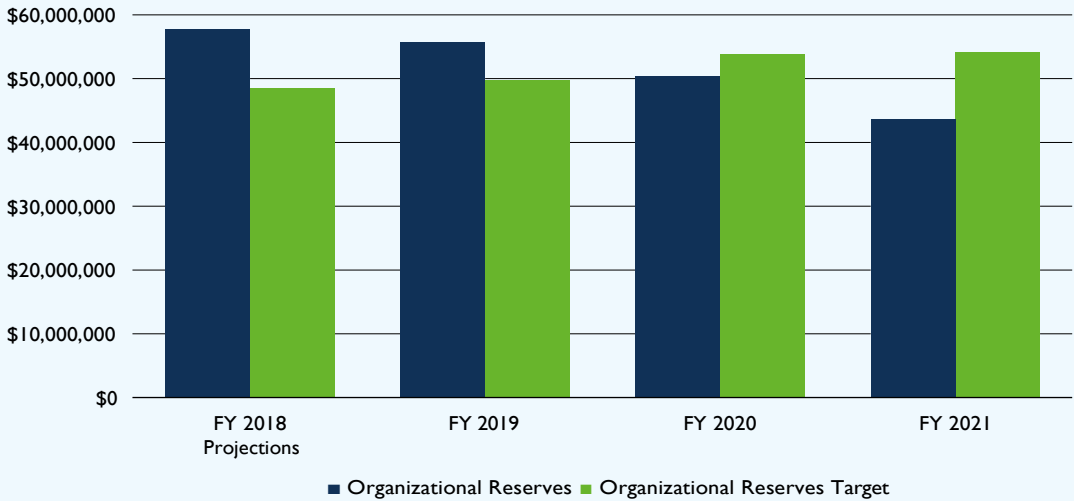
KEY HISTORICAL EXPENSE TRENDS



Reserves

With the level of reserves projected to be above target at September 30, 2018 due to revenues above budget and expense savings achieved, the MSRB determined to budget a \$1.7 million operating deficit in FY 2019, provide a \$2.6 million temporary reduction in the three primary fees during the MSRB’s first quarter of FY 2019 and designate \$5 million of FY 2018 reserves to explore and potentially migrate to the cloud. The Board establishes the target level for reserves, and a Board funding policy provides guidance and continuity in funding decisions and helps align strategic, operational and financial planning, as well as manage level of reserves. This year, the Board will review the reserves target and determine if a change is warranted while ensuring the organization maintains sufficient resources to operate without interruption and remain financially sound. The FY 2019 budget shows out-year projections falling below the current reserves target beginning in FY 2020. Depending on the outcome of actual results as compared to the reserves target (which could potentially change based on the conclusion of the Board’s reserves target analysis), additional revenue sources or increases in current revenue sources would need to be considered in the future to maintain the financial health of the organization, provided expenses are properly calibrated.

ORGANIZATIONAL RESERVES VS. TARGET



Financial Transparency

The MSRB meets the highest standards for financial transparency. Financial information available on our website includes:

- [Annual Reports and Audited Financial Statements](#)
- [Sources and Uses of Funding](#)
- [FY 2017 IRS Form 990](#)

The MSRB also makes the following key financial policies available:

- [Funding Policy](#)
The MSRB’s funding policy provides guidance and continuity in funding decisions and helps align strategic, operational and financial planning.
- [Fine-Sharing Policy](#)
The MSRB’s fine-sharing policy sets parameters for the use of fine revenue collected by the Securities and Exchange Commission and the Financial Industry Regulatory Authority for violations of MSRB rules.
- [Investment Policy](#)
The MSRB’s investment policy establishes guidelines for the investment of MSRB funds.

MSRB Strategic Goals

The MSRB's strategic vision and annual priorities are designed to support the organization's Congressionally mandated mission to protect investors, state and local government issuers, other municipal entities and the public interest by promoting a fair and efficient municipal market. Current strategic goals are:

- ⌚ Facilitate industry understanding of and compliance with MSRB rules through rule guidance, clarification and education in support of market efficiency.
- ⌚ Further evolve the EMMA website into a comprehensive transparency platform that meets the needs of municipal market participants and the public.
- ⌚ Optimize the use and dissemination of municipal market data to further support market transparency and inform regulation.
- ⌚ Leverage the MSRB's unique perspective and expertise as an independent self-regulatory organization.
- ⌚ Promote financial sustainability by assessing fair and equitable fees, diversifying funding sources and spending responsibly.



CORPORATE OFFICE
Municipal Securities
Rulemaking Board
1300 I Street NW, Suite 1000
Washington, DC 20005
202-838-1500

MSRB SUPPORT
202-838-1330

ONLINE
msrb.org
emma.msrb.org
Twitter: @MSRB_News

Appendix B: Milestones in Municipal Market Transparency: The Evolution of EMMA



Municipal Securities Rulemaking Board

transparency
research
pricing
disclosure

Milestones in
Municipal Market
Transparency

THE EVOLUTION OF EMMA[®]

CONTENTS

I. Overview	1
II. The Municipal Market Before EMMA®.....	3
Brief History of the Municipal Securities Market	3
Toward a Ticker: Evolution of Trade Price Transparency in the Municipal Market	4
From Paper to Digital: Evolution of Access to Disclosure Documents	6
III. Municipal Market Access for All: Origins of EMMA	9
Market Consensus for Change	9
Private-Sector Solutions	11
MSRB Takes on Centralized Disclosure	11
EMMA Becomes Official Source	17
EMMA’s Impact	18
IV. Closing Information Gaps: The Future of EMMA	20
Long-Range Plan for Market Transparency	20
Long-Term Vision and Guiding Principles	21
V. Conclusion.....	22
Appendix.....	23



I.

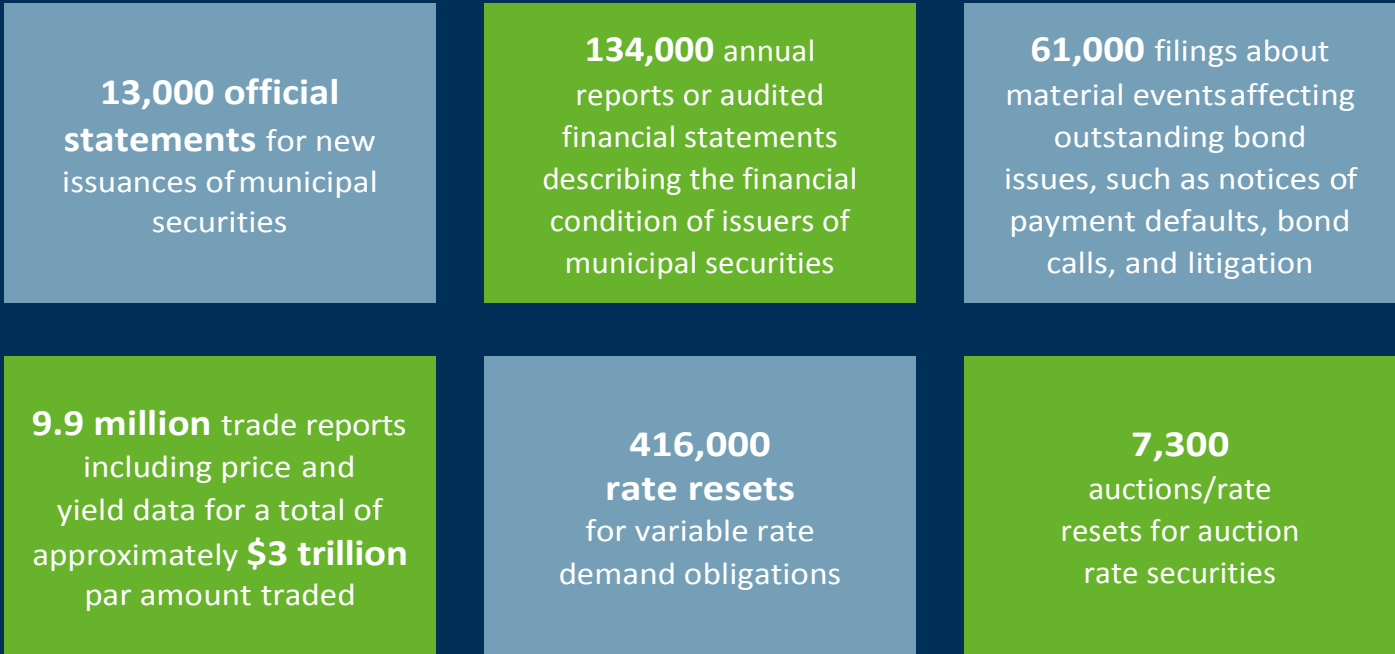
Overview

On March 31, 2008, the Municipal Securities Rulemaking Board (MSRB) unveiled the pilot version of a website to provide free public access to real-time trade price data and disclosure documents for the municipal securities market. For the first time in the centuries-old municipal securities market, individual investors, bond issuers, financial professionals and the public had equal access to bond disclosure and price information, in one place and at no cost. The creation of the Electronic Municipal Market Access (EMMA[®]) website fulfilled the MSRB's vision to create a free, digital source of documents that describe the material features of virtually every municipal security, paired with the prices and other details of the security's trading history. Just over a year later, on July 1, 2009, the U.S. Securities and Exchange Commission (SEC) designated EMMA as the sole, official source for municipal securities data and disclosure documents .

In the 10 years since EMMA's launch, the MSRB has supported and funded the website's continued development by providing an ever-expanding universe of critical disclosure, price and market information, and free analytical and statistical tools . The EMMA website of today continues to honor the original objective of protecting individual investors by democratizing access to municipal marketplace data and disclosure that were previously available primarily to market professionals who had the ability and expertise to utilize paid data services and collect information from many disparate sources .

13,000 61,000 9.9 million 416,000
 134,000 7,300

For a sense of the scale and scope of the information consolidated on EMMA, consider the data and documents collected and disseminated by EMMA in the year 2017 alone:



The EMMA system also collects and disseminates disclosure documents for most 529 savings plans and certain similar state investment programs for people with disabilities, as well as political contribution disclosures made by municipal securities dealers and municipal advisors. In recent years, as users seek a broader view of municipal market activity, the MSRB has enhanced EMMA with the addition of market-wide data alongside interactive tools, including municipal market yield curves and indices and a calendar of new bond issues scheduled to come to market (see *Appendix*).

This report tells the story of the state of municipal market transparency before EMMA, the origins and development of EMMA, and its impact on the evolving municipal market throughout its first decade of dynamic growth. The report concludes with a look to the future of EMMA as the MSRB continues to seek to meet the evolving information needs of investors and other municipal market participants.



II.

The Municipal Market Before EMMA[®]

Brief History of the Municipal Securities Market

Municipal securities serve as the primary means by which state and local governments and their instrumentalities (collectively, “municipal entities”) finance public infrastructure needs and other activities in furtherance of their public purposes. Municipal securities generally represent debt incurred by municipal entities as issuers of bonds, notes and a variety of other types of instruments.

Typically, municipal securities are purchased from the municipal entity by broker-dealers or banks (collectively, “municipal securities dealers”), acting in the capacity of underwriters, and then are resold to investors. In many cases, municipal entities receive financial advice in connection with the issuance of municipal securities and certain other related activities from financial advisors and other market professionals (collectively, “municipal advisors”). In some cases, certain categories of private-sector entities may access the capital

markets through municipal securities issued by municipal entities to fund projects providing public benefits (“obligated persons”). Investors buy and sell municipal securities in secondary market trading with the assistance of municipal securities dealers until the bonds are redeemed by the issuer or obligated person.

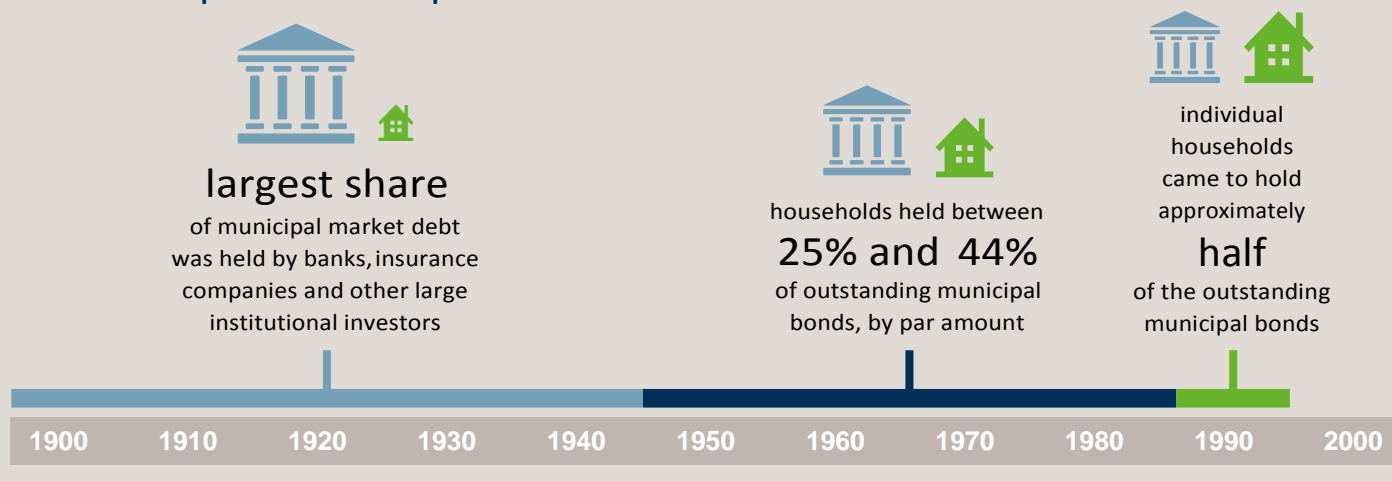
Municipal securities date back to the earliest decades of the nation’s history. For example, the construction of the Erie Canal in New York beginning in 1817 was one of the most important state-sponsored municipal projects in early U.S. history. At a cost of \$7 million, the canal more than paid for itself by opening trade between the state of New York and the Great Lakes region, prompting other states to use proceeds from bond offerings to finance economic development projects.¹

By the early 20th century, the largest share of municipal market debt was held by banks, insurance companies and other large institutional investors.² These investors had

¹ Gerard Koeppel’s Bond of Union: Building the Erie Canal and the American Empire.

² Harry G. Guthmann, “The Movement of Debt to Institutions and Its Implications for the Interest Rate,” *The Journal of Finance*, Vol. 5, No. 1 (March 1950); Bruno Biais and Richard C. Green, “The Microstructure of the Bond Market in the 20th Century” (August 29, 2007).

Share of Municipal Bond Ownership Over Time



greater access than individual investors to professional financial services, as well as greater financial resources and expertise to understand and bear the risk of investing in municipal bonds . From 1945 until the Internal Revenue Code amendments of 1986 took effect, households held between 25 percent and 44 percent of outstanding municipal bonds, by par amount.³ The investor base for municipal bonds shifted after 1986, when changes in tax law made the municipal market more attractive for individual investors . Between the late 1980s and early 1990s, individual households came to hold approximately half of the outstanding municipal bonds .

When making investment decisions, these individual investors often relied exclusively on municipal bond credit ratings — many of which were based on the credit rating of a bond insurer rather than the issuer of the bond itself . Thus, even though the municipal bond market was increasingly becoming a market for individual investors, there was little demand by these investors for greater access to key disclosures and data . Institutional investors continued to take advantage of far greater access to trade data and disclosure documents that were not available to the burgeoning class of individual investors .

Toward a Ticker: Evolution of Trade Price Transparency in the Municipal Market

As more individual investors were entering the market, the MSRB became the market’s primary regulator, created by Congress in 1975 to support a fair and efficient market (see *About the MSRB sidebar*) . The MSRB early on recognized the importance of price transparency to achieving its mission of protecting investors, especially since municipal bonds, unlike equities, do not trade on a centralized exchange . The absence of a real-time public “ticker” of trade prices for municipal bonds limited investors’ ability to know the prices at which municipal bonds were traded .

In its second decade, the MSRB undertook an incremental approach to developing systems to shed light on municipal securities trade prices, first for market professionals and ultimately for individual investors . In March 1985, the MSRB first suggested the possibility of collecting and making available to the marketplace secondary market trading data, by leveraging the then-recent adoption of automated clearance and settlement procedures for the municipal market.⁴ Yet it was not until market systems had sufficiently matured that the MSRB established rules to collect and publicly disseminate municipal bond trade price information .

³ Board of Governors of the Federal Reserve System, Flow of Funds Accounts of the United States (Table L .211), 1945-1986 .

⁴ MSRB Reports, Vol . 5, No . 3 (April 1985) at 7 .

About the MSRB: The Organization Behind EMMA®

The MSRB was created by Congress in 1975 as a self-regulatory organization to serve as the principal regulator for the municipal securities market. The MSRB's initial statutory mandate was to protect investors and the public interest by adopting rules for the activities of municipal securities dealers. In 2010, Congress expanded the MSRB's mission to include the protection of municipal entities and obligated persons, and extended the MSRB's rulemaking jurisdiction to encompass the activities of municipal advisors. In furtherance of its statutory mandate, the MSRB promotes a fair and efficient municipal market through its rulemaking, its transparency systems that collect and disseminate market information, and its programs to provide market leadership, outreach and education.

While the MSRB regulates the activities of municipal securities dealers and municipal advisors, it does not have authority to regulate the municipal entities that issue municipal securities. The SEC, a federal independent agency that oversees the MSRB and has concurrent jurisdiction with respect to municipal securities dealers and municipal advisors, does have limited authority with respect to municipal entities, primarily under the antifraud provisions of the federal securities laws. The MSRB works closely with the SEC and other federal regulators to provide a comprehensive regulatory regime designed to achieve the MSRB's statutory mandate.

In 1995, the MSRB began collecting and disseminating transaction price data on inter-dealer trades, on a next-day basis, to paid subscribers in a data file downloaded through a "computerized bulletin board," as well as on paper at the MSRB's Public Access Facility in its offices. By March 1998, the MSRB was making next-day customer trade price information available to data subscribers, combining it with inter-dealer trade data to produce a daily report, also available for download daily by paid subscribers.

The MSRB initially disseminated information only for securities that traded four or more times on a particular day; however, it gradually expanded the universe of securities and the associated data elements. By June 2003, trades in all municipal securities, including those trading only once in a day, became available as part of the MSRB's data subscriptions.

In January 2005, the MSRB replaced its original transaction reporting system for dealers with the Real-Time Transaction Reporting System (RTRS), which required dealers to report trade

information to RTRS within 15 minutes of the time of trade to support price transparency and market surveillance by regulators. To promote efficiency in the reporting process for dealers, RTRS leveraged the Depository Trust and Clearing Corporation's (DTCC) Real-Time Trade Matching (RTTM) System, with a secondary venue for reporting customer trades through the MSRB's RTRS Web interface. RTRS trade price information initially was available by subscription for a fee; however, as a service to individual investors, the Securities Industry and Financial Markets Association (SIFMA, then known as The Bond Market Association) agreed with the MSRB to make RTRS data available to the public for free on its Investinginbonds.com website.⁵

With the launch of the EMMA pilot on March 31, 2008, RTRS trade price information became available to the public, at no charge, through the EMMA website, both on a real-time basis as well as for all prior trades occurring since the inception of RTRS in January 2005. The parallel development of EMMA as a centralized source for both price data and disclosure documents is discussed in Section III.

⁵ SIFMA ceased providing publicly available RTRS data beginning on October 1, 2012, instead directing users to the EMMA website for trade information.



The best way for issuers to get complete information to the market is through an official statement. [In the late 1970s] there was no good delivery mechanism to get the official statement — if one was even produced — in the hands of investors. With the MSRB’s rule, dealers became the delivery mechanism.”

Robert Fippinger, former MSRB Board of Directors member and former MSRB Chief Legal Officer



From Paper to Digital: Evolution of Access to Disclosure Documents

In addition to price transparency, the availability of timely, accurate and complete information about municipal bonds is critical to a well-functioning market . In the primary market , when new bonds are issued, documents called official statements describe the terms, features and risks of the bonds, which help prospective investors make more informed decisions . For outstanding bonds trading in the secondary market, documents called continuing disclosures help current bondholders and prospective investors evaluate important information about a municipal security and its issuer’s ongoing financial condition, and provide notice of specific events that can affect the bonds, such as payment defaults or rating changes . For many decades, these documents did not exist, and, if they did, they were difficult and sometimes impossible for an individual investor to access .

To help connect investors with any official statements that did exist, in 1978, the MSRB adopted MSRB Rule G-32 to require dealers to deliver official statements, if available, to investors . According to Robert Fippinger, author of the definitive text on regulation of the municipal securities market and former MSRB Board of Directors member and former MSRB Chief Legal Officer, “The best way for issuers to get complete information to the market is through an official statement . At that time however, there was no good delivery mechanism

to get the official statement — if one was even produced — in the hands of investors . With the MSRB’s rule, dealers became the delivery mechanism.”

However, the MSRB could not mandate that the issuer create an official statement, because the MSRB has no regulatory jurisdiction over the issuers of municipal securities . Yet it was concerned both with the delays in official statements becoming available to municipal securities dealers to meet their customer delivery obligations under Rule G-32, and with the inability of municipal securities dealers and investors to obtain information about basic features of municipal bonds traded in the secondary market .

The MSRB first proposed creation of a central repository of official statements in electronic form in 1987,⁶ suggesting that the SEC require issuers, under the antifraud provisions of the Securities Exchange Act of 1934 (“Exchange Act”), to provide, after the bond sale, any official statements they produced in electronic format to a central repository . Information vendors would then access the repository and make information available electronically to market participants through their marketplace products . The MSRB believed that rapid access to descriptive information in the official statements for all bond issues would facilitate compliance with Rule G-32 and provide a more complete and reliable source of information than was then generally

⁶ Letter from James B.G. Hearty, MSRB Chair, to David S. Ruder, SEC Chairman, dated December 17, 1987, *reprinted in MSRB Reports*, Vol . 8, No . 1 (January 1988) at 7 .



available . The MSRB further believed that, to be successful, submission to the repository would have to be mandatory, rather than voluntary, through a regulated venue .

The SEC decided to take an alternative approach in September 1988 when it proposed a new rule for municipal securities dealers, along with a report on the large-scale defaults by the Washington Public Power Supply System (WPPSS).⁷ The report noted that “[t]he experiences in the sale of [WPPSS bonds] indicate that close attention to disclosure obligations and the use of appropriate disclosure practices are necessary in the sale of municipal bonds,” and found significant failures in disclosure in the official statements by the issuer and in due diligence undertaken by the underwriters .

Beginning on January 1, 1990, Exchange Act Rule 15c2-12 prohibited municipal securities dealers from underwriting most issues of municipal securities unless they obtain, review and provide an official statement to investors in a timely manner .

There was not industry consensus on whether the private sector or a regulator like the MSRB

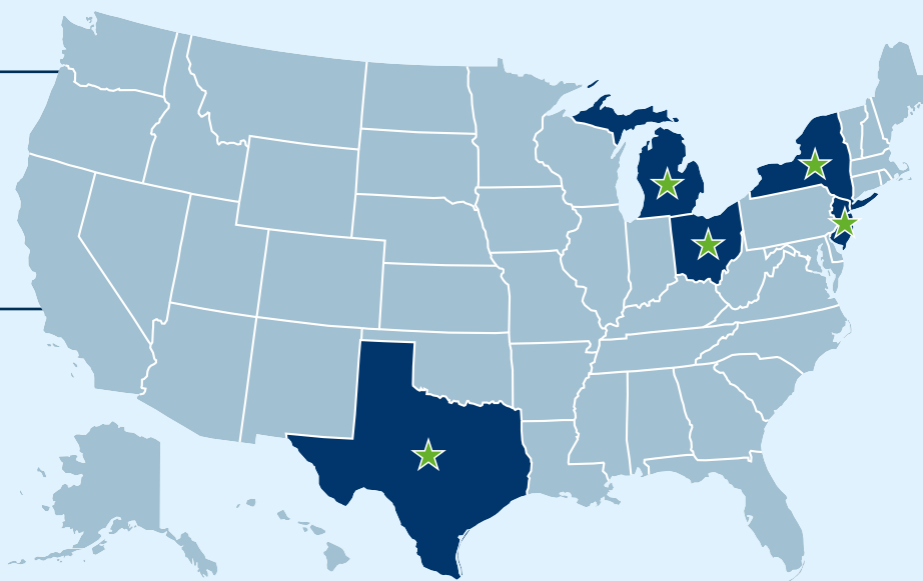
“The experiences in the sale of [WPPSS bonds] indicate that close attention to disclosure obligations and the use of appropriate disclosure practices are necessary in the sale of municipal bonds.”

SEC Staff Report on the Investigation in the Matter of Transactions in Washington Public Power Supply System Securities, 1988

should create one or more repositories for the official statements, and many in the issuer community were reluctant to have a repository operated by a regulator . Ultimately, Rule 15c2-12 created the concept of a “nationally recognized municipal securities information repository,” or NRMSIR . Several organizations throughout the country met the requirements to serve as NRMSIRs, including several state information depositories (SIDs) that made information available about municipal bonds issued in their states . The SEC’s creation of the NRMSIR system helped ensure important information about features and risks of municipal bonds would be created and delivered to investors, yet it meant that these documents were scattered around the country and not easily or freely accessible to the broader investing public .

Disparate Sources of Municipal Securities Information

Locations of NRMSIRs, pre-2009



⁷ See SEC Staff Report on the Investigation in the Matter of Transactions in Washington Public Power Supply System Securities (September 1988) .

While the NRMSIRs served as the official repositories for disclosures, the MSRB decided to establish its Municipal Securities Information Library (MSIL) system to collect official statements from underwriters for new issue offerings on and after January 1, 1990 . The MSIL system made available electronic copies of the official statement, as well as advance refunding documents, by paid subscription, primarily to information vendors, with individual paper copies available for purchase through the MSRB's Public Access Facility . All document submissions were made to the MSIL system in paper form until January 2, 2002, at which time the MSIL system began accepting documents in electronic format, at the election of the underwriter, through its new e-OS submission system.⁸

In conjunction with the establishment of the MSIL system in 1990, the MSRB also proposed to establish a Continuing Disclosure Information (CDI) system as a central utility to accept and disseminate electronic disclosures made by issuers and trustees concerning municipal securities in the secondary market.⁹ Disclosures could include periodic financial reports and other notices or reports relating to the financial status and the likelihood of default or early redemption, such as pre-default notices . The CDI system became operational on a pilot basis in January 1993, receiving continuing disclosures on purely a voluntary basis .

Amendments to Exchange Act Rule 15c2-12 in 1994 put the onus on the underwriting dealer to ensure that issuers contracted to provide updated information about their financial health throughout the life of their bonds.¹⁰ With these changes, issuers were to provide annual reports and audited financial statements to all NRMSIRs

and any applicable SID . They also were to provide material event notices and notices of failures to file annual financial reports to any applicable SID and either all NRMSIRs or to the MSRB's CDI system .

To address the availability of disclosures to individual investors, each NRMSIR made continuing disclosure documents available for sale to non-subscribers.¹¹ For its part, the MSRB made its collection of continuing disclosures available in electronic form by subscription for a fee . It made paper documents available to the public at the MSRB's Public Access Facility . This arrangement meant the availability of these important disclosures remained fragmented, with no one repository containing a complete collection of primary market and continuing disclosure documents for the municipal bond market . Further, each NRMSIR took a different approach to indexing the disclosures, with some not indexing at all .

The evident inefficiencies in the NRMSIR system ultimately resulted in the further development of EMMA . Within EMMA's first year, the website became the central repository for all disclosures, replacing the dispersed NRMSIR system and providing retail investors with a single, online portal for accessing these important disclosure documents, without charge, as further described in Section III .

⁸The MSRB four years earlier had provided interpretative guidance that permitted municipal securities dealers to provide electronic delivery of official statements to customers under Rule G-32 . See "Electronic Delivery and Receipt of Information by Brokers, Dealers and Municipal Securities Dealers," November 20, 1998, MSRB Reports, Vol. 19, No. 1 (February 1999) .

⁹MSRB Reports, Vol. 10, No. 3 (July 1990) at 3 .

¹⁰See Exchange Act Release No. 34961 (Nov. 10, 1994), 59 FR 59590 (Nov. 17, 1994) .

¹¹See Exchange Act Release No. 58255 (July 30, 2008), 73 FR 46138 (Aug. 7, 2008) .



III.

Municipal Market Access for All: Origins of EMMA

Market Consensus for Change

Persistent concerns about municipal market disclosure, more so than concerns about access to trade price data, prompted the market to coalesce around the need for change . In 1998, the MSRB launched a series of disclosure forums focused on primary and secondary market disclosure practices and concerns.¹² The MSRB also published a discussion paper on disclosure in the municipal securities market, identifying opportunities for improvements and innovations in the municipal securities disclosure process.¹³

“The MSRB believes that additional improvements in disclosure would strengthen the municipal securities market and benefit issuers, investors and dealers.”

MSRB Discussion Paper on Disclosure
in the Municipal Securities Market, 2000

The report noted, “[N]otwithstanding significant progress, disclosure still has not reached an optimum level in the municipal securities market . The MSRB believes that additional improvements in disclosure would strengthen the municipal securities market and benefit issuers, investors and dealers.” Specifically, the MSRB suggested that it could produce a central index of continuing disclosure documents to address the widely recognized difficulties arising from the divergent collections at the different NRMSIRs and the lack of consistent indexing by those NRMSIRs .

“There was overall frustration with the inefficiency of the existing de-centralized NRMSIR system,” said Laura Slaughter, Executive Director of the Municipal Advisory Council of Texas, which ultimately would create the first centralized index for disclosures . “Stakeholders were frustrated by the lack of indexing information associated with a filing,

¹² See e.g., MSRB to Host Disclosure Forum, MSRB notice dated August 14, 1998; MSRB Will Host Forums on Land-Secured Disclosure, MSRB notice dated July 15, 1999; Forum on Hospital Finance Disclosure, MSRB Notice 2000-04 (Jan . 24, 2000); MSRB to Host Its Second Disclosure Forum, MSRB Notice 2000-25 (Aug . 18, 2000); Forum on Disclosure for Long-Term Care/Senior Living Debt, MSRB Notice 2002-08 (Mar . 22, 2002) .

¹³ MSRB Discussion Paper on Disclosure in the Municipal Securities Market, MSRB Notice 2000-35 (Dec . 21, 2000) .



There was overall frustration with the inefficiency of the existing de-centralized NRMSIR system.”

*Laura Slaughter, Executive Director of
Municipal Advisory Council of Texas*



which made it difficult to verify that filings had been made,” she said . “And the issuers were frustrated by having to keep up with all the different NRMSIRs and the time and expense of having to mail their documents to many different locations.”

To address these challenges, the MSRB convened, on May 31, 2001, a disclosure roundtable of key municipal market groups, informally referred to as the Muni Council.¹⁴ “The purpose of the Muni Council was to bring together all the market participants to talk about what the market could do to improve the way disclosure worked,” said Frank Chin, former Co-head of Public Finance at Citi, who led the development of EMMA as Chairman of the MSRB Board of Directors in 2008 . “It was very clear at the time that there was a problem in that arena — that information was being provided by issuers to the NRMSIRs, but it was not necessarily done in a way that was easy on the issuers or helpful for investors.”

The Muni Council determined to focus its energy on improving the process for submitting and

accessing continuing disclosures, seeking to achieve progress without requiring regulatory actions by the SEC or the MSRB . “Issuers were very accustomed to supporting their own best practices when it came to disclosure,” said Alan Anders, Deputy Director of the New York City Office of Budget and Management . With the emphasis on non-regulatory action, the MSRB bowed out of a formal role on the Muni Council it had established .

Adding urgency to the Muni Council’s efforts to find a non-regulatory solution, the SEC published a small-scale study in 2002 that found, for 30 randomly selected bond issues from 1996–1997, only 32 percent of audited financial statements in the NRMSIR system for those issues were available from all then-existing NRMSIRs, and only 16 percent of annual reports from those issues were available from all NRMSIRs.¹⁵ In addition, in some cases, issuers had been late or had not filed at all their annual reports or audited financial statements . Finally, SEC staff concluded that individual investors had meaningful access to continuing disclosures through only one NRMSIR’s web-based interface,

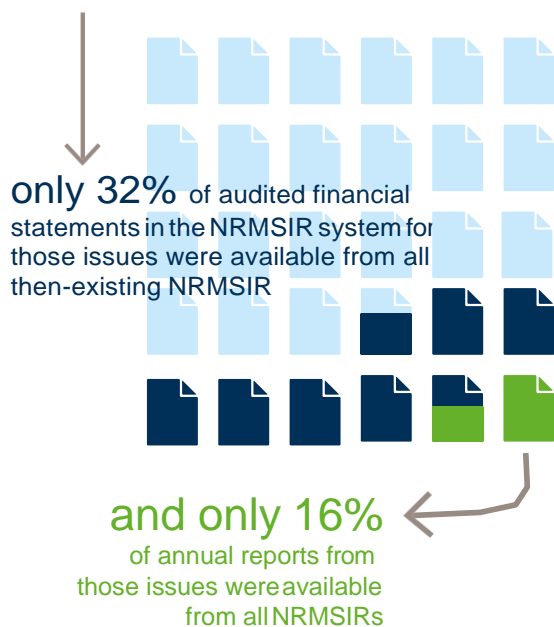
¹⁴ The MSRB and the Muni Council Announce a Long-Range Planning Session on the Municipal Securities Market Disclosure System, MSRB Notice 2001–27 (July 25, 2001) . The Muni Council initially consisted of the MSRB, American Bankers Association, Association for Investment Management and Research (now known as the CFA Institute), Council of Infrastructure Financing Authorities, Government Finance Officers Association, Healthcare Financial Management Association, Investment Company Institute, Investment Counsel Association of America (now known as the Investment Adviser Association), Municipal Advisory Council of Texas, National Association of Bond Lawyers, National Association of Independent Public Finance Advisors (now known as the National Association of Municipal Advisors), National Association of State Auditors, Comptrollers and Treasurers, National Association of State Treasurers, National Council of Health Facilities Finance Authorities (now known as National Association of Health and Educational Facilities Finance Authorities), National Council of State Housing Agencies, National Federation of Municipal Analysts, and The Bond Market Association (now known as SIFMA) .

¹⁵ Hume, Lynn, “SEC Exposes Deficiencies in Disclosure Problems Apparent Throughout System,” The Bond Buyer, March 15, 2002 .



Inefficiencies in NRMSIR System

In 2002, the SEC published a small-scale study that found of 30 randomly selected issues from 1996–1997



provided background assistance to the Muni Council in the development of its request for proposals . At the time, Muni Council members recognized that, if the Muni Council could not establish a viable private-sector solution, it might then need to turn to the MSRB.¹⁶

In November 2003, the Muni Council selected the Municipal Advisory Council of Texas, a SID, to develop and operate the central post office, which began operation in September 2004 . In support of the central post office, the SEC issued a no-action letter to the effect that SEC staff would not recommend enforcement action with respect to Exchange Act Rule 15c2-12 if issuers were to submit continuing disclosures through the central post office rather than directly with the NRMSIRs.¹⁷ While use of the central post office was voluntary, the level of use became appreciable in its second year of operation, and some industry participants felt that its use should be made obligatory in the future .

but individual investors were largely unaware of the existence of and access to continuing disclosures .

Private-Sector Solutions

To advance a private-sector solution, the Muni Council sought to establish a central submission and retransmission utility, which would be the single venue where issuers could choose to submit their continuing disclosures and receive assurances that the documents would be routed to all NRMSIRs on an equal basis with consistent indexing information . The Muni Council issued a request for proposals in early 2003 for the establishment and operation of a continuing disclosure “central post office.” The MSRB

MSRB Takes on Centralized Disclosure

A turning point in the market’s willingness for the MSRB to provide a centralized transparency venue came with the movement toward an “access equals delivery” standard, first proposed by the SEC for the corporate market in 2004¹⁸ and finalized in 2005.¹⁹ “When I got on the Board in 2005 it was pretty clear to me that the MSRB had a mandate to help with the efficiency of the market,” said Frank Chin . “There was a need and a goal to improve communications among all market participants, and the MSRB had the regulatory mandate to do it.”

The “access equals delivery” standard for registered offerings²⁰ is premised on, among

¹⁶ Hume, Lynn, “No Role for MSRB in Muni Council RFP – Board Will Not Respond or Review,” The Bond Buyer, December 30, 2002 .

¹⁷ Letter dated September 7, 2004 from Martha Mahan Haines, Chief of the Office of Municipal Securities, Division of Market Regulation, U.S. Securities and Exchange Commission to W. David Holland, Chairman, Texas MAC, and John M. McNally, Hawkins Delafield & Wood LLP .

¹⁸ See Securities Act Release No. 8501 (Nov. 3, 2004), 69 FR 67392 (Nov. 17, 2004) .

¹⁹ See Securities Act Release No. 8591 (July 19, 2005), 70 FR 44722 (Aug. 3, 2005) .

²⁰ This standard is not available to certain classes of registered securities, including, but not limited to, mutual fund shares .

“We commend the MSRB’s initiative in promoting an ‘access equals delivery’ standard for the dissemination of primary market offering materials for municipal securities.”

National Federation of Municipal Analysts’
Comment Letter to the MSRB, 2006

other things, the immediate, free and public availability of prospectuses and other filings through the SEC’s Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system . To move the municipal securities primary market disclosure system to an “access equals delivery” standard much like the SEC’s, the MSRB published a concept proposal in July 2006.²¹

With regard to accessibility by the public at no cost, the MSRB believed that investors would be best served if official statements were made available through a centralized website and sought comment on whether the MSRB itself or some other party should create and operate a centralized website . However, sensitive to previous concerns from some industry participants over having a regulator operate a disclosure system for documents produced by unregulated issuers, the MSRB also sought comment on alternatives to a central repository, such as the creation of a central directory that would permit investors to navigate to official statements posted for free in a more decentralized manner (*e.g.*, on various websites operated by issuers, financial advisors, underwriters, information vendors or other parties).

With limited exceptions, industry participants responded to the concept proposal with strong support for the move to the “access equals delivery” standard, as well as for the MSRB serving as the central venue for posted official statements . The National Federation of Municipal Analysts, for example, said, “We commend the MSRB’s initiative in promoting an ‘access equals delivery’ standard for the dissemination of primary market offering materials for municipal securities.” Taking into account industry input, the MSRB published a notice for comment on January 25, 2007, specifically proposing that the MSRB establish and operate a central access facility at which official statements would be available to the public at no cost for the life of the securities.²² The MSRB observed that this portal might include additional items beyond official statements, such as indicative data, transaction pricing data, secondary market information and analytical tools, and that it might be used for other purposes such as accepting voluntary submissions of preliminary official statements.²³

In light of the near unanimous support for “access equals delivery” and an MSRB central portal, the MSRB moved forward with requesting SEC approval on the proposal in November 15, 2007.²⁴ Initially, a pilot version of the portal would operate as a public information venue during a period of testing until the effective date of rule changes that were needed to implement the “access equals delivery” standard, at which time the permanent central disclosure platform would be launched . In addition to providing direct access to the official statements and advance refunding documents collected by the MSRB and dating back to January 1, 1990, the

²¹ MSRB Seeks Comments on Application of ‘Access Equals Delivery’ Standard to Official Statement Dissemination for New Issue Municipal Securities, MSRB Notice 2006-19 (July 27, 2006) .

²² MSRB Seeks Comments on Draft Rule Changes to Establish an Electronic Access System for Official Statements, MSRB Notice 2007-05 (Jan. 25, 2007) . The MSRB proposed that other MSIL/Access portals, in addition to the MSRB’s central portal, could be established by information vendors or other market participants so long as they met certain basic parameters .

²³ *Id.* .

²⁴ See Exchange Act Release No . 57004 (Dec . 20, 2007) (SR-MSRB-2007-06); 72 FR 73941 (Dec . 28, 2007); MSRB Files Pilot Portal for On-Line Dissemination of Official Statements and Related Information and Seeks Comments on Revised Draft Amendments to Establish an Access Equals Delivery Standard Under Rule G-32, MSRB Notice 2007-33 (Nov. 15, 2007) .



pilot portal would provide basic identifying information for the securities in the issue, real-time and historical price information for municipal securities trades, educational information to assist investors in understanding the documents and data that they would have ready access to for the first time, and investor-friendly search functionality .

While the MSRB did not formally propose in its November 2007 SEC filing for its pilot portal to include continuing disclosures, the MSRB stated that it stood ready to expand its planned system to also serve as the central electronic submission system for free filings of all continuing disclosures, upon the SEC making the necessary amendments to Exchange Act Rule 15c2-12 . This would allow the MSRB to integrate continuing disclosure information with its official statement and advance refunding document collections, as well as its trade data, to provide a free comprehensive centralized public access portal for primary market disclosure information, continuing disclosure information and transaction price information, as the MSRB had suggested in its January 2007 notice .

Only days after the MSRB's filing with the SEC for the pilot portal for primary market disclosures and trade price data, then SEC Chairman Christopher Cox wrote to the MSRB that he had instructed SEC staff to prepare a proposal, for consideration by the SEC Commissioners, to amend Rule 15c2-12 to provide for submission of continuing disclosures to the MSRB rather than to the NRMSIRs.²⁵ "I write to reiterate my support for the Board's plan to streamline the existing municipal securities disclosure system by creating a centralized filing venue similar to the Commission's EDGAR system," Cox said . "Replacing the multiple paper filing venues

"...I write to reiterate my support for the Board's plan to streamline the existing municipal securities disclosure system by creating a centralized filing venue similar to the Commission's EDGAR system. Replacing the multiple paper filing venues of the existing system with an electronic filing system that is freely accessible to the investing public on the Internet would be a significant step forward to increase public access to municipal securities disclosure."

SEC Chairman Christopher Cox, in a letter to the MSRB, 2007

of the existing system with an electronic filing system that is freely accessible to the investing public on the Internet would be a significant step forward to increase public access to municipal securities disclosure."

With this clear indication of Chairman's Cox's support, the MSRB published, on January 31, 2008, a notice seeking industry comment on various aspects of the continuing disclosure submission process that would be implemented in the planned MSRB portal.²⁶ In a nod to the portal's similarity to the EDGAR system for corporate securities, the portal was christened with a name, EMMA, for "Electronic Municipal Market Access."

The MSRB Establishes EMMA®

In recognition of the unmet needs of retail investors in the municipal securities market, the MSRB adopted, in 2007, the core principle that would guide EMMA's development:

[EMMA] will be designed to serve as a comprehensive centralized on-line

continued on page 16

²⁵ Letter dated November 21, 2007 from Christopher Cox, Chairman, Securities and Exchange Commission, to Frank Y. Chin, Chairman, Municipal Securities Rulemaking Board .

²⁶ MSRB Begins Planning for Continuing Disclosure Component of the New Electronic Municipal Market Access System (EMMA), MSRB Notice 2008-05 (Jan . 31, 2008) .



Milestones in Municipal Market Transparency

The multi-trillion-dollar municipal securities market connects investors with communities in need of capital to finance infrastructure. As the self-regulatory organization dedicated to safeguarding the integrity of this critical capital market, the Municipal Securities Rulemaking Board (MSRB) has promoted price transparency and access to public disclosures about municipal securities by developing the Electronic Municipal Market Access (EMMA®) website.

Road to Price Transparency

Going Digital

Goodbye, bearer bonds; hello, electronic clearing and settlement.

1980s

Price Transmission

MSRB pilots electronic collection of trade prices.

1994

Daily Dose of Data

MSRB streams daily digital data to professionals.

1995

Real-Time Speed

Data gain speed with MSRB's Real-Time Transaction Reporting System.

2005



MSRB Creates

EMMA® merges with important disclosure documents.

CAUTION

Low Visibility to See if You're Getting a Fair Price for Municipal Bonds!

Fax it In

MSRB collects continuing disclosures about bond issuers' financial health.

1993

Check it Out

MSRB's Municipal Securities Information Library houses offering documents.

1990

Setting a Standard

Investors get available offering documents under MSRB rules.

1978

Road to Public Disclosure

CAUTION

Barriers to Access Information on Features and Risks of Municipal Bonds!

cy
of
e
vided

THE ROAD AHEAD

Learn more at MSRB.org



Seeing the Big Picture

Expanded market-wide statistics and interactive tools visualize market trends.

2017

Flagging Special Conditions

See when trades are executed on an alternative trading system, for example.

2016

Construction Work Ahead

Comparing Securities

See trade prices of municipal securities with similar characteristics.

2014

tes EMMA®
real-time trade data
ments.

Plugging in Variables

MSRB integrates data on variable rate demand obligations and auction rate securities.

2009

Bank on It

EMMA makes it easier to see issuers' bank loans.

2016

Policing Pay to Play

Financial firms' political contribution disclosures are integrated into EMMA.

2013



2007

Access Equals Delivery

MSRB paves way for online repository of offering documents.

2001

Muni Council Convenes

MSRB hosts discussion on improving disclosure practices.

2010

Tracking Securities

Investors can receive alerts when disclosure documents are posted.

2011

Credit Check

EMMA provides free access to municipal credit ratings.

2013

Tool for Timeliness

Email reminders help bond issuers keep up with disclosure filing deadlines.



Upon full implementation, EMMA will provide a permanent, centralized and comprehensive Internet-based system for free real-time public access to all primary market, secondary market and trade price data for municipal securities submitted to the MSRB. In furtherance of our mission of investor protection, we are pleased that the MSRB can provide this important utility to investors in our market.”

Frank Chin, then-Chair of the MSRB Board of Directors, in a statement upon EMMA’s launch in 2008



continued from page 13

source for primary and secondary market disclosure documents and transaction pricing data provided free of charge to investors and the public on a real-time basis with a specific aim of serving the needs of retail investors who are not expert in financial and investing matters and of other infrequent investors in or holders of municipal securities.²⁷

On March 31, 2008, the EMMA pilot went live.²⁸ On that date, 38 new official statements and three advance refunding documents were received by the MSRB and posted onto the EMMA pilot for offerings then in the market, which became available alongside the full historical collection of official statements and advance refunding documents for the previous two decades . EMMA also made public 28,517 trades that occurred on March 31, 2008, in most cases posted on a real-time basis, along with the historical collection of trade data since January 2005. This information was embedded in an overall website framework that included educational information about the municipal marketplace as well as information on how to find and understand the data and documents available on the EMMA website, all specifically oriented toward individual investors .

“Upon full implementation, EMMA will provide a permanent, centralized and comprehensive Internet-based system for free real-time public access to all primary market, secondary market and trade price data for municipal securities submitted to the MSRB,” MSRB Chair Chin said at the time . “In furtherance of our mission of investor protection, we are pleased that the MSRB can provide this important utility to investors in our market.”

In developing EMMA, the MSRB constructed a data, software and hardware infrastructure that would not only achieve the immediate goals of the EMMA pilot but also would set the stage for providing access to additional disclosures, market-wide data and interactive tools . The MSRB designed the EMMA website to eliminate the barriers between individual investors and the critical information about their investments .

The MSRB understood that other market participants could benefit from the new accessibility to market data and disclosure, including issuers, their municipal advisors, bond counsel and others . The MSRB also understood its responsibility to promote the ability of municipal securities dealers to perform their marketplace and regulatory duties in the

²⁷ MSRB Long-Range Plan for Market Transparency Products, January 27, 2012, available at <http://www.msrb.org/msrb1/pdfs/Long-Range-Plan.pdf> .

²⁸ MSRB Press Release, “EMMA: Electronic Municipal Market Access is Launched Today,” March 31, 2008; Ackerman, Andrew, “MSRB Ready to Launch Pilot Version of EMMA Just 4 Months After Start of Development,” The Bond Buyer, March 31, 2008 .



most effective and efficient manner possible . Thus, the MSRB continued to provide paid subscription products, permitting the streaming to subscribers of the full set of documents and data presented on the EMMA website . The structured manner allowed information vendors and others to repackage the information for their industry products, while not creating barriers to professionals from using the functionality offered on the EMMA website . In keeping with the fundamental principle of making information available to all market participants on an equal basis, the EMMA system and its related subscription feeds were designed to ensure that documents and data appeared simultaneously on the EMMA website and in the subscription feeds .

Finally, the MSRB recognized the importance of supporting efficiency through straight-through processing by feeding data into EMMA from existing industry sources, to the extent possible, to minimize burdens on data submitters . As an additional benefit to this approach, individual investors and others who received their information primarily through the EMMA website would be able to “speak the same language” as their investment professionals that might be accessing the data from a different industry source .

The launch of the EMMA pilot represented a fundamental change in access to core municipal market disclosures and data . Yet it was a surprise to the MSRB that perhaps the first use of EMMA by the non-professional population that came to its attention was not in connection with individual investors in municipal securities . Instead, the MSRB found that a community activist in a small Tennessee city had, just three days after its launch, found on the EMMA website the city’s most recent official statement and posted several excerpts

on a community blog in a discussion of city finances and governance practices . It quickly became apparent to the MSRB that, in addition to making a significant improvement in access to key information in the municipal securities market, the EMMA website would prove to be a critical tool for citizens across the country and researchers of all kinds to whom a new window had opened into state and local government finance, infrastructure development and governance processes .

EMMA Becomes Official Source

Within a year, EMMA had completed its pilot phase and become the official source of municipal securities data and disclosure documents . On December 5, 2008, the SEC approved, for an effective date of July 1, 2009, amendments to its Rule 15c2-12 to eliminate the NRMSIR system of disclosure dissemination in favor of centralized disclosure through the EMMA system,²⁹ as well as the MSRB’s filing to establish the continuing disclosure component of the EMMA system as an official facility of the MSRB.³⁰

On July 1, 2009, the MSRB — through its EMMA website — assumed the role as the centralized, electronic repository for all municipal bond disclosure documents and trade data . Lynnette Kelly, MSRB President, said at the time, “This is a historic day for the municipal bond market . The MSRB’s creation of EMMA and the market transparency it provides catapults municipal bond disclosure decades ahead of the fragmented and cumbersome system that preceded it,” she said . “With EMMA, we have created a system that promotes public access to disclosure documents and shines light on the disclosure practices of issuers.”

²⁹ See Exchange Act Release No . 59062 (Dec . 5, 2008); 73 FR 76104 (Dec . 15, 2008) .

³⁰ See Exchange Act Release No . 59061 (Dec . 5, 2008) (SR-MSRB-2008-05); 73 FR 75778 (Dec . 15, 2008) .



This is a historic day for the municipal bond market. The MSRB's creation of EMMA and the market transparency it provides catapults municipal bond disclosure decades ahead of the fragmented and cumbersome system that preceded it. With EMMA, we have created a system that promotes public access to disclosure documents and shines light on the disclosure practices of issuers."

Lynnette Kelly, MSRB President, in a statement in 2009



Consistent with the core principle guiding EMMA's development, the website incorporated key tools designed to make the information available on EMMA more readily accessible and understandable . This included enhancements to the educational information and search functionality initially included in the EMMA pilot, as well as the introduction of email alerts that would automatically inform EMMA users of the posting of new documents and daily trade activity (*see Appendix*) .

EMMA's Impact

EMMA and the related MSRB transparency systems that transmit municipal market data and documents to the public, have brought about considerable changes . Early academic studies provide evidence of EMMA's positive impact on the pricing of municipal securities. One study found that the introduction of EMMA to the municipal market over the period from March 2008 through June 2009 "enhanced the efficiency of trade pricing in municipal securities secondary markets as average daily price differentials and volatility both declined market-wide," although the effect was more pronounced for institutional-sized trades than for retail-sized trades.³¹ An earlier study focused specifically on the

introduction by the MSRB of real-time trade price information through RTRS in 2005, which, while pre-dating EMMA's launch, significantly decreased mark-ups on secondary market trades market-wide.³² Another study undertaken on behalf of the MSRB focused on the impact of making the RTRS data available on EMMA and found that the data's availability reduced mark-ups on municipal securities transactions.³³ The MSRB has worked to encourage further academic research into the municipal securities market by facilitating access by researchers to its RTRS data in a manner designed to allow them to more closely analyze trading patterns and other relationships in the marketplace .

As planned, EMMA has effectively ended the use of paper documents as the core means of disseminating disclosure information to the marketplace, with physical deliveries now limited to individual cases at the investor's request . Real-time trade price information about virtually every security in the market is now broadly available with no barriers . This impact reaches far beyond allowing an investor to understand the nature of a specific investment — now the entire landscape of the market is open to viewing, comparison and deeper analysis .

³¹ Dzigbede, Komla, "Regulatory Disclosure Interventions in Municipal Securities Secondary Markets: Market Price Effects and the Relative Impacts on Retail and Institutional Investors," July 2017, *available at* <https://www.brookings.edu/wp-content/uploads/2017/04/dzigbede.pdf> .

³² Schultz, Paul, "The Market for New Issues of Municipal Bonds: The Roles of Transparency and Limited Access to Retail Investors," January 2012, *available at* <http://ssrn.com/abstract=1988548> .

³³ Sirri, Erik, "Report on Secondary Market Trading in the Municipal Securities Market," July 2014, *available at* <http://www.msrb.org/msrb1/pdfs/MSRB-Report-on-Secondary-Market-Trading-in-the-Municipal-Securities-Market.pdf> .



“[EMMA] enhanced the efficiency of trade pricing in municipal securities secondary markets as average daily price differentials and volatility both declined market-wide.”

Study by Komla Dzigbede, PhD,
Binghamton University, 2017

“Given the enormous number of municipal credits, the ability to easily access all this information in one place has created tremendous efficiencies for the market,” said Thalia Meehan, former Managing Director and Portfolio Manager at Putnam Investments .

For their part, issuers can see how other state and local governments are funding their capital needs and at what cost, significantly broadening their perspective on their own options . In addition, municipal entities armed with knowledge are better able to make informed choices when accessing the capital markets and when engaging with other market professionals . Alan Anders believes issuers also are more likely to approach disclosure as a tool for improving communications with investors . “One of the great things that EMMA did was to change the culture of disclosure . Originally, issuers thought of disclosure as a

legal requirement . Now, they recognize and take advantage of the value of good disclosure from an investor relations perspective,” he said . “That happened because of the MSRB’s willingness to respond to issuer feedback and improve the disclosure filing process for issuers . EMMA made issuers think that disclosure wasn’t an onerous thing but something they could do as a matter of course .”

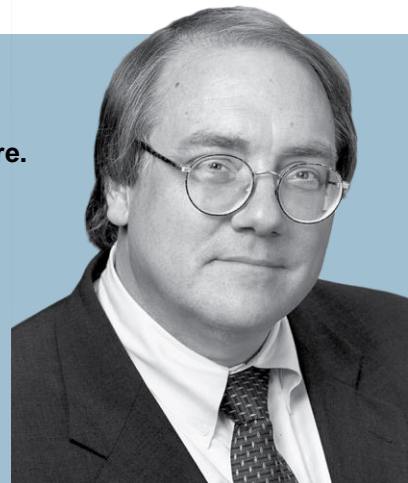
Meanwhile, EMMA also has provided municipal advisors, bond lawyers and other market participants — whose direct experience might be limited to particular regions or types of transactions — the ability to access information about other regions, structures and projects .

The market transparency offered by EMMA has had a significant secondary impact on transparency into the operations of state and local governments that has been embraced by the public . Citizens and good government groups can access detailed information about the financial condition and capital plans of states, municipalities and any entity that issues bonds . Journalists regularly cite EMMA and information derived from EMMA in their statehouse and local reporting .



One of the great things that EMMA did was to change the culture of disclosure. Originally, issuers thought of disclosure as a legal requirement. Now, they recognize and take advantage of the value of good disclosure from an investor relations perspective. That happened because of the MSRB’s willingness to respond to issuer feedback and improve the disclosure filing process for issuers. EMMA made issuers think that disclosure wasn’t an onerous thing but something they could do as a matter of course.”

*Alan Anders, Deputy Director of the
New York City Office of Budget and Management*



IV.

Closing Information Gaps: The Future of EMMA

Throughout EMMA’s first decade, the MSRB has continued to focus on making tools and other resources available to individual investors, municipal entities and other market participants who do not have ready access to the resources used by market professionals . The MSRB has continuously updated core navigational features to improve the usability of the EMMA website, and has kept pace with the evolving information needs of municipal market participants and the increasing appetite for market-wide information to assist in evaluating and monitoring broader trends. Refer to the Appendix for a full list of enhancements since EMMA’s launch as a pilot service in 2008 .

Long-Range Plan for Market Transparency

To most effectively and efficiently prioritize and implement EMMA’s evolution, the MSRB, in January 2012, published a Long-Range Plan for Market Transparency Products . The plan was designed to guide the marshaling of MSRB resources to improve transparency in the most cost-effective manner to achieve the greatest positive impact on the protection of investors, municipal entities, obligated persons and the public interest .

The long-range plan laid out a series of potential enhancements that would pave the way to an EMMA 2 .0, which was designed to close gaps and address inequalities in information services for certain market participants, such as individual investors and smaller municipal entities . Among the priorities noted in the long-range plan are enhanced search functionality and greater access to tools and utilities . Many of the enhancements made by the MSRB in the following years can find their roots in the long-range plan . Later in 2012, the SEC published its Report on the Municipal Securities Market, which endorsed continued enhancements to EMMA specifically oriented toward retail investors.³⁴

³⁴SEC Report on the Municipal Securities Market (July 31, 2012), *available at* <https://www.sec.gov/news/studies/2012/munireport073112.pdf> .



Long-Term Vision and Guiding Principles

As the EMMA website enters its tenth year, the MSRB has published a renewed long-term vision and set of guiding principles to shape the website's evolution into a comprehensive transparency platform . The long-term vision, released in 2017, states:

Promoting transparency in the municipal securities market is part of the mission of the Municipal Securities Rulemaking Board (MSRB) . Our Electronic Municipal Market Access (EMMA[®]) website is designed to support a transparent market and serve the evolving information and decision-making needs of market participants and the public . EMMA provides free data, disclosures and interactive tools that promote a fair and efficient municipal securities market . Enhancing the availability of pricing-related market data by creating a Central Transparency Platform (CTP) on EMMA and helping market participants comply with regulatory obligations are future-state goals .

To achieve the vision for EMMA, the MSRB must evaluate and prioritize many possible investments, developments and improvements . The following guiding principles are intended to aid the MSRB in determining the future development of and investment in EMMA .

Promote fair municipal security transactions and support investment and issuance decisions by making comprehensive pricing and disclosure information readily available at no cost

Facilitate efficient access to and submission of municipal market data, disclosures and information through an interface that is intuitive and dynamic

Prioritize potential enhancements based on the public interest, cost, benefit and size of target audience

Ensure that data storage and delivery are reliable and secure without sacrificing availability

The MSRB has begun implementing this vision by making usability enhancements to the navigation and presentation of information on EMMA in 2018, which were derived from extensive input from an almost year-long series of focus groups with market participants and stakeholders . The MSRB will also continue to add interactive tools, such as additional third-party yield curves, to support users' understanding of market trends .

information transparency research
pricing disclosure

V. Conclusion

The MSRB has taken an evolutionary approach to establishing and enhancing EMMA as a market transparency platform that helps fulfill the MSRB's statutory mandate to promote a fair and efficient municipal market . The EMMA website provides public access to the data, disclosures and tools that help level the playing field, enabling investors and issuers to independently research, compare and verify information provided by financial professionals .

EMMA's first decade has proven transformative for the municipal market . The MSRB remains committed to assessing the evolving information needs of municipal market participants and exploring new ideas and technologies to further enhance the value and effectiveness of the EMMA website and the transparency of the municipal market for decades to come .

Appendix

The Municipal Securities Rulemaking Board (MSRB) periodically adds new features to its Electronic Municipal Market Access (EMMA®) website . EMMA houses information on approximately 1 million outstanding municipal securities .

Read about enhancements to EMMA since its inception in 2008 .

2018

Enhanced Design and Navigation

April 2018

The MSRB unveiled a series of investor-focused improvements to the design and navigation of EMMA . Streamlined homepage navigation provides direct access to an interactive map to search for information by state, as well as quick links to information for new EMMA users, interactive tools and setting up MyEMMA® alerts . An enhanced display of information about each specific security includes a transparent overlay to point out key features and tools for investors .

2017

Market-wide Statistics

September 2017

The MSRB enhanced its extensive set of municipal market statistics on EMMA with the addition of new views showing the top 20 most actively traded securities and most active issuers by par amount or number of trades . The enhanced statistics also provide a state-by-state view of trading in the primary and secondary market . Search results can be filtered by date range, state, tax status and trade type .

Municipal Market Yield Curves and Indices

July 2017

The EMMA website provides free public access to municipal market yield curves and indices from third-party providers . Each market indicator on EMMA is based on tax-exempt bonds and can be useful for understanding the general level and direction of municipal bond interest rates and comparing the relative yields of specific municipal securities . The dynamic functionality available on EMMA gives users the ability to view the actual curves or values in table format and filter by date range and credit quality .

Improved EMMA Alerts

February 2017

EMMA alerts help users stay up to date when new information becomes available on EMMA for a security or group of securities . Users can now modify their alerts preferences to subscribe to specific types of continuing disclosure filings, such as audited financial statements or bond calls . Previously, users could opt to receive all financial disclosure filings and all event notices but could not narrow their selection to particular events or documents . An improved email design provides more descriptive information about the security and the trade activity or newly filed disclosure documents that triggered the alert .

New Issue Calendar

January 2017

Among the free tools and resources available on the EMMA website is a new issue calendar listing the municipal bond issues scheduled to come to market, as well as those recently sold . This dynamic tool enables individual investors, issuers and other market participants to see the breadth and depth of new bond issues coming to market as well as final pricing information for bond issues sold through competitive and negotiated sales .

2016

Bank Loan Disclosure

September 2016

To facilitate the filing of bank loan disclosures on the EMMA website, the MSRB has improved the submission process for issuers and enhanced the ability of investors to locate available bank loan disclosures on EMMA . If submitted, issuers' voluntary bank loan and alternative financing disclosures will now be displayed under a separate tab on their customized EMMA issuer homepages . Bank loan disclosures will also be integrated in the other security and issuer detail views on EMMA, as well as in the advanced search function . The availability of bank loan disclosures

enables current bondholders and prospective investors to assess a municipal entity's creditworthiness and evaluate the potential impact of these financings .

Special Condition Indicators

July 2016

To help investors better understand municipal securities trade data, EMMA now includes an indicator that identifies inter-dealer trades that are executed with or using the services of an alternative trading system (ATS) . A second new indicator flags customer trades that do not include dealer compensation in the reported trade price .

Economic Calendar

June 2016

EMMA's tools and resources now include an economic calendar that provides users with free, convenient access to information about key macroeconomic developments that could have an impact on the trading and issuance of municipal securities . Municipal securities issuers, investors and their financial professionals may want to consult the economic calendar when assessing market activity .

ABLE Program Disclosures

June 2016

Alongside program disclosure documents for 529 college savings plans, the EMMA website now provides access to disclosures for Achieving a Better Life Experience (ABLE) programs, which help individuals with disabilities save for qualified disability expenses .

of new CUSIPs can occur when, for example, a bond is partially "called" in connection with a current refunding . In this case, the original CUSIP will be retired and new CUSIPs are assigned to the refunded and unrefunded portions . Investors in the new securities may want to refer to the official statement or other disclosures associated with the retired security . To find these disclosures, investors can go to EMMA's "Security Details" for a bond then click the "Related Securities" tab to find links to any new (or former) CUSIPs .

Moody's Credit Ratings on EMMA

June 2015

Credit ratings from Moody's Investors Service, Inc . are presented alongside trading and disclosure information for each municipal security on EMMA, and are integrated into EMMA's advanced search function and price discovery tool . EMMA is the only source of free access to ratings from the largest municipal securities ratings agencies presented in a consolidated format with all other key information about every municipal security .

Asset-backed Securities (ABS) Disclosures

January 2015

EMMA accepts and provides free public access to continuing disclosures for municipal asset-backed securities required under Securities Exchange Act Rule 15Ga-1 .

Users can easily locate ABS disclosures using EMMA's Advanced Search and Browse Issuers functions and set up MyEMMA Alerts to receive an automated email when new ABS disclosures are posted on EMMA .

2015

Display of Bank Loan Disclosures

August 2015

To support investor access to full disclosure about an issuer's indebtedness, the EMMA website makes it possible for issuers to display bank loan disclosures on their customized homepages, integrating these voluntary disclosures with all other disclosure documents and recent trade activity of an issuer .

Access to Full Universe of Disclosures for a Municipal Security

June 2015

To facilitate the ability of investors and others to see the full universe of disclosure information for a municipal security, the EMMA website now provides a link between a bond and any new identification (CUSIP) numbers assigned to portions of the bond after the initial issuance . The assignment

2014

New Bond Ratings on EMMA

September 2014

EMMA provides free access to public finance ratings from Kroll Bond Rating Agency (KBRA), giving market participants additional resources to make more informed decisions about municipal bonds . Ratings from Fitch Ratings and Standard & Poor's became available on EMMA in 2011 .

EMMA Help

July 2014

Resources to assist users with navigating EMMA and utilizing EMMA tools are consolidated in EMMA Help . Users seeking educational resources about the municipal market can refer to the MSRB Education Center, accessible from the EMMA homepage, EMMA Help and directly from msrb.org . The MSRB Education Center includes multimedia resources for investors, state and local governments, and others interested in the municipal market .

Graphical Display of Yield Data

July 2014

A graphical display of yields on municipal securities transactions allows users to visualize historical prices and yields for a particular security. From the Security Details page of any security on EMMA, select the Trade Activity tab and then click the “Trade Price and Yield Graphs” link in the lower left corner to open a graph of a particular security’s trade prices and yields over time. Yield graphs are also available in EMMA’s price discovery tool for multiple securities with similar characteristics. These graphs display a summary of the daily high and low yield for selected securities.

Price Discovery Tool

June 2014

A free tool on EMMA makes it easy for investors and other municipal market participants to find and compare trade prices of municipal securities with similar characteristics. EMMA’s price discovery tool can help investors get a sense of the price of a security that trades infrequently. By entering the CUSIP of any security, users can quickly find others that share its key characteristics and view a side-by-side comparison of their prices and yields. Users can also graph trade prices of up to five securities for a visual representation of prices over time.

Improved Display of Trade Data

June 2014

A graphical view of trade prices over time, available for every municipal security on EMMA, allows users to visualize historical pricing and analyze trends. The “Trade Price Graph” link, located in lower left corner of the Trade Activity tab on every Security Details page of EMMA, provides access to a graph that displays a summary of the daily high and low price for a security, as well as a graph of the security’s trade prices over time.

The grid display of trade data for individual securities has also been enhanced to provide a daily summary of trade prices, yield, principal amount and other trade information.

Enhanced EMMA Homepage

February 2014

Enhanced organization and presentation of the EMMA homepage helps all municipal market participants discover new ways to use EMMA. From the new homepage, users can easily and quickly find prices, disclosures and other important information about a specific municipal security, browse all municipal securities issuers in a particular state, explore market trends and access multimedia educational materials about the municipal market and using EMMA. In addition, the homepage features a snapshot of the most actively traded fixed rate municipal securities from the previous trading day.

The homepage provides direct links to essential EMMA tools and resources, including recent trades, official statements for new issues, continuing disclosures and daily summaries of market transactions. The homepage also maintains the quick search function and EMMA Dataport, the application through which municipal market participants submit data and disclosures to EMMA.

Easier Browsing

February 2014

A pilot feature enables users to more quickly and easily find municipal securities issuers and access consolidated information about all of their securities. Using a simple interactive map, users can browse a comprehensive list of state, city, county and other issuers in a particular state. Each issuer has a unique “homepage” that consolidates information about that issuer, including its bond issues, trade data, official statements, financial and event-based disclosures, refunding escrows and contact information, if provided by the issuer.

2013

EMMA 101 Video

August 2013

A new video geared toward first-time EMMA users explains how investors can use EMMA to learn about the municipal market, evaluate municipal bond features, risks and prices, and monitor the health of their municipal bond investments over time.

Email Reminder Tool for State and Local Governments

July 2013

To assist state and local governments in meeting their obligations to make financial information available to municipal bondholders on a timely basis, EMMA now provides a service to allow state and local governments to schedule automated email reminders about an approaching deadline for providing annual and quarterly financial disclosures.

Initial Offering Price and Yield Information

May 2013

Additional primary market data on now EMMA displays both the initial offering dollar price and yield for a bond, when available. These changes provide more meaningful primary market information to market participants about the initial offering price and facilitate comparisons to trade data, which is normally displayed with both a dollar price and yield.

Continuing Disclosure Monthly Statistics

March 2013

EMMA now provides statistics on the number and type of disclosure filings that issuers of municipal securities make available to investors throughout the life of a bond . The continuing disclosure statistics on EMMA represent monthly volumes since 2010 and can be viewed by types of disclosure and by category, such as annual financial information, bond calls and credit rating changes, for example .

Political Contribution Disclosures

February 2013

The MSRB's electronic library of political contribution disclosures is now available on EMMA, allowing users to view the information alongside other municipal market disclosures, trade prices, official statements and market statistics . Disclosures submitted to the MSRB by dealers in connection with contributions to governmental issuer officials, state and local political parties and bond ballot campaigns help investors and others assess any financial relationships and potential conflicts of interest between dealers and the issuers with which they are doing business .

2012

Auction Rate Security Calculation Improvement

December 2012

EMMA improves the calculation of bid-to-cover ratios for auction rate securities (ARS) to provide a ratio that is more consistent with bid-to-cover ratios calculated for Treasury auction results . EMMA has displayed bid-to-cover ratios since 2011, which provide an indication of demand for ARS in ARS auctions .

MyEMMA

November 2012

MyEMMA is a free tool that provides customized access to municipal disclosures and trade data available on the EMMA website . With MyEMMA, users can create, view and manage alerts to learn when new information becomes available on EMMA about individual securities, groups of securities and 529 college savings plans . Users can also limit searches to groups of securities and save frequently used sets of search criteria .

Additional Search Capabilities

October 2012

Users can enter a combination of descriptive characteristics about municipal securities into EMMA to search for specific bonds using the Advanced Search menu on the primary navigation bar on every page in EMMA . Advanced search

filters help users identify municipal securities that meet certain criteria such as maturity date, credit rating and interest rate . EMMA users can also search for bonds that traded during a certain period of time and at a particular price and yield .

The enhanced search provides a powerful tool for finding securities . It supplements the "Quick Search" feature provided on each page of EMMA for conducting CUSIP-based or text searches, as well as the search functions that focus on market activity data, such as trade activity .

529 Plan Display

September 2012

An interactive map accessible from the primary navigation bar on every page in EMMA allows individuals interested in learning about 529 college savings plans to quickly and easily access information about plans in each state . EMMA provides access to 529 plan disclosure documents that describe each plan's investment options, fees and expenses and any state tax benefits .

New Issue Data and Revamped Market Statistics

September 2012

EMMA now provides public access to monthly data on new issuance of municipal securities . The addition of the data is part of an overall redesign of EMMA's Market Statistics section, which includes information on the amount and volume of municipal market trading .

Yield Data for Inter-Dealer Trades

May 2012

Yield information for municipal securities transactions between dealers is available for the first time on EMMA . The public now has free access to the same price and yield information for all of the municipal securities transactions that occur in the market, both those between customers and dealers, and those between dealers .

Trade Email Alerts

February 2012

Investors and others now have the ability to be notified through an end-of-day email when a specific bond trades in the municipal market . Investors can also subscribe to alerts about the availability of disclosure documents such as ratings changes or financial statements for particular securities, and can now specify whether they want to receive financial-based or event-based disclosures, or both .

EMMA Mobile

February 2012

A mobile version of the EMMA website optimizes certain elements of the site for display on mobile devices . EMMA Mobile allows direct access and improved navigation to municipal bond trade price information, EMMA's search function and market statistics . EMMA users accessing the site from a mobile phone will be redirected to EMMA Mobile but still have access to the full site .

2011

Credit Ratings Available on EMMA

November 2011

EMMA provides free access to municipal credit ratings from Fitch Ratings and Standard & Poor's for all individual municipal securities that have ratings assigned by one or both agencies . The display of ratings on EMMA is consistent with the MSRB's goal of supporting individual investors' free access to municipal bond information .

New Voluntary Disclosure Options for Issuers

May 2011

Municipal securities issuers can make pre-sale documents associated with new bond issues available directly to the public by submitting them to EMMA . Issuers and obligated persons can also voluntarily provide investors with information about the timing and accounting standard used to prepare annual financials . The changes allow issuers to provide key documents to investors at the early stages of a bond offering and additional continuing disclosure information about existing bonds .

Additional Information for Municipal Variable Rate Securities

May 2011

Liquidity facility documents for variable rate demand obligations (VRDOs) such as letters of credit and stand-by bond purchase agreements are now available on EMMA . Public information on municipal variable rate securities allows investors to assess the level of demand, liquidity provisions and auction procedures for the securities .

Indicator for Expected Timing of Continuing Disclosures

February 2011

Municipal securities investors can get information about the expected timing of continuing disclosures made by municipal bond issuers and easily identify the most recent disclosures on EMMA . The enhancements provide broad and timely access to key municipal market documents and data .

2010

Additional Municipal Securities Disclosures Available on EMMA

December 2010

EMMA begins collecting additional ongoing disclosures made by municipal securities issuers and obligated persons about their bonds . These disclosures are required for issuers to comply with amended Securities and Exchange Commission Rule 15c2-12 .

Search Function Upgrade

August 2010

Enhancements to EMMA's search capabilities help investors more easily locate municipal market data and documents on the site . Investors can now conduct searches for real-time trade data for a period of up to a month rather than for a single day, allowing for review of data over a particular time period . Another improvement makes it easier to run a search on a single category of information on EMMA, such as continuing disclosures .

Enhanced Bond Disclosure Alerts

April 2010

New bond disclosure alerts on EMMA allow users to set up a customized alerts dashboard and begin receiving email alerts about newly available bond disclosure documents produced by municipal bond issuers throughout the life of a bond .

Enhanced Market Statistics

March 2010

A new date-range functionality for EMMA's market statistics allows users to view municipal trading patterns between any two available dates . EMMA also provides the ability to view trade activity based on coupon type .

Continuing Disclosure Submission Video

February 2010

A step-by-step video tutorial for continuing disclosure submission provides an overview of the submission process and demonstrates how to make a continuing disclosure submission . The instructional video is geared toward municipal securities issuers and others who submit continuing disclosure documents to EMMA .

2009

Continuing Disclosure Search Function

October 2009

A new dedicated search function on EMMA helps investors find a particular continuing disclosure document using a combination of search criteria such as date of posting, issuer name, state, CUSIP number and category of filing .

Bond Disclosure Email Alerts

September 2009

Investors can sign up to receive email alerts when primary market and continuing disclosure documents for individual municipal securities are posted on EMMA . Investors who track particular securities identified by their unique “CUSIP” numbers can receive an email notification from EMMA every time a disclosure document is posted for the security .

Enhanced Continuing Disclosure Submission Process

August 2009

A new feature on EMMA automatically saves lists of securities so that future submissions can be easily and quickly applied to those securities . The enhanced feature makes it easier to submit continuing disclosure documents . In addition, users now also can search for securities directly from the EMMA submission screen and easily make a submission against a large number of securities — as many as 6,000 .

EMMA Becomes Official Central Repository for Municipal Securities Information

July 2009

EMMA becomes the official repository for all municipal bond disclosure documents and trade data as the MSRB provides electronic access to market-wide continuing disclosure documents . Previously these documents were collected by private enterprises that charged investors for the information .

Voluntary Issuer Disclosures

June 2009

EMMA now collects and disseminates voluntary issuer disclosure documents from municipal bond issuers . Quarterly financial statements, budgets, changes in accounting standards, disclosures on related derivatives transactions and other disclosures are available for free to retail investors .

Collection and Publication of Continuing Disclosures

June 2009

EMMA begins collection and publication of electronic continuing disclosure documents from municipal bond issuers . Issuers, obligated persons and those that act on their behalf must voluntarily submit continuing disclosure documents to EMMA during its pilot period .

All-Electronic Standard for Municipal Bond Official Statements

June 2009

All official statements and advance refunding documents associated with new bond offerings are filed electronically and posted on EMMA .

Continuing Disclosure Pilot Phase

May 2009

EMMA begins a one-month pilot phase for collecting continuing disclosures from municipal bond issuers . Issuers and their agents will be able to create a submission account on EMMA, upload documents and get acquainted with the system before its mandatory launch .

Variable Rate Demand Obligation Transparency

April 2009

Interest rate information for municipal variable rate demand obligations is available to investors on the EMMA website . The addition of variable rate demand obligations interest rate data on EMMA will allow investors to perform a side-by-side comparison across securities . In addition, investors can view trade data and official statements for each security . Municipal securities dealers are required to provide interest rate data on variable rate demand obligations on the day that an interest rate reset occurs .

Auction Rate Securities Transparency

February 2009

Current interest rate information for municipal auction rate securities is available to investors on EMMA . Dealers are required to submit interest rate information the day auctions take place and then immediately publish the data on EMMA . All municipal auction rate transactions are displayed together on EMMA so investors can compare interest rates from program to program .

Municipal Market Statistics

January 2009

EMMA launches market statistics for investors to view snapshots of daily municipal trade data based on municipal security characteristics such as size, sector, maturity and source of repayment . Daily statistics on EMMA provide investors with more extensive data on municipal bonds to help them better understand the market .

2008

SEC Designates EMMA as Official Repository for Continuing Disclosure

December 2008

The Securities and Exchange Commission designated EMMA as the central repository for ongoing disclosures by municipal issuers . EMMA operates as a consolidated, online portal where investors can instantly access free information produced by municipal bond issuers about their bonds .

Pilot Version of EMMA

March 2008

The MSRB launches EMMA as a pilot website to provide official statements for new issues of municipal securities and related documents for advance refunds of outstanding municipal securities, together with real-time municipal securities trade price data . EMMA provides a permanent, centralized and web-based system for free real-time public access to all primary market, secondary market and trade price data for municipal securities submitted to the MSRB .

2007

SEC Chair Supports MSRB's Creation of Central Website for Municipal Securities Information

November 2007

In a letter to the MSRB, Securities and Exchange Commission (SEC) Chairman Christopher Cox supports the MSRB's proposal to establish a pilot internet-based disclosure portal to provide free public access to official statements for new issues of municipal securities, related documents for advance refundings of outstanding municipal securities and real-time municipal securities trade price data . The municipal securities disclosure system would be similar to the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system .

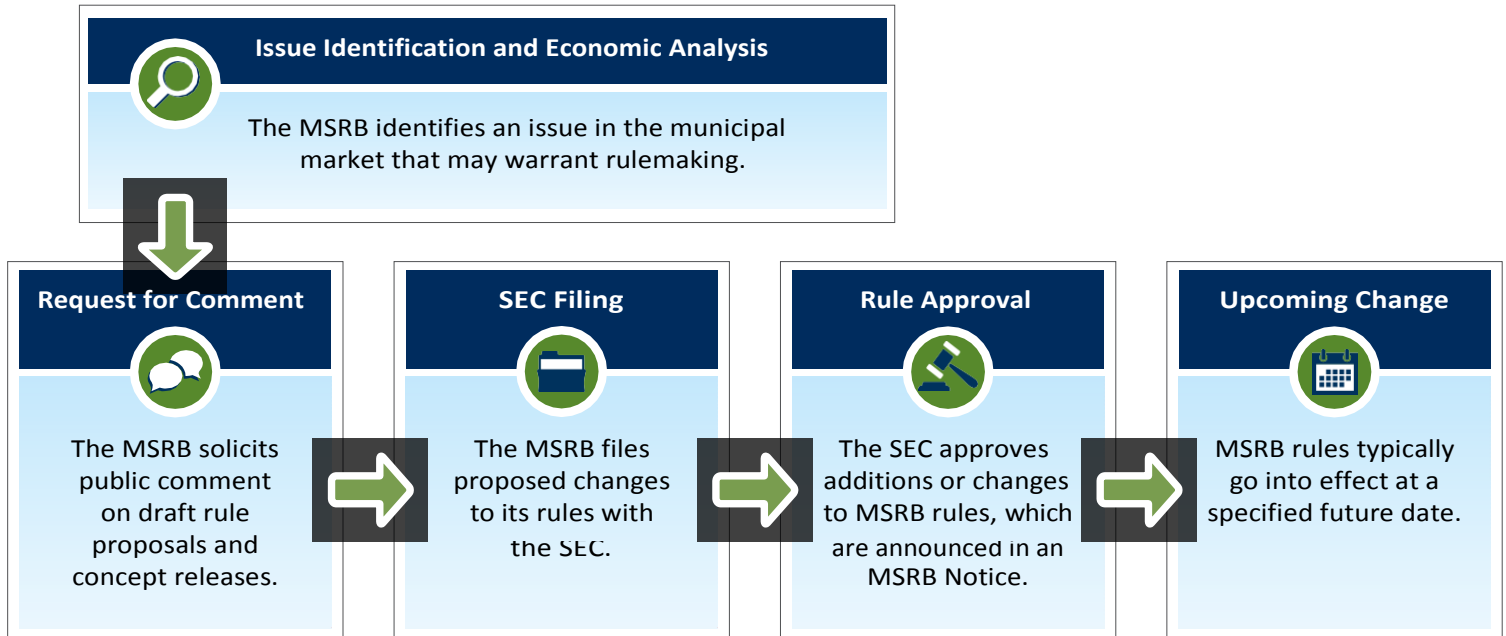


Municipal Securities
Rulemaking Board
1300 I Street NW, Suite 1000
Washington, DC 20005
202-838-1500

msrb.org
emma.msrb.org
Twitter: @MSRB_News

Appendix C: MSRB Rulemaking Process

The Municipal Securities Rulemaking Board (MSRB) develops rules for municipal securities dealers and municipal advisors through a transparent and participatory process that typically provides market stakeholders with a number of opportunities to comment on potential rulemaking. Generally, the MSRB’s rulemaking process follows the below steps¹:



READ MORE ABOUT EACH STEP

Issue Identification and Economic Analysis

The MSRB monitors market activity and engages fellow regulators and other market participants to assist in identifying issues in the municipal securities market that may warrant rulemaking. Once an issue is identified, the MSRB explores alternatives to rulemaking such as educating market participants or enhancing market transparency. The MSRB applies a formal [economic analysis policy](#) to assist in rigorous assessment of the potential implications of possible approaches to addressing market issues.

Request for Public Comment

If the MSRB believes a rule is needed to address an identified issue, it develops a proposal and typically solicits public comment to learn more about potential implications of the rule for regulated entities and the expected benefits of the rule for the fairness and efficiency of the market. A [request for comment is published on the MSRB’s website in the form of an MSRB Notice](#). The notice typically contains background information on the regulatory issue and the outcomes the rule proposal aims to achieve, a brief summary of the key provisions of the rule proposal,

¹The rulemaking process may vary depending on factors such as the nature of the rule proposal, input from market stakeholders and decisions of the Securities and Exchange Commission (SEC), the federal agency responsible for oversight of the MSRB. Depending on the complexity of the issue and the extent of comments on a proposed rule, certain steps of the process may be repeated, delayed or changed as appropriate.



Subscribe to MSRB email updates on the MSRB’s website to keep up to date with the MSRB rulemaking process.

specific questions directed to market participants and the full text of the rule proposal.

The MSRB may decide that preliminary information is needed before determining whether a rule proposal may be warranted. In these cases, the MSRB publishes a concept release to seek comment on the issue and a proposed method of addressing it in advance of developing a rule proposal.

With both concept releases and requests for comment, market participants are invited to engage in the rulemaking process by submitting comments during the designated comment period. These responses help inform the rulemaking process and improve the quality and effectiveness of rulemaking. All comment letters received, including any identifying information, generally are published on the MSRB's website.

The MSRB reviews all comment letters and evaluates whether, and to what extent, the proposed rule should be revised in light of comments received. If the MSRB determines that revision is necessary, additional public comment may be requested on the revisions. This process may continue a number of times until the MSRB concludes that a proposed rule appropriately balances competing considerations and represents the best approach to address the underlying issue.



SEC Filing

Rule proposals are then filed for approval with the SEC. [SEC filings](#) are public documents that are published on the MSRB's website. Filings typically contain general background information on the issue and the development of the rule proposal, an assessment of any burden on competition and why it is necessary and appropriate, a summary of the comments received and related MSRB responses, as well as a detailed description of the rule proposal. Filings will typically be accompanied by a number of exhibits including complete copies of the MSRB request(s) for comment and the related comment letters received.

Once a rule proposal has been filed, the SEC typically publishes the proposal for public comment. The MSRB may choose to withdraw a rule proposal that has been filed with the SEC due to market or other considerations.

When the SEC publishes the MSRB's rule proposal in the Federal Register — the official publication of the federal government for rules, proposed rules and notices — it invites market participants to submit comments on the proposed rule. The comment period generally lasts 21 days.

The MSRB may respond to, and revise a rule proposal in light of, the comments received by the SEC. If amended, the rule proposal will be republished for comment in the Federal Register. This process may be repeated as necessary.



Rule Approval

The SEC reviews the full record on a rule proposal and determines whether to approve or disapprove the rule proposal in accordance with applicable statutory standards. If approved, MSRB rules have the force and effect of federal law. The MSRB publishes an [approval notice](#) on its website and the SEC publishes its approval order in the Federal Register to announce rule approval and to notify regulated entities of the rule's effective date.

Under certain circumstances, the SEC may extend its time for consideration of a rule proposal by instituting proceedings to determine whether to approve or disapprove, which can extend the time for SEC action up to 240 days from the initial publication of the proposal in the Federal Register.



Subscribe to MSRB email updates on the MSRB's website to keep up to date with the MSRB rulemaking process.

Appendix D: Progress Report on Expanded Compliance Support

Progress Report on Expanded Compliance Support

Publication Date
September 7, 2018

Table of Contents

Background..... 1

**Forming the
Compliance Advisory
Group 2**

**Developing
Compliance
Resources and
Guidance.....2**

**Revamping
Communications and
Outreach4**

**Supporting
Compliance
Examinations... 4**

Background

Effective regulation of the municipal securities market is achieved through appropriately tailored rules accompanied by robust compliance support, such as interpretive guidance, supervisory checklists and continuing education. In 2017, the Municipal Securities Rulemaking Board (MSRB) [established a long-term strategic goal](#) to increase its commitment to developing guidance and resources that assist and support regulated entities’ ability to comply with their standards of conduct and develop effective compliance systems.

The MSRB’s strategic shift toward providing additional compliance support stemmed from a recognition that the industry continues to adapt to new foundational rules for municipal advisors and landmark new investor protection rules for dealers. The MSRB’s shift in strategic priorities has not been without its challenges. Stakeholders continue to express concern about the intent and purpose of MSRB compliance resources, as well as about market advisories addressing topics beyond the scope of MSRB rulemaking.

With the input of its Compliance Advisory Group, the MSRB continues to work to provide more clarity about the [different types of compliance information](#) and how its [market leadership activities](#) support its mission. The MSRB also aims to more clearly state the intent and scope of any new resource in the introduction of each document. Further, the MSRB is revising its policy on providing interpretive guidance to facilitate its efforts to serve as a resource to regulated entities.

The MSRB welcomes feedback from stakeholders about how the organization can continuously improve its approach to providing compliance support and ensure the resources available to regulated entities are clear, helpful and relevant. Please contact the MSRB at compliance@msrb.org.



Contact the MSRB at
compliance@msrb.org.

Forming the Compliance Advisory Group

The MSRB sought to leverage the significant experience and perspectives of regulated entities in shaping its approach to compliance support. With the [formation of the Compliance Advisory Group in 2017](#), the MSRB brought together nine compliance-oriented senior executives representing the diversity of MSRB-regulated firms. These experienced professionals contributed their time, perspectives and insights to advance the MSRB's long-term strategic goal to facilitate compliance.

Given the important contributions of the Compliance Advisory Group this year, the MSRB Board of Directors will convene another Compliance Advisory Group in the coming year. More information on Board advisory groups and opportunities to participate will be provided at the start of the next fiscal year.

Developing Compliance Resources and Guidance

Together with feedback received on a [public request for comment](#) and through [ongoing stakeholder engagement](#), the Compliance Advisory Group advised the MSRB on the development of 32 new compliance resources for municipal securities dealers and municipal advisors. At the suggestion of the group and other stakeholders, the MSRB sought broader public comment on draft guidance to ensure the information would be helpful and relevant to regulated entities. All compliance resources are available in the MSRB's consolidated online [Compliance Center](#). Additionally, compliance resources and a history of rule amendments have been integrated with the relevant MSRB rules in the [Rules and Guidance](#) section of MSRB.org.

Municipal Advisor Compliance Resources

- ✓ [Q&A Summary: MSRB Compliance Workshop on Small Firm Municipal Advisor Supervision](#)
- ✓ [FAQs Regarding MSRB Rule G-42 and Making Recommendations](#)
- ✓ [Municipal Advisor Outsourcing of Compliance Functions](#)
- ✓ [Sample Template and Checklist for Municipal Advisor WSPs](#)
- ✓ [FAQs on Continuing Education Program Requirements for Municipal Advisors](#)
- ✓ [Developing a CE Needs Analysis and Written Training Plan](#)
- ✓ [Compliance Advisory for Municipal Advisors](#)
- ✓ **Draft:** [FAQs Regarding Rule G-40 and the Use of Municipal Advisory Client Lists and Case Studies](#)
- ✓ **Coming Soon:** Draft Guidance on MSRB Rule G-40 Content Standards for Advertisements
- ✓ **Coming Soon:** Compliance Resource on Submitting Form G-37

Dealer Compliance Resources

- ✓ [Resource on Disclosing Mark-ups and Determining Prevailing Market Price](#)
- ✓ [Updated FAQs on Confirmation Disclosure and Prevailing Market Price](#)
- ✓ [Investor Education Resources on New Mark-up Disclosure Requirements](#)
- ✓ [Regulatory Reminder on Existing Guidance on Filtering of Bids and Offers](#)
- ✓ [Retrospective Review of 2012 Interpretive Notice Concerning the Application of MSRB Rule G-17 to Underwriters of Municipal Securities](#)
- ✓ [Compliance Advisory for Brokers, Dealers and Municipal Securities Dealers](#)
- ✓ [Supervisory Responsibilities of Qualified Principals](#)
- ✓ **Coming Soon:** Draft Guidance on Last Look under MSRB Rule G-17
- ✓ **Coming Soon:** Draft Guidance on Pre-arranged Trading under MSRB Rule G-17

Compliance Resources for All Regulated Entities

- ✓ [Checklist for Certain Organizational Changes by Regulated Entities](#)
- ✓ [Information on Exemptive Relief under MSRB Rule G-37](#)
- ✓ [Compliance Calendar](#)
- ✓ Email Reminder: Compliance Deadline for MSRB Rule G-10 on Investor and Municipal Advisory Client Education and Protection
- ✓ [Updated Resource List in Content Outlines for MSRB Professional Qualification Examinations](#)
- ✓ **Draft:** [FAQs Regarding Use of Social Media in Advertising](#)

MuniEdPro® Courses

To further support understanding of MSRB rules, the MSRB this year added seven new rule-based courses to its suite of online learning courses, [MuniEdPro®](#). Courses are offered at subsidized rates for regulated entities, and the MSRB made its course on mark-up disclosure available at no cost during the implementation period of the new requirements.

- ✓ [Mark-up Disclosure and Prevailing Mark-up Price: MSRB Rules G-15 and G-30](#)
- ✓ [Best Execution of Transactions in Municipal Securities: Rule G-18](#)
- ✓ [Gifts, Gratuities, Non-Cash Compensation and Expenses of Issuance: MSRB Rule G-20](#)
- ✓ [Political Contributions and Prohibitions on Municipal Securities Business and Municipal Advisory Business: MSRB Rule G-37](#)

- ✓ [Uniform Practices and Close-Out Procedures: MSRB Rule G-12](#)
- ✓ [Supervisory and Compliance Obligations of Municipal Advisors: MSRB Rule G-44](#)
- ✓ [Municipal Advisor Recordkeeping: MSRB Rules G-8 and G-9](#)

Revamping Communications and Outreach


The Compliance Advisory Group suggested a new email service to provide subscribers short, actionable "Compliance Tips of the Week." Today, nearly 1,800 subscribers receive weekly compliance tips in their inboxes. Topics include cybersecurity considerations, recordkeeping reminders and compliance calendar items. [Sign up to receive Compliance Tips of the Week](#). Also new in 2017 was a [quarterly Compliance Corner newsletter](#), now disseminated to more than 7,000 recipients, that provides a forward-looking calendar of key compliance dates, a recap of the previous quarter's compliance resources, a brief summary of a relevant enforcement action and answers to a frequently asked compliance question, among other content.

To facilitate in-depth discussions about key provisions of MSRB rules, the MSRB launched in 2017 a [virtual compliance workshop series](#) in a dynamic question-and-answer format. Over the course of six workshops this year, approximately 1,700 participants have enhanced their knowledge about such topics as developing effective supervisory systems at small municipal advisor firms and understanding underwriters' obligations to make disclosures to issuers. The workshops are available [on-demand on the MSRB's website](#), and the MSRB publishes post-workshop summaries to ensure all stakeholders can benefit from the information discussed on the live webcast.

The MSRB also hosted two compliance-focused in-person outreach events: a mark-up implementation forum for dealers and a joint compliance outreach program for municipal advisors with fellow regulators that reached a combined 700 attendees.

Supporting Compliance Examinations

Although the MSRB does not have enforcement authority, it is empowered by statute to provide guidance and assistance to examining authorities, which include the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA) and applicable bank regulators. This year, the MSRB offered extensive training to examination staff, including access to the full catalog of MuniEdPro® courses for FINRA examiners. [Read about the MSRB's regulatory coordination and enforcement support](#).



Further, the MSRB introduced a regular feature of the Compliance Corner newsletter to briefly summarize a recent enforcement matter brought by an examining authority. Enforcement matters can, when applicable, inform firms and help identify potential compliance risks.

Contact the MSRB

The MSRB welcomes feedback from all stakeholders on how to continuously improve its approach to providing compliance support. Comments and suggestions may be sent to compliance@msrb.org.