Thank you Chairman Bachus, Chairman Schapiro and Commissioner Walter. The MSRB appreciates the opportunity to again participate in the Securities and Exchange Commission’s series of field hearings. We view today’s venue to be particularly compelling given the difficulties that the citizens of Jefferson County are going through in connection with the water and sewer debt and collateral transactions that have been so much in the news these past couple of years and which were so clearly outlined in Chairman Bachus’s law review article, “Federal Policy Responses to the Predicament of Municipal Finance.” The MSRB very much looks forward to continuing to work with the Commission and the House Financial Services Committee to address some of the issues brought to light here in Jefferson County and on other issues facing the municipal securities market.

The credit crisis, the current uneven recovery and the resulting changes to the financial regulatory structure have had an enormous impact on the municipal securities market. We have seen how inextricably intertwined this market’s fate is to the broader national and international economy. Although the predicted cascade of municipal defaults has not materialized as state and local governments have, by and large, gotten down to the serious business of beginning to get the public’s finances in order, Jefferson County’s on-going struggle to negotiate a solution that avoids further default or municipal bankruptcy serves as a bracing reminder that there continues to be much work to be done to strengthen protections for investors, state and local governments and their citizens, and to stop the wrongdoings of financial professionals and public officials that made Jefferson County particularly vulnerable to the effects of the financial crisis.

The MSRB

Congress created the MSRB in 1975 to write rules governing the conduct of broker-dealers and banks that buy, sell, trade and underwrite municipal securities. Last year’s financial reform legislation made various changes in the MSRB’s statutory charter, including additional rulemaking responsibilities in connection with advisors to state and local governments and their public funds on their bond and related financing activities as well as a newly formed majority public governing board. The MSRB’s mission today includes not only the protection of investors but also the protection of issuers of municipal securities, state and local pension plans and other similar funds, and entities whose credit stands behind municipal securities. The MSRB pursues these goals and works to foster a fair and efficient municipal market through rulemaking,
disclosure and market transparency programs, educational and market outreach programs, and through operation of its Electronic Municipal Market Access (or “EMMA”) website.²

As a self-regulatory organization under the Securities Exchange Act, the MSRB works closely with the Commission on these activities and is subject to Commission oversight. In recent years, the Commission and the MSRB have worked closely on numerous important investor protection initiatives, including MSRB programs for the collection and dissemination of electronic disclosure documents and the establishment of the EMMA website.

Transaction Transparency

At today’s hearing, I have been asked to provide information on transparency, particularly pre-trade price transparency, in the municipal securities market. The term “transparency” can mean a number of things, but for today I will be talking about “transaction transparency.” This refers to the degree to which information regarding quotations for securities, the prices of transactions, and the volume of those transactions is made publicly available in a securities market.³ Transaction transparency can be categorized as either “post-trade” or “pre-trade.”⁴ “Post-trade” transparency refers to the dissemination of trade price and volume information of completed trades for specific securities. “Pre-trade” transparency typically refers to public dissemination of information indicating the size and price of prospective trading interest in specific securities. Generally, this means dissemination of firm quotations of a specified size—that is, a commitment to buy or sell a specific quantity of a particular municipal security at a stated price. Pre-trade transparency information may also include pending limit orders⁵ from customers or other indications of trading interest. The exact nature of pre-trade transparency information that is (or can be made) available will depend on the structure of the specific market in question.

Structure of the Municipal Securities Market

There are about 1.5 million different municipal securities comprising approximately $3.7 trillion in par value.⁶ These securities represent a wide variety of credit structures, call features, put features and other terms and conditions. The municipal market is an over-the-counter dealer

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² EMMA is accessible at www.emma.msrb.org.
³ Principles of Transaction Transparency, Securities Regulators of the Americas ("COSRA") (1993). Transaction transparency is distinct from concepts relating to dissemination of official statements, periodic financial information and other disclosure information about an issuer and its securities. Of course, transparency and disclosure are both important principles for a securities market, each serving to reduce information asymmetries, to promote efficient pricing and to foster investor confidence and liquidity.
⁴ Id.
⁵ A limit order is an order placed to buy or sell a set quantity of securities at a specified price or better.
market. In contrast with other over-the-counter markets, such as for equity securities, there are no designated market makers. On any given day, the number of securities with firm, two-sided quotations will be relatively small compared to the total number of issues traded and very small compared to the outstanding universe of securities.

There are several electronic trading platforms operating in the municipal market that display offerings to their participants and some venues may post firm, executable quotations. However, the municipal market can be generally characterized as decentralized. There is no central venue for quotations or other indications of interest. Although most of the par value traded each day occurs among a relatively concentrated group of dealers in large transactions that are priced primarily through negotiation, a much broader range of national, regional and small dealers routinely execute smaller trades, representing the bulk of retail activity in the municipal securities market.

Primary market activity is a very important component of the municipal securities market. Each year, state and local governments issue hundreds of billions of dollars of new municipal securities, with last year representing a record new issuance total of $432.9 billion and this year representing a much slower pace of $116.9 billion through June 30, 2011. Normally, municipal securities most readily trade during the first month after issuance, with such trading making up approximately 37 percent of the total par value of municipal securities traded in 2010. Thereafter, trading in a particular municipal security drops off significantly for the remainder of the time such security remains outstanding.

Post-Trade Transparency

Prior to 1995, the municipal securities market was essentially “opaque,” meaning that there was no systematic and comprehensive dissemination of either post-trade or pre-trade information. In spite of strong opposition from some market participants who expressed concern

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7. For example, approximately 90 percent of customer trades, measured by transaction size, are effected by approximately 40 dealers. However, during the first five months of 2011, approximately 445 dealers averaged one or more municipal securities sales transaction each business day.

8. Source: Thomson Reuters (based on data available on July 8, 2011). Includes securities with maturities of 13 months or more.

9. Source: 2010 MSRB Fact Book, p. 16. Includes securities with maturities of two or more years with fixed or zero interest rate.

10. Thus, after the first month of relatively heavy trading for new issue municipal securities, the level of trading in such issue drops dramatically, hovering at approximately 4-5 percent of total par value traded on a typical day for the remainder of the first year after initial issuance. Measured in terms of number of trades, new municipal securities in their first month after issuance constitute approximately 20 percent of all trades in municipal securities on a typical day and then drop to a level of approximately 3-4 percent of total trades for the remainder of the first year after initial issuance. Source: 2010 MSRB Fact Book, pp. 16-17.
that mandating transaction reporting to provide post-trade transparency would expose market participants’ trading positions and create other negative effects on overall liquidity in the market, the MSRB recognized that such transparency would bring improved pricing efficiency and investor confidence to the municipal market and therefore launched our transaction reporting program in measured steps. This began with a pilot program for next-day public dissemination of certain inter-dealer trades launched in 1995, with purchases and sales by customers of more frequently traded municipal securities added in 1998. By 2003, after incremental increases in the breadth of trades covered by this program, the MSRB was collecting and disseminating comprehensive price data on all municipal securities transactions on the morning after trade date. The implementation of the Real-Time Transaction Reporting System (“RTRS”) in January 2005 created, for the first time ever in the broader U.S. fixed income market, transaction price transparency for municipal securities that is both comprehensive and contemporaneous.

Today, MSRB rules require dealers to report transactions, with limited exceptions, to the MSRB within 15 minutes of trade execution.\textsuperscript{11} Trade data is disseminated nearly simultaneously after the transaction report is received.\textsuperscript{12} Disseminated trade data includes price, direction of trade (dealer to customer, customer to dealer, or inter-dealer trade) and quantity. For trades greater than $1 million, a “1MM” indicator is disseminated in real-time while the precise quantity is disseminated on a delayed basis (by five business days) to alleviate concerns about identifying the trading positions of specific market participants.

Since the implementation of real-time trade reporting, market participants have noted reduced information asymmetries, improved pricing and the introduction of new investors drawn to the market because of the additional transparency. In addition, we are not aware of any reductions in liquidity attributable to the additional transparency.

More recently, the MSRB has addressed transaction transparency with respect to auction rate securities (ARS) and variable rate demand obligations (VRDO). These short-term securities typically are sold at a price of par, with the short-term interest rate reset being the critical market information. Dealers are required to report ARS and VRDO interest rate information to the MSRB’s Short-term Obligation Rate Transparency (SHORT) system on an end-of-day basis for dissemination to the market.\textsuperscript{13} As of June 2011, the program has collected information on nearly 2.2 million rate resets for ARS and VRDOs since the initial launch of the SHORT system in

\textsuperscript{11} The main exception is primary market trades at the published list or “take-down” price, which must be reported by end of day.

\textsuperscript{12} Processing and automated error checking prior to dissemination generally occur in a matter of seconds.

\textsuperscript{13} A number of key items of information are collected, including the length of the interest rate reset period, the minimum denomination of the security, and minimum and maximum rates. For ARS, the par amount auctioned and whether the interest rate set represents a “maximum rate,” “all hold rate” or “set by auction” is collected. For VRDOs, the type and expiration date of any liquidity facility is also collected.
January 2009.\textsuperscript{14} The scope of information collected through the SHORT system was expanded in May 2011, when program dealers for ARS began submitting information on bids in periodic auctions as well as financing documents setting forth the auction and rate setting procedures, and remarketing agents for VRDOs began submitting information on bonds held by banks – typically due to a failed remarketing – as well as key liquidity documents such as letters of credit, reimbursement agreements and standby bond purchase agreements. The information and documents collected through SHORT for municipal ARS and VRDOs are not available on a comprehensive basis in any other market.

The MSRB disseminates real-time trade data and interest rate resets through its EMMA website. The EMMA website integrates this transparency information, consisting of the real-time trade data and ARS/VRDO rate reset information and related documentation, for every issue of municipal securities with access to disclosure documents such as official statements, advance refunding documents, annual disclosures, material event notices and other continuing disclosure documents. The EMMA website was designed specifically to meet the previously unmet needs of retail investors, who make up such a significant portion of the municipal securities market customer base but who did not, prior to 2008, have access to the kind of key trade data and disclosure information that market professionals routinely access through market data vendors. EMMA serves as a free, user-friendly platform that brings retail investors onto a more even playing field with market professionals and provides vital information to help investors make more informed investment decisions.\textsuperscript{15} The democratization of disclosure documents, trade data, rate reset information and related information that has been achieved through EMMA for the municipal securities market is, to our knowledge, unmatched in any other securities market. EMMA has been recognized as an “easy-to-use site”\textsuperscript{16} that is “a great resource for investors”\textsuperscript{17} and has been credited with providing “transparency in muniland [that] is an order of magnitude better than any other bond market, including the U.S. Treasury market, which is liquid but not transparent.”\textsuperscript{18}

\textsuperscript{14} Source: MSRB Report: Municipal Auction Rate Securities and Variable Rate Demand Obligations – Interest Rate and Trading Trends (July 2011), pp. 5, 8. The SHORT system began collecting ARS rate reset information in January 2009 and VRDO rate reset information in April 2009.

\textsuperscript{15} The MSRB offers various data subscription services providing comprehensive trade information in real-time, at the end of the day and/or historically, designed primarily for market professionals, information vendors and other high-volume users. A number of subscribers re-disseminate the data on other platforms and are able to use the subscription service to produce additional value-added products for market professionals or retail customers. The MSRB also offers subscription services for the ARS and VRDO information and documents, primary market disclosures and continuing disclosures.


\textsuperscript{18} Cate Long, “Muniland is the most transparent bond market,” \textit{Reuters}, July 1, 2011.
Pre-Trade Transparency

There is today no central location in which quotations or offerings or indications of interest in municipal securities are posted. As noted earlier, the great majority of the par value traded is through negotiated transactions by dealers rather than execution of firm quotations posted on electronic systems. There are approximately 80 issues of municipal securities currently listed for trading on NYSE Bonds, the New York Stock Exchange’s bond trading system. However, in recent years, little or no exchange trading in these issues has occurred, with these securities still effectively trading exclusively over-the-counter.  

Several commentators have posed questions on why the municipal securities market has not naturally gravitated to exchange trading. Another interesting comparison is on-the-run Treasury bonds. Although not exchange-traded, the market for these securities has gravitated to automated systems that provide high levels of pre-trade transparency.  

Several characteristics of the market may help to explain why neither of these developments has naturally occurred as they did in the equity and Treasury markets. One previously mentioned unique characteristic is the large number and heterogeneous nature of municipal securities. The 1.5 million municipal securities compares with about 5,700 equities that trade on US exchanges and about 254 Treasury securities. The heterogeneous nature of these securities reflects the various financing needs of tens of thousands of different municipal issuers, including general obligation, revenue and conduit issuers.  

Another related and potentially relevant characteristic of the municipal market is the level of trading. On a typical trading day, there are about 39,000 trades in 14,000 different securities. This means that over 99 percent of municipal securities do not trade on a given day. In fact, over 90 percent typically do not trade in a given month. The individual municipal securities that are traded each day change as new issues come to market, are traded, and eventually are purchased by investors that hold them as long-term investments, in many cases with the intention of retaining until maturity. After that time, trading in a typical issue of municipal securities will be sporadic at best. In addition to the occasional sale of a relatively small sized lot based on any number of reasons personal to the current owner of the security, trading may be triggered when an institutional holder sells a large position, which in some cases engenders a small flurry of trades as one or more subsequent inter-dealer trades result in the

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19 Several commentators have noted municipal bonds were once actively traded on the NYSE during the 1920s. See Bruno Biais and Richard C. Green, The Microstructure of the Bond Market in the 20th Century, August 29, 2007.

20 Id.

21 See 2010 MSRB Fact Book, pp. 36.

22 Although investors in municipal securities have traditionally been viewed as “buy and hold” customers, municipal securities investors in reality reflect the full range of investing styles seen in other marketplaces while retaining a significant segment of investors seeking a stable, long-term investment vehicle.
securities being sold to another institutional investor, but in other cases may result in a significant amount of trading for a short period of time as the securities are sold through other dealers to a number of investors in smaller lot sizes. Some of these sales of large positions by institutional investors may be reflective of such investors’ own investment strategies, or may reflect a higher degree of sensitivity by retail investors who participate in the municipal market through mutual funds, exchange traded funds, separately managed accounts or other products, which can effectively force institutional trades if large numbers of retail investors simultaneously invest or divest due to general economic or other news events that can move the market. However, such trading typically subsides after a short period of time – often a matter of one or several days – at which point the security may not trade again for an extended period.

Thus, although the growing complexity of the municipal securities market has introduced greater interest in the trading of such securities than has traditionally been the case, the municipal securities market nonetheless continues to be characterized as a significantly more “buy and hold” market as compared to the equity market, and this tendency may also help to explain why trading is infrequent and has not resulted in successful exchange trading in the modern markets. That may be related to the essential nature of the investment, which is normally purchased to establish a constant income (generally tax-exempt), rather than to speculate on the security increasing in its market value. In addition, in contrast to holders of equity securities who must sell shares in order to liquidate a position, fixed income investors can, and often do, hold bonds until they mature or are called. This may also partially explain why trading in municipal securities is much less frequent than for equities.

Finally, it is worth noting how transaction size may be related to market structure. With about 70 percent of all municipal securities being held by “households,” either through direct purchases or investments in mutual funds or similar products, retail demand is a critical component of the municipal securities market. In terms of trading, the small par value transaction – $100,000 or less – accounts for about 8.6 million or 82 percent of the transactions that occur each day. However, as noted, 79 percent of the par value traded each day is in transactions of $1 million or greater. With the exception of extremely liquid markets such as the one for Treasury securities, transactions of such large size naturally tend to be negotiated rather than executed from firm quotes or through an order-driven system.

A number of alternative trading systems (ATS) have emerged in the securities markets over the past decade, with some offering municipal securities through their electronic platforms. These electronic platforms may be accessed directly by other dealers (and in some cases institutional investors) and offer continuous listings of bid-wanteds and offerings, typically limit access to dealers and institutional investors by subscription, and may offer continuous order matching. In some cases, these platforms may preserve complete anonymity (in which case execution, clearance, and settlement are performed by the system as a riskless principal) or may

Federal Reserve statistical release, “Flow of Funds Accounts of the United States,” June 9, 2011. The household category includes both direct investments by individual investors and trust and other accounts (e.g., some types of hedge fund accounts that do not fall into other tracked categories), and the mutual fund category includes both municipal bond funds and money market funds.
only preserve anonymity through contract formation (with the parties to the contract left to execute, clear, and settle their transactions). By their nature, ATS typically display the inventory, or selected portions of the inventory, of the dealers that subscribe to their system and bid/offer information is available only to subscribers, although transaction price information is reported to the MSRB and disseminated on EMMA for trades consummated in connection with municipal securities offered through an ATS.

MSRB Review of Market Structure

In recent years, Commission members and staff have suggested that the municipal securities market might benefit from greater pre-trade transparency. The MSRB is also interested in how additional transparency might improve pricing efficiency, investor confidence and liquidity in the market, whether through processes or structures currently existing in other markets or through initiatives tailored to the specific characteristics of the municipal securities market.

To help ensure that the market is operating in an optimum manner, the MSRB is working with Erik Sirri, professor of finance at Babson College and former SEC Chief Economist and Director of the Commission’s Division of Trading and Markets, to undertake a study of market structure. Professor Sirri is currently sifting through eight years of the MSRB’s vast municipal market trading data, spanning from the period when only next-day trade data was available, to the institution of real-time trade reporting, to the free public dissemination of such data on EMMA and the market dislocations during the recent financial crisis. Among other things, he is looking to gain a comprehensive understanding of the trading characteristics of this market; to assess the empirical effects of implementation of real-time post-trade transparency on transaction costs and trading behaviors; to consider the nature, extent and causes of price dispersion across different categories of market participants (focusing specifically on retail investors); and to develop a preliminary assessment, to the extent possible from the available information, of the impact of current pre-trade transparency in light of its scope and general accessibility to the broader market.

The overriding focus will be on transparency as it relates to investor protection, particularly in the retail market, given that a retail investor can face challenges in understanding the value of his or her security when it comes time for the investor to sell a relatively small lot of a security that may not have traded any time recently. Just this Wednesday at our Board’s quarterly meeting, Professor Sirri outlined his initial impressions on some of these issues and engaged our Board members in a thoughtful discussion of what he is seeing in the data. Given the complexity of the marketplace and the issues being considered, our expectation is that any initial findings will not be the end but only the beginning of a process that will inevitably lead to

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24 See, e.g., Commissioner Elisse B. Walter, Key Note Address at the National Association of Bond Lawyers 35th Bond Attorneys’ Workshop, San Antonio, Texas (October 28, 2010); Commissioner Roel C. Campos, Remarks Before the 31st Annual Conference of IOSCO, Hong Kong (June 8, 2006); Chester S. Spatt, Chief Economist and Director of the Office of Economic Analysis, Speech on Overview of Bond Market Transparency at the American Finance Association Meeting, Boston, Massachusetts (January 6, 2006).
significant transparency improvements spanning pre-trade, concurrent and post-trade information flows. There is much additional spadework to be done to arrive at interim findings that could be released in the context of an MSRB concept release or other public notice seeking comment from market participants on such findings and on potential options for addressing identified needs.25

The MSRB will be keeping the Commission and the appropriate Congressional committees abreast of the progress on this project and looks forward to working with the Commission to identify and implement any regulatory changes that may be needed.

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I thank you again for the invitation to participate in this hearing and look forward to answering any questions.

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25 For example, a number of suggestions have been made for increasing pre-trade transparency and providing investors with better access to information on market conditions and the market value of individual securities. See Commissioner Elisse B. Walter, Key Note Address at the National Association of Bond Lawyers 35th Bond Attorneys’ Workshop, San Antonio, Texas (October 28, 2010).