



EMMA – Electronic Municipal Market Access

The Official Source for Municipal Disclosures and Market Data

Specifications for EMMA Continuing Disclosure Financial Reporting Subscription Service

(EMMA Financial Reporting
Subscriber Manual)

Version 2.2, August 2015

Revision History

Version	Date	Description of Changes
1.0	June 2009	Initial version.
1.1	April 2010	- Consolidated into a single document; - Added Figure: EMMA Continuing Disclosure Subscription Extended Services – Overview Message & Type Definition Schemas
1.2	June 2010	Figure 3 updated to view entire table
1.3	August 2010	Updated data message, disclosure indexing data, and event disclosure category listing for 15c2-12 changes including: - Figure 2 – Event Disclosure Category Type enumerated set for 15c2-12 - Figure 3 - 15c2-12 Event Disclosure Categories - Figure 5 – reference data type definition schema in Figure 2
1.4	May 2011	Added Specifications for Financial Accounting Web Service Interface
1.5	June 2012	Note added to Continuing Disclosure Message flow diagram: GetSubscriptionReplayData Method has been deprecated and will not be functional after June 2012. If the GetSubscriptionReplayData Method is called after it is no longer functional, an exception message will be returned.
2.0	April 2014	Summary of Changes: - EMMA Subscription Web Service Interface – Common Data and Document Retrieval Service Interface - Figure 1: Message Processing Overview - retrieval methods: get transactions for day, get transaction; get document file - XML Message Schema removed - Sample SOAP Messages - Table 2: EMMA Subscription response messages

2.1	June 2014	SOAP MESSAGE HEADER Changes: 1) All reference to "tempuri.org" has been replaced with "emma.msrb.org/schemas/subscriber-service." 2) The "ActivityId" element has been changed FROM: <ActivityId CorrelationId="918e8838-d4ea-40b3-afd8-bd8834f63c79" xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">63d52b7d-6b6f-46aa-b2e0-f9cbbd0a9949</ActivityId> TO: <ActivityId CorrelationId="39e2e1ca-2924-4aa6-9c1c-86b9254970d1" xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">05803968-d604-4cd1-bc0c-4500a0b6a0b1</ActivityId<http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics%22%3E05803968-d604-4cd1-bc0c-4500a0b6a0b1%3C/ActivityId>> SOAP MESSAGE BODY Changes: 1) All references to "xmlns="http://emma.msrb.org/schemas/subscriptionmessages/types" have been removed
2.2	August 2015	Updated the Resources and Support section to reflect the change in hours of operation for Email Support.

Resources and Support

MSRB Website: www.msrb.org

EMMA Website: emma.msrb.org

For assistance, contact MSRB Support at 202-838-1330 or
MSRBsupport@msrb.org.

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

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

Municipal Securities Rulemaking Board

1300 I Street NW, Suite 1000

Washington, DC 20005

Tel: 202-838-1500

Fax: 202-898-1500

Table of Contents

Introduction	6
Background	7
EMMA Subscription Service Interface	8
Beta Platform for EMMA Subscription Web Service Interface	8
Data and Document Feed Process	9
Message Processing, Schemas and Data Tags	10
Data Message	10
Figure 1: Message Processing Overview for the Subscription Web Service Interface	11
Figure 2: XML Data Tag Structure	12
Data Tag Glossary	13
Table 1: Data Tag Glossary for EMMA Subscription Service	13
Sample Disclosure Data Messages	16
Sample XML Data Message – Transaction List	16
Sample XML Data Message – CUSIP9.....	17
Sample XML Data Message – Commercial Paper	17
Sample XML Data Message – Ineligible for CUSIP Number Assignment (NON-CUSIP).....	18
Sample XML Data Message – Municipal Fund Security	18
Sample SOAP Messages.....	19
SOAP Request Message – Get Transaction List	19
SOAP Response Message – Return Transaction List.....	20
SOAP Request Message – Get Transaction Data	21
SOAP Response Message – Return Transaction Data.....	22
SOAP Response Message – Error Return - Transaction	23
SOAP Response Message – Error Return – Authentication Failed.....	24
Response Messages.....	25
Table 2: EMMA Subscription Response Codes	25

Introduction

The Municipal Securities Rulemaking Board (MSRB) protects investors, issuers of municipal securities, entities whose credit stands behind municipal securities and public pension plans by promoting a fair and efficient municipal market. The MSRB fulfills this mission by regulating securities firms, banks and municipal advisors that engage in municipal securities and advisory activities. To further protect market participants, the MSRB promotes disclosure and market transparency through its Electronic Municipal Market Access (EMMA®) website, provides education and conducts extensive outreach. The MSRB has operated under Congressional mandate with oversight by the Securities and Exchange Commission since 1975.

The EMMA website is a centralized online database operated by the MSRB that provides free public access to official disclosure documents and trade data associated with municipal bonds issued in the United States. In addition to current credit rating information, the EMMA website also makes available real-time trade prices and primary market and continuing disclosure documents for over one million outstanding municipal bonds, as well as current interest rate information, liquidity documents and other information for most variable rate municipal securities.

This manual contains specifications for the real time, computer-to-computer dissemination of information such as designated accounting standards, timeline for submitting financial statements and the website link where additional financial information can be obtained.

Background

Submissions made through the EMMA financial reporting service accepted during the hours of 8:30 a.m. to 6:00 p.m. Eastern Time on an MSRB business day are, in general, posted on the EMMA website within 15 minutes of acceptance, although during peak traffic periods posting may occur within one hour of acceptance. Submissions outside of such hours often are posted within 15 minutes although some submissions outside of the MSRB's normal business hours may not be processed until the next business day.

The EMMA subscription service makes available all disclosure documents and related indexing information simultaneously with the posting thereof on EMMA. The EMMA subscription service is provided through a web service accessible by using various commercially available products. Data is streamed, depending on the subscriber's own software settings, using XML files with embedded or accompanying transmissions of, PDF files of continuing disclosure documents.

The MSRB subscription service is available to paying subscribers subject to a subscription agreement entered into with the MSRB. Subscribers must conform to the terms and conditions of that agreement. In addition, to purchase a subscription it is necessary to provide the MSRB with verification of the appropriate license from CUSIP Global Services. More information about the subscription agreement and license verification is available on the MSRB's website at msrb.org.

The MSRB reserves the right to restrict or remove the access of users when their use of the Subscription Service Interface is endangering the integrity of EMMA and its systems.

EMMA Subscription Service Interface

The MSRB will expose a web service interface to allow subscribers to receive Simple Object Access Protocol (SOAP) standard extensible markup language (XML) messages using secure, computer-to-computer communications. These interfaces will be remotely consumed by applications written by or for subscribers in a wide variety of programming languages and running on a wide variety of platforms. The EMMA Subscription Service Interface exposes the following web service for retrieval of submission data:

Data and Document Retrieval Service:

<https://services.emma.msrb.org/SubscriberServices/EmmaSubscriptionService.svc>

Beta Platform for EMMA Subscription Web Service Interface

Beta access to the subscription web service interface is made available by the MSRB. These serve as a platform for potential and existing subscribers to conduct tests to ensure proper programming and configuration of their applications for accessing the EMMA Subscription Web Service Interface.

Data available through the beta platform are for test purposes only and are not to be re-disseminated or otherwise used by subscribers, other than for purposes of testing programming and configuration of subscription applications.

Access to the beta platform site may require a separate set-up. To inquire about the procedures for accessing the beta platform site, contact MSRB Support at 202-838-1330. The web service interfaces for the beta platform are as follows:

Beta platform for data:

<https://servicesbeta.emma.msrb.org/SubscriberServices/EmmaSubscriptionService.svc>

Data and Document Feed Process

The EMMA Subscription Web Service Interface will provide XML files of data submitted to the EMMA Submission Service through both the EMMA data submission portal and the automated submission interface.

Data File Dissemination

Each day EMMA receives and publishes data submissions from issuers and their agents. Individual publishing events (“transactions”) will normally be available for subscriber access simultaneously with the posting of publicly disseminated information to the EMMA website. Subscribers will first determine which transactions to retrieve by polling the data file subscription web service, at a frequency to be determined by each subscriber, by issuing a data request to receive the current day’s transaction list, based on subscriber-determined parameters¹. Due to the anticipated volume and frequency of submissions, the MSRB recommends polling the subscription service not less frequently than once every 10 minutes and not more frequently than once per minute. To this end, the MSRB reserves the right to establish a maximum polling frequency as it deems appropriate. Subscribers use the list provided to retrieve the corresponding XML data files by issuing an individual data request for each transaction. Throughout the day subscribers will repeatedly request that day’s list of transactions because additional transactions will be added to the day’s list of published transactions as more submission events are processed by EMMA. Subscribers can compare the most recent transaction list against the data previously received to determine which additional transactions have not yet been requested.

¹ Alternatively subscribers may choose to request transaction lists for prior days subject to a look-back window/period maintained by the MSRB consistent with the subscription service agreement. Because transaction dates are determined by the processing date, transaction lists from prior dates will not change. However, the data published may be updated by transactions published on subsequent dates.

Message Processing, Schemas and Data Tags

This document refers to a series of figures and tables providing more detailed information about the continuing disclosure subscription service. A message processing overview is included in Figure 1. An XML data schema and a type definition schema are included in Figure 2. A data tag glossary is provided in Figure 3.

Data Message

Data elements to be disseminated through the continuing disclosure subscription service will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) disclosure indexing data and (iii) securities data. These categories, and the available data tags applicable to each category, are included in Figure 3 and are also summarized below:

- **Submission Data**
 - (i) Submission identifier (uniquely identifies submission being disseminated)
 - (ii) Submission status (always defined as publish)
 - (ii) Submission transaction date and time (indicates EMMA posting date and time)
- **Disclosure Indexing Data**
 - (i) Obligated person type (entered value 'Issuer', 'ObligatedPerson')
 - (ii) name of obligated person for continuing disclosure filing (name of submitting party)
 - (iii) Reporting schedule days post fiscal year end (entered value)
 - (iv) Reporting schedule fiscal year end month (entered value)
 - (v) Reporting schedule fiscal year end day (entered value)
 - (vi) Reporting schedule additional information (entered information)
 - (vii) Organization URL (entered value)
 - (viii) Organization URL additional information (entered information)
 - (ix) Reporting GAAP standard (selected value)
 - (x) Reporting GAAP standard additional information (entered information)
- **securities data**
 - (i) CUSIP9 (reference CUSIP9 security identifier)
 - (ii) CUSIP6 (reference commercial paper identifier)
 - (iii) Issuer name (reference issuer name)
 - (iv) Issue description (reference issue description)
 - (v) Issuer state (entered state abbreviation)
 - (vi) Issue dated date (reference date)
 - (vii) Security status (entered value 'Published', 'Withdrawn')

Examples of XML files disseminating data submissions for various types of continuing disclosures are included herein.

Figure 1: Message Processing Overview for the Subscription Web Service Interface

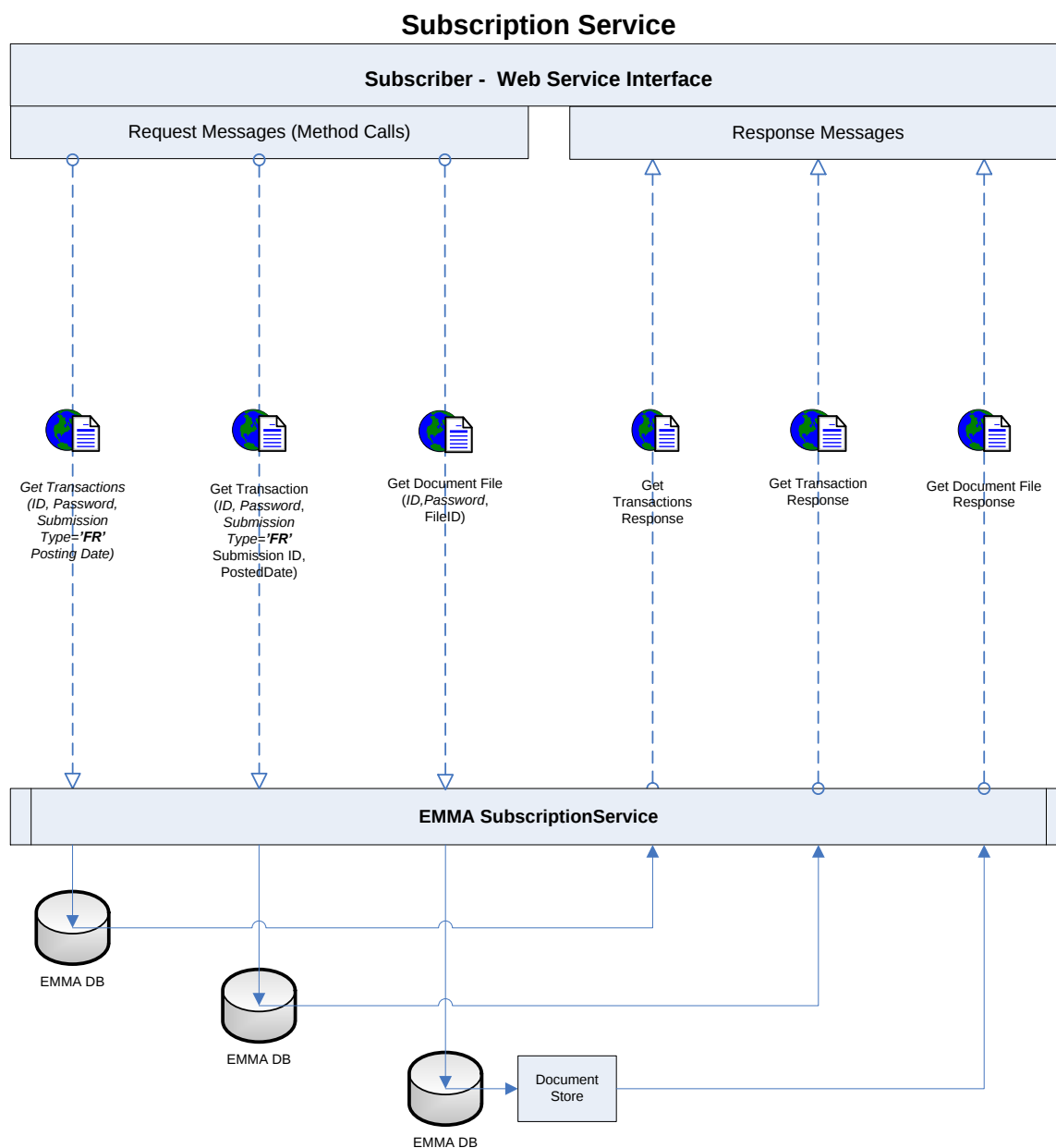
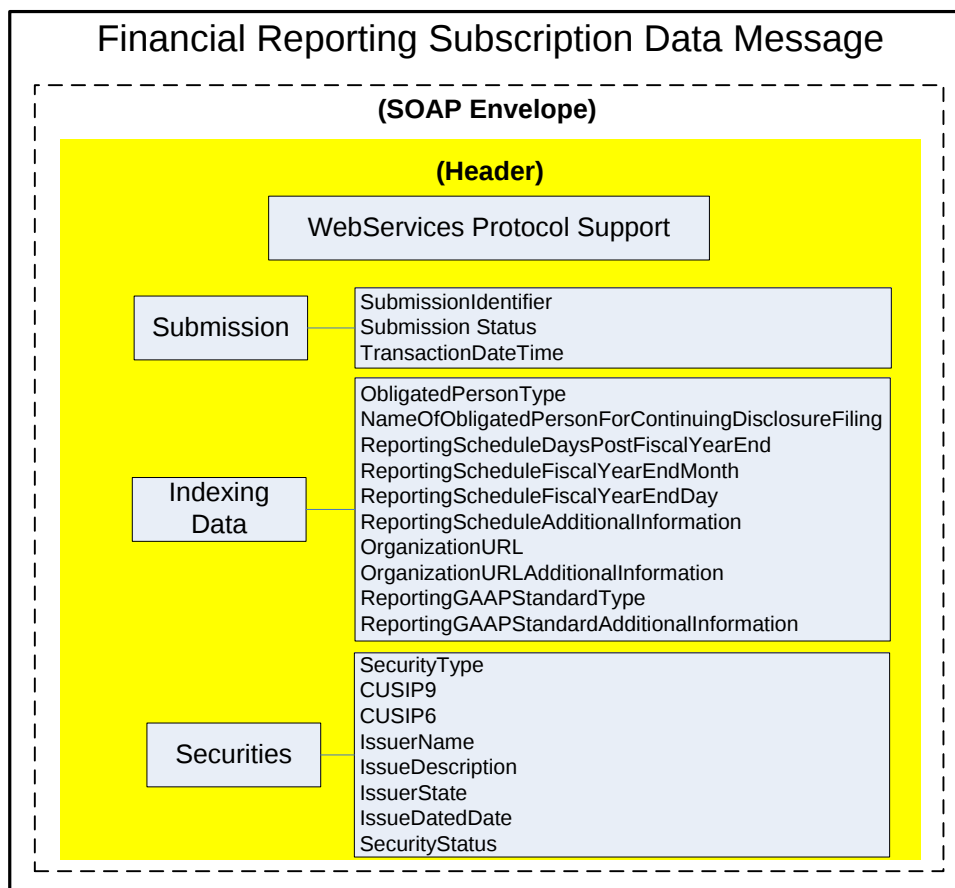


Figure 2: XML Data Tag Structure

The following is a listing of possible data tags that may be included in XML data files depending on the specifics of the disclosure being reported.



SOAP (Simple Object Access Protocol) - foundation layer of the web services protocol stack

MTOM (SOAP Message Transmission Optimization Mechanism) - a method of efficiently sending binary data to and from web services

Data Tag Glossary

Table 1: Data Tag Glossary for EMMA Subscription Service

Below is a glossary of all data tags to be used in EMMA's automated subscription interface for data and document messages. These data elements are organized in a hierarchical data relationship. This glossary sets out each data element's XML container, data tag, definition and data specifications, including a listing of enumerated values for those data elements where the submitter is to choose a value and an example of the data format where the submitter is to enter a value.

Subscription Data Tags Description and Specification			
EMMA Subscription Service			
XML Container	Data Tag	Definition	Data Specification
Submission	Submission Identifier	Unique identifier assigned by the system at time of initiation of submission (the initial submission event) and used by the submitter in connection with subsequent submission events	Max25Text ex: S212345678910
	Transaction Date Time	Indicates the date and time the submission event was registered in EMMA	CCYY-MM-DDT00:00:00 ex: 2008-12-01T13:30:00
Obligated Persons For Continuing Disclosure Filing	Obligated Person Type	Indicates the type of the party making the disclosure	Enumerated Value: • Issuer • ObligatedPerson
	Name Of Obligated Person For Continuing Disclosure Filing	Indicates the name of the Issuer or other Obligated Person making the financial reporting disclosure filings	Type= String{Min1,Max140} ex: Obligated Person who is responsible for continuing financial reporting

XML Container	Data Tag	Definition	Data Specification
	Reporting Schedule Days Post Fiscal Year End	For Financial Reporting Filings, used to indicate the number of days after the end of the Obligated Person fiscal year end on which the filing will be made available	Integer ex: 120
	Reporting Schedule Fiscal Year End Month	For Financial Reporting Filings, used in conjunction with Reporting Schedule to indicate the applicable fiscal year end month	Integer ex: 12
	Reporting Schedule Fiscal Year End Day	For Financial Reporting Filings, used in conjunction with Reporting Schedule to indicate the applicable fiscal year end month day	Integer ex: 31
	Reporting Schedule Additional Information	For Financial Reporting Filings, used to provide free text additional information and/or explanation regarding the reporting schedule	Type= String{Min1,Max140} ex: Some additional information regarding the reporting schedule
	Organization URL	The uniform resource locator (URL) of the issuer's or obligated person's Internet-based investor relations or other repository of financial/operating information	Type= String{Min1,Max140} ex: http://www.url.com
	Organization URL Additional Information	For Financial Reporting Filings, used to provide free text additional information and/or explanation regarding the organization URL	Type= String{Min1,Max140} ex: Some additional information regarding the URL
	Reporting GAAP Standard	An issuer's or obligated person's undertaking to prepare audited financial statements pursuant to generally accepted accounting principles ("GAAP") as established by the Governmental Accounting Standards Board ("GASB"), or pursuant to GAAP as established by the Financial Accounting Standards Board ("FASB"), as applicable to such issuer or obligated person	Enumerated Value: • FASB • GASB
	Reporting GAAP Standard Additional Information	For Financial Reporting Filings, used to provide free text additional information and/or explanation regarding the accounting standard	Type= String{Min1,Max140} ex: Some additional information regarding the compliance with an accounting standard
Securities	Security Type	Indicates whether (i) nine-digit CUSIP numbers are assigned to the securities in the issue, (ii) a six-digit CUSIP number is assigned to the securities in the commercial paper issue, (iii) no CUSIP numbers are assigned to the securities in the issue, or (iv) only a six-digit CUSIP number has been submitted to EMMA for a commercial paper issue	Enumerated Value: • CUSIP9 • CommercialPaper • nonCUSIP • MunicipalFundSecurity
	CUSIP9	Nine-digit CUSIP number for each security, as assigned by the CUSIP Service Bureau – not provided for securities ineligible for CUSIP numbers and for commercial paper issues	Type= String{Min9,Max9} ex: 123456AB7

XML Container	Data Tag	Definition	Data Specification
	CUSIP6	Six-digit base CUSIP number for commercial paper issues, as assigned by the CUSIP Service Bureau	Type= String{Min6,Max6} ex: 123456
	Issuer Name	Reference issuer name as it appears on the official statement or as assigned by the CUSIP Service Bureau	Type= String{Min1,Max250} ex: Emma County Infrastructure Finance Authority
	Issue Description	Reference issue description as it appears on the official statement or as assigned by the CUSIP Service Bureau	Type= String{Min1,Max250} ex: Road Improvement Refunding Bonds, Series 2008A
	Issuer State	Standard state abbreviation	Type= String;StateCode;2 (pattern value="[A-Z]{2,2}") ex: VA
	Issue Dated Date	Dated date of the issue	Type= ISODate (CCYY-MM-DD) ex: 2008-12-01
	Security Status	Indicates the association of a security or issue and the continuing disclosure filing information. If a security or issue is removed from a filing, the security status will indicate publish withdrawn	Enumerated Value: - Published - PublishWithdrawn

Sample Disclosure Data Messages

Sample XML Data Message – Transaction List

```
"<? xml version="1.0" encoding="utf-16"?>
<ArrayOfEmmaTransaction xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <EmmaTransaction>
    <SubmissionId>X2456945</SubmissionId>
    <PostingDateTime>2014-01-10T14:14:42.640552</PostingDateTime>
  </EmmaTransaction>
  <EmmaTransaction>
    <SubmissionId>X2456946</SubmissionId>
    <PostingDateTime>2014-01-10T14:15:41.109378</PostingDateTime>
  </EmmaTransaction>
  <EmmaTransaction>
    <SubmissionId>X2456947</SubmissionId>
    <PostingDateTime>2014-01-10T14:16:32.953128</PostingDateTime>
  </EmmaTransaction>
</ArrayOfEmmaTransaction>"
```

Sample XML Data Message – CUSIP9

```
<FinancialReportingSubmission xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-
                             instance" SubmissionIdentifier="ER419569"
                             TransactionDateTime="2011-06-
                             22T16:52:41.625886"
                             xmlns="http://emma.msrb.org/schemas/subscriptionm
                             essages/types">

  <DisclosureIndexingData>
    <ObligatedPersonsForContinuingDisclosureFiling ObligatedPersonType="Issuer"
      NameOfObligatedPersonForContinuingDisclosureFiling="Village of EMMA"
      ReportingScheduleDaysPostFiscalYearEnd="150"
      ReportingScheduleFiscalYearEndMonth="12"
      ReportingScheduleFiscalYearEndDay="31"
      ReportingGAAPStandard="GASB" />

    <Securities SecurityType="CUSIP9">
      <Security CUSIP9="492999CH8" SecurityStatus="Published" />
      <Security CUSIP9="492999CJ4" SecurityStatus="Published" />
      <Security CUSIP9="492999CK1" SecurityStatus="Published" />
      <Security CUSIP9="492999CL9" SecurityStatus="Published" />
      <Security CUSIP9="492999CM7" SecurityStatus="Published" />
    </Securities>
  </DisclosureIndexingData>
```

Sample XML Data Message – Commercial Paper

```
<FinancialReportingSubmission xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-
                             instance" SubmissionIdentifier="ER419569"
                             TransactionDateTime="2011-06-
                             22T16:52:41.625886"
                             xmlns="http://emma.msrb.org/schemas/subscriptionm
                             essages/types">

  <DisclosureIndexingData>
    <ObligatedPersonsForContinuingDisclosureFiling ObligatedPersonType="Issuer"
      NameOfObligatedPersonForContinuingDisclosureFiling="Village of EMMA"
      ReportingScheduleDaysPostFiscalYearEnd="150"
      ReportingScheduleFiscalYearEndMonth="12"
      ReportingScheduleFiscalYearEndDay="31"
      ReportingGAAPStandard="GASB" />

    <Securities SecurityType="CommercialPaper">
      <Security CUSIP9="4929HA" SecurityStatus="Published" />
    </Securities>
  </DisclosureIndexingData>
```

Sample XML Data Message – Ineligible for CUSIP Number Assignment (NON-CUSIP)

```
<FinancialReportingSubmission xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-
                             instance" SubmissionIdentifier="ER419569"
                             TransactionDateTime="2011-06-
                             22T16:52:41.625886"
                             xmlns="http://emma.msrb.org/schemas/subscriptionm
                             essages/types ">

  <DisclosureIndexingData>
    <ObligatedPersonsForContinuingDisclosureFiling ObligatedPersonType="Issuer"
      NameOfObligatedPersonForContinuingDisclosureFiling="Village of EMMA"
      ReportingScheduleDaysPostFiscalYearEnd="150"
      ReportingScheduleFiscalYearEndMonth="12"
      ReportingScheduleFiscalYearEndDay="31"
      ReportingGAAPStandard="GASB" />

    <Securities SecurityType="nonCUSIP">
      <Security IssuerName='EMMA' IssueDescription='EMMA New Building Construction'
        IssuerState='VA' SecurityStatus="Published" />
    </Securities>
  </DisclosureIndexingData>
```

Sample XML Data Message – Municipal Fund Security

```
<FinancialReportingSubmission xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-
                             instance" SubmissionIdentifier="ER419569"
                             TransactionDateTime="2011-06-
                             22T16:52:41.625886"
                             xmlns="http://emma.msrb.org/schemas/subscriptionm
                             essages/types ">

  <DisclosureIndexingData>
    <ObligatedPersonsForContinuingDisclosureFiling ObligatedPersonType="Issuer"
      NameOfObligatedPersonForContinuingDisclosureFiling="Village of EMMA"
      ReportingScheduleDaysPostFiscalYearEnd="150"
      ReportingScheduleFiscalYearEndMonth="12"
      ReportingScheduleFiscalYearEndDay="31"
      ReportingGAAPStandard="GASB" />

    <Securities SecurityType="MunicipalFundSecurity">
      <Security IssuerName='EMMA' IssueDescription='EMMA Investment Fund' IssuerState='VA'
        SecurityStatus="Published" />
    </Securities>
  </DisclosureIndexingData>
```

Sample SOAP Messages

SOAP Request Message – Get Transaction List

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
  xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-
  200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
    service/IEmmaSubscriptionService/GetTransactions</a:Action>
    <a:MessageID>urn:uuid:10e93c71-fa08-4729-a81d-5a6ce56cd71b</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <a:To s:mustUnderstand="1">https:// emmaservices
    /SubscriberServices/EmmaSubscriptionService.svc/regulator</a:To>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
    open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T15:19:36.055Z</u:Created>
        <u:Expires>2014-02-14T15:24:36.055Z</u:Expires>
      </u:Timestamp>
      <c:SecurityContextToken u:Id="uuid-8a119f90-be65-4406-a6d2-6131f8e9a308-
      1" xmlns:c="http://schemas.xmlsoap.org/ws/2005/02/sc">
        <c:Identifier>urn:uuid:32bcf390-4019-4b03-b483-
        de99bfd2434f</c:Identifier>
        </c:SecurityContextToken>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"></CanonicalizationMethod>
            <SignatureMethod
            Algorithm="http://www.w3.org/2000/09/xmldsig#hmac-sha1"></SignatureMethod>
            <Reference URI="#_0">
              <Transforms>
                <Transform
                Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"></Transform>
              </Transforms>
              <DigestMethod
              Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
            </Reference>
            <DigestValue>j2n1HKcb1N0J2XdBHh4h8PyHEK0=</DigestValue>
          </SignedInfo>
          <SignatureValue>9wZqUdQaKFqTO3AebPt8mOpfq1w=</SignatureValue>
          <KeyInfo>
            <o:SecurityTokenReference>
              <o:Reference
              ValueType="http://schemas.xmlsoap.org/ws/2005/02/sc/sct" URI="#uuid-8a119f90-be65-4406-a6d2-
              6131f8e9a308-1"></o:Reference>
            </o:SecurityTokenReference>
          </KeyInfo>
        </Signature>
      </o:Security>
    </s:Header>
    <s:Body>
      <GetTransactions /">
        <submissionType>FR</submissionType>
        <postingDate>2014-02-13T00:00:00</postingDate>
      </GetTransactions>
    </s:Body>
  </s:Envelope>

```

```

    </s:Body>
  </s:Envelope>

```

SOAP Response Message – Return Transaction List

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
  xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-
  open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
  service/IEmmaSubscriptionService/GetTransactionsResponse</a:Action>
    <ActivityId CorrelationId="39e2e1ca-2924-4aa6-9c1c-86b9254970d1"
  xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">05803968-d604-4cd1-
  bc0c-4500a0b6a0b1</ActivityId<http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics%22
  %3E05803968-d604-4cd1-bc0c-4500a0b6a0b1%3C/ActivityId>>
    <a:RelatesTo>urn:uuid:10e93c71-fa08-4729-a81d-5a6ce56cd71b</a:RelatesTo>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
  open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T15:19:37.361Z</u:Created>
        <u:Expires>2014-02-14T15:24:37.361Z</u:Expires>
      </u:Timestamp>
    </o:Security>
  </s:Header>
  <s:Body>
    <GetTransactionsResponse /">
      <GetTransactionsResult
  xmlns:b="http://schemas.datacontract.org/2004/07/SubscriberServices.ViewModels"
  xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:RequestId>bd49cbc6-19fa-42d5-8c9e-
  1d42874bbfb5</b:RequestId>
        <b:RequestedPostingDate>2014-02-
  13T00:00:00</b:RequestedPostingDate>
        <b:RequestedSubmissionType>PM</b:RequestedSubmissionType>
        <b:StatusCode>200</b:StatusCode>
        <b:Transactions>
          <b:EmmaTransaction>
            <b:PostingDateTime>2014-02-
  13T15:06:11.765471</b:PostingDateTime>
            <b:SubmissionId>X2457377</b:SubmissionId>
          </b:EmmaTransaction>
        </b:Transactions>
      </GetTransactionsResult>
    </GetTransactionsResponse>
  </s:Body>
</s:Envelope>

```

SOAP Request Message – Get Transaction Data

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
  xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-
  200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
    service/IEmmaSubscriptionService/GetTransaction</a:Action>
    <a:MessageID>urn:uuid:28c673c5-bc51-4328-8164-5f1facac0c55</a:MessageID>
    <a:ReplyTo>
      <a:Address>http://www.w3.org/2005/08/addressing/anonymous</a:Address>
    </a:ReplyTo>
    <a:To s:mustUnderstand="1">https:// SubscriberServices
    /SubscriberServices/EmmaSubscriptionService.svc/regulator</a:To>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
    open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T16:00:26.675Z</u:Created>
        <u:Expires>2014-02-14T16:05:26.675Z</u:Expires>
      </u:Timestamp>
      <c:SecurityContextToken u:Id="uuid-a3382ec4-feac-4655-801c-05e31799db60-
      3" xmlns:c="http://schemas.xmlsoap.org/ws/2005/02/sc">
        <c:Identifier>urn:uuid:9ee66f39-1c88-4b9e-b6e7-
        91df2192f8e8</c:Identifier>
        </c:SecurityContextToken>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"></CanonicalizationMethod>
            <SignatureMethod
            Algorithm="http://www.w3.org/2000/09/xmldsig#hmac-sha1"></SignatureMethod>
            <Reference URI="#_0">
              <Transforms>
                <Transform
                Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"></Transform>
              </Transforms>
              <DigestMethod
              Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
            </Reference>
            <DigestValue>8hnNnopqij5cT6MbQnGe1AR4eU4=</DigestValue>
          </SignedInfo>
          <SignatureValue>dxB5un/Q1/iMI0UcLwt7mxNnRPQ=</SignatureValue>
          <KeyInfo>
            <o:SecurityTokenReference>
              <o:Reference
              ValueType="http://schemas.xmlsoap.org/ws/2005/02/sc/sct" URI="#uuid-a3382ec4-feac-4655-801c-
              05e31799db60-3"></o:Reference>
            </o:SecurityTokenReference>
          </KeyInfo>
        </Signature>
      </o:Security>
    </s:Header>
    <s:Body>
      <GetTransaction /">
        <submissionType>FR</submissionType>
        <postingDateTime>2014-02-13T15:06:11</postingDateTime>
        <submissionId>X2457377</submissionId>
      </GetTransaction>
    </s:Body>
  </s:Envelope>

```

SOAP Response Message – Return Transaction Data

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-
200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
service/IEmmaSubscriptionService/GetTransactionResponse</a:Action>
    <ActivityId CorrelationId="39e2e1ca-2924-4aa6-9c1c-86b9254970d1"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">05803968-d604-4cd1-
bc0c-
4500a0b6a0b1</ActivityId<http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics%22
%3E05803968-d604-4cd1-bc0c-4500a0b6a0b1%3C/ActivityId>>
    <a:RelatesTo>urn:uuid:28c673c5-bc51-4328-8164-5f1facac0c55</a:RelatesTo>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T16:00:27.065Z</u:Created>
        <u:Expires>2014-02-14T16:05:27.065Z</u:Expires>
      </u:Timestamp>
    </o:Security>
  </s:Header>
  <s:Body>
    <GetTransactionResponse /">
      <b:RequestId>508381b9-2f99-41bf-937e-
3a477f36b164</b:RequestId>
      <b:RequestedPostingDateTime>2014-02-
13T15:06:11</b:RequestedPostingDateTime>
      <b:RequestedSubmissionId>Q2457399</b:RequestedSubmissionId>
      <b:RequestedSubmissionType>FR</b:RequestedSubmissionType>
      <b:ReturnData
        <FinancialReportingSubmission
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
SubmissionIdentifier="Q2456999"
TransactionDateTime="2014-01-22T15:20:03.991349"
xmlns="http://emma.msrb.org/schemas/subscriptionmessag
es/types">
      <DisclosureIndexingData>
        <ObligatedPersonsForContinuingDisclosureFiling ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="M
SRB" ReportingScheduleDaysPostFiscalYearEnd="120"
ReportingScheduleFiscalYearEndMonth="2"
ReportingScheduleFiscalYearEndDay="27" />
      <Securities SecurityType="CUSIP9">
        <Security CUSIP9="123456AB1" SecurityStatus="Published" />
      </Securities>
    </DisclosureIndexingData>
  </b:ReturnData>
      <b:StatusCode>200</b:StatusCode>
    <GetTransactionResult
xmlns:b="http://schemas.datacontract.org/2004/07/SubscriberServices.ViewModels"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      </GetTransactionResult>
    </GetTransactionResponse>
  </s:Body>
</s:Envelope>

```

SOAP Response Message – Error Return - Transaction

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
service/IEmmaSubscriptionService/GetTransactionsResponse</a:Action>
    <ActivityId CorrelationId="39e2e1ca-2924-4aa6-9c1c-86b9254970d1"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">05803968-d604-4cd1-
bc0c-4500a0b6a0b1</ActivityId<http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics%22
%3E05803968-d604-4cd1-bc0c-4500a0b6a0b1%3C/ActivityId>>
    <a:RelatesTo>urn:uuid:d1ebc3e1-5627-4eaf-893f-1a6500029f7b</a:RelatesTo>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T17:59:17.608Z</u:Created>
        <u:Expires>2014-02-14T18:04:17.608Z</u:Expires>
      </u:Timestamp>
    </o:Security>
  </s:Header>
  <s:Body>
    <GetTransactionsResponse /">
      <GetTransactionsResult
xmlns:b="http://schemas.datacontract.org/2004/07/SubscriberServices.ViewModels"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:RequestId>46ac4110-ce41-4165-99ce-
b13830318051</b:RequestId>
        <b:RequestedPostingDate>2013-05-
28T00:00:00</b:RequestedPostingDate>
        <b:RequestedSubmissionType>C4</b:RequestedSubmissionType>
        <b:StatusCode>400</b:StatusCode>
        <b:Transactions i:nil="true"></b:Transactions>
      </GetTransactionsResult>
    </GetTransactionsResponse>
  </s:Body>
</s:Envelope>

```

SOAP Response Message – Error Return – Authentication Failed

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
  xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="http://docs.oasis-
  open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <a:Action s:mustUnderstand="1">http://emma.msrb.org/schemas/subscriber-
    service/IEmmaSubscriptionService/GetTransactionsResponse</a:Action>
    <ActivityId CorrelationId="39e2e1ca-2924-4aa6-9c1c-86b9254970d1"
    xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">05803968-d604-4cd1-
    bc0c-4500a0b6a0b1</ActivityId<http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics%22
    %3E05803968-d604-4cd1-bc0c-4500a0b6a0b1%3C/ActivityId>>
    <a:RelatesTo>urn:uuid:d1ebc3e1-5627-4eaf-893f-1a6500029f7b</a:RelatesTo>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-
    open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <u:Timestamp u:Id="_0">
        <u:Created>2014-02-14T17:59:17.608Z</u:Created>
        <u:Expires>2014-02-14T18:04:17.608Z</u:Expires>
      </u:Timestamp>
    </o:Security>
  </s:Header>
  <s:Body>
    <GetTransactionsResponse /">
      <GetTransactionsResult
        xmlns:b="http://schemas.datacontract.org/2004/07/SubscriberServices.ViewModels"
        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:RequestId>46ac4110-ce41-4165-99ce-
        b13830318051</b:RequestId>
        <b:RequestedPostingDate>2013-05-
        28T00:00:00</b:RequestedPostingDate>
        <b:RequestedSubmissionType>FR</b:RequestedSubmissionType>
        <b:StatusCode>401</b:StatusCode>
        <b:Transactions i:nil="true"></b:Transactions>
      </GetTransactionsResult>
    </GetTransactionsResponse>
  </s:Body>
</s:Envelope>

```

Response Messages

Table 2: EMMA Subscription Response Codes

EMMA will generally follow the standard published Hypertext Transfer Protocol (HTTP) response status codes when reporting the status of subscription requests. Listed below are typical EMMA response codes, with descriptions based on specific situations, however, other application specific codes may be returned from time to time without prior notice.

Subscription Response Codes EMMA Subscription Web Service Interface	
Response Code	Description
200	OK
400	Request is not parse-able or bad request
401	Authentication Failed
402	The request is outside the look-back window
403	You are not authorized to subscribe to the submission type requested.
404	Not Found - the reference provided is valid
429	Request frequency violation – as applicable
500	System Error
550	Not Found - the file requested is not found