



MSRB

Municipal Securities
Rulemaking Board

EMMA – Electronic Municipal Market Access

The Official Source for Municipal Disclosures and Market Data

Specifications for the MSRB Primary Market Disclosure Historical Data Product

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August 2015

Revision History

Version	Date	Revision History
1.0	June 2012	Initial version.
1.1	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.

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Introduction

The *EMMA Primary Market Disclosure Historical Data Product* is composed of historical documents and related indexing information made available by the MSRB Primary Market Subscription Service (“Primary Market Real-Time Service”). The Primary Market Real-Time Service disseminates documents and related indexing information submitted to the MSRB Primary Market Submission Service of the MSRB’s Electronic Municipal Market Access (EMMA®) system simultaneously with their posting on the EMMA website. The Primary Market Real-Time service has two distinct streams of data made available through separate web services: the Primary Market Web Service and the Preliminary Official Statement Web Service. The Historical Data Product makes available the documents and data from both services.

This specifications manual provides the hierarchical arrangement of the document and data structure as it appears on the storage device (such as CD, DVD, or external hard drive) and the data specifications for the EMMA Primary Market Subscription Service. The EMMA Primary Market Disclosure Historical Data Product may be purchased in any consecutive twelve-month data set.

This manual consists of two parts:

Part I contains specifications for the historical documents and data made available through the Primary Market Web Service and is used to obtain official statements, certain preliminary official statements and advance refunding documents submitted by underwriters under MSRB Rule G-32, as well as similar documents submitted voluntarily by issuers.

Part II contains specifications for the historical documents and data made available through the Preliminary Official Statement Web Service and is used to obtain preliminary official statements and related pre-sale documents, such as a notice of sale, submitted voluntarily by issuers.

Background

The *Primary Market Disclosure Historical Data Product* is delivered to purchasers subject to the terms and conditions of a purchase agreement entered into with the MSRB. In addition, to purchase the data product 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 are available at www.msrb.org.

In June 2009, the MSRB created the Primary Market Web Service Interface, making available primary market documents and related information submitted by underwriters to the MSRB Primary Market Submission Service.

In May 2011, the MSRB added the Preliminary Official Statement Web Service Interface. This new interface allows subscribers to obtain additional types of documents being submitted by issuers to the Primary Market Submission Service, including preliminary official statements and other pre-sale documents.

The *MSRB Primary Market Disclosure Historical Data Product*, which became available in June 2012, provides an avenue for obtaining the same set of documents and related indexing information that were previously published on a real-time basis through the Primary Market and Preliminary Official Statement Web Service Interfaces.

Part I: Specifications for the Primary Market Disclosure Historical Data Product

Data and Document Delivery

The Primary Market Disclosure Historical Data Product provides PDF files of primary market documents, and associated XML files of indexing data, submitted to the EMMA primary market disclosure service through both the EMMA web interface and the automated submission interface.

Figure 1 shows the hierarchical structure and relationship of data and documents stored on the historical subscription delivery device. Historical disclosure documents, along with associated indexing data, are available on a storage device. The indexing data is organized in a hierarchical directory by date (e.g. CCYY MM DD) based on the SubmissionTransactionDateTime (e.g. "2008-03-20T00:00:00"). Associated disclosure documents are located in corresponding directories and may be associated with the data messages via the File ID references (e.g. FileIdentifier="MS223987-2").

Overview of Schemas and Data Tags

The Historical Data Product utilizes the same schemas and definitions as the current version of the Primary Market Subscription Service. This document refers to a series of figures and tables providing more detailed information about the Primary Market Subscription Service. An XML data schema and a type definition schema are included in **Figure 2**. A data tag glossary is provided in **Figure 3**.¹

Data Message

Data elements disseminated through the Primary Market Web Service Interface are organized in a hierarchical relationship into the following categories: (i) subscriber data; (ii) submission data; (iii) offering data; (iv) issue data; (v) security data; (vi) document data; (vii) file data; and (viii) limited offering contact data. These categories, and the available data tags applicable to each category, are included in **Figure 4** and are also summarized below:

¹ The descriptions of the submission data elements to be provided by submitters to EMMA as described in the MSRB Primary Market Submission Specifications provide more detailed information about the data elements to be disseminated to subscribers through the primary market subscription service.

- **Subscriber Data**
 - i. submission transaction count (indicates number of submissions in data message)
 - ii. replay date (if data replay requested by subscriber, indicates period of data replay)
NOTE: See **Figure 1** - If a subscriber calls the GetSubscriptionReplayData Method, which has been deprecated and will not be functional after January 1, 2012, the call will return the following exception message: “The GetSubscriptionReplayData Method for subscription services expired on <DATE>”
- **Submission Data**
 - i. submission identifier (uniquely identifies submission being disseminated)
 - ii. submission type (primary market disclosure, advance refunding disclosure)
 - iii. submission status (publish, notice of cancellation of offering)
 - iv. submission transaction date and time (indicates EMMA posting date and time)
- **Offering Data**
 - i. offering type (bond, municipal fund security)
 - ii. underwriting spread (if no underwriting spread disclosure indicator used)
 - iii. underwriting spread disclosure indicator (if underwriting spread not provided – disclosed in official statement, not disclosed for competitive sale)
 - iv. OS availability status (as applicable – indicates if official statement not available at closing, if no official statement is available and applicable exemption under Rule 15c2-12, if official statement available only from underwriter for limited offering under Rule 15c2-12)
 - v. POS availability status (if OS availability status used – indicates if preliminary official statement is available or is not available)
 - vi. CUSIP-9 of latest maturity on issue not underwritten (provided only for offerings where different underwriters underwrite separate issues in the offering)²
- **Issue Data (each element provided for each issue in the offering, as applicable)³**
 - i. issue type (new issue, remarketed, refunded)
 - ii. security type (CUSIP-9, Non-CUSIP, commercial paper)⁴
 - iii. issuer name (full name as entered by submitter)
 - iv. issue description (full description as entered by submitter)
 - v. issuer state
 - vi. issue closing date
 - vii. issue dated date
 - viii. original dated date (for remarketings if CUSIP-9 is unchanged and new dated date is assigned)
 - ix. original CUSIP-9 of remarketed security (provided only if new CUSIP-9 number is assigned to a remarketed issue)
 - x. CUSIP-6 (provided only for commercial paper issue where CUSIP-9s are not submitted to EMMA or for Non-CUSIP issues if CUSIP-6 of issuer is known)

² Note that the “CUSIP-9 of latest maturity on issue not underwritten” is moved from the issue data category in the preliminary specifications to the offering data category

³ Note that the “CUSIP-9 of latest maturity on issue not underwritten” is moved from the issue data category in the preliminary specifications to the offering data category

⁴ Note that the “CUSIP-6” is renamed from the preliminary specifications to “commercial paper”

- xi. indicator (Yes or No) based on whether issuer or other obligated persons have agreed to undertake to provide Continuing Disclosure information as contemplated by Exchange Rule 15c2-12
- **Obligated Person**
 - i. obligated person type (issuer or other) who has agreed to provide to EMMA continuing disclosure documents
 - ii. name of obligated person for continuing disclosure filing that has or will undertake, or is otherwise expected to provide, continuing disclosure
- **Disclosure Filing Schedule**
 - i. schedule basis for filing can be provided either as a specific date each year (CalendarYear basis, i.e., month and day, such as June 30) or the number of days or months after the end of the fiscal year (FiscalYear basis, i.e., such as 120 days after the end of the fiscal year December 31)
 - ii. calendar year annual filing month indicates the CalendarYear month of the specific date of each year of the continuing disclosure undertaking
 - iii. calendar year annual filing day indicates the CalendarYear day of the specific date of each year of the continuing disclosure undertaking
 - iv. fiscal year end month indicates the FiscalYearEnd month of the obligated person's fiscal year
 - v. fiscal year end day indicates the FiscalYearEnd day of the obligated person's fiscal year
 - vi. month or day count after fiscal year end when filing expected indicates the number of days or months after a specified end date of the issuer's or obligated person's fiscal year of the continuing disclosure undertaking
 - vii. month or day after fiscal year end when filing expected indicates whether the number provided after a specified end date of the issuer's or obligated person's fiscal year is a "day" or "month" count
- **Security Data**
 - i. CUSIP-9 (as applicable for new issue or remarketed issue type but not provided for municipal fund security issue type or Non-CUSIP or CUSIP-6 security type)
 - ii. maturity date
 - iii. security dated date (if different from issue dated date)
 - iv. maturity principal amount
 - v. interest rate
 - vi. initial offering price or yield⁵
 - vii. security status (as applicable if underwriter is only underwriting a portion of an issue – not underwritten indicates that this security is underwritten by a different underwriter, partially underwritten indicates that underwriter is underwriting a portion of this security and the remaining portion is underwritten by another underwriter)
 - viii. par value underwritten (if security is partially underwritten, represents portion of security underwritten by the underwriter)⁶
 - ix. original CUSIP-9 of refunded security (used only for refunded issue type – not provided for Non-CUSIP or CUSIP-6 security type)
 - x. new CUSIP-9 of refunded security (used only for refunded issue type if new CUSIP-9 assigned for refunded portion of partially refunded security)

⁵ Note that the "initial offering price or yield range" is removed and was included in the preliminary specifications prior to the final specifications.

⁶ Note that the MSRB has renamed the data element "Underwritten Indicator" in the preliminary specifications to "Security Status." Further, selection choices "Underwritten," "Remarketed," and "Not Remarketed" are added to the final specifications.

- xi. new CUSIP-9 for unrefunded balance (used only for refunded issue type if new CUSIP-9 assigned for unrefunded balance of partially refunded security)
- **Document Data (each element provided for each document associated with the submission, as applicable)⁷**
 - i. document identifier (uniquely identifies submission being disseminated)
 - ii. document type (official statement, preliminary official statement, advance refunding document, remarketing supplement, municipal fund security disclosure document, municipal fund security disclosure document supplement)
 - iii. document description
 - iv. document status (current, archived, removed)⁸
 - v. document posting date (date first file of document posted to public on EMMA)
 - vi. document archive date (date document moved to EMMA archive)
 - vii. document remove date (date document removed from EMMA)⁹
 - viii. CUSIP-9 identifier of refunding issue (only for advance refunding document – provided for each advance refunding issue applicable to such document)
 - ix. original CUSIP-9 of refunded security (only for advance refunding document – provided for each refunded security applicable to such advance refunding document)
- **File Data (each element provided for each file of a document, as applicable) –**
 - i. file identifier (unique identifier for each PDF file of the document)
 - ii. file order (as applicable if multiple files for the document are submitted)
 - iii. file status (current, archived, removed)¹⁰
 - iv. file posting date (date file posted to public on EMMA)
 - v. file remove date (date file removed from EMMA)¹¹
- **Limited Offering Contact (provided only if an official statement for an offering exempt from Rule 15c2-12(d)(1)(i) is produced but will not be submitted to EMMA)**
 - i. OS contact organization name
 - ii. OS contact first name
 - iii. OS contact last name
 - iv. OS contact title
 - v. OS contact phone number


⁷ Note that the “document disclosure completion indicator” and “document posting operation indicator” were included in the preliminary specifications but were removed from the final specifications.

⁸ Selection choice “Removed” is added to the final specifications. The document archive for each issue or security generally contains all documents submitted to EMMA for public dissemination with respect to such issue or security. In addition to “current” documents posted on their respective Issue Detail or Security Detail page on the EMMA portal, the archive sometimes includes duplicate submissions of documents that may occur from time to time, as well as documents that may be superseded through subsequent amendatory submissions to EMMA. Such superseded documents are moved from the “current” document list on the Issue Detail or Security Detail page to the “archive” list available to the public through the archive link appearing on such Issue Detail or Security Detail page. In very limited circumstances, a document may be removed altogether from EMMA, in which case the document status would be listed as “removed.”

⁹ Note that the “document remove date” is added and was not included in the preliminary specifications prior to the final specifications.

¹⁰ Selection choice “Removed” is added to the final specifications. See footnote 11 *supra*.

¹¹ Note that the “file remove date” is added and was not included in the preliminary specifications prior to the final specifications.

- 
- vi. OS contact phone number extension
 - vii. OS contact address
 - viii. OS contact city
 - ix. OS contact state
 - x. OS contact zip code
 - xi. OS contact email address

Several examples of XML files disseminating data submissions for various types of primary market disclosures and advance refunding disclosures are included in **Figure 5**.



Primary Market Disclosure Historical Data Product Specification Figures

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Figure 1: Storage of Historical Information

Data and Document Hierarchical Profile

Indexing data and document files are hierarchically arranged on the storage device by the year (YYYY) then by month (MM) and day (DD).

- The “Doc” directory contains the disclosure documents in PDF format. The PDF files are uniquely named by their File ID (e.g., “EA123456.pdf”).
- The “Index Data” directory contains indexing information about the disclosure documents in XML format. The XML files are uniquely named by their transaction ID (e.g. “EP7891023.xml”).

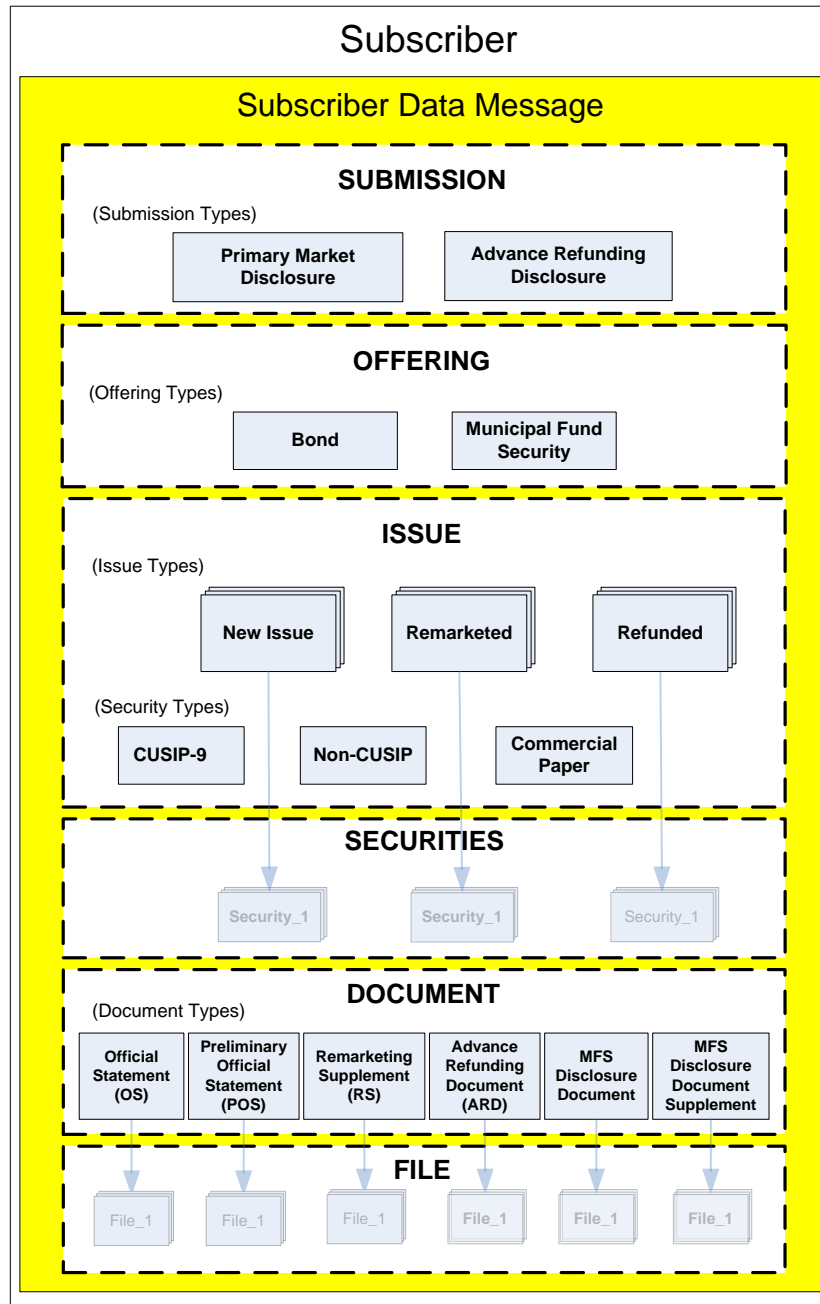
Some submissions have multiple submission events (“transactions”) because the submitter returned and modified the original submission one or more times. Each transaction is recorded in a separate XML file in the “Index Data” directory. Multiple transactions for the same submission share the same value in the ‘SubmissionIdentifier’ field.

Where multiple transactions exist for a single submission, the most recent transaction will contain the complete, up-to-date information and the earlier transactions can be discarded or overwritten completely. The ‘SubmissionTransactionDateTime’ field can be used to determine which XML file contains the transaction with the most recent transaction for that submission.

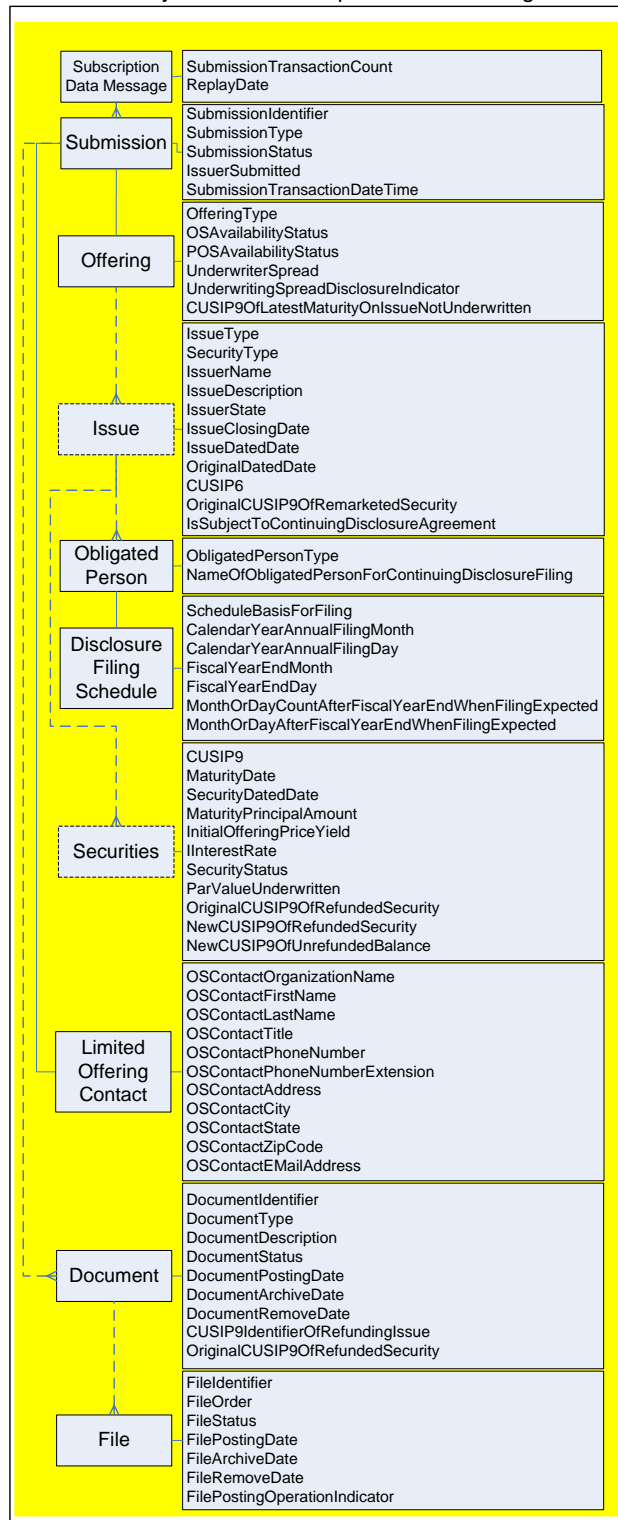
Some dates in the “Doc” or “Index Data” directories are not populated with XML files, documents, or both due to submissions not being received on that date.

Figure 2: Data Message & Type Definition Schemas

Data Message & Type Definition Schemas



Primary Market Subscription Data Message



XML MESSAGE SCHEMAS

Detailed below are Data, Document and Type Definition schemas. The Data and Document schemas describe the base structural containers which in turn reference child-level containers and specifications described in the Type Definition schema.

Data Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBSCRIPTION-XML" targetNamespace="EMMA-
SUBSCRIPTION-XML" elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include
    schemaLocation="C:\EMMA\EMMA_B2B\Schema\PrimaryMarket\Subscription\EMMA_B2B_SUBSCRIPTION_TypeDefinition_Schema_v
15.xsd"/>
  <xs:element name="SubscriptionDataMessage" type="SubscriptionDataMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="SubscriptionDataMessageType">
    <xs:sequence>
      <xs:element name="Submission" type="SubmissionDetailsType" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="SubmissionTransactionCount" type="xs:integer"/>
    <xs:attribute name="ReplayDate" type="ISODate"/>
  </xs:complexType>
  <xs:complexType name="SubmissionDetailsType">
    <xs:sequence>
      <xs:element name="Offering" type="OfferingDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Document" type="DocumentDetailsType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="OSAvailabilityContactInformation" type="OSAvailabilityContactInformationType" minOccurs="0"
maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="SubmissionIdentifier" type="Max25Text" use="required"/>
    <xs:attribute name="SubmissionType" type="SubmissionType" use="required"/>
    <xs:attribute name="SubmissionStatus" type="SubmissionStatusType"/>
    <xs:attribute name="SubmissionTransactionDateTime" type="ISODateTime"/>
  </xs:complexType>
</xs:schema>
```

Document Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML" elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include schemaLocation="..."/>
  <xs:element name="SubscriptionDocumentMessage" type="SubscriptionDocumentMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="SubscriptionDocumentMessageType">
    <xs:sequence>
      <xs:element name="File" type="FileDetailsType" minOccurs="1" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <!-- Type definition ends -->
</xs:schema>
```

Type Definition Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <!-- Type Definition starts -->
  <xs:complexType name="OfferingDetailsType">
    <xs:sequence>
      <xs:element name="Issue" type="IssuesType" maxOccurs="unbounded"/>
      <xs:element name="CUSIP9OfLatestMaturityOnIssueNotUnderwritten" type="Cusip9Type" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="OfferingType" type="OfferingType"/>
    <xs:attribute name="OSAvailabilityStatus" type="OSAvailabilityStatusType"/>
    <xs:attribute name="POSAvailabilityStatus" type="POSAvailabilityStatusType"/>
    <xs:attribute name="UnderwritingSpreadDisclosureIndicator" type="UnderwritingSpreadDisclosureIndicatorType"/>
    <xs:attribute name="UnderwritingSpread" type="xs:float"/>
  </xs:complexType>
  <xs:complexType name="IssuesType">
    <xs:sequence>
      <xs:element name="OriginalCUSIP9OfRemarketedSecurity" type="Cusip9Type" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

```

    <xs:element name="ObligatedPersonsForContinuingDisclosureFiling"
      type="ObligatedPersonsForContinuingDisclosureFilingType" minOccurs="0" maxOccurs="1"/>
    <xs:element name="UnderlyingSecurities" type="UnderlyingSecuritiesType" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
  <xs:attribute name="IsSubjectToContinuingDisclosureAgreement" type="IsSubjectToContinuingDisclosureAgreementType"/>
  <xs:attribute name="IssueType" type="IssueType"/>
  <xs:attribute name="SecurityType" type="SecurityType"/>
  <xs:attribute name="IssueDescription" type="Max250Text"/>
  <xs:attribute name="IssuerName" type="Max250Text"/>
  <xs:attribute name="IssuerState" type="StateCode"/>
  <xs:attribute name="IssueClosingDate" type="ISODate"/>
  <xs:attribute name="IssueDatedDate" type="ISODate"/>
  <xs:attribute name="OriginalDatedDate" type="ISODate"/>
  <xs:attribute name="CUSIP6" type="Cusip6Type"/>
<xs:complexType name="ObligatedPersonsForContinuingDisclosureFilingType">
  <xs:sequence>
    <xs:element name="ObligatedPerson" type="ObligatedPersonsType" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ObligatedPersonsType">
  <xs:sequence>
    <xs:element name="DisclosureFilingSchedule" type="DisclosureFilingScheduleType" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
  <xs:attribute name="ObligatedPersonType" type="PersonType"/>
  <xs:attribute name="NameOfObligatedPersonForContinuingDisclosureFiling" type="Max250Text"/>
</xs:complexType>
<xs:complexType name="DisclosureFilingScheduleType">
  <xs:attribute name="ScheduleBasisForFiling" type="ScheduleTypes"/>
  <xs:attribute name="CalendarYearAnnualFilingMonth" type="MonthType"/>
  <xs:attribute name="CalendarYearAnnualFilingDay" type="xs:integer"/>
  <xs:attribute name="FiscalYearEndMonth" type="MonthType"/>
  <xs:attribute name="FiscalYearEndDay" type="xs:integer"/>
  <xs:attribute name="MonthOrDayCountAfterFiscalYearEndWhenFilingExpected" type="xs:integer"/>
  <xs:attribute name="MonthOrDayAfterFiscalYearEndWhenFilingExpected" type="MonthDayType"/>
</xs:complexType>
</xs:complexType>
<xs:complexType name="UnderlyingSecuritiesType">
  <xs:sequence>

```

```

        <xs:element name="Security" type="SecurityDetailsType" maxOccurs="unbounded"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="SecurityDetailsType">
    <xs:attribute name="CUSIP9" type="Cusip9Type"/>
    <xs:attribute name="MaturityDate" type="ISODate"/>
    <xs:attribute name="SecurityDatedDate" type="ISODate"/>
    <xs:attribute name="InitialOfferingPriceYield" type="xs:float"/>
    <xs:attribute name="MaturityPrincipalAmount" type="xs:decimal"/>
    <xs:attribute name="InterestRate" type="xs:decimal"/>
    <xs:attribute name="SecurityStatus" type="SecurityStatusType"/>
    <xs:attribute name="ParValueUnderwritten" type="xs:decimal"/>
    <xs:attribute name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
    <xs:attribute name="NewCUSIP9OfUnrefundedBalance" type="Cusip9Type"/>
    <xs:attribute name="NewCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
</xs:complexType>
<xs:simpleType name="IsSubjectToContinuingDisclosureAgreementType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Yes"/>
        <xs:enumeration value="No"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ScheduleTypes">
    <xs:restriction base="xs:string">
        <xs:enumeration value="CalendarYear"/>
        <xs:enumeration value="FiscalYearEnd"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="MonthDayType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Day"/>
        <xs:enumeration value="Month"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="MonthType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="1"/>
        <xs:enumeration value="2"/>
    </xs:restriction>
</xs:simpleType>

```

```

        <xs:enumeration value="3"/>
        <xs:enumeration value="4"/>
        <xs:enumeration value="5"/>
        <xs:enumeration value="6"/>
        <xs:enumeration value="7"/>
        <xs:enumeration value="8"/>
        <xs:enumeration value="9"/>
        <xs:enumeration value="10"/>
        <xs:enumeration value="11"/>
        <xs:enumeration value="12"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="PersonType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Issuer"/>
        <xs:enumeration value="Other"/>
    </xs:restriction>
</xs:simpleType>
<xs:complexType name="DocumentDetailsType">
    <xs:sequence>
        <xs:element name="CUSIP9IdentifierOfRefundingIssue" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
        <xs:element name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
        <xs:element name="UnderlyingFiles" type="UnderlyingFileType" maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="DocumentIdentifier" type="Max25Text"/>
    <xs:attribute name="DocumentType" type="DocumentType"/>
    <xs:attribute name="DocumentDescription" type="Max75Text"/>
    <xs:attribute name="DocumentStatus" type="DocumentStatusType"/>
    <xs:attribute name="DocumentPostingDate" type="ISODate"/>
    <xs:attribute name="DocumentArchiveDate" type="ISODate"/>
    <xs:attribute name="DocumentRemoveDate" type="ISODate"/>
</xs:complexType>
<xs:complexType name="UnderlyingFileType">
    <xs:sequence>
        <xs:element name="File" type="FileDetailsType" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="FileDetailsType">

```

```

<xs:attribute name="FileIdentifier" type="Max25Text"/>
<xs:attribute name="FileOrder" type="xs:integer"/>
<xs:attribute name="EffectiveDate" type="ISODate"/>
<xs:attribute name="FileStatus" type="DocumentStatusType"/>
<xs:attribute name="FilePostingDate" type="ISODate"/>
<xs:attribute name="FileArchiveDate" type="ISODate"/>
<xs:attribute name="FileRemoveDate" type="ISODate"/>
</xs:complexType>
<xs:complexType name="OSAvailabilityContactInformationType">
  <xs:attribute name="OSContactOrganizationName" type="Max140Text"/>
  <xs:attribute name="OSContactFirstName" type="Max25Text"/>
  <xs:attribute name="OSContactLastName" type="Max25Text"/>
  <xs:attribute name="OSContactTitle" type="Max140Text"/>
  <xs:attribute name="OSContactPhoneNumber" type="Max15Text"/>
  <xs:attribute name="OSContactPhoneNumberExtension" type="Max6Text"/>
  <xs:attribute name="OSContactAddress" type="Max140Text"/>
  <xs:attribute name="OSContactCity" type="Max25Text"/>
  <xs:attribute name="OSContactState" type="StateCode"/>
  <xs:attribute name="OSContactZipCode" type="Max15Text"/>
  <xs:attribute name="OSContactEMailAddress" type="Max50Text"/>
</xs:complexType>
<xs:simpleType name="SubmissionType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="PrimaryMarketDisclosure"/>
    <xs:enumeration value="AdvanceRefundingDisclosure"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SubmissionStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Publish"/>
    <xs:enumeration value="NoticeOfCancellationOfOffering"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OfferingType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Bond"/>
    <xs:enumeration value="MunicipalFundSecurity"/>
  </xs:restriction>

```

```

</xs:simpleType>
<xs:simpleType name="IssueType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="NewIssue"/>
    <xs:enumeration value="Remarketed"/>
    <xs:enumeration value="Refunded"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SecurityType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="CUSIP-9"/>
    <xs:enumeration value="CommercialPaper"/>
    <xs:enumeration value="non-CUSIP"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SecurityStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Underwritten"/>
    <xs:enumeration value="PartiallyUnderwritten"/>
    <xs:enumeration value="NotUnderwritten"/>
    <xs:enumeration value="Remarketed"/>
    <xs:enumeration value="NotRemarketed"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="OfficialStatement"/>
    <xs:enumeration value="PreliminaryOfficialStatement"/>
    <xs:enumeration value="AdvanceRefundingDocument"/>
    <xs:enumeration value="RemarketingSupplement"/>
    <xs:enumeration value="MFSDisclosureDocument"/>
    <xs:enumeration value="MFSDisclosureDocumentSupplement"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Current"/>
    <xs:enumeration value="Archived"/>
  </xs:restriction>

```

```

        <xs:enumeration value="Removed"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="POSAvailabilityStatusType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="POSSubmitted"/>
        <xs:enumeration value="NoPOSPrepared"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OSAvailabilityStatusType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="OSNotAvailableAtClosing"/>
        <xs:enumeration value="OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering"/>
        <xs:enumeration value="OSNotProduced_15c212ExemptLimitedOffering"/>
        <xs:enumeration value="OSNotProduced_15c212ExemptShortTermOffering"/>
        <xs:enumeration value="OSNotProduced_15c212ExemptPuttableOffering"/>
        <xs:enumeration value="OSNotProduced_15c212ExemptSmallOffering"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwritingSpreadDisclosureIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="DisclosedInOfficialStatement"/>
        <xs:enumeration value="NotDisclosed_CompetitiveSale"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip6Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="6"/>
        <xs:maxLength value="6"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip9Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="9"/>
        <xs:maxLength value="9"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="StateCode">

```



```

        <xs:restriction base="xs:string">
            <xs:pattern value="[A-Z]{2,2}" />
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="ISODate">
        <xs:restriction base="xs:date" />
    </xs:simpleType>
    <xs:simpleType name="ISODateTime">
        <xs:restriction base="xs:dateTime" />
    </xs:simpleType>
    <xs:simpleType name="Max250Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1" />
            <xs:maxLength value="250" />
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max140Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1" />
            <xs:maxLength value="140" />
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max75Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1" />
            <xs:maxLength value="75" />
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max50Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1" />
            <xs:maxLength value="50" />
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max25Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1" />
            <xs:maxLength value="25" />
        </xs:restriction>
    </xs:simpleType>

```

```
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max15Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="15"/>
        </xs:restriction>
    </xs:simpleType>
    <xs:simpleType name="Max6Text">
        <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="6"/>
        </xs:restriction>
    </xs:simpleType>
    <!-- Type definition ends -->
</xs:schema>
```

Figure 3: Date Tag Glossary

Data Tag Glossary

The Historical Data Product has many of the same data tags as the Primary Market Web Service Interface. 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 chooses a value and an example of the data format where the submitter enters a value.

Subscription Data Tags Description and Specification Primary Market Web Service Interface			
XML Container	Data Tag	Definition	Data Specification
Subscriber Data Message	Submission Transaction Count	The number of submission transactions contained in the Subscriber Data Message	Integer ex: 37
	Replay Date	For subscriber data requests that contain date parameters, return data will be one day per Subscriber Data Message. The Replay Date will indicate the applicable date to which the content of the data message applies	CCYY-MM-DD ex: 2008-12-01
Submission	Submission Type	Indicates base category of disclosure, consisting of primary market or advance refunding disclosure	Enumerated Value: <ul style="list-style-type: none"> • PrimaryMarketDisclosure • AdvanceRefundingDisclosure
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or as official notice of cancellation of the offering	Enumerated Value: <ul style="list-style-type: none"> • Publish • NoticeOfCancellationOfOffering
	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of submission (the initial submission event) and used by the submitter in connection with subsequent submission events	Max25Text ex: S212345678910

XML Container	Data Tag	Definition	Data Specification
Submission	Submission Transaction Date Time	EMMA-assigned date and time the submission was registered in EMMA	CCYY-MM-DDT00:00:00 ex: 2008-12-01T13:30:00
Offering	Offering Type	Identifies the offering as debt securities, including bonds, notes, certificates of participation and other debt obligations	Enumerated Value: • Bond • Municipal Fund Security
	CUSIP9 Of Latest Maturity On Issue Not Underwritten	Nine-digit CUSIP number of the latest maturity of each issue in the offering that is not underwritten by the underwriter, if any	String{Min9,Max9} ex: 123456AB7
	OS Availability Status	Indicates special availability conditions with respect to the official statement, including whether (i) the official statement will be made available late (after closing); (ii) an official statement has not been produced; or (iii) the official statement produced for a limited offering under Rule 15c2-12(d)(1)(i) is available only from the underwriter	Enumerated Value: • OSNotAvailableAtClosing • OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptShortTermOffering • OSNotProduced_15c212ExemptPuttableOffering • OSNotProduced_15c212ExemptSmallOffering
	POS Availability Status	Indicates special availability conditions with respect to the preliminary official statement where an official statement is not available by closing, including whether (i) the preliminary official statement is being made available or (ii) preliminary official statement has not been produced	Enumerated Value: • POSSubmitted • NoPOSPrepared
	Underwriting Spread	Underwriting spread or agency fee paid to underwriter in a negotiated offering, if not disclosed in official statement (if Underwriting Spread is in dollars – e.g., express \$1,000,000.00 as 1000000; otherwise if in basis points – e.g., express 25 basis points as 0.25) Interpretation of value: If Underwriting Spread value is greater than 100.00 the value will be interpreted as dollars, otherwise as percent.	Float ex: 450245.55 [dollars] or 0.85 [basis points]

XML Container	Data Tag	Definition	Data Specification
Offering	Underwriting Spread Disclosure Indicator	If underwriting spread not submitted to EMMA, indicates whether underwriting spread or agency fee paid is disclosed in official statement or if not disclosed for a competitive sale.	Enumerated Value: <ul style="list-style-type: none"> • DisclosedInOfficialStatement • NotDisclosed_CompetitiveSale
Issue	Is Subject To Continuing Disclosure Agreement	Indicates whether the issuer or other obligated persons have agreed to undertake to provide continuing disclosure information as contemplated by Exchange Act Rule 15c2-12	Enumerated Value: <ul style="list-style-type: none"> • Yes • No
	Issue Type	Indicates whether issue is (i) a new issue (including new money issues and current and advance refunding issues), (ii) an outstanding issue that is being remarketed, or (iii) an outstanding issue that is being refunded	Enumerated Value: <ul style="list-style-type: none"> • NewIssue • Remarketed • Refunded
	Security Type	Indicates whether (i) nine-digit CUSIP numbers are assigned to the securities in the issue, (ii) no CUSIP numbers are assigned to the securities in the issue, or (iii) only a six-digit CUSIP number has been submitted to EMMA for a commercial paper issue	Enumerated Value: <ul style="list-style-type: none"> • CUSIP-9 • CommercialPaper • Non-CUSIP
	Issuer Name	Full issuer name as it appears on the official statement	Max250Text ex: Emma County Infrastructure Finance Authority
	Issue Description	Full issue description as it appears on the official statement	Max250Text ex: Road Improvement Refunding Bonds, Series 2008A
	Issuer State	Standard state abbreviation	String;StateCode;2 ex: VA
	Issue Closing Date	Date on which the issue is expected to settle	CCYY-MM-DD ex: 2008-12-15
	Issue Dated Date	Dated date of the issue	CCYY-MM-DD ex: 2008-12-01
	Original Dated Date	Original dated date of an issue if a new dated date is assigned for the remarketed issue in which the CUSIP number has not changed	CCYY-MM-DD ex: 2008-12-01
CUSIP6	Six-digit base CUSIP number for commercial paper issues, as assigned by the CUSIP Service Bureau	String{Min6,Max6} ex: 123456	

XML Container	Data Tag	Definition	Data Specification
	Original CUSIP9 Of Remarketed Security	Original nine-digit CUSIP number of the latest maturity of an issue being remarketed if one or more new CUSIP numbers are assigned to the remarketed securities	String(Min9,Max9) ex: 123456AB7
Obligated Person	Obligated Person Type	Indicates the type of person(s) (issuer or other obligated person) who has agreed to provide to EMMA continuing disclosure documents pursuant to continuing disclosure undertakings entered into consistent with Exchange Act Rule 15c2-12	Enumerated Value: <ul style="list-style-type: none"> • Issuer • Other
	Name Of Obligated Person For Continuing Disclosure Filing	The name of the entity acting as an obligated person, that has or will undertake, or is otherwise expected to provide, continuing disclosure as identified in the continuing disclosure undertaking	Max140Text ex: Emma County Infrastructure Finance Authority
Disclosure Filing Schedule	Schedule Basis For Filing	The timing for submission of annual financial information can be provided either as a specific date each year (CalendarYear basis, i.e., month and day, such as June 30) or the number of days or months after the end of the fiscal year (FiscalYear basis, i.e., such as 120 days after the end of the fiscal year December 31).	Enumerated Value: <ul style="list-style-type: none"> • CalendarYear • FiscalYearEnd
	Calendar Year Annual Filing Month	Indicates the CalendarYear month of the specific date of each year of the continuing disclosure undertaking	Enumerated Value: <ul style="list-style-type: none"> • 1 (for January) • 2 (for February) • 3 (for March) • 4 (for April) • 5 (for May) • 6 (for June) • 7 (for July) • 8 (for August) • 9 (for September) • 10 (for October) • 11 (for November) • 12 (for December)
	Calendar Year Annual Filing Day	Indicates the CalendarYear day of the specific date of each year of the continuing disclosure undertaking	Integer ex: 31

XML Container	Data Tag	Definition	Data Specification
Disclosure Filing Schedule	Fiscal Year End Month	Indicates the FiscalYearEnd month of the obligated person's fiscal year	Enumerated Value: <ul style="list-style-type: none"> • 1 (for January) • 2 (for February) • 3 (for March) • 4 (for April) • 5 (for May) • 6 (for June) • 7 (for July) • 8 (for August) • 9 (for September) • 10 (for October) • 11 (for November) • 12 (for December)
	Fiscal Year End Day	Indicates the FiscalYearEnd day of the obligated person's fiscal year	Integer ex: 30
	Month Or Day Count After Fiscal Year End When Filing Expected	Indicates the number of days or months after a specified end date of the issuer's or obligated person's fiscal year of the continuing disclosure undertaking	Integer ex: 120 (i.e, 120 days after end of fiscal year) ex: 3 (i.e, 3 months after end of fiscal year)
	Month Or Day After Fiscal Year End When Filing Expected	Indicates whether the number provided after a specified end date of the issuer's or obligated person's fiscal year is a "day" or "month" count	Enumerated Value: <ul style="list-style-type: none"> • Day • Month
Securities	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	String{Min9,Max9} ex: 123456AB7
	Maturity Date	Maturity date of the security – not provided for commercial paper issues	CCYY-MM-DD ex: 2025-12-01
	Security Dated Date	Dated date of security not eligible for CUSIP number assignment	CCYY-MM-DD ex: 2025-12-01
	Maturity Principal Amount	Total principal amount at maturity of the security – not provided for commercial paper issues	Decimal ex: 5000000

XML Container	Data Tag	Definition	Data Specification
Securities	Initial Offering Price Yield	Initial offering price or yield of the security – not provided for commercial paper issues.	Float ex: 100.5 [price] or 3.95 [yield]
	Interest Rate	Interest rate of the security – not provided for commercial paper issues	Decimal ex: 3.9 [fixed rate] or 0 [zero coupon/capital appreciation] or blank [variable rate]
	Security Status	If the underwriter partially underwrites an issue, indicates if a security was not underwritten by the underwriter or if the underwriter underwrote only a portion of a security; or if an issue is partially remarketed, indicates if a security was not remarketed	Enumerated Value: <ul style="list-style-type: none"> • Underwritten • NotUnderwritten • PartiallyUnderwritten • Remarketed • NotRemarketed
	Par Value Underwritten	If the underwriter partially underwrites a security (i.e., Underwritten Indicator = Partially Underwritten), par value of the security underwritten by underwriter	Decimal ex: 2500000
	Original CUSIP9 of Refunded Security	For a refunded issue, provides original CUSIP number(s) for security(ies) being advance refunded	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Refunded Security	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) being advance refunded, if new CUSIP number is assigned to all or a portion of the refunded security	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Unrefunded Balance	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) not being advance refunded, if new CUSIP number is assigned to all or a portion of the unrefunded balance of the refunded security	String{Min9,Max9} ex: 123456AB7
Document	Document Identifier	EMMA-assigned unique identifier for a document of specific document type	Max25Text ex: 2535
	Document Type	Indicates type(s) of documents available for the offering, including (i) official statement, (ii) preliminary official statement, (iii) advance refunding document, (iv) remarketing supplement (v) Municipal Fund Security (MFS) Disclosure Document, or (vi) Municipal Fund Security (MFS) Disclosure Document Supplement	Enumerated Value: <ul style="list-style-type: none"> • OfficialStatement • PreliminaryOfficialStatement • AdvanceRefundingDocument • RemarketingSupplement • MFSDisclosureDocument • MFSDisclosureDocumentSupplement

XML Container	Data Tag	Definition	Data Specification
Document	Document Description	Document name, if any	Max75Text ex: Official Statement or Preliminary Official Statement or Escrow Deposit Agreement or Reoffering Circular
	Document Status	Indication of the active state of a document consisting of current and archived	Enumerated Value: • Current • Archived • Removed
	Document Posting Date	The date the document was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08
	Document Archive Date	The date the document was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
	Document Remove Date	The date the document was removed from a submission on the EMMA primary market disclosure service	CCYY-MM-DD ex: 2008-12-08
	CUSIP9 Identifier Of Refunding Issue	Nine-digit CUSIP number (s) of the refunding issue	String{Min9,Max9} ex: 123456AB7
	Original CUSIP9 of Refunded Security	Original CUSIP number for security being refunded, reflecting the CUSIP number of the security immediately preceding the refunding	String{Min9,Max9} ex: 123456AB7
File	File Identifier	EMMA-assigned unique identifier for electronic file(s) constituting the submitted document	Max25Text ex: MS223986-1
	File Order	If a document consists of more than one electronic file, provides file sequence information	Integer ex: 24
	File Status	Indication of the active state of a file consisting of current and archived	Enumerated Value: • Current • Archived • Removed
	File Posting Date	The date the file was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08

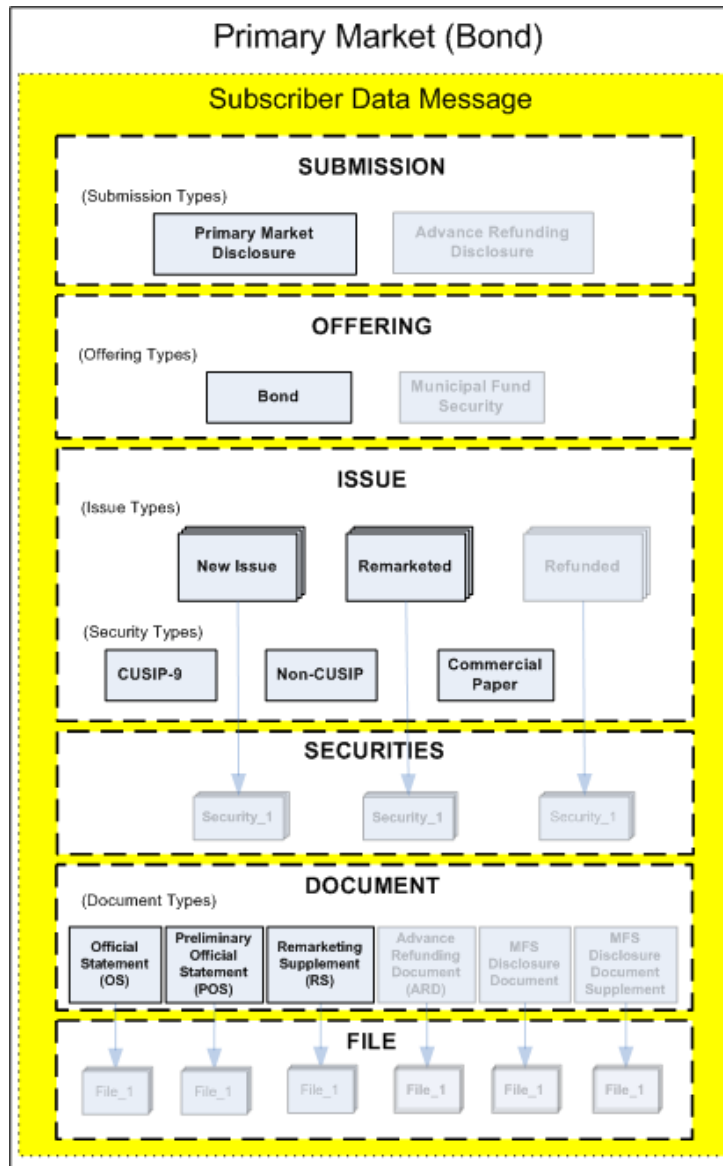
XML Container	Data Tag	Definition	Data Specification
File	File Archive Date	The date the file was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
	File Remove Date	The date the file was removed from a submission on the EMMA primary market disclosure service	CCYY-MM-DD ex: 2008-12-08
Limited Offering Contact	OS Contact Organization Name	Long name of the contact organization responsible for making the official statement available upon request	Max140Text ex: MuniBond Dealer
	OS Contact First Name	The first name of the contact person responsible for making the official statement available upon request	Max25Text ex: Emma
	OS Contact Last Name	The last name of the contact person responsible for making the official statement available upon request	Max25Text ex: Jones
	OS Contact Title	The title of the contact person responsible for making the official statement available upon request	Max140Text ex: Senior Vice President
	OS Contact Phone Number	The phone number of the contact person responsible for making the official statement available upon request	Max15Text ex: 703-555-2222
	OS Contact Phone Number Extension	The extension of the phone number (if any) of the contact person responsible for making the official statement available upon request	Max6Text ex: 1235
	OS Contact Address	The street address or post office box of the contact person responsible for making the official statement available upon request	Max140Text ex: 123 Security Road
	OS Contact City	The address city of the contact person responsible for making the official statement available upon request	Max25Text ex: Alexandria
	OS Contact State	The address state of the contact person responsible for making the official statement available upon request	String;StateCode;2 ex: VA

XML Container	Data Tag	Definition	Data Specification
	OS Contact Zip Code	The address zip code of the contact person responsible for making the official statement available upon request	Max15Text ex: 22301-5555
	OS Contact Email Address	The email address of the contact person responsible for making the official statement available upon request	Max50Text ex: ejones@munibonddealer.com

Figure 4: Data Tag Mapping

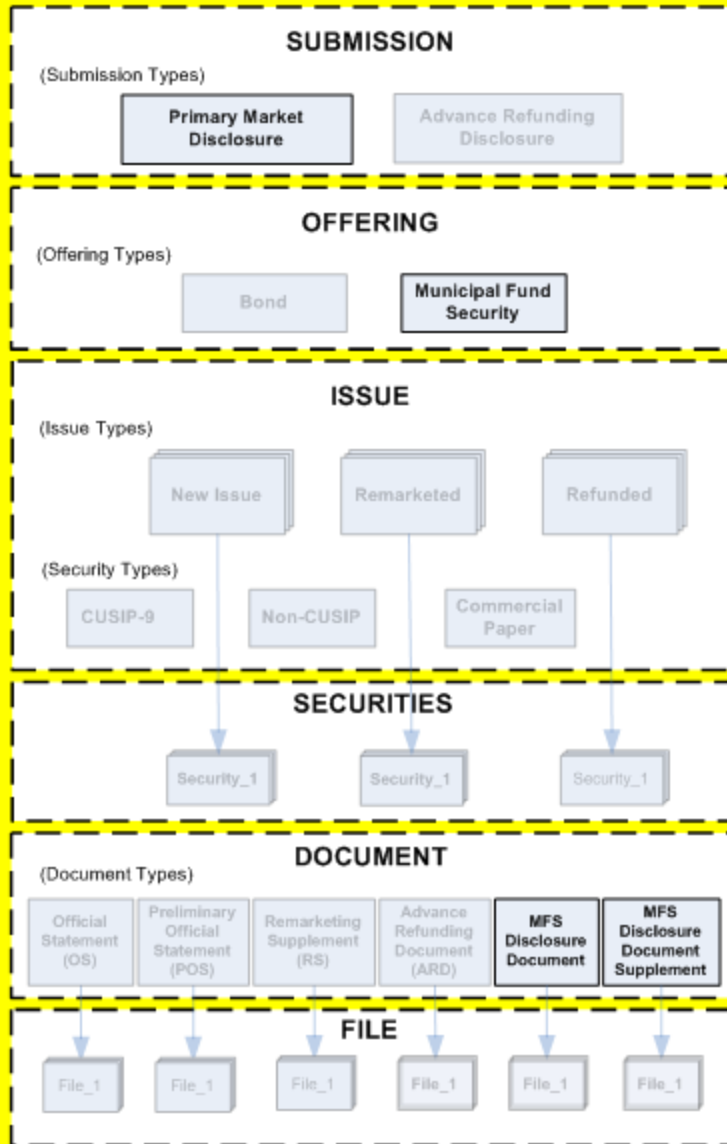
Data Tag Mapping

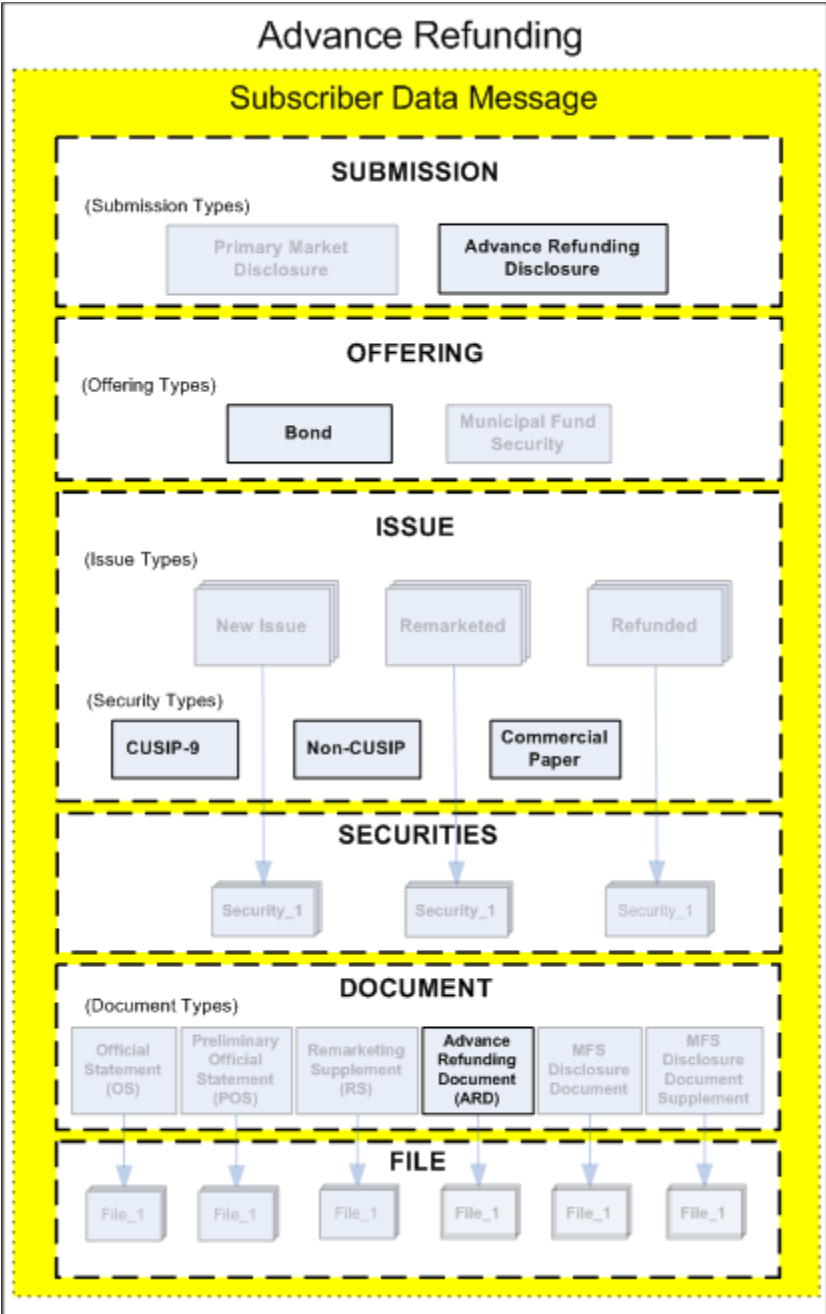
Below are the information types and allowed values associated with subscription messages. Primary market disclosures will consist of offering types “bond” and “municipal fund securities.” Advance refunding disclosures will consist of offering type “bond.” Issue and security types are included as appropriate to describe the nature of the offering. Five types of documents will be disseminated to subscribers: official statements, preliminary official statements, municipal fund securities disclosure documents and municipal fund securities disclosure document supplements. Normally, a document will consist of a single PDF file. If a document consists of multiple files, each file will be disseminated separately.



Primary Market (Municipal Fund Security)

Subscriber Data Message





Primary Market Subscription Data Message

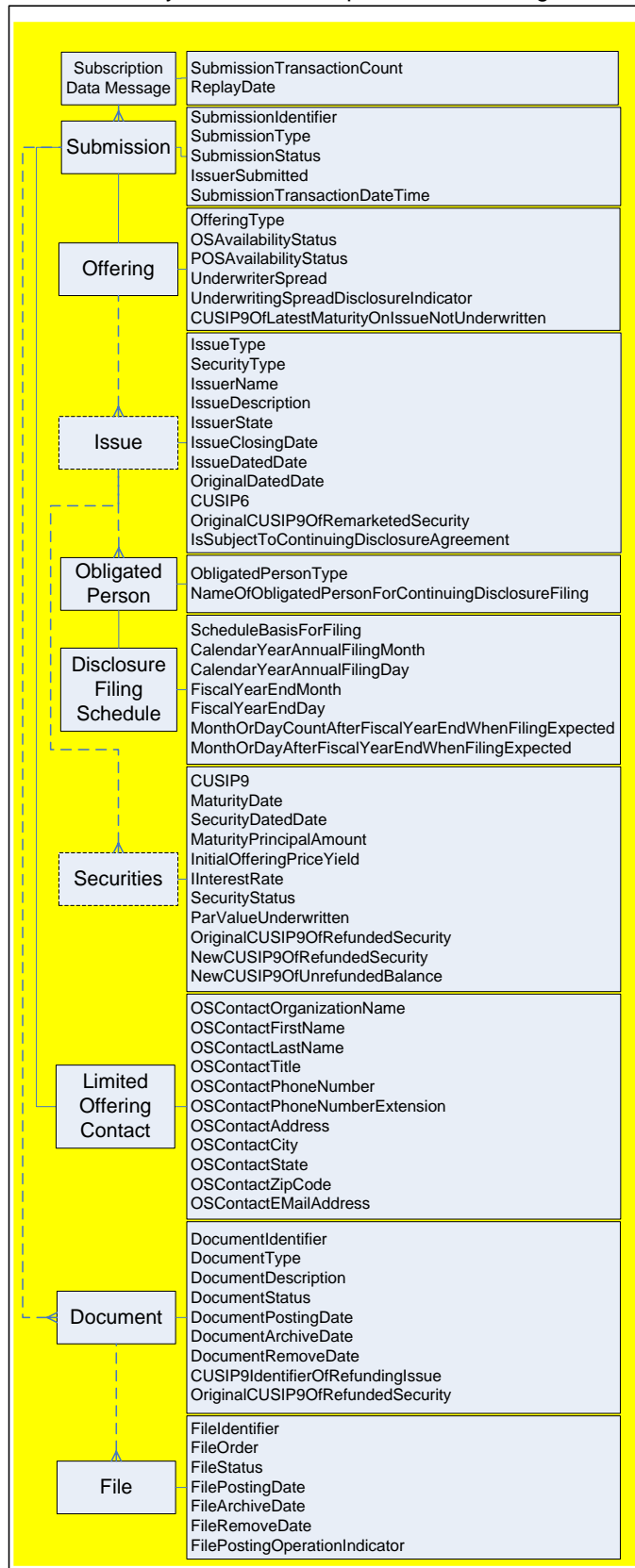


Figure 5: Sample XML Messages

Sample XML Messages

NEW ISSUE

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="1300" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement" >
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssueType="NewIssue" SecurityType="CUSIP-9"
IssuerName="Emma City Industrial Development Agency"
IssueDescription="Public Improvement Revenue Bonds (2008 EMMA University Project), Series A"
IssueClosingDate="2008-12-18">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="Emma City
Industrial Development Agency">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
CalendarYearAnnualFilingMonth="12"
CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
          <ObligatedPerson ObligatedPersonType="Other"
NameOfObligatedPersonForContinuingDisclosureFiling="Other Obligated
Person Expected to Make Filing">
            <DisclosureFilingSchedule ScheduleBasisForFiling="FiscalYearEnd" FiscalYearEndMonth="6"
FiscalYearEndDay="30"
MonthOrDayCountAfterFiscalYearEndWhenFilingExpected="120"
MonthOrDayAfterFiscalYearEndWhenFilingExpected="Day"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
        <UnderlyingSecurities>
          <Security CUSIP9="699438AJ7" MaturityPrincipalAmount="255000.00" InitialOfferingPriceYield="3.88"/>
          <Security CUSIP9="699438AK4" MaturityPrincipalAmount="265000.00" InitialOfferingPriceYield="3.92"/>
          <Security CUSIP9="699438AL2" MaturityPrincipalAmount="275000.00" InitialOfferingPriceYield="3.98"/>
        </UnderlyingSecurities>
      </Issue>
    </Offering>
  </Submission>
</SubscriptionDataMessage>
```



```

SecurityStatus="NotUnderwritten"/>
    <Security CUSIP9="699438AM0" MaturityPrincipalAmount="290000.00"
SecurityStatus="NotUnderwritten"/>
    <Security CUSIP9="699438AN8" MaturityPrincipalAmount="300000.00"
SecurityStatus="NotUnderwritten"/>
    <Security CUSIP9="699438AP3" MaturityPrincipalAmount="315000.00"
SecurityStatus="PartiallyUnderwritten"
    <Security CUSIP9="699438BD9" MaturityPrincipalAmount="7380000.00"
        ParValueUnderwritten="4000000.00" InitialOfferingPriceYield="3.90"/>
    </UnderlyingSecurities>
    </Issue>
    <Issue IssueType="NewIssue" SecurityType="CUSIP-9">
    </Issue>
    <CUSIP9OfLatestMaturityOnIssueNotUnderwritten>699438AH1</CUSIP9OfLatestMaturityOnIssueNotUnderwritten>
</Offering>
<Document DocumentIdentifier="1000" DocumentType="OfficialStatement" DocumentDescription="Offering Circular">
    <UnderlyingFiles>
        <File FileIdentifier="MS223986-1" FileStatus="Current" FilePostingDate="2008-12-06"/>
    </UnderlyingFiles>
</Document>
</Submission>

```

REMARKETING

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="1400" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssueType="Remarketed" SecurityType="CUSIP-9"
IssuerName="Health Facilities Authority of Emma County"
IssueDescription="Variable Rate Demand Retirement Facility Revenue Bonds (Muni Retirement Corporation
Project) Series 2008A" OriginalDatedDate="2008-04-10" IssueClosingDate="2008-05-27">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="Health
Facilities Authority of Emma County">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
CalendarYearAnnualFilingMonth="December" CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
        <UnderlyingSecurities>
          <Security CUSIP9="49833RAX3" MaturityPrincipalAmount="3275000.00"
InitialOfferingPriceYield="100.0"/>
        </UnderlyingSecurities>
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1001" DocumentType="RemarketingSupplement" DocumentDescription="Reoffering
Memorandum">
      <UnderlyingFiles>
        <File FileIdentifier="MS265468-1" FileStatus="Current" FilePostingDate="2008-05-27"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
```

COMMERCIAL PAPER

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="SUB111115" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
    SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssueType="NewIssue" SecurityType="CommercialPaper"
        CUSIP6="694004" IssuerName="Emma County, Virginia"
        IssueDescription="Commercial Paper Program A-2" IssueClosingDate="2008-05-22">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
            NameOfObligatedPersonForContinuingDisclosureFiling="Emma County, Virginia">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
              CalendarYearAnnualFilingMonth="December" CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
      </Issue>
    </Offering>
    <Document DocumentType="OfficialStatement" DocumentDescription="Commercial Paper Memorandum">
      <UnderlyingFiles>
        <File FileIdentifier="MS26776-1" FileStatus="Current" FilePostingDate="2008-05-21"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
</ SubscriptionDataMessage >
```

OFFERING HAVING NO CUSIP NUMBERS

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="SUB111116" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" OSAvailabilityStatus="OSNotProduced_15c212ExemptSmallOffering"
POSAvailabilityStatus="POSSubmitted">
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssueType="NewIssue" SecurityType="non-CUSIP"
IssuerState="NE"
IssuerName="Sanitary Improvement District No. 4858-
1 of Emma County" IssueDescription="Construction Warrants, First Series" IssueClosingDate="2009-05-14"
IssueDatedDate="2009-04-26">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="Emma County, Virginia">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
CalendarYearAnnualFilingMonth="December" CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
        <UnderlyingSecurities>
          <Security SecurityDatedDate="2009-04-26" MaturityDate="2014-04-26"
MaturityPrincipalAmount="149137.36"
InterestRate="6.50" InitialOfferingPriceYield="100.0"/>
        </UnderlyingSecurities>
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1038" DocumentType="PreliminaryOfficialStatement">
      <UnderlyingFiles>
        <File FileIdentifier="MS156903-1" FileOrder="1" FileStatus="Current" FilePostingDate="2009-04-22"/>
      </UnderlyingFiles>
    </Document>
    <Document DocumentIdentifier="1039" DocumentType="PreliminaryOfficialStatement">
      <UnderlyingFiles>
        <File FileIdentifier="MS156904-1" FileOrder="2" FileStatus="Current" FilePostingDate="2009-04-22"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
```

</ SubscriptionDataMessage >

MUNICIPAL FUND SECURITY (529 COLLEGE SAVINGS PLAN)

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="SUB111117" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="MunicipalFundSecurity">
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssuerName="State of Emma"
IssueDescription="529 College Savings Plan – Advisor Series">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="Emma Issuer of State 529 College Savings
Plan">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
CalendarYearAnnualFilingMonth="December" CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1039" DocumentType="MFSDisclosureDocument" DocumentStatus="Current"
DocumentDescription="Plan
Disclosure Document">
      <UnderlyingFiles>
        <File FileIdentifier="MS264639-1" FileOrder="1" FilePostingDate="2008-08-25" FileStatus="Current"/>
      </UnderlyingFiles>
    </Document>
    <Document DocumentIdentifier="1040" DocumentType="MFSDisclosureDocumentSupplement" DocumentStatus="Current"
DocumentDescription="EmmaFunds Growth Fund Prospectus" >
      <UnderlyingFiles>
        <File FileIdentifier="MS261156-1" FileOrder="1" FilePostingDate="2008-08-25" FileStatus="Current"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
</ SubscriptionDataMessage >
```

MUNICIPAL FUND SECURITY (LOCAL GOVERNMENT INVESTMENT POOL)

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="SUB111118" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="MunicipalFundSecurity">
      <Issue IsSubjectToContinuingDisclosureAgreement="Yes" IssuerName="Emma Public School Investment Trust – EPSIT"
IssueDescription="Cash Reserve Fund – Class A">
        <ObligatedPersonsForContinuingDisclosureFiling>
          <ObligatedPerson ObligatedPersonType="Issuer"
NameOfObligatedPersonForContinuingDisclosureFiling="Emma County Local Government Investment
Pool">
            <DisclosureFilingSchedule ScheduleBasisForFiling="CalendarYear"
CalendarYearAnnualFilingMonth="December" CalendarYearAnnualFilingDay="31"/>
          </ObligatedPerson>
        </ObligatedPersonsForContinuingDisclosureFiling>
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1070" DocumentType="MFSDisclosureDocument" DocumentStatus="Current"
DocumentDescription="Information Statement" >
      <UnderlyingFiles>
        <File FileIdentifier="MS265281-1" FileOrder="1" FileStatus="Current" FilePostingDate="2008-02-22"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
</ SubscriptionDataMessage >
```

PART II: Specifications for the Preliminary Official Statement Historical Data Product

Data and Document Delivery

The Historical Data Product will provide PDF files of primary market documents and XML files of related indexing data submitted to the EMMA preliminary official statement disclosure service through the EMMA web interface.

Figure 1 shows the hierarchical structure and relationship of data and documents stored on the historical subscription delivery device. Historical indexing data along with associated disclosure documents are available on a storage device with the indexing data organized in a hierarchically directory by date (e.g. CCYY MM DD) based on the SubmissionTransactionDateTime (e.g: "2008-03-20T00:00:00"). Associated disclosure documents are corresponding located and may be associated with the data messages via the File ID references (ex: FileIdentifier="MS223987-2").

Overview of Schemas and Data Tags

This document refers to a series of figures and tables providing more detailed information about the Preliminary Official Statement Historical Subscription Service. An XML data schema and a type definition schema are included in **Figure 7**. A data tag glossary is provided in **Figure 8**.

Data Message

Data elements to be disseminated through the Preliminary Official Statement Web Service Interface will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) issue indexing data; (iii) security data; (iv) file data and (v) contact information data. These categories, and the available data tags applicable to each category, are included in **Figure 9** and are also summarized below.

The elements available for the document message, together with the value to be selected, would be as follows:

- **Submission Data**
 - i. submission status (selected 'publish', 'cancel', 'test')
 - ii. submission identifier (identification number assigned by EMMA to identify submission for modification purposes)
 - iii. transaction identifier(identification number assigned by EMMA to identify submission events)

- iv. transaction date time (indicates the date and time the submission event was registered in EMMA)
- v. submission transaction count (indicates number of submissions in data message)
- **Issue Data** (each element provided for each issue in the offering) –
 - i. security type (selected 'CUSIP9', 'CommercialPaper', 'nonCUSIP')
 - ii. issue description (entered full plain English description as it appears in the preliminary official statement)
 - iii. issuer name (entered full plain English issuer name as it appears in the preliminary official statement)
 - iv. issuer state (entered state abbreviation)
 - v. issue closing date (entered date)
 - vi. dated date (entered date)
 - vii. preliminary official statement date (entered date)
 - viii. issue total par amount (entered value)
 - ix. issuer CUSIP6 (entered reference value)
 - x. CUSIP6 (entered CUSIP6 of commercial paper)
- **Security Data** (each element provided for each security in the offering)
 - i. CUSIP9 (entered value)
 - ii. maturity date (entered date)
 - iii. interest rate (entered value)
 - iv. maturity principal amount (entered value)
- **File Data**
 - i. file type (selected 'CUSIP9', 'PreliminaryOfficialStatement', 'NoticeOfSale', 'Advertisement', 'RelatedDocument')
 - ii. file description (entering description)
 - iii. file identifier (identification numbers assigned by EMMA to identify the file)
 - iv. file status (entering status)
 - v. file status date time (indicates the date and time the submission event was registered in EMMA)
- **Contact Information Data**
 - i. contact organization name (entered full name of organization to contact regarding submitted disclosure)
 - ii. contact first name (entered first name of contact person)
 - iii. contact last name (entered last name of contact person)
 - iv. contact phone number (entered phone number of contact person)
 - v. contact phone number extension (entered extension, if any, of contact person)
 - vi. contact address (entered street/post office address of contact person)
 - vii. contact city (entered city of contact person)
 - viii. contact state (entered state of contact person)
 - ix. contact zip code (entered zip code of contact person)
 - x. contact e-mail address (entered e-mail address of contact person)



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Figure 7: Data Message & Type Definition Schemas 54
Figure 8: Data Tab Glossary 62
Figure 9: Sample XML Messages 66



Figure 6: Storage of Historical Information

Data and Document Hierarchical Profile

Indexing data and document files are hierarchically arranged on the storage device by the year (YYYY) then by the month (MM) and the day (DD).

- The “Doc” directory contains the disclosure documents in PDF format. The PDF files are uniquely named by their File ID (e.g. “EA123456.pdf”).
- The “Index Data” directory contains indexing information about the disclosure documents in XML format. The XML files are uniquely named by their transaction ID (e.g. “EP7891023.xml”).

Some submissions have multiple submission events (“transactions”) because the submitter returned and modified the original submission one or more times. Each transaction is recorded in a separate XML file in the “Index Data” directory. Multiple transactions for the same submission share the same value in the ‘SubmissionIdentifier’ field.

Where multiple transactions exist for a single submission, the most recent transaction will contain the complete, up-to-date information and the earlier transactions can be discarded or overwritten completely. The ‘SubmissionTransactionDateTime’ field can be used to determine which XML file contains the transaction with the most recent transaction for that submission.

Some dates in the “Doc” or “Index Data” directories are not populated with XML files, documents, or both due to submissions not being received on that date.

PreSale

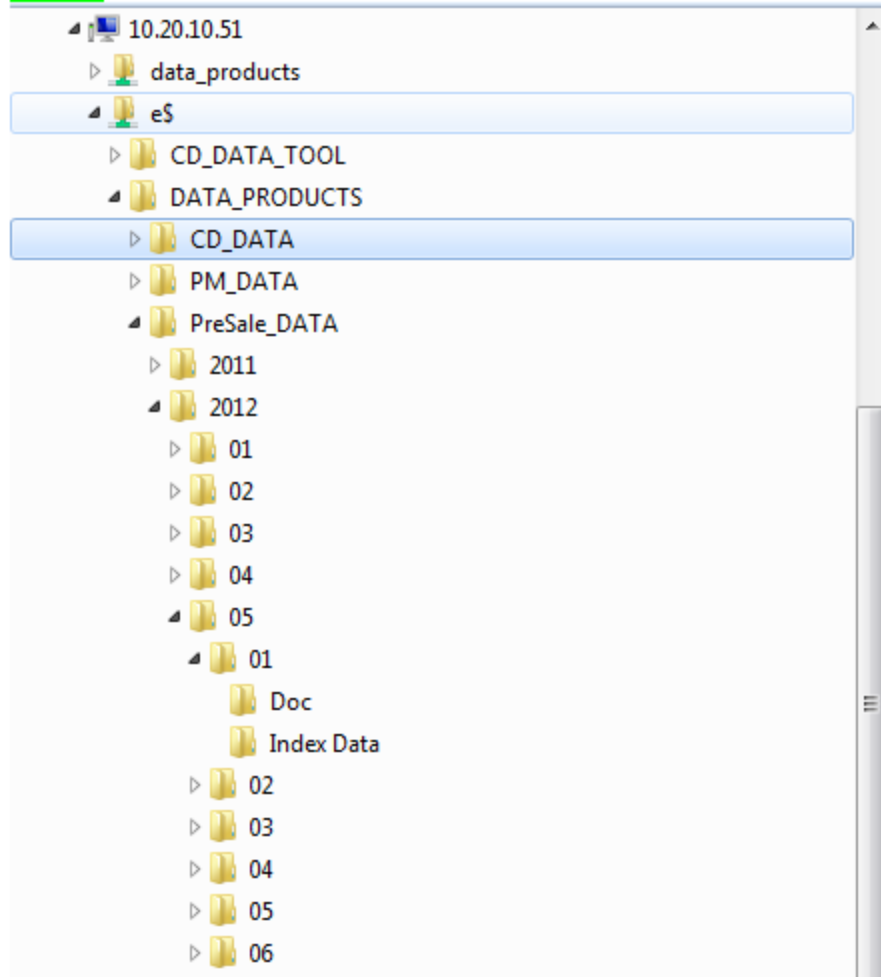
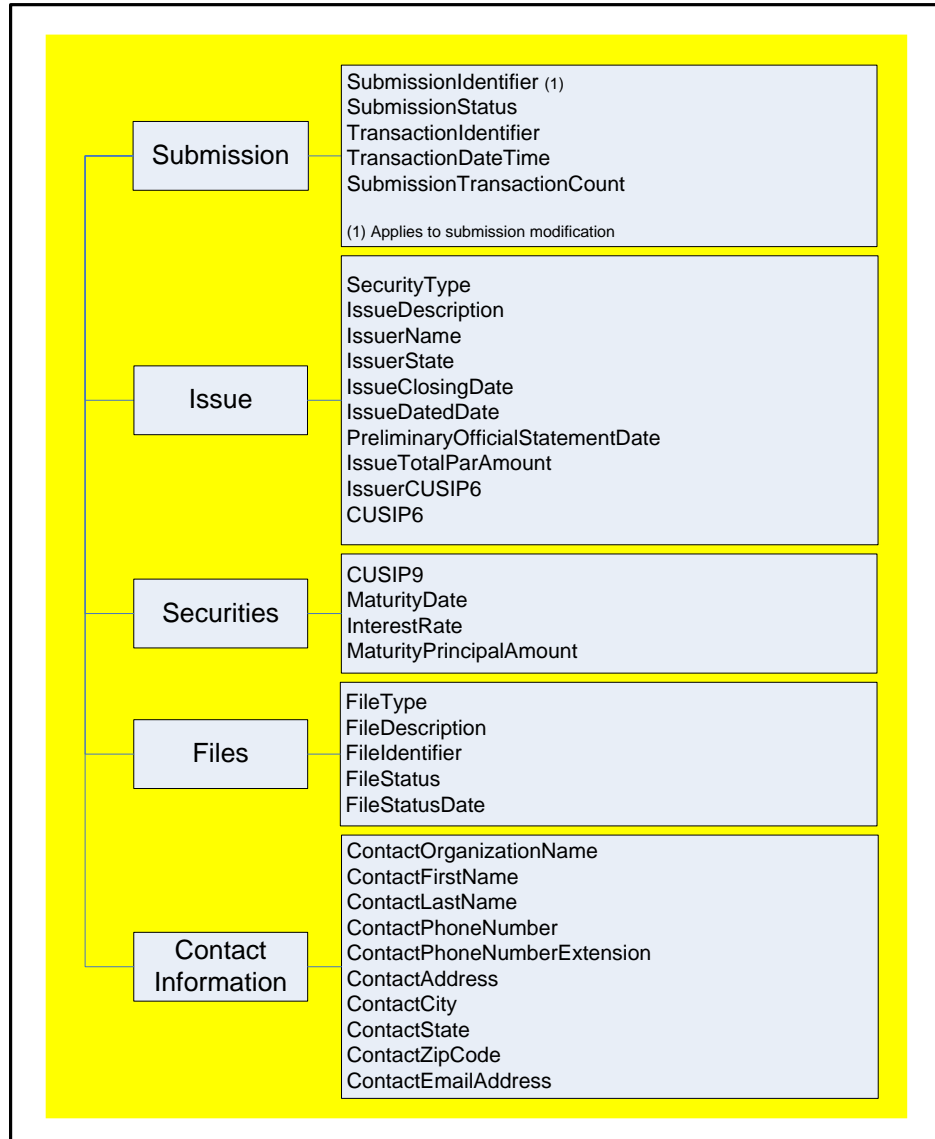


Figure 7: Data Message & Type Definition Schemas

The Historical Data Product has the same general data structure of the XML data model for Preliminary Official Statement Subscription Service. Within each message are information containers (Submission, Issue, Securities, Files and Contact Information) and the information types and values associated with each.

Preliminary Official Statement Subscription Service



XML MESSAGE SCHEMAS

PresaleSubscriptionService_0.xsd

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://emma.msrb.org/schemas/presalesubscriptionmessages"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:tns="http://emma.msrb.org/schemas/presalesubscriptionmessages">
  <xs:import schemaLocation="https://services.emma.msrb.org/SubscriptionServices/PresaleSubscriptionService_1.xsd"
namespace="http://emma.msrb.org/schemas/presalesubscriptionmessages/types"/>
  <xs:element name="SubscriptionDataRequestMessage">
    <xs:complexType/>
  </xs:element>
  <xs:element name="SubscriptionResponseMessageType">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="SubscriptionDataMessage" type="q1:SubscriptionDataMessageType"
xmlns:q1="http://emma.msrb.org/schemas/presalesubscriptionmessages/types"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SubscriptionDataReplayRequestMessage">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="1" maxOccurs="1" name="PostingDate" type="xs:date"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SubscriptionReplayTransactionsResponseMessageType">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="SubscriptionReplayTransactionsMessage"
type="tns:ArrayOfSubscriptionReplayTransactionMessageType"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="ArrayOfSubscriptionReplayTransactionMessageType">
    <xs:sequence>
```

```

<xs:element minOccurs="0" maxOccurs="unbounded" name="SubscriptionReplayTransactionMessageType" nillable="true"
type="q2:SubscriptionReplayTransactionMessageType" xmlns:q2="http://emma.msrb.org/schemas/presalesubscriptionmessages/types"/>
</xs:sequence>
</xs:complexType>
<xs:element name="SubscriptionTransactionReplayRequestMessage">
<xs:complexType>
<xs:sequence>
<xs:element minOccurs="0" maxOccurs="1" name="SubmissionIdentifier" type="xs:string"/>
<xs:element minOccurs="0" maxOccurs="1" name="TransactionIdentifier" type="xs:string"/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>

```

PresaleSubscriptionService_1.xsd

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://emma.msrb.org/schemas/presalesubscriptionmessages/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:tns="http://emma.msrb.org/schemas/presalesubscriptionmessages/types">
<xs:import schemaLocation="https://services.emma.msrb.org/SubscriptionServices/PresaleSubscriptionService_2.xsd"
namespace="http://emma.msrb.org/schemas/presalesubscriptionmessages/presalesubscription/types"/>
<xs:complexType name="SubscriptionDataMessageType">
<xs:sequence>
<xs:element minOccurs="0" maxOccurs="unbounded" name="Submission" type="q1:SubmissionDetailsType"
xmlns:q1="http://emma.msrb.org/schemas/presalesubscriptionmessages/presalesubscription/types"/>
</xs:sequence>
<xs:attribute name="SubmissionTransactionCount" type="xs:integer"/>
</xs:complexType>
<xs:complexType name="SubscriptionReplayTransactionMessageType">
<xs:attribute name="SubmissionIdentifier" type="xs:string"/>
<xs:attribute name="TransactionIdentifier" type="xs:string"/>
<xs:attribute name="TransactionDateTime" type="xs:dateTime" use="required"/>
</xs:complexType>
</xs:schema>

```

PresaleSubscriptionService_2.xsd

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified"
targetNamespace="http://emma.msrb.org/schemas/presalesubscriptionmessages/presalesubscription/types"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:tns="http://emma.msrb.org/schemas/presalesubscriptionmessages/presalesubscription/types">
  <xs:complexType name="SubmissionDetailsType">
    <xs:sequence>
      <xs:element minOccurs="1" maxOccurs="1" name="Issue" type="tns:IssueDetailsType"/>
      <xs:element minOccurs="1" maxOccurs="1" name="Files" type="tns:FilesDetailsType"/>
      <xs:element minOccurs="1" maxOccurs="1" name="ContactInformation" type="tns:ContactInformationType"/>
    </xs:sequence>
    <xs:attribute name="SubmissionIdentifier" type="tns:Max25Text" use="required"/>
    <xs:attribute name="SubmissionStatus" type="tns:SubmissionStatusType"/>
    <xs:attribute name="TransactionIdentifier" type="tns:Max25Text" use="required"/>
    <xs:attribute name="TransactionDateTime" type="tns:ISODateTime"/>
  </xs:complexType>

  <xs:complexType name="IssueDetailsType">
    <xs:sequence>
      <xs:element name="UnderlyingSecurities" type="tns:UnderlyingSecuritiesType" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="SecurityType" type="tns:SecurityType"/>
    <xs:attribute name="IssueDescription" type="tns:Max250Text"/>
    <xs:attribute name="IssuerName" type="tns:Max250Text"/>
    <xs:attribute name="IssuerState" type="tns:StateCode"/>
    <xs:attribute name="IssueClosingDate" type="tns:ISODate"/>
    <xs:attribute name="IssueDatedDate" type="tns:ISODate"/>
    <xs:attribute name="PreliminaryOfficialStatementDate" type="tns:ISODate"/>
    <xs:attribute name="IssueTotalParAmount" type="xs:decimal"/>
    <xs:attribute name="IssuerCUSIP6" type="tns:Cusip6Type"/>
    <xs:attribute name="CUSIP6" type="tns:Cusip6Type"/>
  </xs:complexType>

  <xs:complexType name="UnderlyingSecuritiesType">
    <xs:sequence>
      <xs:element name="Security" type="tns:SecurityDetailsType" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```



```

</xs:sequence>
</xs:complexType>
<xs:complexType name="SecurityDetailsType">
  <xs:attribute name="CUSIP9" type="tns:Cusip9Type"/>
  <xs:attribute name="MaturityDate" type="tns:ISODate"/>
  <xs:attribute name="InterestRate" type="xs:decimal"/>
  <xs:attribute name="MaturityPrincipalAmount" type="xs:decimal"/>
</xs:complexType>
<xs:complexType name="FilesDetailsType">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="unbounded" name="File" type="tns:FileDetailsType" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="FileDetailsType">
  <xs:attribute name="FileType" type="tns:FileType" />
  <xs:attribute name="FileDescription" type="tns:Max200Text" />
  <xs:attribute name="FileIdentifier" type="tns:Max25Text" />
  <xs:attribute name="FileStatus" type="tns:FileStatusType" />
  <xs:attribute name="FileStatusDate" type="tns:ISODate" />
</xs:complexType>
<xs:complexType name="ContactInformationType">
  <xs:attribute name="ContactOrganizationName" type="tns:Max140Text" />
  <xs:attribute name="ContactFirstName" type="tns:Max25Text" />
  <xs:attribute name="ContactLastName" type="tns:Max25Text"/>
  <xs:attribute name="ContactPhoneNumber" type="tns:Max15Text"/>
  <xs:attribute name="ContactPhoneNumberExtension" type="tns:Max6Text"/>
  <xs:attribute name="ContactAddress" type="tns:Max140Text"/>
  <xs:attribute name="ContactCity" type="tns:Max25Text"/>
  <xs:attribute name="ContactState" type="tns:StateCode"/>
  <xs:attribute name="ContactZipCode" type="tns:Max15Text"/>
  <xs:attribute name="ContactEMailAddress" type="tns:Max50Text"/>
</xs:complexType>
<xs:simpleType name="SubmissionStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Publish" />
    <xs:enumeration value="Cancel" />
  </xs:restriction>

```

```
</xs:simpleType>
<xs:simpleType name="SecurityType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="CUSIP9"/>
    <xs:enumeration value="CommercialPaper"/>
    <xs:enumeration value="nonCUSIP"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="FileType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="PreliminaryOfficialStatement" />
    <xs:enumeration value="NoticeOfSale" />
    <xs:enumeration value="Advertisement" />
    <xs:enumeration value="RelatedDocument" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="FileStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Current"/>
    <xs:enumeration value="Archived"/>
    <xs:enumeration value="Removed"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip6Type">
  <xs:restriction base="xs:string">
    <xs:minLength value="6"/>
    <xs:maxLength value="6"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip9Type">
  <xs:restriction base="xs:string">
    <xs:minLength value="9"/>
    <xs:maxLength value="9"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="StateCode">
```

```
<xs:restriction base="xs:string">
  <xs:pattern value="[A-Z]{2,2}"/>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max250Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="250"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max200Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="200"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max140Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="140"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max50Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="50"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max25Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="25"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max15Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
```

```
<xs:maxLength value="15"/>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max6Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="6"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ISODate">
  <xs:restriction base="xs:date"/>
</xs:simpleType>
<xs:simpleType name="ISODateTime">
  <xs:restriction base="xs:dateTime"/>
</xs:simpleType>
</xs:schema>
```

Figure 8: Data Tab Glossary

Data Tag Glossary

The Historical Data Product has many of the same data tags as the Preliminary Official Statement Subscription Service. 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 chooses a value and an example of the data format where the submitter entered a value.

Subscription Data Tags Description and Specification			
Preliminary Official Statement Web Service Interface			
XML Container	Data Tag	Definition	Data Specification
Submission	Submission Identifier	Unique identifier assigned by the EMMA at time of initiation of submission (the initial submission event) and used by the submitter in connection with subsequent submission events	Max25Text ex: S212345678910
	Submission Status	Indicates the intention to publish the information in the EMMA public portal	Enumerated Value: • Publish • Cancel
	Transaction Identifier	EMMA-assigned transaction identifier for each submission event registered in EMMA	Max25Text ex: AS212345678
	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
	Submission Transaction Count	Indicates number of submissions in data message	Integer ex: 200

XML Container	Data Tag	Definition	Data Specification
Issue	Security Type	Indicates whether (i) nine-digit CUSIP numbers are assigned to the securities in the issue, (ii) no CUSIP numbers are assigned to the securities in the issue, or (iii) only a six-digit CUSIP number has been submitted to EMMA for a commercial paper issue	Enumerated Value: <ul style="list-style-type: none"> • CUSIP9 • CommercialPaper • nonCUSIP
	Issue Description	Full issue description as it appears on the Preliminary Official Statement	Max250Text ex: Road Improvement Refunding Bonds, Series 2008A
	Issuer Name	Full issuer name as it appears on the Preliminary Official Statement	Max250Text ex: Emma County Infrastructure Finance Authority
	Issuer State	Standard state abbreviation	String;StateCode;2 ex: VA
	Issue Closing Date	Date on which the issue is expected to settle	CCYY-MM-DD ex: 2008-12-15
	Issue Dated Date	Dated date of the issue	CCYY-MM-DD ex: 2008-12-01
	Preliminary Official Statement Date	The date appearing on the face of the Preliminary Official Statement document	CCYY-MM-DD ex: 2008-12-01
	Issue Total Par Value	The total par value of the offering	Decimal ex: 5000000
	Issuer CUSIP6	A CUSIP6 by which the Issuer would like as a reference identifier	String{Min6,Max6} ex: 123456
CUSIP6	Six-digit base CUSIP number for commercial paper issues, as assigned by the CUSIP Service Bureau	String{Min6,Max6} ex: 123456	
Securities	CUSIP9	Indicates the nine-digit CUSIP number(s) to which the disclosure applies if the Security Type is CUSIP9	CUSIP9 String{Min9,Max9} ex: 123456AB7 IF: Security Type is CUSIP9
	Maturity Date	Maturity date of the security – not provided for commercial paper issues	CCYY-MM-DD ex: 2025-12-01

XML Container	Data Tag	Definition	Data Specification
	Interest Rate	Interest rate of the security – not provided for commercial paper issues	Decimal ex: 3.9 [fixed rate] or 0 [zero coupon/capital appreciation] or blank [variable rate]
	Maturity Principal Amount	Total principal amount at maturity of the security – not provided for commercial paper issues	Decimal ex: 5000000
File	File Type	Indicates type document being submitted	Enumerated Value: <ul style="list-style-type: none"> • PreliminaryOfficialStatement • NoticeOfSale • Advertisement • RelatedDocuments
	File Description	File name, if any, and/or general description	Max250Text ex: Free text description that provides descriptive information concerning the nature of the file
	File Identifier	EMMA-assigned unique identifier for a file	Max25Text ex: 2535
	File Status	Indication of the active state of a file	Enumerated Value: <ul style="list-style-type: none"> • Current • Archived • Removed
	File Status Date	Indicates the date the file status was acquired	CCYY-MM-DD ex: 2008-12-08
Contact Information	Contact Organization Name	Full name of the contact organization that the public should contact with questions about the submitted disclosure	Max140Text ex: MuniBond Dealer
	Contact First Name	The first name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Emma
	Contact Last Name	The last name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Jones
	Contact Phone Number	The phone number of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 703-555-2222

XML Container	Data Tag	Definition	Data Specification
	Contact Phone Number Extension	The extension of the phone number (if any) of the contact person that the public should contact with questions about the submitted disclosure	Max6Text ex: 1235
	Contact Address	The street address or post office box of the contact person that the public should contact with questions about the submitted disclosure	Max140Text ex: 123 Security Road
	Contact City	The address city of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Alexandria
	Contact State	The address state of the contact person that the public should contact with questions about the submitted disclosure	String;StateCode;2 ex: VA
	Contact Zip Code	The address zip code of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 22301-5555
	Contact Email Address	The email address of the contact person that the public should contact with questions about the submitted disclosure	Max50Text ex: issuer@issuer.com

Figure 9: Sample XML Messages

SAMPLE DOCUMENT XML MESSAGES

CUSIP9 BASED

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="EMMA-SUBMISSION-XML C:\EMMA\EMMA_B2B\Schema\PreSale\Subscription\EMMA_PreSale_Subscription.xsd">
  <Submission SubmissionStatus="Publish" SubmissionIdentifier="ER12345" TransactionIdentifier="ER12345"
    TransactionDateTime="2011-03-15T00:00:00" >
    <Issue SecurityType="CUSIP9" IssuerState="VA" IssueTotalParAmount="30000000" IssuerCUSIP6="123456"
      IssuerName="Emma City Industrial Development Agency"
      IssueDescription="Public Improvement Revenue Bonds (2008 EMMA University Project), Series A"
      IssueClosingDate="2011-01-31"
      IssueDatedDate="2011-01-01" PreliminaryOfficialStatementDate="2011-02-01">
      <UnderlyingSecurities>
        <Security CUSIP9="123456XX1" MaturityDate="2025-01-01" InterestRate="4.88"
          MaturityPrincipalAmount="500000" />
      </UnderlyingSecurities>
    </Issue>
    <Files>
      <File FileIdentifier="AA123456" FileType="PreliminaryOfficialStatement" FileDescription="Preliminary Official Statement
for the
      EMMA City Industrial Development Public Improvement Project" FileStatus="Current" FileStatusDate="2011-02-01"/>
      <File FileIdentifier="AA123457" FileType="NoticeOfSale" FileDescription="Notice of Sale for the EMMA City Industrial
Development Public Improvement Project" FileStatus="Current" FileStatusDate="2011-02-01"/>
    </Files>
    <ContactInformation ContactOrganizationName="ContactOrganization" ContactFirstName="ContactFirstName"
      ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
      ContactZipCode="55555" ContactPhoneNumber="555-55-5555" ContactPhoneNumberExtension="1234"
      ContactEmailAddress="Issuer@mail.com"/>
  </Submission>
</SubscriptionDataMessage>
```

COMMERCIAL PAPER

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="EMMA-SUBMISSION-XML C:\EMMA\EMMA_B2B\Schema\PreSale\Subscription\EMMA_PreSale_Subscription.xsd">
  <Submission SubmissionStatus="Publish" SubmissionIdentifier="ER12345" TransactionIdentifier="ER12345"
    TransactionDateTime="2011-03-15T00:00:00" >
    <Issue SecurityType="CommercialPaper" CUSIP6="12345T" IssuerState="VA" IssueTotalParAmount="5000000"
      IssuerName="Emma City Industrial Development Agency" IssueDescription="Public Improvement Revenue Bonds (2008
      EMMA University Project), Series A" IssueClosingDate="2011-12-18" IssueDatedDate="2011-01-01"
      PreliminaryOfficialStatementDate="2011-02-01">
    </Issue>
    <Files>
      <File FileIdentifier="AB123456" FileType="PreliminaryOfficialStatement" FileDescription="Preliminary Official Statement
for the
      EMMA City Industrial Development Public Improvement Project" FileStatus="Current" FileStatusDate="2011-02-01"/>
      <File FileIdentifier="AB123457" FileType="NoticeOfSale" FileDescription="Notice of Sale for the EMMA City Industrial
      Development Public Improvement Project" FileStatus="Current" FileStatusDate="2011-02-01"/>
    </Files>
    <ContactInformation ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
      ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
      ContactZipCode="55555"
      ContactPhoneNumber="555-55-5555" ContactPhoneNumberExtension="1234"
      ContactEMailAddress="Issuer@mail.com"/>
    </Submission>
  </SubscriptionDataMessage>
```

INELIGIBLE FOR CUSIP NUMBER ASSIGNMENT

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="EMMA-SUBMISSION-XML C:\EMMA\EMMA_B2B\Schema\PreSale\Subscription\EMMA_PreSale_Subscription.xsd">
  <Submission SubmissionStatus="Publish" SubmissionIdentifier="ER12345" TransactionIdentifier="ER12345"
    TransactionDateTime="2011-03-15T00:00:00" >
    <Issue SecurityType="nonCUSIP" IssuerState="VA" IssueTotalParAmount="5000000" IssuerName="Emma City School
Development"
      IssueDescription="School Improvement Revenue Bonds (2011 EMMA University Project), Series A"
      IssueClosingDate="2011-01-18" PreliminaryOfficialStatementDate="2011-02-01">
    </Issue>
    <Files>
      <File FileType="PreliminaryOfficialStatement" FileDescription="Preliminary Official Statement for the EMMA City Industrial
Development Public Improvement Project"/>
      <File FileType="NoticeOfSale" FileDescription="Notice of Sale for the EMMA City Industrial Development Public
Improvement
      Project"/>
    </Files>
    <ContactInformation ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
      ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
      ContactZipCode="55555" ContactPhoneNumber="555-55-5555" ContactPhoneNumberExtension="1234"
      ContactEMailAddress="Issuer@mail.com"/>
  </Submission>
</SubscriptionDataMessage>
```