Response to MSRB Request for Comments
January 11, 2021

Feedback on Question 4:   How can modernization of EMMA and related technology systems best support users? What gaps should be addressed to enhance market transparency?

TO: **MSRB**
       Municipal Securities Rulemaking Board

FROM: Allyson Ugarte,
       XBRL US Member

       I take pleasure in
       submitting my
       response…….

The MSRB is considering the modernization of their EMMA system, which is a repository for municipal data. The main problem is that the content is currently available only in PDF format. This is a response from a member of XBRL US, specifically addressed to their Question Number 4.

Comment 1: EMMA is the Electronic Municipal Market Access system for a repository of municipal data.

Problem: Outdated format!
The disclosures are only available in standard PDF format.

The PDF format is stored as a picture and cannot be edited. Since its content cannot be digitized or manipulated, it is very frustrating for users of this report to access and reuse the data.

Problem: Stored as a picture. Cannot edit or digitize its content.

Comment 2:

> The MSRB is ready to modernize the EMMA system.

Problem:

> There may be great anxiety about changing the EMMA system. Who has done it before?

The financial world requires data-driven solutions and tools for data analysis. The SEC has been requiring corporate filers to submit their reports to the EDGAR system in XBRL format for the past 10 years. Municipal bond issuers and investors would benefit from a low-cost solution to publish and access audited financial reports online.

The SEC has modernized their systems.

2005
Voluntary Program using XBRL

2007
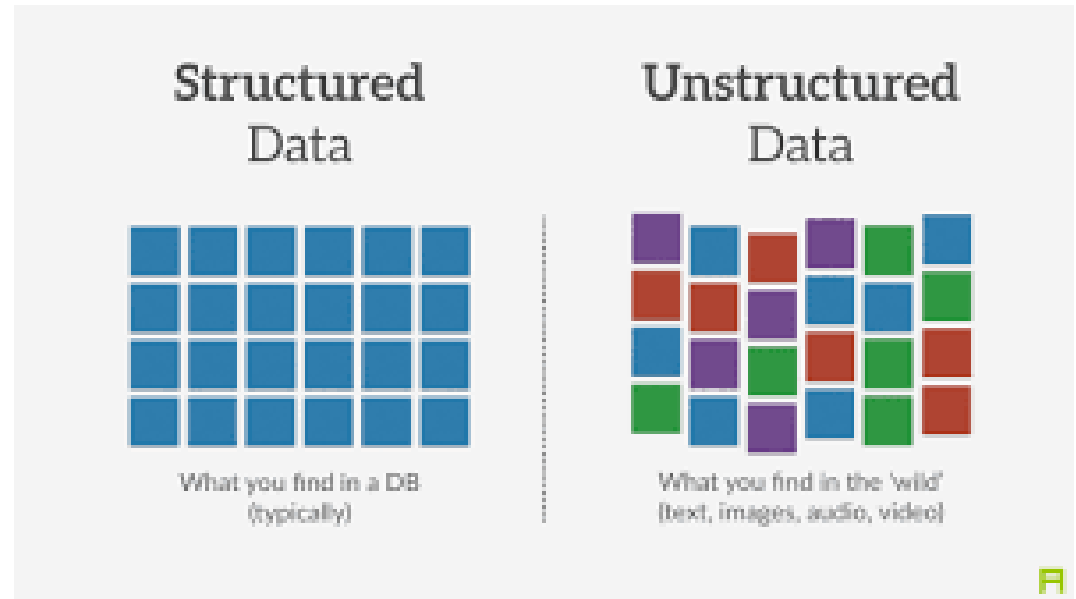Mutual Funds using XBRL

2009
Mandatory Filings using XBRL

All publicly-traded companies and certain individuals use EDGAR – the Electronic Data Gathering, Analysis, and Retrieval system – to submit required, time-sensitive documents to the U.S. Securities and Exchange Commission in the XBRL format.

Comment 3: Why change from PDF to XBRL like the SEC?

Problem: Need to understand the benefits of structured data.

Why XBRL? Because XBRL provides a way to break down all the data into structured pieces that you can identify and reuse in other reports and ratios. Every piece of data uses (or is tagged with) a standardized identifier. No more apples and oranges! No more Tower of Babel! Everyone uses the same terms and definitions to share information.

Structured Data

What you find in a DB (typically)

Unstructured Data

What you find in the 'wild' (text, images, audio, video)
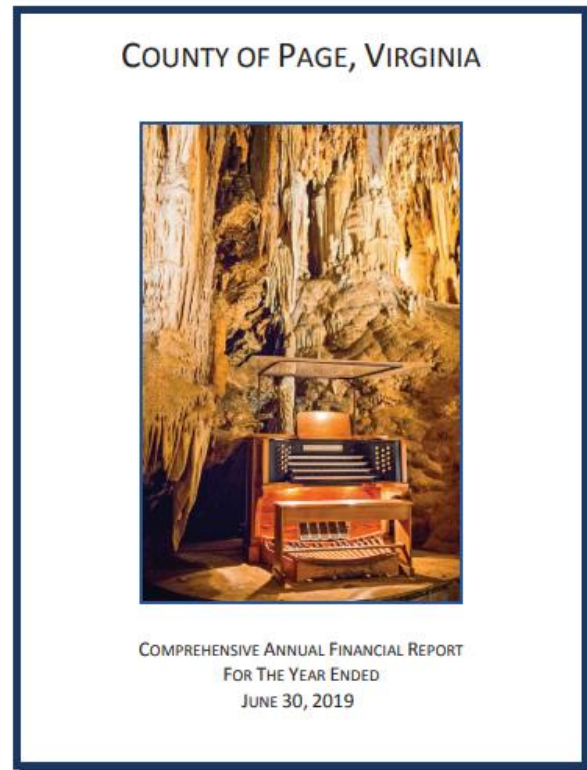
XBRL
THE BUSINESS REPORTING STANDARD

Structured data is data that is divided into standardized pieces that are identifiable and accessible by both humans and computers. It offers numerous benefits without burdensome manual processing. It allows investors, analysts and regulators to access, manipulate and compare data across periods using, for example, ratios for analysis.

Comment 4:

In summary,

Problem:

There may be some anxiety about changing the EMMA system for CAFR disclosures.
Change is distressing.
Change is costly.
Change is intimidating.

COUNTY OF PAGE, VIRGINIA

COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR THE YEAR ENDED
JUNE 30, 2019

The state and local municipalities need a simple tool to prepare their own CAFR Reports using an XBRL taxonomy.
- Not expensive
- Easy to use – no technical knowledge
- Easy to map and extract data

In summary, the move to structured documents using XBRL does not have to be costly or unfriendly.

Comment 5:

APPENDIX

Here are some screenshots of how XBRL can show structured data for financial statements and ratio analysis. Notice how the content and values are tagged.

You may see a video version of this presentation on YouTube:
https://youtu.be/B3e4CkhVcEw

Low-Cost Solution

This is an example of an Excel file that has been converted into Inline XBRL. You can see that Cash and Cash Equivalents and the exact dollar amount have been "tagged" with the XBRL taxonomy element.

City of Alexandria, Virginia
Auditor of Public Accounts - Commonwealth of Virginia

APA Ratios for 2018 Early Warning System

Local Government Fiscal Distress Model

Taxonomy Elements

Line item
apa:RatioGovtWideRevenueShortfall

Value
0.48

Period
2018-06-30

Units
xbrli:pure

Entity
47210100100000

		Ratio	Distress Monitoring	Points	Weight	Thresholds
Government-wide Activity						
Ratio 1	Ability to make up revenue shortfalls	47.78%		0	10	>15% 15% to> 10% to> 5% or less
Ratio 2	Ability to pay current liabilities	66.58%		0	5	>60% 60% to> 30% or less
Ratio 3	Ability to fund expenses in unforeseen situation	30.40%		0	15	>15% 15% to> 10% to> 5% or less
Ratio 4	Change in Net Position	26.03%		0	10	>0% 0% to> -15% to> -40% or less
Ratio 5	Outstanding debt supported by tax valuation	1.67%		0	10	<3% 3% to< 6% or more
General Fund Activity						
Ratio 6	Ability to fund expenditures in unforeseen situation	17.56%		0	15	>15% 15% to> 10% to> 5% or less
Ratio 7	Sufficiency of reserves	17.97%		0	10	>10% 10% to> 5% or less
Ratio 8	Annual revenues sufficient for operations	116.76%		0	10	>100% 100% to> 60% or less
Ratio 9	Debt service repayment	9.22%		0	10	<10% 10% to< 20% or more
Ratio 10	Change in unassigned fund balance	19.85%		0	10	>0% 0% to> -15% to> -30% or less
Ratio 11	Reliance on State and Federal revenues	7.88%		0	10	<25% 25% to< 50% or more
Ratio 12	Enterprise Funds are self-supporting	There are no Enterprise Funds in this CAFR.		0	10	>100% 100% to> 50% or less

TOTAL DISTRESS POINTS 0 over 125 max. points, or 0% fiscal distress.

NOTE: ● *The (green/yellow/red) position indicates the ranking level in the fiscal distress monitoring system.*

APA Source: *Ratio analysis used by the Auditor of Public Accounts as part of the annual Local Fiscal Distress Monitoring Process.*

City of Alexandria, Virginia
Auditor of Public Accounts - Commonwealth of Virginia

APA Ratios for 2018 Early Warning System
Details on Ratios

Ratio Details for Early Warning System

Taxonomy Elements

Government-wide Activity

Ratio 1   **Ability to make up revenue shortfalls**   47.78%

(Cash-current liabilities)/(charges for services+general revenues)		
Cash and cash equivalents	336,089,928	
Cash and investments-fiscal agent	219,874,961	
Subtotal cash		555,964,889
Total liabilities	998,032,004	
Less: Long term debt	657,636,767	
Less: Net pension liability	163,020,518	
Subtotal current liabilities		177,374,719
Cash, net of current liabilities		378,590,170
Charges for services	77,661,733	
General revenues	714,712,769	
Subtotal revenues		792,374,502

Ratio 2   **Ability to pay current liabilities**   66.58%

(Cash/total liabilities)		
Cash and cash equivalents	336,089,928	
Cash and investments-fiscal agent	219,874,961	
Subtotal cash		555,964,889
Total liabilities	998,032,004	
Less: Net pension liability	163,020,518	
Subtotal		835,011,486

Inline XBRL

☑ Highlight all tags

Line item

apa:RatioGovtWideRevenueShortfall

Value

0.48

Inline XBRL

☑ Highlight all tags

Line item

cafr:CashAndCashEquivalents

Value

336,089,928.00

Period

2018-06-30

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Ratio Details for Early Warning System

General Fund Activity

Ratio 6   Ability to fund expenditures in unforeseen situation   **17.56**%

(Unassigned+assigned fund balance/total expenditures)
Unassigned fund balance   73,780,565
Assigned fund balance   34,152,482
   Subtotal   107,933,047
Total expenditures   614,696,136

Ratio 7   Sufficiency of reserves   **17.97**%

(Total fund balance/total revenues)
Total fund balance   128,958,343
Total revenues   717,727,325

Ratio 8   Annual revenues sufficient for operations   **116.76**%

(Total revenues/total expenditures)
Total revenues   717,727,325
Total expenditures   614,696,136

Ratio 9   Debt service repayment   **9.22**%

(Debt service/total revenues)
Debt service principal   44,404,949
Debt service interest   21,795,764
   Subtotal debt service   66,200,713   66,200,713
Total revenues   717,727,325

Inline XBRL

Taxonomy Elements

☑ Highlight all tags

Line item
apa:RatioDebtServiceRepayment

Value
0.09

☑ Highlight all tags

Line item
apa:DebtServicePrincipal

Value
44,404,949.00

☑ Highlight all tags

Line item
apa:DebtServiceInterestAndOtherChar

Value
21,795,764.00

This is an example of how each concept and value is tagged with an XBRL taxonomy element.

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