Great Expectations or Great Expense? XBRL and Other Strategies for Electronic Reporting

Monday, May 20, 2019
Los Angeles, California

Michelle Savage
Vice President, XBRL US, Inc.

Darrel Thomas
Assistant City Manager/CFO, City of Weston, FL

Kenton Tsoodle
Interim Finance Director, City of Oklahoma City, OK
Michelle Savage
Vice President, XBRL US, Inc.
Why standards?
What is a financial data standard

- Digital dictionary of clearly defined terms used to report information
  - Common language with clear, consistent definitions for all stakeholders (preparers, consumers)
  - Leverages accounting standards already used – FASB, GASB
  - Mechanism to make data machine-readable

- Goal: reduced cost of reporting, data collection and analysis, improve accuracy and quality, increased timeliness

Data that is Better, Faster, Cheaper
What is a financial data standard
Is it possible to create a common language for thousands of municipalities?

- Reck/Snow study -- different terms for the same reported fact

<table>
<thead>
<tr>
<th>Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Portion of Bonds &amp; Notes Payable</td>
</tr>
<tr>
<td>Current Portion of Bonds Payable</td>
</tr>
<tr>
<td>Current Portion of Long Term Debt</td>
</tr>
<tr>
<td>Current Portion of Long Term Compensation Liability</td>
</tr>
<tr>
<td>Current Portion of Long Term Liabilities</td>
</tr>
<tr>
<td>Long Term Liabilities – Current and Noncurrent Portions</td>
</tr>
<tr>
<td>Current Liabilities</td>
</tr>
<tr>
<td>Long Term Liabilities Due in Less than One Year</td>
</tr>
<tr>
<td>Long Term Liabilities Due Within One Year</td>
</tr>
</tbody>
</table>

- A single common language is used 4X/year by 6,000 US publicly traded companies (different industries, accounting practices, business structures, management, etc.)
- The start of a digital dictionary of CAFR terms is underway
What is a financial data standard

- Marries an existing accounting standard (GASB) with a means to unambiguously convey financial facts
- Doesn’t change what is reported or who it is reported to, only how the information is conveyed
What is a financial data standard

What do we mean by machine-readable?

- HTML (Hyper Text Markup Language): format to tag text files with font, color, graphic, and hyperlink effects on WWW pages.
- XML (eXtensible Markup Language): format to define custom markup languages.
- PDF (Portable Document Format): format for an electronic image, looks like a printed document, can be viewed, printed, and electronically transmitted. **Machine-readable document**.
- XBRL (eXtensible Business Reporting Language): financial data standard that renders financial and other data, machine-readable and unambiguous. Can be based on HTML, XML, JSON, or CSV. **Machine-readable data**.

Government Financial Officers Association – May 20, 2019
What is a financial data standard

Why is **data** better than **documents**?

- Extracting data
  - HTML filings, 20 minutes
  - Good quality PDF (cut & paste), 30 minutes
  - Image filings, 50 minutes
  - From XBRL, 1-2 minutes

- “Using XBRL has increased our productivity and efficiency ... We are able to process each filing within 1-2 minutes, and provide our clients with more timely data.”*

---

*Morningstar Head of Equity Fundamentals, Jo Guo
Why financial data standards? They work.

- U.S. Securities and Exchange Commission
  - 6,000 companies
  - Data providers opt for XBRL over HTML/Text
  - Analyst community wants more XBRL data
  - SEC is proposing XBRL for more reporting entities

- Federal Deposit Insurance Corporation
  - 8,000 banks reporting
  - 95% of data met FFIEC validation requirements
  - 100% of data met FFIEC mathematical validation (70% in legacy system)
  - Data available immediately after quarter end (weeks later in legacy system)
  - Staff productivity increased 10-33%
  - Data distributed to agency users in one hour (several days in legacy system)

- Australia
  - All government and businesses
  - $1.1 billion savings per year across business and government
What is the XBRL standard?

1. Open, nonproprietary (no licensing fees)
2. Only standard that handles complexity of financial data and accommodates lots of data types (text, etc.)
3. Software “agnostic” (XBRL is **not** software!!)
4. Adapts to change in reporting needs and technology
5. Widely used
2. Only standard that handles financial data
2. Only standard that handles financial data
3. Software agnostic

- **Not** software – XBRL is a standard
- XBRL data can be created, extracted, and analyzed by thousands of commercial and open source software applications on the market today (even Excel spreadsheets!)
- Most tools can be “XBRL-enabled” to work with XBRL-formatted data
4. Adaptable

- Reporting requirements change which often means:
  - Recreating and distributing forms/documents to hundreds of municipalities
  - Re-engineering software tools and internal agency systems
  - Business managers must revise and learn new processes
- With XBRL, only requires a new release of the digital dictionary of terms
  - How do we know this? 6,000 + public companies and hundreds of software applications easily transition to a new US GAAP standards every year
4. Adaptable

- Technology changes:
  - New technologies should be absorbed into the data collection and distribution process
  - With XBRL, the technical specification continuously evolves

**Evolution of the Technical Specification**

- **HTML**
  - 1999

- **XML**
  - 1999

- **(Inline XBRL)**
  - 2011

- **JSON**
  - 2019

- **CSV**
  - 2019
5. Widely used

Public company reporting: South Korea, Mexico, Peru, Colombia, Chile, Israel, China, Japan, Taiwan, Canada, United Arab Emirates, Singapore

Private company reporting: the UK, India, Denmark, South Korea, Italy, Belgium, Germany

Banks: Peru, Panama, Chile, Belgium, France, Spain, United States

Government reporting: the Netherlands, Australia

Proven.
Global marketplace of tools to create and analyze XBRL-formatted data.
Municipal Data Standards Project

Start with a premise: that data standards, implemented properly, can improve efficiencies in the reporting of CAFR data.

- Improve the usability of the data
- Reduce the cost of
  - Preparing and transmitting data
  - Extracting and analyzing data by investors, securities analysts, taxpayers, government
- Free up funds for more investment
- Allow smaller municipalities to get noticed
Municipal Data Standards Project

Explore the opportunities and challenges with financial data standards for state & local government reporting

➢ Build a digital dictionary for CAFR, to be leveraged by any state as a free and open standard

➢ Encourage MSRB to allow municipalities to voluntarily submit XBRL-formatted CAFR statements

➢ Measure results
What do standards mean for municipal finance officers?

1. Increases your **efficiency and effectiveness**
2. Makes your data **faster and more understandable** to stakeholders
3. Enables **easier, less expensive analysis, sharing and storing of data** for public managers
What do standards mean for municipal finance officers?

Answer questions such as:

- What are other municipalities spending on new parks, schools program, 911 call center, equipment servicing?
- How can you be more effective in working with unions? Where do you get data for pay and compensation to be used in negotiations?
- How do your property taxes, water and garbage pickup rates stack up against other municipalities?
- When hiring new administrative staff, how do you know what to pay?
- Pew Charitable Trust research – study on how local data can be used to:
  - Create policy responses to complex problems
  - Improve service delivery
  - Manage existing resources
  - Examine policy and program effectiveness
What do standards mean for municipal finance officers?

Eliminate duplicate reporting
What’s behind the push for standards
## What’s behind the push?

### Users of Muni Data

<table>
<thead>
<tr>
<th>Who</th>
<th>Municipal Securities Analysts &amp; Investors</th>
<th>State Comptrollers</th>
<th>Local Governments</th>
<th>Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why</td>
<td>Identify investment opportunities, evaluate the financial health of municipalities they’ve already invested in</td>
<td>Aggregate state data that must be submitted at a federal level so that the federal government can evaluate their state financial performance; to identify localities that may be in distress and need funding; to determine performance metrics for local programs and gauge whether programs should continue being funded or be discontinued; to report to taxpayers and investors how they’re doing</td>
<td>Evaluate performance of existing and potential programs success and failure rates in other localities; to compare program performance in your city to similar programs in other cities; to make the case to state govt where funds are needed – evidence to support a potential program you’d like to implement; to make policy decisions</td>
<td>Learn how tax dollars are being spent; evaluate local government and compare it to other nearby towns; to evaluate their own investments (many residents are also investors); to collect support and build a case for programs or services they want in their town; or for changes in policy, e.g., reducing taxes, spending more on education, reviewing salaries of town administrators</td>
</tr>
<tr>
<td>How</td>
<td>Manual extraction of data from CAFRs &amp; AFRs for multiple municipalities, rekey data into financial models, analyze fiscal health indicators. May also rely on credit ratings.</td>
<td>Download CAFRs &amp; AFRS from municipalities, normalize them (standardize them) in order to aggregate the data and report out to federal govt, taxpayers and investors.</td>
<td>Manual extraction of data from CAFRs &amp; AFRs. Purchase data from consultants or outside services.</td>
<td>Manual extraction of data from CAFRs, AFRs.</td>
</tr>
</tbody>
</table>

---

Government Financial Officers Association – May 20, 2019
What’s behind the push?

- MSRB, on announcing launch of EMMA, stated:

  The MSRB supports the SEC’s Interactive Data and XBRL Initiatives for registered offerings and would consider designating XBRL as a designated electronic format for purposes of submissions to the EMMA primary market disclosure service at such time in the future as appropriate taxonomies for the municipal marketplace have been developed and as issuers begin the process of producing primary market disclosure documents using XBRL.

- State interest in adopting standards:
  - Florida House Bill 1073 (passed)
  - California Senate Bill 598 (proposal)
What’s behind the push?
Building momentum in data standards

2005
FDIC: banks

2009
SEC: public companies, mutual funds, NRSROs

2015
Surety insurance industry

2016
Department of Energy: solar financing

2017
SEC: foreign private issuers (IFRS)

2018
GREAT Act (grants, Single Audit)

2019
SBA: surety insurance, Open Govt Data Act: federal agencies, GREAT Act: grants/SAR, FERC: utilities, SEC: variable annuity companies, BDCs, CEFs
What’s behind the push?

Technology advances, maturity in the standard

• XBRL standard can accommodate multiple underlying technologies
• Mature marketplace of tools to create, extract, and analyze XBRL data
• Significant learning in the marketplace
Demonstration:

Automating the use of XBRL state and local data
Who benefits, what are the costs?
Who benefits, what are the costs?

- Municipal securities analysts & investors: data is available faster, less expensive, may be more granular, can easily expand universe of municipalities to review (analyzing thousands of municipalities takes same time as analyzing one)
- State comptrollers: automated data aggregation, easier to extract comparable metrics to identify municipalities in distress, set policy, articulate state needs to federal govt
  - Cost: building/leveraging existing taxonomy for state-wide use
- Local governments: compare performance of local programs to other municipalities, provide support for funding requests to state govt; determine success/failures rates for local programs
  - Cost: revising current process to generate XBRL version of financials (may involve your current financial system creating XBRL output module; leveraging an Excel add-in or template)
- Citizens: more timely, accessible, accurate, granular data to gauge use of tax dollars; evaluate performance of local government, and specific programs
How to prepare a standardized CAFR
Preparing standardized financial data

Use financial management system to generate reports in PDF, XBRL

Prepare data in spreadsheets

Outsource

CAFR Online
CaseWare International
Workiva
EZ-XBRL
DataTracks
Oracle, SAP, etc.

Other cities and towns
Muni data providers
Taxpayers
Municipal investors
Local Business
Media
Demonstration

Creating XBRL-formatted data
Panel Discussion and Questions
Great Expectations or Great Expense? XBRL and Other Strategies for Electronic Reporting

Monday, May 20, 2019
Los Angeles, California