journal
OF GOVERNMENT FINANCIAL MANAGEMENT® SPRING 2019 VOL. 68, NO. 1

Emerging Financial Management Practices

AGA.

BUILDING MOMENTUM
PREPARING FOR XBRL IN GOVERNMENT

By Jacqueline Reck, Ph.D., CPA; Shannon N. Sohl, Ph.D., CPA; and Tammy R. Waymire, Ph.D., CPA

XBRL, or eXtensible Business Reporting Language, provides advanced search capabilities with data-tagging that offer benefits to state and local government financial reporting acknowledged as far back as 2002.[1] Yet, 17 years later, this powerful tool to increase the usefulness and timeliness of reports is still not widely used in government. However, given its development in the corporate sector, the demand for better reporting, and federal and state legislation providing momentum for the use of XBRL at local government levels, it is time to get started.

Why Now?

Because of pressure to improve the transparency and timeliness of financial information, now is the opportune time for governments to adopt XBRL financial reporting. Its usage throughout the world by both public and private entities presents governments with many examples to follow in utilizing XBRL to improve communication with taxpayers, reduce reporting lag and lower costs. Several European governments required its use prior to 2009, the year the Securities and Exchange Commission (SEC) began to phase in XBRL reporting for publicly traded U.S. companies. Stock exchanges in China, Japan, Singapore and South Korea mandated XBRL in 2008.[2]

Noting its effects in publicly traded companies can give governments valuable insights as the call for its implementation gains momentum. For example, the SEC recently adopted Inline XBRL.[3] Government entities, which already provide electronic information to the public on their websites in many instances, can now observe and leverage the improvements it affords the private sector.

Figure 1. States with Centralized, Electronic Repositories

State	Municipal CAFRs Available in PDF Format from State Website	Limited Municipal CAFR-based Data Available Electronically & Downloadable from State Website	Website for CAFR PDFs and/or Electronic Data
Alabama			
Alaska			
Arizona			
Arkansas	●		http://www.arklegaudit.gov/our-reports/search-audits/default.aspx
California			
Colorado			
Connecticut			
Delaware			
Florida	●	●	https://flauditor.gov/pages/municipalities_efiles.html https://apps.fldfs.com/LocalGov/Reports/AdHoc.aspx
Georgia			
Hawaii			
Idaho			
Illinois	●	●	http://warehouse.illinoiscomptroller.com/
Indiana	●		https://secure.in.gov/apps/sboa/audit-reports/#/
Iowa	●		https://www.auditor.iowa.gov/reports/audit-reports/
Kansas	●		https://admin.ks.gov/offices/chief-financial-officer/municipal-services/municipal-audits
Kentucky			
Louisiana	●	●	https://www.lla.la.gov/reports-data/index.shtml
Maine	●		https://www.maine.gov/audit/municipal/annual-audit-reports.html
Maryland			
Massachusetts			
Michigan			
Minnesota			
Mississippi	●		http://www.osa.state.ms.us/reports/local/
Missouri			
Montana			
Nebraska	●		http://www.nebraska.gov/auditor/FileSearch/entity.cgi?cat=CV
Nevada			
New Hampshire			
New Jersey			
New Mexico	●		https://www.saonm.org/audit_reports/search
New York			
North Carolina			
North Dakota	●		https://www.nd.gov/auditor/cities
Ohio	●		https://ohioauditor.gov/auditsearch/Search.aspx
Oklahoma	●		https://www.sai.ok.gov/audit_reports/index.php?action=justreleased
Oregon	●		https://secure.sos.state.or.us/muni/public.do
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota	●		https://legislativeaudit.sd.gov/reports/reports.aspx
Tennessee	●		https://comptroller.tn.gov/
Texas			
Utah	●		https://reporting.auditor.utah.gov/searchreport
Vermont			
Virginia	●	●	http://www.apa.virginia.gov/APA_Reports/localgov_cafrs.aspx http://www.apa.virginia.gov/APA_Reports/LG_ComparativeReports.aspx
Washington	●	●	http://www.sao.wa.gov/local/Pages/LGFRS.aspx http://portal.sao.wa.gov/LGFRS/
West Virginia	●	●	https://www.wvsao.gov/chiefinspector/
Wisconsin			
Wyoming			

Source: Individual state websites (as of Nov. 1, 2018).
Note: See Endnote 4 for methodology for determining whether state audit agencies provide a central repository of PDF documents of municipal CAFRs and downloadable CAFR information to the public.

Unless the information that governments offer is centralized and available electronically, it is limited in usefulness. As depicted in **Figure 1**, less than half of U.S. states (21 in all) provide a centralized repository of audited comprehensive annual financial reports (CAFR) or annual audits from their localities in PDF format. Furthermore, only six state agencies provide audit-based local government information in an electronic, downloadable format.[4] The information captured across those few states is limited in the number of concepts reported, and it is not comparable from state to state. If more widely adopted, XBRL offers stakeholders the opportunity to compare and analyze data — particularly investors, lenders, federal grantors, analysts, and rating agencies that may need to evaluate municipal health across state lines.

Adoption of XBRL would simplify and standardize the myriad financial reports required of governments. For example, in light of concerns about transparency, the SEC increased disclosure requirements about the financial condition of the issuers of municipal securities[5] to better protect the $3.8 trillion held by investors.[6,7] Moreover, governments are challenged to address new Governmental Accounting Standards Board (GASB) reporting requirements, such as those related to pensions and other post-employment benefits.

A First in Florida

Federal and state legislative developments reflect demand for improved governmental financial reporting. At the federal level, the Digital Accountability and Transparency Act of 2014 (DATA Act) sought to make information related to federal expenditures more accessible. Recently re-introduced legislation (H.R. 150), entitled the Grant Reporting Efficiency and Agreements Transparency (GREAT) Act, would require federal grant recipients to report required elements according to a taxonomy to produce standardized, machine-readable information.[8]

At the state and local levels, Florida law now requires the state's CFO to create an XBRL taxonomy to be used by local governments, starting in 2022.[9] This represents the first requirement to present audited financial statement information using XBRL. Other states, including Utah and Illinois, are also exploring options for requiring its usage.

XBRL reporting reached a milestone in July 2018, when XBRL.US announced the formation of a state and local government disclosure modernization (SLGDM) working group with members from government, the audit and technology communities, and academia. With the formal recognition and support of XBRL.US, the group is developing a government financial reporting taxonomy. Creation of this working group, combined with legislative developments and a history of frustration with PDF reporting, suggests XBRL stands at the precipice of widespread adoption.

Benefits for Preparers

XBRL offers a range of benefits to a reporting government, including the potential to simplify financial reports for oversight bodies and municipal credit markets and decrease the time it takes to prepare them. Following XBRL adoption, one publicly traded company cut labor hours devoted to preparing its 10-Q filing by approximately 20 percent every quarter.[10] While a reduction in the hours required to prepare an annual CAFR is appealing, the most significant XBRL benefit may be the ability to produce different reports for various stakeholders in a cost-effective manner. Inline XBRL can readily customize reporting for internal and external user needs and deliver reports that simulate traditional, paper-based reports. Thus, the preparer can specify which tags to include, affording customized financial reporting for oversight bodies and municipal credit markets and eliminating the need for internal system updates each time changes in reporting standards are introduced.

In addition, Inline XBRL offers data validation, which improves the consistency and integrity of data.[11] Not having to prepare reports manually mitigates the risk of translation error. Employing standard XBRL taxonomy also increases the reliability of data reporting over time and the comparability of information across government entities. With such improvements, government entities

can develop benchmarks, prepare performance reports and use financial data to help with internal assessments.

Benefits for Users

Users of government financial reports stand to benefit from XBRL as well. Among publicly traded companies, XBRL reporting increases the incorporation of information into market prices.[12] While the initial introduction of XBRL reporting appeared to increase information asymmetry in the market, the impact of asymmetry dissipated as accessibility improved, particularly for investors making smaller trades. Given the concentration of smaller, individual investors in the municipal bond market,[13] XBRL may reduce information asymmetry in municipal bond markets as well.

XBRL reporting and Inline XBRL can also increase data quality provided to external users by increasing timeliness, completeness, volume, consistency and conciseness of data available for analysis.[14] A standard taxonomy ensures data points are defined by their data tag, thus indicating a term has the same meaning for all government entities and has been measured consistently. The ability to extract data from the Inline XBRL documents eases data aggregation and comparison across governments.

XBRL may result in decreased time to prepare and file financial reports.[15,16] In the government setting, this is a significant issue. While corporate annual reports are released as quickly as 60 days after fiscal year-end to meet SEC filing deadlines, government entities may release their annual reports six to nine months after the fiscal year-end. For example, in the local governments of Illinois, the regulatory reporting lag, or the time from audit report date to regulatory filing, is estimated at 23 days — a holdup XBRL could eliminate.[17]
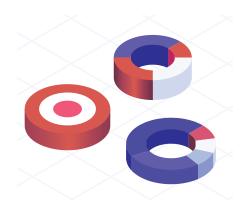
The Challenges

The delay in the implementation of XBRL for government financial reporting provides an opportunity for government entities to learn from corporate XBRL implementation. However, some unique challenges exist in the government setting. In contrast to reporting for publicly traded companies, municipal financial reporting is subject to state oversight and potentially divergent accounting requirements across states. The importance of developing a standardized taxonomy, therefore, cannot be over-emphasized and will require adoption by all states, despite the challenge to meet various state requirements and expectations. In response, initial XBRL solutions will most likely be released at the report level, with future XBRL solutions allowing for tagging of the general ledger for the greatest return on investment.

The complexity of government financial reporting demands time and effort to construct a useful, manageable taxonomy. Unlike corporate entities, governments prepare up to nine required financial statements in their general-purpose financial reports. Additionally, the use of two different bases of accounting causes the same term to assume different definitions, depending on which type of accounting is used in the report. For instance, total assets reported within the statement of net position (accrual based) includes capital assets, but the balance sheet (modified accrual based) excludes them. Furthermore, government differentiates between activities that are governmental versus business-type.

Finally, there is no "champion" for XBRL financial reporting for government entities. The SEC supported XBRL.US in the development of the corporate taxonomies with a $5.5 million investment.[18] Meanwhile, the National Association of State Auditors, Comptrollers and Treasurers and the U.S. Census Bureau serve as "observers" in the SLGDM working group to provide insights in developing a demonstration taxonomy. While far from a million-dollar investment, the resulting demonstration taxonomy should be a viable mechanism to obtain the necessary support.

Likewise, no federal oversight entity exists to require governments to adopt XBRL for financial reporting. At this time, compliance in XBRL financial reporting is voluntary. Legislation such as the GREAT Act, if passed, would call for a national governmental taxonomy. In the meantime, progressive states, such as Florida, with the ability to conceptualize the long run net benefit and proceed with adopting digital financial reporting mechanisms, must remain committed to the cost of change that will incur in both the

implementation of change management and initial start-up. Fortunately, research shows the cost of XBRL declines over time: small private sector companies experienced a 45 percent reduction in XBRL-related costs from 2014 to 2017.[19]

A Collaborative, Feasible Approach for Government

Many vendors (e.g., technology, accounting, auditing, consultants, etc.) are now very experienced with XBRL and the implementation challenges experienced in the private sector roll-out. They are also becoming familiar with the nuances of government financial reporting. Additionally, states are learning more about XBRL, with some leaders already preparing for the conversion. The XBRL.US working group is bringing these experts together to design a basic solution suitable for soft entrance into government, with continuously added rigor reserved for future releases.

Sample digital CAFRs of governmental entities derived from the working group's demonstration taxonomy can be found at https://xbrl.us/xbrl-taxonomy/2019-cafr/. To learn more about the activities of the XBRL.US working group or to get involved, visit https://xbrl.us/home/government/state-and-local-government/. ❏

Endnotes

1. Rezaee, Z. and Turner, J. L. (2002). XBRL-based Financial Reporting: Challenges and Opportunities for Government Accountants. *Journal of Government Financial Management*, Vol. 51, No. 2, pp. 16-22. Association of Government Accountants, Alexandria, VA.

2. Kernan, K. (2008). A Look Beyond U.S. Shores to Put the SEC's Interactive Data Initiative in a Global Context. *Journal of Accountancy*, Vol., 206, No. 4, pp. 62-69. AICPA, Durham, NC.

3. U.S. Securities and Exchange Commission. (2018). SEC Adopts Inline XBRL for Tagged Data. Press release 2018-117, June 28. Washington, D.C.

4. Our method involved determining whether states require their municipalities (i.e., cities, villages and towns) to upload CAFRs in a PDF format to a central repository (for those entities required to undergo an annual audit) that is available for public access and download. These states are indicated with a check mark in Column 1 of Figure 1. For municipalities subject to audit, we also determined whether a state agency requires submission of CAFR-based data annually via a template or chart of accounts, aggregated in a financial database and available to the public. In these cases, when data are in a consumable format (i.e., compatible with Excel) and current, the states are indicated with a check mark in Column 2 of Figure 1. We verified data with the National Association of State Auditors, Comptrollers, and Treasurers and a survey of its member states. In addition, Guam reported posting its PDF-based CAFR at http://da.doa.guam.gov/cafrs-updated/, plus a central website for aggregating department and agency financial statements (see http://www.opaguam.org/reports-audits/financial-audits). Minnesota offers a central repository of county annual audits and a subset of municipal annual audits when conducted by the state agency with other municipal audit data available upon request (see http://www.auditor.state.mn.us/list.aspx?type=afs). Missouri offers financial information in a downloadable format, but data are not necessarily based on annual audits. New York also captures financial information from municipalities, but does not meet the criteria above; i.e., the data are not necessarily audited.

5. U.S. Securities and Exchange Commission. (2018). SEC Adopts Rule Amendments to Improve Municipal Securities Disclosure. Press release 2018-158, August 20. Washington, D.C.

6. U.S. Federal Reserve. (2018). Financial Accounts of the United States — Z.1. https://www.federalreserve.gov/releases/z1/20180607/html/l212.htm

7. U.S. Securities and Exchange Commission. (2012). *Report on the Municipal Securities Market*, July 31. Available at http://www.sec.gov/news/studies/2012/munireport073112.pdf

8. See https://www.datacoalition.org/great-act/ (accessed Oct. 31, 2018).

9. Florida House of Representatives (2018). Final Bill Analysis: CS/CS/CS/HB 1073. https://www.flsenate.gov/Session/Bill/2018/1073/Analyses/h1073z1.IBS.PDF

10. Stantial, J. (2007). ROI on XBRL. *Journal of Accountancy*, Vol. 203, No. 6, pp. 32-35. AICPA, Durham, NC.

11. Markelevich, A. and Lamb, K. (2012). XBRL: What is Inline-XBRL? *Strategic Finance*, April, pp. 64-65. *Institute of Management Accountants*, Montvale, NJ.

12. Blankespoor, E., Miller, B. P. and White, H. D. (2014). Initial Evidence on the Market Impact of the XBRL Mandate. *Review of Accounting Studies*, Vol. 19, pp. 1468-1503. Springer, Switzerland.

13. U.S. Securities and Exchange Commission. (2012). *Report on the Municipal Securities Market*, July 31. Available at http://www.sec.gov/news/studies/2012/munireport073112.pdf

14. Strong, D. M., Lee, Y. W. and Wang, R. Y. (1997). Data Quality in Context. *Communications of the ACM*, Vol. 40, No. 5, pp. 1003-110. Association for Computing Machinery, New York City, NY.

15. Amin, K., Eshleman, J. D. and Feng, C. (2018). The Effect of the SEC's XBRL Mandate on Audit Report Lags. *Accounting Horizons*, Vol. 32, No. 1, pp. 1-27. AAA, Sarasota, FL.

16. Sohl, S.N., T.R. Waymire and T.Z. Webb. (2018). Determinants of Bifurcated Local Government Reporting Lag: The Potential for XBRL to Improve Timeliness. *Journal of Emerging Technologies in Accounting*, Vol. 15, No. 1, pp. 121-140. AAA, Sarasota, FL.

17. Ibid.

18. Stantial, J. (2007). ROI on XBRL. *Journal of Accountancy*, Vol. 203, No. 6, pp. 32-35. AICPA, Durham, NC.

19. AICPA and XBRL (2018). XBRL costs for small reporting companies have declined 45% since 2014, https://www.aicpa.org/content/dam/aicpa/interestareas/frc/accountingfinancialreporting/xbrl/downloadabledocuments/xbrl-costs-for-small-companies.pdf (accessed Nov. 1, 2018).

Jacqueline Reck, Ph.D., CPA, is a professor in the Muma College of Business, University of South Florida. An author of the textbook, Accounting for Governmental & Nonprofit Entities, *she teaches government accounting and does research in government accounting and accounting information systems. She serves on the XBRL.US SLGDM Working Group.*

Shannon N. Sohl, Ph.D., CPA, is a senior research associate at Northern Illinois University's Center for Governmental Studies. She serves on the Transform Illinois data and research committee, the Illinois State Comptroller's Local Government Advisory Board and as vice-chair of the XBRL.US SLGDM Working Group.

Tammy R. Waymire, Ph.D., CPA, is an associate professor of accounting in the Jones College of Business, Middle Tennessee State University. She teaches and researches government and nonprofit accounting and auditing topics. She currently serves on the FASB Not-for-Profit Advisory Committee and the XBRL.US SLGDM Working Group.