



inancial reporting for local governments centers around the Annual Comprehensive Financial Report (ACFR). Today's ACFR is a faithful, PDF reproduction of

the voluminous paper reports that have been produced for decades. We believe technology offers a chance to rethink this paradigm and deliver greater value to the audiences of local government financial reporting: the public, elected officials, bond market participants, grantors, and state/federal governments.1 There is also room to improve the working lives of the finance officers who produce this information.

This article presents a vision for next generation financial reporting that makes a radical leap forward in serving the interests of these stakeholders.

Let's start with what local government is trying to solve with financial reporting. We believe that local government is looking for a way to increase the confidence of key audiences that the local government is:

- A responsible steward of financial resources.
- Creating value for the public through its financial activities, both operational and capital (infrastructure) spending.
- Managing and mitigating risk so the local government can continue to be affordable and effective for taxpayers in the future.

What might the solution look like? We will describe ways to create a solution based mainly on information technologies.

This vision for next generation financial reporting is expressed in three parts:

- Begin with the end in mind: the product
- Where does the data come from?
- What's in it for thee? Benefits of next generation financial reporting for stakeholders

Begin with the end in mind: the product



We'll begin by exploring the product that the audience for financial reporting will use.2

Opportunity 1:

"Unbundle" Financial Reporting

The groups that read these reports have different information needs. For example, bond market participants want more and different information than elected officials or the public. The traditional ACFR bundles information in one place. In the world of paper documents, obtaining one book that has all the information one would want had its benefits: the information was in one physical spot, making it attractive and easy for users to find, collect, and store. It was also economically better for publishers to print one big book or uniform series—like an encyclopedia set-instead of smaller, specialized books.

In a technology-enabled world, unbundling has become popular because of the ability to use IT to offer goods and services that are exactly what the consumer wants.

Local governments could tailor information to each audience by breaking up financial reporting and providing each group with the information they want. This is how music and TV streaming services work. Instead of buying whole albums, consumers buy access to just the songs they want. Or instead of subscribing to a cable TV package, consumers can buy streaming services that offer the shows and movies they're most interested in.

Opportunity 2:

"Personalization" of Financial Reporting

This is a common feature of technologies like streaming, online shopping, and search engines. It complements unbundling by matching the product design to the user's preferences. For example,

elected officials will have differing appetites for financial details. People who want just the basics can have that information, while those who want more information can delve deeper. Or some officials might like charts, while others prefer tables.

Opportunity 3: Align the Presentation to the Audience's **Expertise**

The traditional ACFR presents data in a way that is often too technical for non-experts to understand. Technology provides ways to present information that is more accessible to non-experts. Finance professionals have long been using tools like Microsoft Excel to produce charts and graphs. Generative AI tools may open possibilities to make natural language queries about a local government's financial condition and generate graphs and charts based on user queries. Tools like Stable Diffusion, Midjourney, and DALL-E can generate detailed pictures from text. Expert users may also use AI tools to compile custom data sets to perform their own analysis.

Additionally, psychological research shows us how people consume numbers. AI prompt engineering could use knowledge about the best ways to communicate numbers to laypeople. GFOA and Rutgers are already off to a good start with an AI tool that extracts key data points from existing PDF ACFRs. This data can easily be shared with other tools to create new presentations or graphics that are easy to understand.

Triad of Opportunities

Exhibit 1 shows our first three opportunities as mutually supporting features. Next, we must ask: where does data come from to feed these features?

Where does data come from?

To answer this question, a next generation financial reporting model must address three issues that are key to the financial reporting goals outlined earlier.

1. Timeliness

The traditional ACFR is often produced six months or more after the fiscal year ends. This means the data may not be timely enough for the audience to make informed decisions. It is hard to be confident about a local government's financial position if the information available is not current.

2. Confidence

Local government must gain the audience's confidence by showing that it is creating value with its financial resources. The purpose of local government is not to generate profits or returns for shareholders. Unlike a private firm, financial performance measures are not enough for defining value. Value of government must be measured by what it produces for the public, such as quality infrastructure and public services. Therefore, NextGen Financial Reporting must include information about those outcomes and results.

3. Validation of Data

The ACFR includes audited financial statements. An audit is a form of third-party validation. Such validation boosts confidence in the financial reports. However, audits are not the only validation local governments obtain. Many submit their ACFR to the GFOA's Certificate of Achievement for Excellence in Financial Reporting Program, affirming their commitment to transparency and full disclosure. While next generation financial reporting should consider validations beyond audits, it is important to note that these validations can also increase costs and delay the reporting process.

Thus, next generation financial reporting must try to reduce the time and cost of obtaining third-party validation while also finding ways to expand its role. Currently, many local governments rely on third parties for the statistical section of the ACFR, which is clearly marked as unaudited. This might cast doubt on the information's quality. However, it is generally assumed that these third parties adhere to rigorous standards of care. A form of third-party validation could be a certificate that shows that statistics came from reliable sources. This would be like a consumer good that meets certain safety standards and displays a certificate from Underwriters Laboratories, giving consumers confidence in the product.

Adding a certificate should not increase time or cost; however, it would raise a question about what it implies. This is an important question that could help

local governments differentiate between providers. For example, a provider who refuses to open its methods to inspection and remains a "black box" would be seen as less credible than one who is willing. A certificate from the latter would mean more than one from the former.

Finally, we should not overlook first-party validation (self-monitoring) or second-party validation (internal auditors). Using standardized self-check methods or algorithms could show audiences that a baseline standard of first- or second-party validation is in place. For example, "exception monitoring" is setting a standard and monitoring performance against it. If performance goes beyond acceptable limits, management is notified. This could help make the year-end audit process more efficient. With these issues in mind, let's examine four sources of data for a next generation financial reporting system:

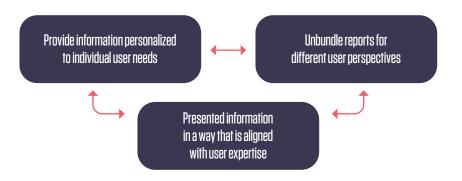
- Audited financial statements.
- Periodic financial reporting.
- Budgets, long-term financial plans, and measurements of service and infrastructure performance.
- Complementary sources of data not produced by government.

Audited Financial Statements

Financial statements are a valuable source of third-party validation. Next generation financial reporting can look for ways to speed up the process. For example, unbundling financial reporting might allow governments to focus on producing the most valued and anticipated data sooner and the less valued or anticipated data later (or not at all). Technology may also speed up the audit process. Robotic process automation is being developed by GFOA and Rutgers to automate the initial check-in of ACFRs into the GFOA award program.

Tools like this might allow the audit process to start earlier if the initial steps can be automated. Using AI tools could be used for other elements of the process. For example, machine learning algorithms can be used to recognize patterns that suggest irregular or fraudulent activities.

EXHIBIT 1 Triad of Opportunities for the Audience Experience of Financial Reporting



AI could examine process logs and workflow patterns to identify control weaknesses.

Next generation financial reporting can also find and share other practices to speed up financial statement production. For example, a recent GFOA survey found that about one in five GFOA members can produce their audited financial statements in four months or less. Perhaps these cases have strategies that can be transferred to the four in five who take longer.

Periodic Financial Reporting

Periodic financial reports are often produced by finance staff for internal management. These reports could play a role in next generation financial reporting. Consider first-party validation or management review of the data. Can technology make first-party validation faster and better with the potential to catch errors, detect fraud, or question values outside of acceptable limits? Using widely accepted validation tools or methods could increase audience trust in the data's quality, making it more appealing to outside stakeholders and reassure local officials about broader publication.

Periodic financial reports could also be used for external communication, but this requires finding the right level of data aggregation and report frequency. For instance, data from daily transactions might not provide much insight into the government's performance. Overly frequent reports could overwhelm the audience rather than inform them. The goal is to clearly communicate the local government's financial performance.

To support the development of periodic reports, high-value information could be offered as a fee-for-service to municipal investors. This could help offset the costs of developing more robust periodic reporting.

Budgets, Long-Term Financial Plans, and Measurements of Service and Infrastructure Performance

Budgets and other financial plans are rich in information that could clarify

questions about value. GFOA firmly believes that performance information should not fall under Governmental Accounting Standards Board (GASB) regulation. This is because financial reporting regulation aims to commoditize financial reporting and make the data highly (if not perfectly) comparable between jurisdictions and interchangeable. Consider, for example, the interest in using eXtensible Business Reporting Language (XBRL) to put financial data into a taxonomy.

Performance information must be highly customized. Each community often has different service goals, strategic priorities, and standards of acceptable service.7 Next generation financial reporting can blend various data sources to provide audiences with the information they seek while keeping a distinction between commoditized financial data and customized performance information on issues like infrastructure condition and service effectiveness. This allows for an understanding of values that align with local needs and priorities.

Complementary Sources of Data Not Produced by Government

It is essential to incorporate information that governments do not produce. For instance, audiences want to know that government is managing and mitigating long-term risks to make sure it remains affordable and effective for taxpayers in the future. One significant long-term risk local governments face is their exposure to natural hazards. Data from insurance companies, the Federal Emergency Management Agency, and private or nonprofit organizations could provide insight into these exposures. Understanding other risks—such as population changes, land use trends, and more—requires data from outside

Imagine each of the data sources we described as a series of "LEGO blocks" that can be put together in different ways to meet the informational needs of any user. This is the essence of personalization.

What's in it for thee?

Benefits for Stakeholders

Let's imagine what GFOA's Rethinking Financial Reporting initiative could accomplish for the stakeholders of financial reporting.

Rethinking Financial Reporting can make financial reporting more efficient and meaningful for local government finance officers. A goal of next generation financial reporting is to automate the process and reduce the load on finance officers by eliminating, reducing, or deferring the production of less useful information. GFOA members often point out that a major, often overlooked, cost of traditional financial reporting is opportunity cost. This refers to things not being accomplished because time and resources are tied up producing traditional financial reports. At the February 2024 meeting of the California Society of Municipal Finance Officers, during a session on Rethinking Financial Reporting, it was broadly agreed that the most important opportunity cost may be the lack of time and resources available for developing finance staff. This includes not providing interesting and fulfilling work opportunities. Spending hours producing financial reports that are not widely read-or read at all-by elected officials or the public is not inspiring work. This does not help for retaining or developing finance staff, which a concern given the long-term staffing challenges facing public finance.8

Next generation financial reporting aims to cut the time and cost of producing commoditized financial information. This would allow staff more time for customized financial analysis, providing the freedom to choose the style of analysis, master analytical techniques, and create presentations that are compelling and useful to elected officials and the public.9

Transforming financial reporting from purely commoditized data and presentations (for example, statements) to a system that contains commoditized and customized data could benefit both the public and elected officials, especially if local government's finance staff applied their knowledge to create custom presentations.

Bond buyers and "expert" users could also benefit. Instead of dealing with PDF versions of the ACFR, they would have access to a file of third-party validated data. This data could be used to create traditional financial statements using standardized templates or to conduct custom analyses based on needs and interests. Further, next generation financial reporting would make this data available sooner.

Finally, next generation financial reporting can address the needs of its varied audiences in ways that were not possible before.

Assessing and Managing Financial Risks

To recap, the audiences want certainty that local government is:

- A. A responsible steward of financial resources.
- B. Creating value for the public through its financial activities, both operational and capital (infrastructure) spending.
- C. Managing and mitigating risk so the local government can continue to be affordable and effective for taxpayers in the future.

Without high-quality information, audiences face uncertainty. Uncertainty, in turn, begets risk. Therefore, financial reporting can be a means to measure the risk that any of these three conditions is false. GFOA's research is currently focused on two types of risk:

- Risk of short-term budget stress or insolvency (responsive to "A").
- Risk that a local government is incapable of funding a consistent and adequate service level over multiple years (responsive to "B" and "C").

Ratio analysis has traditionally been used to assess the risk of short-term budget stress, using numbers from financial reports combined and compared against certain standards. Although useful, this method offers a limited perspective. For example, we could incorporate sentiment analysis of documents produced by the government or third parties that monitor government, which would bring subjective opinions into analyzing risk for budgetary

Should Financial Reports Be Free?

It is said that something is worth what someone is willing to pay for it. There is a long tradition of offering financial reports for free because the public has a right to know. And, of course, the public does have a right to know, but do the reports have the information the public wants? Maybe not.5 Most information in a financial report is of interest to bond market participants who stand to gain financially from it. Given this, perhaps the most critical data from financial reporting—the data that most accurately predicts financial health—is not only free but also presented in graphics and simple language presentations so it is easy to understand. Additional data could be offered for a fee to those who want it. Unbundling reports and owning digital assets, with technologies like Web36, make it possible to create distinction between free and for-a-fee reports. At a minimum, turning boutique financial information into a fee-for-service could help cover the costs of financial reporting. At best, it might show that pieces of boutique financial data have no buyers. This best-case scenario is possible even in places where local laws have fee limits for public information. Knowing what informational services are valued and which are not could lead to discontinuing certain services, thereby freeing up resources for more value-added services.

insolvency. We could also examine data points related to organizational characteristics that may contribute to budgetary solvency. For example, does finance staff professionalism lower the risk of budgetary insolvency? GFOA membership databases could offer insight into the degree of professionalization.

Until now, it has been impossible to measure the risk that a local government is incapable of funding a consistent and adequate service level over multiple years. However, GFOA is working with academic researchers and other experts to integrate data on services and community characteristics that can shed light on this issue.

Where to go from here



This document is intended to spark conversation and ideas about how financial reporting can use leading-edge information technology to greatly improve the information made available to stakeholders. We invite you to help shape the future of financial reporting by providing feedback and sharing your thoughts. We hope this article evolves into practical real-life solutions that can be developed and implemented in the future.

- ¹ State government, external funders, the federal government, and other groups also have an interest in financial reporting, but we suggest the ones listed here constitute the core audience.
- $^{\rm 2}\,$ Acknowledgments to Stephen Covey for "begin with the end in mind."
- $^{\rm 3}\,$ A recent GFOA survey showed about 80 percent of respondents take six months or more.
- 4 Al-enabled fraud detection is in use across many domains, so applying these tools to local government annual financial auditing should be practical.
- ⁵ According to a long-running survey conducted by Chapman University, the No. 1 fear of Americans for over a decade has been corruption of government officials. Hence, it stands to reason that the public would want to know that there is no waste, fraud, and abuse of funds in local government. Traditional financial reports do little to ease such concerns. Furthermore, GFOA has commissioned a prize for researchers to find out what the public wants to know.
- 6 Web3 is a blanket term for technologies that enable clearer ownership rights over digital assets, with blockchain being the prime example.
- ⁷ These differences are a huge reason for local government to exist. Providing local communities with the freedom to make decisions ensures that what people want from their public services lines up with how much they are willing to pay for them.
- ⁸ GFOA, & Lightcast. (2022). State and local public finance offices face talent shortfall according to a new report from GFOA and Lightcast. Retrieved from: https://www.gfoa.org/materials/public-finance-offices-face-talent-shortfall
- 9 Mastery, purpose, and autonomy are the three pillars of motivation and engagement described by Daniel Pink in *Drive*.
- ¹⁰ Sentiment analysis is the computational process of identifying and categorizing opinions expressed in a piece of text, especially to determine whether the writer's attitude toward a particular topic, product, or service is positive, negative, or neutral.