COVER STORY

Rethinking Financial Reporting

How much information is too much? A recent GFOA survey suggests a large portion of members who produce financial reports question whether the benefits outweigh the costs. The following pages define the problem with the current approach and offer questions to help define a new path forward.

RETHINKING FINANCIAL REPORTING

Rethinking Financial Reporting is a fact-based examination of the costs and benefits of the current model of financial reporting and how it can be improved. For more information, visit **gfoa.org/rethinking-financial-reporting**.

Local government is in a time of constrained resources, declining trust, and rapid change, which has prompted GFOA to launch a "rethinking" of several aspects of public finance.

In previous issues of *GFR*, we took a fresh look at how governments budget and raise revenue. These initiatives, known as Rethinking Budgeting and Rethinking Revenue, were inspired by forces like changing public attitudes about government, technological change, and the availability of new and better information about how people make decisions.[1]

Now, GFOA has launched a third initiative, "Rethinking Financial Reporting." Many of the same factors that inspired our other initiatives are relevant to financial reporting. There is one other reason for Rethinking Financial Reporting: there seems to be distinct reservations about the status quo among GFOA members. For example, there have been long-running conversations among public finance professionals about the limitations of traditional budgeting methods. However, the intensity of the reservations expressed to GFOA about the current state of budgeting does not match what has been expressed about financial reporting.[3] In a survey conducted in late 2023, GFOA asked members who prepare financial reports: "In considering the benefits that accrue to your audiences from annual financial reporting and the costs you incur to produce it (staff time plus consultant costs), what is your perception of the total cost-benefit or 'value' of annual financial reporting?" Exhibit 1 summarizes the results.

We see that slightly over half believe the annual financial report is a good value, while slightly under half are either not sure it is a good value or think it isn't a good value. Given that producing an annual financial report is a primary duty of many GFOA members, it is striking that such a large portion of those who produce these reports are not convinced their time spent on this is time well spent. This seems to be a very different attitude compared to budgeting, another primary duty of many GFOA members, where the respondents who reported "satisfied" or "very satisfied" with their budget ranged from 77 percent to 84 percent.[4]

We also looked at attitudes about the value of financial reporting by government size, how long it takes a government to complete their financial report, and how often a government issues debt.

EXHIBIT 1

Perceptions of the value of financial reporting among GFOA members who prepare financial reports

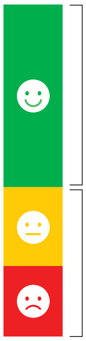
26% **Definitely a good value.** The benefits certainly outweigh the costs.

29% **Probably a good value.** The benefits likely outweigh the costs.

24% **Neutral.** Whether the benefits outweigh the costs, or not, is questionable.

14% **Probably not a good value.** The benefits likely do not outweigh the costs.

7% **Definitely not a good value.** The benefits certainly do not outweigh the costs.



55% express positive views of value.

45% express neutral or negative views of value.

ABOUT THE SURVEY

The survey was sent to 3,000 randomly selected GFOA members. After removing addresses that proved unreachable, there were about 2,700 potential participants. Of these, about 23 percent took part in the survey—an excellent participation rate.[2] About eight in 12 respondents were involved in preparing financial reports. About three in 12 were not involved in preparing financial reports but had some role in government finance and were users of the report. Of the remaining, most were not in the finance function but used the report. A small number of respondents were not involved with reporting at all, as a preparer or user. In this article, we will touch upon some findings of the survey and will focus on the responses from preparers, given they were the majority of respondents. For a more in-depth examination of the survey results, turn to page 28.

Who do GFOA members think is the most important audience?

Preparers of financial statements were almost evenly split on who they believe is the most important audience. When we look at just governments who issue debt, the status of bond market participants goes up slightly but not enough to dramatically change these ratios.

4 IN 10 said the public

3 IN 10 said elected officials

3 IN 10 said participants in the bond market.

The only variable that seems to have a close link to perceptions of value is how much time it takes to prepare financial reports. In short, the longer it takes to prepare the report, the less likely a respondent was to consider financial reporting "definitely a good value."[5] This does not explain all or even most of what is behind respondents' perceptions of financial reporting, but it is notable that neither debt nor size of government appears to explain anything.[6]

What could explain the concern regarding the value of financial reporting? To start, traditional financial reporting seems to be failing its apparent audiences in some ways. The first question is: who is the audience for financial reporting? There are three groups that could constitute the core audience: elected and appointed officials of the reporting government, the public, and participants in the market for local government debt. We could also add a fourth audience: state governments, federal government, and public and private grantors. These stakeholders have an interest in ensuring a certain degree of financial health and integrity among local governments.

Elected officials are stewards of the finances of the communities they serve. Presumably, an end-of-year report scrutinized by a third-party auditor would be valuable for this role. However, according to Mark Scott, a city manager who is well known for turning around financially distressed cities:[7]

[Elected officials] don't really understand their financial status. Elected officials ... don't come into office with degrees in being a council member. They have to learn what they are doing, and financial records are really complicated to understand. The financial records are the financial health indicator [for a government] ... and people don't know how to read those. I'd be surprised if one percent of council members in this country have read their annual financial report ... because they don't know how, and I don't blame them for not knowing how...the ACFR is not very readable.

Perhaps Mr. Scott's estimate of "one percent" of council members is an exaggeration, but it speaks to an underlying reality that the financial reports are not widely read by elected officials. We asked GFOA members to identify elements of financial reporting for which there is "general interest from most of the elected officials on [the] governing board." Whether or not the government received a clean audit receives almost unanimous interest (95 percent) from elected boards, but there are sharp drop-offs in interest from there. The fund balance, as described in the governmental funds balance sheet, was of interest for 62 percent of elected boards. Nothing else received interest from more than 50 percent of boards, but compliance with the adopted budget was close, with general interest from just under 50 percent of boards. Of the nine remaining elements of reporting that our survey respondents were asked about, we found that, on average, 20 percent of boards were interested in those elements.[8] If we ask how many respondents thought there was general interest among the board in a majority of the 11 elements of financial reporting, then Mr. Scott's estimate of those who have read their financial report may be close. We found that only one percent of boards had interest in ten elements or more; two percent in nine elements or more; and four percent in eight elements or more.

Finally, we gave our survey respondents space to give free-form "observations...about how elected officials use annual financial reporting." We categorized each response as:

"Generally positive." This includes responses such as "it gives them a lot of reliable and relevant information to facilitate the decision making process" and "[they use it to] justify their fiscal responsibility and use of resources."

"Limited positive." This covers the comments that are positive but also describe limited interest among officials. Examples include: "our elected official's primary concern is the audit and fund balance" and "elected officials are mainly concerned with how we compare with the approved budget and the ending fund balance."

"Negative." This covers comments that don't reflect well on elected official's use of financial reporting. Examples include: "It isn't used," "Given the complexity of the Annual Comprehensive Financial Report (ACFR), the annual budget has become the primary financial statement used by our governing board and public," and "When the auditor reviews the financial report, they are more interested in their phone."

Of the responses offered, we identified about six in ten as negative, three in ten as limited positive, and about one in ten as generally positive.

If most elected officials don't read and/or can't understand financial reports, it is likely a safe bet that financial reports are not widely read or understood by the public. Furthermore, financial reports may not actually report what the public wants to know. For example, perhaps they care about the value they get for their tax dollars. Or perhaps they care about the potential for fraud, waste, and abuse.[9] Perhaps these topics aren't appropriate for what we have traditionally considered a "financial report." In that case, we might ask how this information could be best conveyed to the public and what governments could stop doing to make time to produce this information. The difficulty in understanding financial reports for the public was a common theme in the free-form comments by our survey respondents who expressed doubts about the value of financial reporting. These types of comments were the most common among doubters, even surpassing remarks about the cost and administrative burden of reporting.

The third audience is participants in the market for municipal debt—or "bond buyers." Conventional financial reports are widely used by bond buyers. However, there are important limits on the usefulness of current reporting methods for this audience. "Time is money" is no mere cliché to this group. The value of information contained in local government reports decays over time. Unfortunately for bond buyers, the time to produce financial reports has increased over time. Exhibit 2, derived from the report "Public vs. Private Auditors, Big vs. Little Issuers: What's Influencing the Timeliness of Municipal Bond Audits"[10] shows that the mean audit times (in days) has increased over the last ten years, across all types of governments.

There is no single cause for these increasing audit times,[11] but it seems likely that the expanding requirements for local government financial reporting play an important role. For example, the Government Accounting Standards Board (GASB) Statements 68 and 75, which address employer accounting for pension benefits and employer accounting for other post-employment benefits (retiree healthcare), were issued in 2012 and 2015, respectively. Beyond the initial time and resources needed to implement, these standards likely have ongoing effects on the timeliness of reporting. This is due to the need for periodic actuarial performance valuations. There are not many actuaries and actuarial firms qualified to do government plan valuations. Recent examples of statements that entail high implementation and maintenance effort include leases (GASB 87, issued in 2017) and subscription-based IT arrangements (GASB 96, issued in 2020).

What have GFOA members experienced with the public's interest in financial reporting?[12]

Most survey respondents' experience (60 percent) was that the public has "little or no interest" in financial reporting. About 35 percent of respondents experienced interest from a small number of parties, like the media and watchdog groups. About five percent of respondents experienced broader "interest from multiple parts of the community." The 35 percent of respondents who experience interest from groups like the media or watchdog groups is notable because of the decline of local media. If local media continues its decline, that might severely diminish what seems to be a nontrivial portion of the public's interest in financial reporting.[13] This may highlight the need for rethinking financial reporting so that reporting can reach the average citizen more directly. If local media no longer exists as an intermediary, the local government will need to make more effort to go direct to the public.

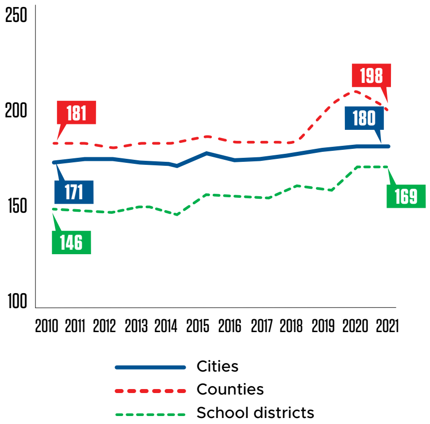
In a time of decreasing trust in government, we should ask if lengthy, technical financial reports that take significant time to compile, undergo lengthy audit processes and as a result are often published many months in arrears are the most effective way to build trust with government's most important constituency: the public.

Let's shift our attention to the public finance professionals who produce these reports. As Exhibit 2 implies, the current system is becoming increasingly burdensome to comply with. Delayed reports have consequences for finance professionals, giving them an incentive to complete the reports within a reasonable period. Nevertheless, reports are still taking longer, despite the consequences. For example, data from S&P shows that, from 2018 to 2023, there has been around a 100 percent increase in negative rating actions[15] due to the lack of timely information (from about 75 to about 150 negative rating actions). During that same period, the number of issuers increased two percent.[16] It is important to recognize that only a small percentage of issuers receive negative rating actions. Over time, S&P might adjust policies for issuing such actions. However, the increase is still noteworthy due to its serious consequences.

If requirements for financial reporting are increasing, public finance staffing is trending in the opposite direction. For example, from 2020–2022, the postings for state and local public finance jobs increased by about 75 percent![17] This may be more than just a short-term supply problem. According to the American Institute of Certified Public Accountants (AICPA), the number of accounting degrees at the bachelor's and master's degree level has been stagnating or declining since 2014/2015.[18] Staffing issues affect not only local governments but also the audit firms that are crucial to financial reporting. The combination of rising requirements and declining staff members suggest that, unless other factors change, it will become more challenging for public finance officers to complete financial reports sooner.

EXHIBIT 2

Mean audit times (in days) by types of government, 2010–2021[14]

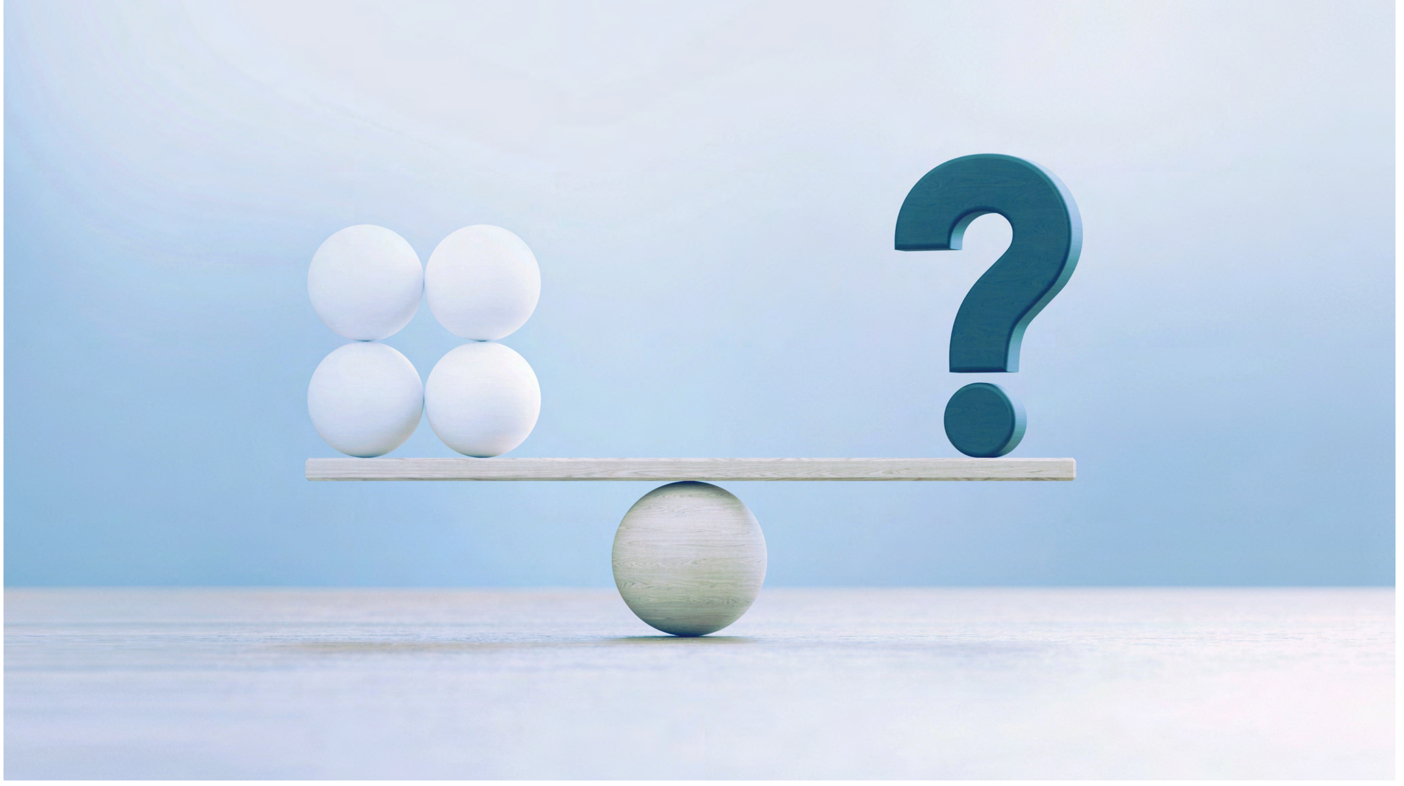


Finally, and perhaps most important, the opportunity costs to the finance officer must be considered. Time spent on financial reporting is time not spent on other things.

Let's take an example from the 2023 California Society of Municipal Finance Officers Annual Conference. In a session about rethinking financial reporting, a finance officer from a small water utility expressed her frustration that it had cost $60,000 (staff time and consultants) to comply with GASB 96, which addresses reporting and disclosures pertaining to subscription-based IT arrangements. The finance officer did not see the value in collecting this information because it did not add to her government's ability to make better decisions. She also found this troubling because the ability for customers to afford water bills was a priority for her utility. One could argue that $60,000 saved would not make much difference in the size of individual customers' bills and, perhaps, having a better handle on software lease costs might eventually help save on some costs. However, one could also argue that the finance office's time and money would probably make a much bigger and more immediate positive impact on the community if it were used, for example, to investigate and work towards new water pricing strategies that are designed to optimize affordability for customers and total revenue for the utility, such as segmented pricing or cost-based pricing.

Here is an example from a much larger local government. King County, Washington, encompasses the Seattle area. The County estimates its expenses for external (non-staff) accounting resources to implement GASB 87, 94, and 96 was $1.6 million. These dollars could have instead provided shelter to 60 to 100 of its most financially challenged households over the same period. Total costs, including costs for internal staff resources, are estimated to have exceeded $2.0 million.[19]

These examples raise a fundamental question about financial reporting. The time, money, and energy spent on financial reporting is money not spent on some other activity. At what point are the opportunity costs incurred by reporting requirements too great?



The Search for Solutions

Now that we know why it is important to rethink financial reporting, let's discuss how we might do that. Our first step is to define the problem. We can do this by gathering more information about the current state of financial reporting. Though GFOA has heard from many members on this topic, the plural form of "anecdote" is not "data." Our search for data should be guided by strong theory. The data can be used to prove or disprove the theory. This is the essence of the scientific method.

In this spirit, let's examine some of the paths we might take to bring together theory, data, and validation of the results in the real world. What follows are five general paths and our description of each, ending with research questions we can ask to validate their usefulness, gather data, and design real-world solutions.

THE VALUE OF INFORMATION

The diminishing returns problem

Information has value if it reduces uncertainty about a consequential decision or if it affects the behavior of people who make those decisions.[20] Users of financial reports are trying to reduce their uncertainty about the financial condition of the government. For example, bond market participants want to reduce their uncertainty about whether a local government's debt is a good buy. Local officials may want to reduce their uncertainty about whether an increase in taxes is needed.

More information can reduce uncertainty. However, the incremental reduction in uncertainty from more information tends to decrease at a certain point. At the same time, the cost to obtain information to further reduce uncertainty goes up as more certainty is gained.

EXHIBIT 3

The value of information[21]

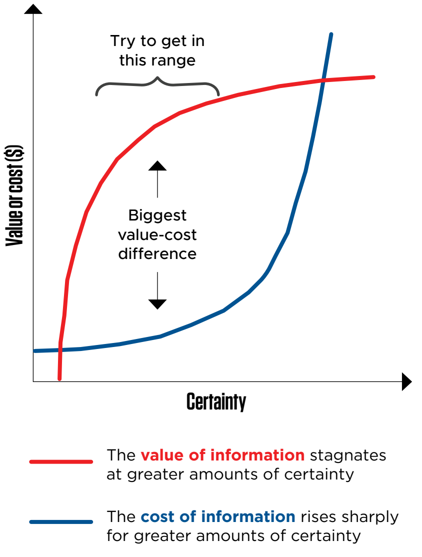


Exhibit 3 illustrates two important implications of this:

- At some point, the marginal benefit of more information does not outweigh the cost to obtain the information. This is also known as the "Law of Diminishing Returns."
- At some point, more information might not provide enough additional certainty to change a decision. Information is only valuable if it can change a decision.[22]

Thus, Rethinking Financial Reporting should seek to:

- Shift the cost curve down and value curve up;
- Understand the trade-off involved between moving further up the curves and the opportunity costs involved; and
- Move financial reporting to the most cost-effective point along the curve.

This is an example of first principles thinking. This means we base our ideas on the most essential elements of what we know to be true (first principles) about the use of financial information. Breaking down the problem of financial reporting to essentials and then rethinking from the ground up is one of the best ways to find new, creative solutions.

Questions for Rethinking Financial Reporting

- ***What is the cost of compliance with recent changes to Generally Accepted Accounting Principles (GAAP)?*** We need to know the additional cost of compliance with new reporting standards if we are to understand the relative cost versus the value of the information produced.
- ***Do financial reports impact policy-making?*** Elected officials may be a key audience for financial reports. We need to know if financial reporting gives them greater confidence about making financially consequential decisions.
- ***Does financial reporting reduce the public's uncertainty about the quality of financial stewardship by local officials?*** If the public is a key audience for financial reporting, then a good financial report should reduce uncertainties they have about whether local officials are managing the government's resources responsibly.
- ***Do financial reports highlight issues that need more attention?*** Financial reports may draw attention to issues that might otherwise be overlooked, such as certain types of long-term liabilities (such as post-employment benefits and pollution remediation obligations).
- ***What is the rate of decay on the value of information for bond buyers?*** Bond buyers prefer timely, current information. Financial reports are often made available to the public months in arrears. If we know how rapidly the value of information decays, we can design solutions accordingly.
- ***What is the information with the highest marginal benefit, and how can that be delivered as quickly and cheaply as possible?*** This is the essence of finding the optimal point on value of information curves.

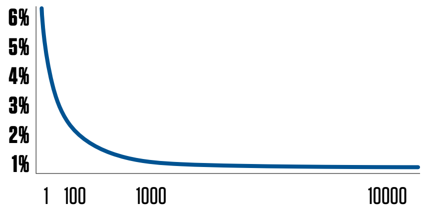
EXHIBIT 4

Power law in U.S. city populations[24]

Rank	City	2016 population	Rank x population
1	New York, NY	8,600,000	8,600,000
2	Los Angeles, CA	4,000,000	8,000,000
3	Chicago, IL	2,700,000	8,100,000
4	Houston, TX	2,300,000	9,200,000
5	Phoenix, AZ	1,600,000	8,000,000

EXHIBIT 5

Approximate power law distribution of web page links[25]



THE 80/20 RULE

Taking advantage of leverage points

The 80/20 rule, or Pareto Principle, states that 80 percent of outcomes (or outputs) results from 20 percent of all causes (or inputs) for some given event. The 80/20 rule is an expression of a statistical phenomenon called a power law distribution. In a power law distribution, relatively few occurrences account for an outsized proportion of the total. Here a few examples that fall into a power law distribution:

City populations: The largest cities in a country usually account for a large portion of the total population. In fact, the largest city is usually twice as large as the next one, three times as large as the third one, and so on. Exhibit 4 provides an example from the U.S.

Word frequency: A power law often occurs in any large corpus of text. The most frequent word will occur about twice as often as the second most frequent word, three times as often as the third most frequent word, and so on.

Web links: The number of links to a website follows a power law. A small number of websites are highly linked to (for example, Amazon.com), but most are not. Exhibit 5 illustrates what a power law of website links looks like.

Knowing when the 80/20 rule is in play provides a powerful leverage point because we can focus our energy on the 20 percent that makes the great impact. When it comes to financial reporting, there is reason to believe that a relatively small portion of the information in a financial report (20 percent) satisfies a large portion of what users need from it (80 percent).[23] What falls into the 20 percent of most valuable information could also differ by type of government. For example, perhaps smaller governments or governments that don't issue debt have different audiences with different needs.

We can then consider how to maximize the timeliness, availability, and clarity of that 20 percent of information. The other 80 percent of information might be candidates for less emphasis or discontinuation. This relates to our discussion of the value of information. The 20 percent of the most useful information has the potential to get us close to the point on Exhibit 3, where the difference between cost and value is greatest. The 80 percent of remaining information pushes us to the right on Exhibit 3, where marginal value begins to decline or even go to zero.

Before we move on, we should acknowledge that it is not immediately clear which information is less important versus more important or that it would be easy to translate it into practical guidance for local government financial reporting.[26] As the adage goes, "Nothing worth having comes easy" and our questions below can start us down this path.

Questions for Rethinking Financial Reporting

- ***What information do bond buyers want most?*** We want to know what information does the most to satisfy bond buyers' needs for assessing the creditworthiness of a government.
- ***What information do elected officials want most?*** We want to know what information does the most to reduce elected officials' uncertainty that a local government's finances are being managed well and are sufficient for fulfilling the government's mission.
- ***What information does the public want most?*** We want to know what information would do the most to reduce the public's uncertainty about the trustworthiness of their local government as stewards of their tax dollars.
- ***What information do state governments and other funders want most?*** We want to know what information would do the most to reduce the uncertainty of state governments and other funders that financial integrity is in place.
- ***What information is most predictive of a local government reaching an undesirable future state?*** In many cases, the audience of a financial report is looking for insight into how likely it is that a local government will encounter some adverse future condition like short- or long-term financial distress.
- ***What is the information worth?*** A way to find out what information is most valuable is to let the market decide. In other words, how much would bond buyers be willing to pay for a given piece of information? If they are not willing to pay for it, then that implies it has no value.

THE SCIENCE OF SUBTRACTION

Less can be more

In *Subtract: The Untapped Science of Less*, Leidy Klotz points out that people have an inborn tendency to add to what already exists and shy away from subtracting. This means that subtraction is an underappreciated way to optimize systems. An example can be found in the U.S. Code of Federal Regulations. This is a record of all the rules made by federal agencies in the U.S. Klotz points out that the Code has ballooned from around 10,000 pages in the 1950s to more than 180,000 pages in 2020. Many of these rules are worthwhile and important; however, some are not. Klotz suggests that "a failure to prune outdated rules leaves stressed [governmental] bodies with less time to do their essential work." The federal government has started pruning rules, including one that required dairy farmers to spend around $10,000 a year to prove they could contain a spill because milk was classified as an oil. Such a rule provided farmers with a reason to cry over spilled milk.[27]

Can bodies with a regulatory character, like the Governmental Accounting Standards Board (GASB) and GFOA,[28] follow the example of the federal government and "adopt policies that encourage reviewing existing regulations to see if they can be modified, streamlined, clarified, or repealed so as to make regulatory programs more effective or less burdensome in achieving their [overarching] objectives"?

GFOA's survey asked respondents to imagine a world in which there are no legal requirements for what governments need to report. Respondents were then asked to choose which elements of a financial report they would discontinue, based on the judgment that the cost to produce them outweighs the benefits to those who use them. Across all respondents, "reporting and disclosures pertaining to leases" and "reporting and disclosures pertaining to subscription-based information technology arrangements" were selected for elimination by eight out of ten respondents. Around half of respondents chose several others for elimination. Perhaps, unsurprisingly, respondents who were able to complete their financial reports quickly (in four months or less) were somewhat less eager to discontinue elements of financial reporting. For example, only about six in ten would discontinue disclosures for leases. Also, surprisingly, respondents who don't issue debt often were no more eager to cut reporting elements than other respondents and may have even been slightly less eager.[29]

These responses suggest that, yes, there is potential to streamline, if not eliminate, regulations that do not produce value. For example, the GFOA Budget Presentation Award program changed its rules to allow for several pieces of information to be made available via hyperlink, thereby eliminating the need to duplicate it in the budget document.

The ACFR is designed to help users get a better sense of a local government's financial condition. Whenever we are trying to get a sense of something, we must separate the "signal" from the "noise." The signal is what we want to know while the noise obscures it. The more noise there is, the harder it is to discern the signal. When it comes to an ACFR, the signal we are looking for is that a government is in acceptable financial condition. We can ask: what parts of the ACFR are signal and which parts are noise? For example, if GASB 87 requires reporting on the number of leases for copy machines…is this signal or noise? We want to eliminate noise and boost the signal. This maximizes the signal-to-noise ratio of the report. An implication is that adding data to the report may not only fail to make a meaningful contribution to the user's certainty about financial condition (as per Exhibit 3), but it might also reduce the overall usefulness of the document by sending the signal-to-noise ratio in the wrong direction.

Before we leave the subject of subtraction, we should address why complexity tends to persist in all kinds of human endeavors, not just financial reporting. One reason is that complexity suggests that the hard work of deep analysis has been done. Even if the audience cannot understand the report, a long, detailed financial report (plus an unqualified audit opinion) suggests a thorough examination of the local government's finances has occurred.[30] Though far from perfect, this still could be a useful mental shortcut for the audience! Therefore, we should be clear that Rethinking Financial Reporting does not envision just a thinner version of today's ACFR. Rather, we envision wrapping the information that the audience needs (the 80/20 rule) in a highly accessible and personalized presentation (see the next section on technology). We can do this by redirecting the time and energy previously spent on producing lower-value information (the science of subtraction) toward creating a compelling presentation that substantially reduces the audience's uncertainty about the decisions they need to make (the value of information).

Questions for Rethinking Financial Reporting

- ***Can we streamline regulations?***[31] We can examine the potential to streamline regulations to meet the underlying purpose with the minimal possible burden.
- ***Can we eliminate regulations?*** We can examine the potential to eliminate regulations that no longer fit a purpose.
- ***Can we repurpose regulations?*** We can examine the potential to repurpose some regulations as purely optional "guidance" for local governments.
- ***Can we align requirements from different regulatory and quasi-regulatory bodies?*** Local governments are required to submit data for continuing disclosure and state reporting requirements, in addition to publishing an ACFR. Can we find a way to align the data requirements and timing of such activities?
- ***What information is of greatest value to bond buyers?*** Some information is more important; some is less important. Perhaps bond buyers would be willing to give up the latter for increased speed of access to the former, or there may be other win-win accommodations between issuers and bond buyers.

In a time of declining resources, we should ask if the finance officer's time is well spent producing these reports, if, in fact, these reports are not the best way to provide accountability to the public.

TECHNOLOGY TO THE RESCUE

The potential of IT for Rethinking Financial Reporting

Technology is often thought to be a way to improve government operations. Indeed, there may be potential when it comes to annual financial reporting. After all, the annual "reports" that most governments produce are faithful reproductions of decades-old paper formats, except now in PDF format. However, before taking for granted that technology will improve the situation, we should consider Bill Gates' first and second rules of technology in a business:

The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.

A way to restate Bill Gates' second rule is that technology can be a way to do the wrong thing faster. This suggests that we should be mindful of two questions about technology application to financial reporting. First, what do the audiences for reporting want to gain from financial reporting? This question would be addressed by the value of information and the 80/20 rule, as discussed earlier. Second, what are the fundamental powers of technology to affect change, and how can we take full advantage of these powers considering what the audience really wants from financial reporting? This speaks to working from first principles and making sure we are not doing the wrong thing faster.

So, what are these "superpowers" of technology? Let's examine them along with some possible implications for financial reporting.

IT Superpower 1: *Drive the marginal cost of producing information toward zero*

Technology reduces the cost of re-creating information because re-creating information does not require a corresponding expenditure of material resources in the physical world. Electrons can be replicated for an immaterial cost. This superpower applies primarily to marginal costs and replication—not to the cost of first gathering the information.

When it comes to Rethinking Financial Reporting, once information is produced, it can be reused and reproduced in countless ways for little cost. This could support highly personalized "portals" for different audiences. These portals could tailor information to what people want and deliver it in a format that aligns with their level of expertise. For example, some audiences may benefit more from summary graphics and plain language explanations, while others may benefit from technical details.

This superpower does not imply that it will be costless for governments to produce as much information as anyone could ever want. Startup is not costless and requires real-world resources. Hence, it is important to be careful about what information to make available. We should focus on the information that will reduce people's uncertainty about the consequential decisions they need to make.

IT Superpower 2: *Driving the costs of moving information around networks toward zero*

In the absence of IT, the costs of moving information around networks can be substantial. Physical mediums like papers, letters, and more are relatively expensive to produce and distribute. Electrons are much cheaper to move.

This means governments could "push" out information. Or interested parties could automatically "pull" information from governments and display the results in whatever format they like, such as an online portal, Excel spreadsheet, or formats for machine-to-machine communication (for example, JSON). This could eliminate the need to mimic paper documents in electronic form. It could also open ways to make information available sooner and better align the availability of information with when audiences want or need it.[32]

In the private sector, this superpower has led to a product strategy of "bundling" and "unbundling." Bundling is combining multiple products or services within a unique offering. Unbundling is the opposite; it takes one part of an offering (often the most valuable) and provides it as a stand-alone product and service. Comprehensive financial reports could be "unbundled" into smaller components that are immediately relevant to specific audiences. Different components could be "bundled" into a package containing the most useful information for a specific audience, while excluding less useful information.

IT Superpower 3: *Encode practices and values into individuals and organizations that adopt the technology*

Designers of technology, as people, have values. Those values are, intentionally or not, often reflected in the design of the technology. The users of technology are influenced by the technology and, thus, are influenced by those values. Technologies are not value neutral.

Sometimes the values of the designers are intentionally baked in. Facebook is a good example of this, where Mark Zuckerberg's values around privacy

NextGen Financial Reporting

Information technology offers the chance to rethink how local governments provide information to their audience—when, and in what format. GFOA has developed a public document on what the future of financial reporting might look like and invites anyone to comment and add their thoughts. Join the discussion at **gfoa.org/next-gen-financial-reporting**.

are part of the Facebook application.[33] It has been argued that, in the wake of Facebook and other social media platforms, people have come to place less value on their privacy.[34]

Finance officers are familiar with how technology can impact values when it comes to enterprise resource planning (ERP or computerized financial systems) that many local governments use. The designers of these systems build the system around "best practices" for how the designers believe that different transactions should be performed. When these practices are adopted by users, they often become so ingrained that if a government replaces its ERP system with one from a different technology firm, a lot of training and coaching are needed for users to adopt the new practices encoded into the software.

In other cases, there is no clear value system underlying the design, but the technology impacts our values, nonetheless. For example, most people now orient their lives around the choices made possible by the smartphone. As a result, their values have changed in countless ways, both subtle and not so subtle.

Financial reports communicate a set of values by virtue of what is communicated and how it is communicated. For example, bond buyers are an important audience for financial reporting. However, bond buyers' interests are not completely aligned with those of the people in the communities that local governments serve. If values are going to be encoded in technology, we must carefully consider what values those are and whose values they are.

IT Superpower 4: *Network effects*

By gathering more people on a common platform, the value produced by the platform increases at a nonlinear rate. For example, being the only user on a social media platform makes the value zero. Two users are a small improvement. Three is only slightly better. But as you get to hundreds, thousands, and millions, the value increases dramatically.

Large-scale sharing of information about the financial condition of local governments may offer significant public benefits. Examples include benchmarking studies for local governments to learn from each other and academic research on practices that either improve or harm financial conditions. To fully realize these benefits, it is a must that data is not used to create "walled gardens,"—or private/proprietary reserves of data—that prevent access by governments and researchers.

IT Superpower 5: *Artificial intelligence (AI)*

AI has reached an inflection point. It now has widely recognized potential to transform our society. It covers a wide range of applications that share the feature of being able to perform tasks that normally require human intelligence. For example, GFOA has successfully collaborated with Rutgers University to use AI to extract data points from PDF files of ACFRs. This could be a big step toward enabling local governments to comply with data dissemination laws. If the data can be extracted from a document by AI in moments, then it can easily be shared with whomever wants it. Another example is a technology called "intelligent process automation." This technology performs routine tasks with little or no human intervention.[35] GFOA is working with Rutgers to apply the technology to inspecting the financial reports submitted to GFOA for the Certificate of Achievement for Excellence in Financial Reporting Program. However, the real promise is to see if the technology can be used to read financial data and then make judgments about what to do next and then perform the next task. This could reveal the potential to automate tasks that governments perform to produce reports.

AI has the potential to automate many financial reporting tasks that currently require people. This could lower the cost curve with respect to the value of information (see Exhibit 3). AI could also bolster the IT superpowers just described. For example, AI could be used to automatically move information to where it needs to go or to replicate information as needed. AI could also create new possibilities. For example, third-party validation of government financial records (such as the external audit) is important to the audiences of financial reporting. AI could speed up and/or reduce the cost of third-party validation or expand the scope of information that is validated by a third party.

There are also risks that should not be overlooked. AI could accelerate Bill Gate's second rule of technology. For example, if we are not intentional about the values that are encoded into the technology, AI could accelerate and solidify less-than-ideal values.

Time spent on general purpose external financial reports is time not spent on other forms of decision support and public engagement. Simply put, this time is lost opportunity cost that could otherwise be used to build trust.

Looking across these superpowers and their implications, we might describe the ideal financial reporting system as:

- Delivering a presentation of information that is customized to audiences' needs. This includes the scope of what is covered in the reports and the level of detail and technical complexity.
- Enabling information to be pushed or pulled by audiences at a schedule that meets audiences' needs.
- Making information free to be aggregated across governments to serve the public interest.
- Accelerating third-party validation of information.
- Being based on a technology platform that reflects the community values that the local government serves.

Questions for Rethinking Financial Reporting

- ***What are the best uses of technology to improve financial reporting?*** We need to accentuate Bill Gates' first rule of technology and minimize the second.
- ***What information can be pushed or pulled to/by the audience for financial reporting?*** Perhaps this could be the basis for a win/win solution to financial reporting, where users are satisfied with more frequent pushes/pulls of key information in exchange for less energy spent by governments on producing low-value information.
- ***What values are being transmitted by financial reporting?*** We need to be clear about the values that would be transmitted by a technological solution.

PROCESS IMPROVEMENT

Can financial reporting be made lean?

Producing a financial report is a process. All processes have potential for improvement. Might there be ways to speed up financial reporting and reduce the time spent by applying process improvement methods that are independent of technology? For example, many local governments have applied methodologies like Lean[36] process improvement to reduce the time spent on financial transaction processing. Perhaps there is the same potential for financial reporting. Our survey of GFOA members suggests there may be. About 20 percent of respondents can complete their financial report in four months or less. A follow-up survey with this group suggests that carefully planning out the audit process and staging work is important to their success. GFOA can further research by exploring what can be learned from these governments and what process improvement methods may have to offer.

Questions for Rethinking Financial Reporting

- ***What are the leading process improvement opportunities for financial reporting?*** What non-technological opportunities are there to reduce the number of person-hours spent on financial reporting and increase the timeliness of reporting by using proven process improvement methods?
- ***Are there distinct organizational features of governments that can complete their financial reports more quickly?*** For example, are the reporting entities less complex or are there more staff members with accounting skills who can contribute to the completion of the report?
- ***To what extent is the capacity of external auditors a constraint?*** External audit firms need to balance their workloads. If many local governments in a region have the same fiscal year end, will capacity constraints among local auditors put a limit on how fast local governments, as a group, can complete their audited reports?

Conclusion

GFOA is "rethinking" several core elements of public finance, including budgeting, revenues, and now financial reporting. The reasons for rethinking include changing public attitudes about government, technological change, and the availability of new and better information about how people make decisions. One reason that stands out for financial reporting is a notable dissatisfaction with the status quo. The current approach may not be serving well the interests of any of its audiences: elected officials, the public, or participants in the market for municipal bonds. Further, the finance professionals who prepare these reports may be facing substantial opportunity costs with their time.

Thus, we believe there is an opportunity to increase the value provided to these audiences. We have identified a series of paths and questions that we might explore to realize this potential.

GET INVOLVED

We encourage you to get involved with the Rethinking Financial Reporting project. You can let us know of your interest via the contact form at **gfoa.org/rethinking-financial-reporting**, or by staying tuned to GFOA via our publications and social media.

1 For more about these forces and their implications for the Rethinking initiatives, please see the following GFOA reports: "Part 1: Rethinking Local Government Revenue Systems: Why is Rethinking Necessary" and "Why Do We Need to Rethink Budgeting?"

2 Response rates to individual questions vary. For example, many respondents choose to skip optional open-ended questions.

3 GFOA has surveyed members about their perceived satisfaction with budgeting. We asked respondents to rate the satisfaction of: the budget office, legislators, chief executives, and department heads. In the most recent 2019 survey, the respondents who reported "satisfied" or "very satisfied" ranged from 77 percent to 84 percent across the four groups mentioned. We also asked about the public's perceived satisfaction with budgeting. Satisfaction drops to 53 percent for the public, but the difference was made up by an increase in the "neutral" score. The percentage dissatisfied did not exceed 11 percent for any of the groups we asked about. This suggests that budgeting is viewed more favorably than financial reporting.

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5 Among the 286 respondents who provided valid answers to the survey question assessing the value of the ACFR, 55 percent indicated that the Annual Comprehensive Financial Report (ACFR) was produced within six months of the fiscal year end. Meanwhile, 21 percent reported that the ACFR was produced more than six months after the fiscal year ended, and 24 percent stated that the ACFR was ready within four months of the fiscal year end. It appears that there is a negative correlation between the timeliness of ACFR completion and the preparers' perception of its "value." Specifically, the longer it took to complete the ACFR, the less likely preparers considered it a "definitely good value," where the benefits outweigh the costs. For instance, only 10 out of 60 preparers who took longer than six months to complete the ACFR considered it a "definitely good value." Conversely, 43 out of 158 (27 percent) of the preparers who completed the ACFR within six months of the fiscal year end regarded it as a "definitely good value." Moreover, a higher proportion (32 percent) of the preparers completing the ACFR within four months of the fiscal year end viewed it as having more value compared to those completing it within six months. The rate of debt issuance appears unlinked to the perceived "value" of the ACFR. Regardless of whether a local government entity issues debt rarely, occasionally (every two to five years), or frequently (at least once a year), the fraction of preparers who believe the ACFR's benefits definitely surpass its costs is fairly consistent, at approximately 26 percent. There also were some differences in value perception based on government size, but it is not clear what the pattern would tell us. For example, 37 percent of governments between $400 million and $1 billion in revenue believed financial reporting was definitely a good value, giving it the highest proportion of respondents who thought so. It was 23 percent for governments between $10 million and $100 million, giving it the lowest proportion. However, governments below $10 million in revenue had 32 percent, and governments greater than $1 billion had 31 percent. Hence, there doesn't appear to be a clear pattern across the size categories.

6 It is possible that those who don't value financial reporting don't put as much effort into completing the report, resulting it longer timelines for those respondents. Our survey can't pinpoint the cause.

7 From the March 27, 2023, episode of "The Public Money Pod." The episode is called "Fix-It Financial Leadership" with Mark Scott.

8 We also asked respondents to tell us about elements we did not include in the survey that was of interest to their board. We only got a handful of responses, and there were no discernable patterns.

9 For example, the Chapman University survey of American's greatest fears has found that "corruption of government officials" has been the top fear of Americans every year since 2018.

10 Carroll, D. A., & Ciccarone, R. (2023, May 1). *Public vs. private auditors, big vs. little issuers: What's influencing the timeliness of municipal bond audits*. Government Finance Research Center, University of Illinois at Chicago.

11 With staffing challenges being one potential additional cause, which we take up in the following paragraphs.

12 As with our other survey results, this reflects the experience of those who prepare financial statements.

13 For more on this topic, see: Farmer, L. (2024, February 24). How the decline of local news is costing us. *Long Story Short*. Substack. Retrieved from: https://lizfarmer.substack.com/p/how-the-decline-of-local-news-is?utm_source=publication-search

14 Data from: Carroll, D. A., & Ciccarone, R. (2023, May 1). *Public vs. private auditors, big vs. little issuers: What's influencing the timeliness of municipal bond audits*. Government Finance Research Center, University of Illinois at Chicago. The report includes these notes about the data: The number of issuers (and commensurately the number of audits) varies from year to year. Median audit times for 2021 reflect 5,833 municipal revenue bond issuers across the individual sectors shown out of 16,713 total revenue and governmental bond issuers across all sectors (shown in the last column). Source of data: Merritt Research Services, an Investortools Company. Data compiled and reported from annual comprehensive audited financial reports available on February 24, 2023.

15 "Negative rating actions" can include a variety of actions, not necessarily a downgrade. For example, a rating could be withdrawn.

16 Based on reporting by: Farmer, L. (2023, March 31). These governments are running out of time. *Long Story Short*. Substack. Retrieved from: https://lizfarmer.substack.com/p/these-governments-are-running-out

17 Walsh, M., & Nason, E. (2023). *Meeting demand for state and local public finance jobs*. Government Finance Officers Association.

18 The Association of International Certified Professional Accountants. (2022). *2021 Trends: A report on accounting education, the CPA exam and public accounting firms' hiring of recent graduates*.

19 Example provided by King County and was cited in a letter from the County to the GASB.

20 This idea has existed since the 1950s as part of a field of mathematics called "decision theory," as described in: Hubbard, D. (2014). *How to measure anything* (3rd ed.). Wiley.

21 Illustration courtesy of Doug Hubbard.

22 Levy, D. (2021). *Maxims for thinking analytically: The wisdom of legendary Harvard Professor Richard Zeckhauser*. Dan Levy.

23 Let's consider two examples and then a theoretical explanation. First, Moody's Rating Service is known for their quantitative approach to analyzing the creditworthiness of local governments. The Moody's system relies on seven measures—when combined, use a small fraction of the total information available in a financial report. One of the well-known ways to evaluate a government's financial health is called "Brown's 10-Point Test." As the name implies, there are ten measures. Again, the total number of data points these measures rely on is relatively small compared to the total amount of information included in an annual financial report. As for a theoretical explanation, there is no single reason that a given phenomenon would follow a power law distribution. There are many. One that seems to fit financial reporting data is "preferential attachment." This means that users of financial statements tend to go where others have gone before. Once certain measures are established as being particularly useful, that's where everyone else will tend to put their attention.

24 Taken from: Page, S. E. (2018). *The model thinker*. Hachette Book Group.

25 Ibid.

26 For example, a recent effort at small government reporting, sponsored by GFOA, failed because, within the small group of volunteers, there was disagreement among preparers and users on what should be reported.

27 Full credit goes to Barack Obama for this pun. Social media has already roasted him for it. Story from Klotz's *Subtract*.

28 Though GFOA does not have a standard-setting role, it does promulgate a form of "soft law" by virtue of its standing as a leading professional association. Examples of "soft law" include GFOA's Best Practices and Distinguished Presentation Award programs.

29 The survey results allow us to probe whether the tendency to discontinue certain report elements is related to the time needed to complete the ACFR or the regularity of debt issuance. It was observed that for 11 of the 15 elements that the survey asked, a smaller proportion of preparers from government entities that rarely issue debt or complete the ACFR within four months tend to discontinue them. Take the aforementioned items for example, about 85 percent of preparers who complete the ACFR within six months or beyond six months are in favor of discontinuing "reporting and disclosures pertaining to leases," compared to 62 percent of those completing the ACFR within four months. A similar discrepancy is evident with respect to debt issuance frequency. To illustrate with another less popular element, around 84 percent of the government entities that issue debt either occasionally or frequently would like to discontinue "reporting and disclosures pertaining to subscription-based information technology arrangements," whereas 67 percent of the government entities prefer to discontinue this element.

30 Housel, M. (2023). *Same as ever: A guide to what never changes*. (Chapter title: Trying Too Hard). Portfolio.

31 By "regulations," we mean standards, practices, etc., published by authoritative bodies that are designed to compel local governments to take a certain course of action.

32 This is not meant to take a position on quarterly reporting. Rather, it suggests that technology could make it more practical to release information on different schedules that better align with the needs of different audiences.

33 Mark Zuckerberg shared his belief that privacy was no longer a social norm at the 2010 Crunchies Awards. Industry observers seem to think his views haven't changed much since. See, for example: Barrett, B. (2018, April 10). Mark Zuckerberg's privacy shell game. *Wired*.

34 An example of such an argument is: Sahota, N. (2020, October 14). Privacy is dead and most people really don't care. *Forbes*. Retrieved from: https://www.forbes.com/sites/neilsahota/2020/10/14/privacy-is-dead-and-most-people-really-dont-care/ This is just an opinion piece, but it seems clear that there is a reduced expectation of privacy among people and that people are willing to trade away privacy for convenience. For example, "free" social media platforms are often paid for by selling the personal data of the users, yet this does not seem to have hurt the growth or popularity of these platforms.

35 This differs from robotic process automation in that it can handle greater ambiguity in the rules governing the process and work with unstructured data.

36 Lean is a widely recognized approach to process improvement that has its origins in the automotive industry but is now used across many sectors, including government.

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