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GASB STATEMENT 34 AND THE MANAGERIAL ACCOUNTING NEXUS

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ABSTRACT. Will implementation of GASB Statement 34 induce the adoption of cost-accounting models in local governments? The authors address that question based on the findings of a national survey of local and county finance officers. Findings suggest that while finance officials recognize that GASB 34 will prompt greater accuracy and transparency in financial reporting, it may not serve to propagate greater utilization of activity-based costing (ABC) or its derivatives. Possible explanations may include feared impacts of increased cost accounting transparency as well as limited perceived payoff for investments in ABC-related tools. The authors acknowledge that this is a baseline “read” of attitudes; continued experience under GASB 34 may crystallize attitudes and lend greater support for future implementation of private-sector based- accounting methods.

INTRODUCTION

In June, 1999, The Governmental Accounting Standards Board revised the financial reporting model for state and local governments with the passage of Statement No. 34 (*Basic Financial Statements – and Management’s Discussion and Analysis – for State and Local Governments*). Until the passage of Statement No. 34, state and local government annual financial reports focused primarily on providing

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information about various governmental activities or sources of revenue within a governmental fund. Under the new reporting model, however, state and local governments' financial reports must provide information that deemphasizes traditional fund precepts while augmenting an entity-wide perspective. Further, Statement No. 34 requires state and local governments to adopt, in part, a full accrual accounting methodology while generating two new sets of financial statements; a statement of net assets and a statement of activities.

The goal of the two new statements is that governments will now report the total costs of service production and will delineate the bearers of those costs. For example, under the new accounting rules, financial statements may reveal the costs of operation for library reading programs or golf courses, and answer questions about whether the programs or courses are self-supporting via user fees, or require subsidies from other sources such as the general fund.

Equally important, Statement 34 implementation will allow consumers of state and local government financial statements to address a simple but profound question: "Are current users of a jurisdiction's infrastructure bequeathing a physical plant to future users that is in the same condition—or better—than that which they received from prior users?" During the early- and late-Eighties, and well on into the Nineties, there was much discussion of "The Infrastructure Crisis" and the apparent neglect of our nation's infrastructure. Many experts in government budgeting and financial management contended (Frank, 1997) that while fiscal stress was the primary driver of this neglect, governmental accounting models that overlooked the depletion of assets in many government operations were a contributory factor. From this perspective GASB 34 implementation represented a long overdue recognition of the fact that streets, roads, museums, courts, and other structures have lifecycles that warrant transparent reporting to the public in order to assess a jurisdiction's true fiscal condition. This aspect of Statement 34 implementation was perhaps its most controversial, and the one most likely to alter governmental financial reporting over time.

Statement 34 Implementation raises a number of auditing, accounting, and budgeting issues. Although GASB does not officially set budgeting standards for state and local governments, there is an implicit relationship between the new reporting model and the budgeting process. In this vein, Chan (2001) notes six implications of

Statement No. 34 for budgeting, including the possibility of accrual budgeting, multi-year budgeting, emphasis of budgets as accountability documents, focus on budgetary aggregates rather than agencies, the linkage of budgets and financial position, and the re-evaluation of budgetary processes. In all, Chan suggests that Statement No. 34 will require additional support of the accounting function, both in terms of resources as well as the harmonization of budget and accounting functions.

Today, finance managers are turning towards the accountants to assist them in developing cost information to be included in the new reporting models. Prior to the adoption of Statement 34 the accounting function's primary dual-fold purpose was that of a financial accounts custodian as well as historian of public assets. However, Statement 34's shift in reporting emphasis from the flow of funds perspective to that of the economic resources used in the production of the goods and services perspective ushers in a new era of governmental cost accounting.

Cost accounting techniques in the public sector have traditionally focused on budgetary forecasting, allocation, and control. The advent of Statement No. 34 is likely to expand this traditional role and may augur implementation of management cost analysis techniques that heighten traditional control and accountability while fostering activity-based accounting analytics.

New management accounting practices have proliferated throughout the public sector in the United Kingdom and Commonwealth, yet management accounting is not widely accepted or practiced by governments in the United States (D'Souza, 2006). Nonetheless, it is considered an integral part of "reinvented government" (Osborne & Plastrik 2001). From the "reinvention" perspective, cost-based management is best practice by providing decision-makers information regarding the investments they will make relative to an expected return—a private sector approach to maximizing public returns under conditions of scarcity. From this perspective, acquisition of accurate and timely programmatic cost information is a sine qua non of financial management in the 21st century.

It has been suggested that the limited acceptance by local government officials of a cost-accounting perspective stems from their perception that this approach is just another "technique-of-the-

day” rather than a support system to aid in strategic resource allocation. Perception aside, a reality that confronts finance officers who might embrace cost-based decision metrics is the limitation of government accounting systems, specifically their inability to identify costs associated with program development and delivery. This limitation becomes even more problematic within the context of local government financial reporting requirements as defined by Statement No. 34.

The purpose of this article is to describe and evaluate local finance officers’ attitudes towards adoption of the currently available cost-based accounting tools. The authors’ assumption is that Statement 34’s implementation provides an incentive to adopt a managerial accounting mindset in the local sector. Additionally, accounting rule changes—and their concomitant investment in accounting infrastructure—will provide an operational platform which will support this change. This article begins with an overview of management accounting to financial reporting and internal management operations and then examines a number of techniques that may be useful at the local level. Each of these tools is then evaluated relative to its potential application in the local sector. We then assess the findings of a survey of local government regarding their indicating their use of cost accounting in the face of Statement 34 implementation. The authors conclude with an assessment of the implications of our findings in light of Statement 34 roll-out and the future of cost-based decision-making in the local sector.

MANAGEMENT ACCOUNTING

The financial accounting and management accounting nexus can be described as the difference between military intelligence and military strategy. Military intelligence is primarily concerned with gathering data to support decision making, while military strategy concerns the utilization of data to make informed decisions. In this vein, the accounting literature suggests that financial accounting is an intelligence gathering device while managerial accounting provides the information needed in a strategic support system. Management accounting systems tailored to the individual needs of a jurisdiction could make a local government more efficient and effective. Appropriate cost measurement will eliminate free goods, create cost awareness and give managers the information they need

to make wise choices to manage constrained resources (Geiger, 1998).

The question then arises as to whether accurate cost accounting information will be utilized by local governments. A research project conducted by Gupta and King (1997) was designed to determine whether accurate cost reports would yield higher profits for private organizations. Surprisingly, the results indicated that decision-makers in these organizations preferred feedback from past decisions and other information, rather than cost information, when goal setting and forecasting expected profits.

However, the profits made by subjects... increased when they were given more accurate cost reports. Thus, more accurate costing systems did provide benefits, but benefits were not as high as would have been predicted had the subjects relied on the cost reports (Gupta, & King, 1997, p. 121).

Local government agencies do not have a profit motive and, thus, cannot be provided with detailed past profit performance figures upon which to base future projections. In addition, government decision-makers currently work with imperfect cost information and under complex environmental circumstances in attempting to reach sub-optimal decisions. One could extrapolate, therefore, that improving the cost reports of local governments would most likely significantly impact the efficiency of a local government's service production. Notwithstanding these environmental limitations, other factors weigh in favor of enhanced cost accounting. Firstly, such reporting would enhance the transparency of financial reports. Secondly, such reporting equalizes the fiscal playing field between traditional general fund operations and other operations such as enterprises that have traditionally absorbed all costs, particularly depreciation.

Management Accounting Techniques

As referred to earlier, financial accounting is designed to serve external users, whereas management accounting primarily serves internal users. Another significant difference between financial and management accounting lies in the valuation of costs. Financial accounting seeks to serve outside entities; hence it incorporates specific costing rules from the Statements of the Financial Accounting Standards Board or the Opinions of the Accounting Principles Board.

On the other hand, since cost accounting is meant to serve the needs of internal entities, its rules and metrics exhibit much greater diversity. This section briefly describes the various cost accounting techniques used by both the public and private sectors in valuing costs, with an added emphasis on how these current techniques can be utilized by local governments. The methods reviewed for this study are:

1. Activity Based Costing,
2. Full Costing / Unit Costing,
3. Theory of Constraints / Throughput Analysis,
4. Opportunity Costing / Cost-of-Quality Costing,
5. Micro-Profit Centers,
6. Multidimensional Balanced Benchmarking,
7. Economic Value Added Methodology, and
8. Value Chain Analysis.

Activity Based Costing / Activity Based Management

Activity Based Costing ("ABC") has been described as a method that measures cost and performance of activities and objects. It assigns costs to activities based on their use of resources and to products or customers based on their use of activities. It recognizes the causal relationship of cost drivers to activities (Weiss, 1997). In other words, "ABC is the practice of focusing on some unit of output—whether it's printing a dollar or maintaining peace in the Middle East..." (Walters, 1997, p. 18) and then trying to figure out as closely as possible what costs contributed to that output.

On the face of it, deployment of ABC would be useful tool for budgetary allocation and control. Unfortunately, current accounting systems used by most local governments in the United States today were developed when organizational structure and function were uncomplicated; today's organizational and programmatic complexity has effectively outgrown the ability of these systems to provide direct and indirect costs. These limitations preclude the ability of prospective ABC practitioners from making "special queries to extract more meaningful information than is provided in summarized data" (Gearhart, 1999, p. 13). Therefore, delivering the information

necessary to rollout ABC to front-line managers is sometimes a source of frustration.

Before a local government can address the technical issues of ABC implementation, it must first segment its business process into service units. The City of Indianapolis, Indiana, for example, used a five-phase approach in implementing ABC within its various city departments, which began by identifying the city's outputs. In Phase 1, the city defined project objectives and established departmental activities and outputs. Phase 2 of the plan entailed the collection and analysis of costs and the selection of an allocation method. In this phase, the appropriate cost drivers, the factors that effect total costs, for the activities in Phase 1 were identified. The current direct and indirect cost information was collected in Phase 3, allowing for the actual development of their ABC Model during Phase 4. "Using the information in the first three phrases, an ABC model [was] developed which [was] used to drive the activity cost pools to each output" (Anderson, 1993:, p. 8). The final phase for the City was the production of cost information and the expansion of the departments' capabilities for continued use of the ABC Model. By adopting an ABC approach, Indianapolis is not only measuring every service dollar delivered but it is also measuring the quality of that service.

The upshot is that ABC shows considerable promise, but its adoption by local governments is likely to entail a number of thorny technical and substantive issues (Gearhart, 1999). In practice, ABC is not much more than a paper exercise unless the richer accounting data are factored in budget, program, and human resources issues. Experience to date suggests that in the American context, particularly in local government, connecting these facets of operations has been an exception and not the rule. Thus, wide scale adoption of ABC is unlikely in the near term.

Full Costing / Unit Costing

Full Costing ("FC") is a close relative of Activity-Based-Costing. Its goal is to identify the total cost of an operation regardless of funding source, and to relate this cost to the organization's service objectives based on developed output measures. The use of FC in the budgeting process is innovative because government agencies typically expense their capital investments in the year of acquisition, rather than over an anticipated lifecycle. This allows projects or programs that do not

recoup the entirety of their capital costs to be viewed as "successful" or funded, even if that is not the case. Further, FC requires that all expenses associated with a department are expensed to that department or business unit.

Full Costing can also be used in conjunction with ABC. This scenario would be termed Unit Costing ("UC") and ensure inclusion of all costs, including direct operations, indirect operations, and general and administrative costs.

The Defense Logistics Agency ("DLA") developed a total unit cost-output model based on the UC method in order "to transform its resource allocation process from a traditional input oriented line item budget to an output-oriented operating budget" (Harr, & Godfrey, 1992, p. 15). Under UC, the DLA charged its depreciation of capital investments to its operating budget as a way to ensure its investments were actually paid back. "The certainty of having to improve operations sufficiently to pay for any investments led managers to undertake only projects with a reasonable probability of success" (Harr, & Godfrey, 1992, p. 22). By converting to this methodology, DLA linked its output measures to its performance standards, thereby ensuring accountability for purchases.

Opportunity Costing / Cost-of-Quality Costing

Two other approaches that could be deployed to assess the efficiency of government operations would be the assessment of opportunity costs ("OC") and cost-of-quality ("COQ") to improve the exactness of cost figures by including opportunity costs and cost-of-quality costs in the analysis. "Economic theory stresses that opportunity costs are relevant to resource allocation decisions" (Munoz, 1998, p. 47), yet these costs are rarely considered by governmental decision-makers. The essence of opportunity costs is that the cost of a resource used in a particular application is determined by the value of that resource used in the best foregone alternative. In other words, "... every act of choice requires an act of sacrifice." QOC assessment takes a broader perspective. It is based on the assumption that not only is "a penny saved a penny earned," but quite possibly, five cents, ten cents or more, if the savings or concomitant change in production method result in increased quality or quantity of service in the future.

Classic microeconomic theory holds that when resources are limited, opportunity cost must be considered to make the optimal allocation (Munoz, 1998). Nonetheless, Munoz notes that even in the private sector, use of opportunity costs for managerial decision-making is outweighed by historical costs based on financial statements and ledgers prepared under Generally Accepted Accounting Principles. This suggests that OC's adoption in the public sector, where sunk costs are often viewed as a primary determinant of future action (Stokey & Zeckhauser, 1978), may be equally limited.

The cost-of-quality is another calculus rarely considered in the public sector but deemed critical to informed decision-making in many private operations. The purpose of COQ is to reduce costs by shifting resources into training and error prevention. The reasoning behind this concept is most easily explained using "\$1, \$10, \$100 rule of thumb" (Kline, 1993, p. 15). This rule suggests that preventing problems costs a company \$1 whereas correcting or reworking a problem causes a company to incur an additional \$ 10 cost. Lastly, "[i]f the customer receives a poor quality product or service and walks away dissatisfied, however, it costs the company \$100" (Kline, 1993, p. 15). Traditional accounting methods may undervalue or overlook the importance of prevention and quality assurance programs.

Economic Value Added

Economic Value Added ("EVA"), also known as Residual Income, is distinguished from the conventional method of determining net operating profits (costs) because EVA requires the subtraction of capital charges from net operating profits. Capital charges equal the weighted average cost of capital multiplied by invested capital. Invested capital is defined as the sum of notes payable, long-term debt, capital leases, minority interest and stockholders' equity.

One major advantage of integrating ABC and EVA is that the decision maker becomes sensitive to the economic return of products, customers, and channels, as opposed to only considering the pure accounting profits of the traditional system. Therefore, EVA encourages more efficient uses of capital.

The EVA concept is related to both the Full Costing and Opportunity Costing concepts in that it can be integrated with an ABC system and advocates for the inclusion of costs not normally assessed when evaluating unit production costs. EVA's narrow focus

and tangible fiscal basis, however, makes this cost accounting adaptation easier to implement and more palatable to the accounting traditionalists than the broad-based Opportunity Costing model. It is clear, however, that public sector adoption of this process would require some modification of the definition of capital relative to the private sector.

Value Chain Analysis

Value Chain Analysis ("VCA") is a specific form of ABM; VCA has an activity based focus and, therefore, requires an ABC system to be already in place before it can be implemented. A "value chain is the linked set of value-creating activities all the way from basic raw materials sources ... through to the ultimate end-use product" (Shank, 1989, p. 50, as cited in Lord, 1996, p. 351). The goal of Value Chain Analysis is to diminish costs by reducing processes that create costs without increasing value.

In theory, implementing VCA in the public sector would be beneficial. It would force governments to think about the value-added of each of its services. In practice however, the absence of market prices for many of government's services might limit VCA's feasibility.

Theory of Constraints / Throughput Analysis

The Theory of Constraints ("TOC") is a management philosophy based on the assumption "that every organization has at least one factor that inhibits the organization's ability to meet its objectives" (Bushong & Talbott, 1999, p. 53). For example the time available of one or more key employees may constrain certain services from being provided. TOC emphasizes the maximization of an entity's objectives by assuring that this or other limiting factors be deployed more efficiently.

Throughput rate is the driver of TOC in the private sector. This is the rate by which a system generates profit through sales after allowances for material costs, commissions, and distribution costs. Because TOC operates under short-run time horizons, other operating costs are assumed to be fixed. "Once the constraining factor is identified, then a calculation is made determining the throughput per unit of the constraining factor" (Bushong & Talbott, 1999, p. 53).

Throughput analysis focuses improvement efforts on identifying and eliminating constraints that prevent material flow from generating more throughput with less expense. In the case of local governments, therefore, using this system would require administrators to assign dollar figures to the services they provide because prices would not be naturally occurring through the market process. This is the first drawback of using this system in the public sector, as these assigned prices may lack validity and reliability. Another foreseeable problem easily is the potential elimination or under production of services needed for a community's welfare. While most would agree to place a high value on police and firefighter services, how many would assign a large price to sheltering and feeding the indigent? If sheltering and feeding the indigent is not priced at a level commensurate with other services, so as to obtain a high throughput rate, then under TOC, resources would be funneled away from indigent services and into other areas. Given that a major role of government is to perform needed services that the private sector does not want to finance, a market-oriented approach such as this is likely to produce poor results when extrapolated to apply to local governments. Some merit might still be gained generally from TOC, however, if government entities were to evaluate their constraining factors in order to maximize their output efficiency.

Micro-profit Centers

A micro-profit center is an intra-organizational cost management technique better characterized as an artificial motivational construct rather than an accounting tool. "At the heart of the micro-profit center technique lies in the conversion of large responsibility centers into smaller profit centers" (Cooper, 1998, p. 16). The key is to reduce the size of the organizational form such that each center is small enough for all employees to feel able to impact their center's objective, yet, to keep the centers large enough to attach revenues to their produced outputs. For local governments, this would mean the creation of pseudo micro-profit centers, because local governments do not generate actual revenues. The revenues of pseudo micro-profit centers are based upon the standard cost of inputs under the control of the center and then adjusted according to output quality; revenues are increased for superior quality and decreased for substandard quality. The goal of this technique is to create incentives for individuals to improve yields and reduce resource consumption "by

harnessing the entrepreneurial spirit of the workforce" (Cooper, 1998, p. 17).

The concept of micro-profit centers has three major deficiencies. First, the aim of this technique is "to create incentives to improve performance, not accurately measure the profitability of the center" (Cooper, 1998, p. 17). Therefore, individuals within the organization may be relying upon false perceptions for their motivation, rather than accurate insights into the needs of the organization. This reliance upon inaccurate information could ultimately lead to inefficiency and ineffectiveness in relation to the organizational purpose. Second, compartmentalizing the whole makes coordination between micro-profit centers difficult and also impedes the creation of a coherent strategy for the entire organization. Further, this strategy encourages myopic contributions, thereby limiting the potential of the individual to contribute to the organization as a unit. Thirdly, in the case of pseudo micro-profit centers, without a market system to evaluate the price of the services or goods produced, the price determinants may be arbitrary and leave the system primed for failure.

Multidimensional Balanced Benchmarking

Multidimensional Balanced Benchmarking ("MBB") seeks to identify the best practices in an organization and proceed to develop a model based on these benchmarks. MBB thereby helps an organization to improve its operations using its own experience. The goal of MBB is to identify "new paths to improve operations and profitability in manufacturing and service organizations" (Sherman, 1998, p. 34). What distinguishes MBB from basic financial performance measurements is that MBB encompasses qualitative as well as quantitative goals. Under MBB, there are four performance dimensions: 1) quality of service, 2) marketing effectiveness, 3) productivity, and 4) profitability. By implementing MBB, local governments would make strides toward identifying and adopting the best practices for providing the public with **optimal services**.

MBB can be viewed as an expansion of the ABC process in that MBB requires an organization to identify the products and services it provides as an initial step in the process. Further, ABC would aid an agency in determining the appropriate benchmarks for both the productivity and profitability aspects of the model. NMB insights

about how much a service should cost combined with the ABC view of how much it does cost can enable the ABC analysis to focus on actual costs in best practices and move the organization closer to an optimal cost structure (Sherman, 1998).

Assessment

MBB, like the other cost-based methods we have just described, is a tool that could be utilized by public sector managers seeking to emulate their private counterparts. It is clear, however, that following the lead of private managers may not be easy in the absence of market signals attendant to provision of public goods. Further, local governments would need to make significant investments in their accounting systems to implement these market-based approaches. Lastly, neither the Government Finance Officers Association nor any public accounting body has mandated their implementation. That said, implementation of GASB 34 may be viewed as a necessary precursor to more enhanced costing of public service delivery. Statement 34's mandates take state and local government into an era of heightened concern for the true or total costs of operation. The survey results that follow constitute an initial read of attitudes towards the implementation of GASB 34 as an inducement to diffusion of the costing methodologies just described.

METHODOLOGY

The authors surveyed a random sample of 800 counties (of a total of 1,248) and 800 cities (of a total of 1,137) in the United States with populations greater than 35,000. Mailing addresses were culled from Census data, and we conducted two mailings addressed to the chief financial officer of each jurisdiction. Fifty-seven of our letters to cities and 63 to counties were returned as bad addresses. One hundred and seventy-four usable surveys were received from counties for a response rate of 23.6%, and 275 usable surveys were received from cities for a response rate of 25.5%. The overall response rate was 24.7 %. We attribute this moderate response rate to the prospective nature of the survey items, and to the fiscal problems experienced by most of the potential respondents at the time of the survey.

Our sample was very representative of our population size. We tended to under-sample the New England area at the expense of the

Midwest. Our responses were slightly biased in favor of the Council Manager form over the Strong Mayor. Nonetheless, we have garnered responses that were representative of the demographics reflected in the *2003 ICMA Yearbook*.¹

FINDINGS

The authors first attempted to identify any differences between cities and counties on the key variables of interest – namely, the effect of GASB Statement 34 on the adoption of the analytical techniques that form the substance of this paper. Few statistically significant differences emerged; those that were identified were either deemed trivial or too weak to be of interest. Hence, cities and counties constitute a common database for the remainder of this analysis.

Table 1 depicts the responses to the item: “The adoption of the financial reporting requirements described in GASB’s Statement 34 will facilitate the implementation of the following.” The respondents indicated their perceptions with a Likert-type five-point scale (1=strongly agree, 2= somewhat agree, 3=neutral, 4=somewhat disagree, 5=strongly disagree). The large standard deviations associated with each technique may indicate why no significant differences emerged between cities and counties. Indeed, no

TABLE 1
The Adoption of the Financial Reporting Requirements in GASB’s Statement 34 will Facilitate Implementation of the Following.

Activity	Mean	St. Dev.	Strongly or Somewhat Agree (%)	Strongly or Somewhat Disagree (%)
Activity-Based Costing	3.01	1.20	38.0	31.7
Unit Costing	3.27	1.05	20.8	35.7
Throughput Analysis	3.26	1.02	19.9	32.1
Opportunity Costing	3.33	1.00	17.2	35.3
Cost of Quality Costing	3.34	1.00	15.2	35.0
Profit-Cost Centers	2.98	1.14	37.1	28.6
Financial Benchmarking	2.88	1.16	42.6	27.2
Value Added Analysis	3.21	1.07	22.9	32.2
Value Chain Analysis	3.40	0.94	10.2	33.9
Performance Budgeting	2.93	1.30	38.6	28.6

significant differences were identified with any of the other variables examined size of jurisdiction, region, form of government, size of operating budget, size of capital budget, number of funds, number of personnel in the finance function, fiscal condition, gender, race, or age, or experience of respondent.

We did, however, find one significant correlate of attitude towards adoption, that being education level. A significant correlation ($p < 0.05$) was found between education (e.g., high school, bachelor's masters, and Ph.D.) and perceptions that the implementation of GASB 34 would facilitate incorporation of: activity-based costing ($\gamma=0.22$); unit costing ($\gamma=0.17$); profit-cost centers ($\gamma=0.20$); financial benchmarking ($\gamma=0.24$) and value-added analysis ($\gamma=0.26$). These relationships are obviously weak (i.e., < 0.30). But they may suggest that better-educated respondents are either a) more familiar with the techniques under consideration; or b) believe that the benefits of implementing these tools within the context of Statement 34 roll-out may outweigh the costs. This possible relationship between education level and attitude towards GASB 34 adoption is one that warrants future amplification. In the current context it is suggestive of linkage between heightened knowledge of a given accounting tool and perceived payoff in practice.

While all accounting activities detailed in Table 1 average relatively close to 3.0 mark, it may be of note that "Financial Benchmarking," "Performance Budgeting," "Profit/Cost Centers," and "Activity-Based Costing" form a cluster that is closer to the 3.0 average than the other tools. On the face of it, these techniques are likely to be more familiar to our respondents than their counterparts. Further, support for these tools may corroborate Chan's (2001) contention, noted at the onset, that GASB 34 is likely to heighten concern for the cost of producing government goods and services. At a minimum, Statement 34's adoption lays the groundwork for introducing an enhanced infrastructure (human and technical) for capturing all costs of service in government. Our findings may provide inkling that the GASB 34 adoption process has had an impact on the mindset of financial managers as well. Some of the tools about which we queried, such as Value-Added Analysis or Cost-of Quality may have seemed esoteric to our respondents. But sizable proportions of respondents either "strongly" or "somewhat" agreed

with Statement's 34's potential to introduce the locus of traditionally defined cost-accounting or budgetary tools.

Findings shown in Table 2, however, seem to cast at least some doubt regarding GASB 34's potentially catalytic impact on the adoption of cost-based accounting tools. Nearly half of our respondents believed that GASB 34 would "Pinpoint Infrastructure and Capital Investment Needs." Given that enhanced infrastructure reporting was one of the cornerstone principals of the Statement—arguably its *raison d'être*—limited support for this outcome would be surprising and disappointing from the perspective of the Statement's supporters. On the other hand, our respondents appear to view GASB 34 as having a limited impact on other facets of operations, including the identification of unit costs of service, the central theme of this article.

Further interpretation of these findings may be suggestive of how GASB 34 is perceived at this early stage of its history. The low percentages of support for GASB 34 as an inducement to a less politicized capital budgeting process or to enhanced strategic planning may be identified as two possible schools of thought. The first is that respondents may view Statement 34 implementation as a

TABLE 2
How Would You Gauge the Implementation of GASB 34 to Provide Incentive to Engage in the Following?

Activity	Mean	St. Dev.	Significant Incentive (%)	Little Incentive (%)
Activity-Based Costing	2.56	1.30	24.6	47.6
Implementation of Performance-Based Budgeting	2.59	1.33	25.6	47.8
Conduct Benchmarking with Other Jurisdictions	2.64	1.30	26.1	50.0
Pinpoint Infrastructure and Capital Improvement Needs	3.22	1.35	44.6	30.3
Identify Costs per Unit of Service	2.58	1.23	23.3	48.7
Identify and Implement Best Practices	2.79	1.28	29.9	41.7
De-politicize the Capital Budget Process	2.44	1.37	22.7	54.8
Engage in Strategic Planning	2.64	1.29	27.1	46.4

largely technocratic exercise, devoid of public or political scrutiny or interest. In so many words—it will change government financial statements to which few if any citizens or elected officials pay attention. As such, its impact will be minimal on public or political discourse. A second but closely related interpretation is that Statement 34's roll-out is so recent that its potential fiscal impacts are yet to be felt. Hence there is no appreciation for how GASB 34 might impact political and strategic deliberations on a locale's current and future infrastructure.

The 50.0% of our respondents who believed that GASB 34 implementation would provide little incentive to “Conduct Benchmarking Comparisons with Other Jurisdictions” may implicitly address two other important facets of local government financial management: the state-of-the-art of performance measurement in local government, and the lack of a widely-accepted performance or accounting “shorthand” method that relates production cost to some commonly established performance benchmark.

Recent evidence (Berman & Wang, 2000; O'Toole & Stipak, 2002; Tat-Kei Ho & Ni, 2005) suggests that local governments are increasingly moving beyond simple line-item budgets and adopting performance-oriented budget formats, with budgetary allocation linked to higher-level administrative concerns as community strategic planning, individual performance appraisals, and customer satisfaction. Moreover, local governments are increasing their utilization of outcome measurement. Ten years ago, only a small proportion of governments were engaged in systematic performance reporting (Kelley & Rivenbark, 2003), and to the extent it was taking place, such reporting was focused on output measurement.

Notwithstanding this diffusion of performance measurement and budgeting, as well as its development beyond “widget counting,” there is evidence to suggest that few local governments engage in systematic comparison of performance across jurisdictions (Morley, Bryant, & Hatry, 2001). The International City and County Managers Association's Performance Consortium has traditionally had only about 100 participants out of approximately 3,000 incorporated governments of 10,000 or more population in the United States, and there has been significant turnover among those participants throughout the project's first decade (Frank & D'Souza, 2004; Frank, et. al; 2004; Smith & Schiffel, 2006). The North Carolina Local

Government Performance Project lost its county participants in 2000 due to a mismatch of needs relative to the local government participants. Further, some of the county participants believed that five years of experience had garnered them as much as they could learn from the benchmarking experience (Smith & Schiffel, 2006). And finally, North Carolina's regional approach to local government benchmarking has had little emulation elsewhere (Frank & D'Souza, 2004).

The limited participation in comparative performance measurement in local government is likely to have a fairly complicated etiology. Recent survey research among city managers in Florida (Frank, et. al., 2004) suggests that few jurisdictions have the staff or information technology needed for such work, that many city managers are unwilling to invest money and time in an untested approach, and most importantly, many managers subscribe to the oft-opined view (Ammons, 1999) that their jurisdictions are unique and cannot be validly compared in the first place.

Etiology aside, the limited diffusion of systematic performance measurement across jurisdictions has implications for any GASB 34-cost-based accounting linkages and for our findings. As Coe (1999) notes, systematic comparison of services across jurisdictions requires two components: agreement on a service taxonomy, and a commonly-accepted costing structure. The former is needed to assure "apples with apples" comparisons (e.g., one jurisdiction's definition of a ton of garbage collected and disposed is the same for all jurisdictions); the latter is needed to facilitate price-value comparisons directly related to adoption of commonly accepted service taxonomies.

Coe's reasoning and the paucity of systematic inter-jurisdictional comparisons amongst local governments provide insight into why so few of our respondents perceived GASB 34's rollout as providing little inducement to benchmarking. If comparative performance measurement were a staple of local managers, it is more likely that our respondents would see the advent of Statement 34 as an inducement to benchmarking. On its face, Statement 34 rollout **could** provide the technical infrastructure needed to meet Coe's preconditions for systematic comparison. But if comparative performance measurement is not an established part of the local government management repertoire, it is highly unlikely that

managers will avail themselves of this infrastructure, absent a mandate from GASB or some other body.

A closely related factor in our respondents' limited perception of Statement 34 as inducement to increased benchmarking is the that local governments or the services they provide are not universally graded or scored on a widely-accepted price-value metric. If, for example, a reader wished to invest \$10,000 in a large capitalization growth mutual fund, he or she could obtain a **Morningstar** rating that shows how the hundreds of funds in that category rate in terms of investment return adjusted for risk and cost relative to peers and benchmarks, and invest accordingly (i.e., choose funds that have the best risk-adjusted returns with the lowest management fees).² Similarly, an individual interested in a mid-sized sport utility vehicle in the \$25,000-\$30,000 base price range could obtain **Edmunds**, **Consumer Reports**, or similar publications that rate automobiles on a number of dimensions such as handling, safety, gas mileage, on-road vs. off-road capacity, and the like, and make a purchase choice factoring these assessments. To our knowledge, there are no analogs to **Morningstar**, **Edmunds**, or **Consumer Reports** insofar as the rating of cities or their respective services is concerned. The popular literature (e.g., **Places Rated Almanac**, **Money**) or professional associations (e.g., Insurance Services Organization) may rate metropolitan areas or some of the services delivered therein. However, these measures seldom if ever relate quality-of-life or service to cost, and if they do so, the cost is shown as a jurisdiction-wide tax level (either in absolute dollar terms or as a percentage of personal income) rather than to the cost of a particular service. But, if performance measurement in local government continues to advance, it is conceivable that metrics relating costs of particular municipal services relative to service quality may be developed and disseminated, either voluntarily or via mandate. Such action would obviously bring about greater concern for, and application of, unit-based cost accounting among local finance practitioners.

CONCLUSION

Modern management accounting technologies have already entered the private sector and have filtered into the federal government in the United States. As globalization continues to force public and private entities to become increasingly cost-conscious, it

appears that local governments will need to redesign their accounting structures accordingly. Experience has shown that in the United Kingdom, cost accounting has become an integral part of their local governments' accounting systems. Outside verification of performance and accounting data has demonstrated that this practice has successfully increased the efficiency and effectiveness of these public entities.

Our findings suggest that this cost-accounting mindset may not have permeated our sample of local financial managers. This may reflect several cross-cutting currents. First, GASB 34 is a new experience for our respondents. It may be several more years of operation under the Statement before senior local government fiscal officers crystallize their beliefs regarding 34's merits and demerits. This possibility of "non-attitudes" may be reflected in the absence of significant predictors of sentiment that we noted earlier.

Another related factor is that GASB 34's depreciation requirements are eventually reflected across all funds at an enterprise-wide level, not at the agency or service unit level. Indeed, it is conceivable that a jurisdiction could be making net investments in its overall infrastructure from year-to-year (i.e., refurbishment and/or replacement of infrastructure exceeds depreciation and/or infrastructure that is taken out of service or depletes) while segments of its physical plant are being effectively "triaged" or written down. To our knowledge, GASB 34 does not mandate geographical or programmatic distribution of asset replenishment. Hence its implantation, particularly under conditions of fiscal restraint, may not necessarily filter down to all operations in a given local government.

Furthermore, one could argue that a generational effect may be at play in interpreting GASB 34's potential impact. While state-of-the-art financial practices such as those described earlier in this article call for absorption of all costs in the pricing of public services, many practitioners may still operate on the assumption that control is the paramount financial concern in public management. As John Mikesell (2003, p. 190) notes in one of the leading public budgeting texts: "There are limits to the utility of full-blown ABC to government decision making. Accurate cost estimates may be interesting as an intellectual and philosophical exercise, but may not mean much for actual public choice." Mikesell's comments suggests that there may be a chasm between "best practice" and the widely held belief that

the ultimate truth in public budgeting will be keeping spending within particular line-item or aggregate restraints. Over time, estimating the true costs of operation will be increasingly important component of public management, but at the present it may seem less important than staying within one's annual budget allocation. Our results may capture that belief.

Ultimately, widespread adoption of ABC techniques may be a function of mandate from either the GASB or other bodies such as the bond rating agencies or the Government Finance Officers Association. Both traditional public management (Leonard, 1986) and public choice (Wagner, 1983) perspectives hold that the typical civil servant is fearful of revealing the true cost of doing business. From a traditional perspective, fuller cost absorption may lead to greater bureaucratic infighting over scarce resources. ABC and related tools will increase costs for typical line managers who have been able to ignore or downplay depreciation and overhead in the absence of accounting mandates to the contrary. Our survey findings may capture at least part of the unease associated with the heightened scrutiny that ABC-related costing may bring. From the Public Choice perspective, this revelation may incur greater (and theoretically undesired) scrutiny through traditional oversight from the legislative branch. This discomfort may be difficult to overcome in the absence of more stringent, mandatory reporting requirements.

Microeconomic theory holds that diffusion of innovation is ultimately a benefit-cost decision. Our survey findings may suggest that senior finance officers do not perceive payoffs or incentives from GASB 34 as an inducement to cost-accounting based decision models as an everyday part of their financial management schemata. This might change. GASB 34's rollout is likely to require senior managers in the local and state sectors to pay greater attention to their "costs of doing business" over time.

On the face of it, the Statement's reporting requirements will differentiate public units that can raise at least a part of their funding via charges or fees *vis-à-vis* those that cannot and are more or less general fund-general revenue dependent. This split is likely to bring about the intensified scrutiny just mentioned, which will in turn increase the interest in cost-based accounting and value-added methodologies in local management. In essence, discerning the value of programs and the degree of cross-subsidy they can or should

receive from non-earmarked revenues may shift the benefit-cost calculus in favor of greater ABC utilization. Follow-up surveys to our baseline data presented herein may detect this shift.

NOTES

- 1 Here is the cross-tabulation of our responses by size and actual distribution:

TABLE 3
City and County Response Sample Cross-tabulated by Population Distribution

Population Group	Cities		Counties	
	Actual	Sample	Actual	Sample
>1,000,000	0.01%	0.01%	0.03%	0.02%
500,000-1,000,000	0.02	0.02	0.04	0.05
250,000-499,999	0.03	0.03	0.07	0.09
100,000-249,999	0.15	0.15	0.18	0.22
50,000-99,999	0.34	0.35	0.26	0.31
35,000-49,999	0.45	0.46	0.45	0.31

Our analysis showed that our responses also tracked region (i.e., New England, North Central, and West) as well as form of government (i.e., Council/Administrator, County Commission, and Mayor-Council) very closely, with no sample proportion tracking over three percentage points from its population proportion. These proportions support our belief that the responses to the survey were representative of the population.

Twenty-one in point-of-fact, the recent explosion in Exchange-Traded Funds (ETF's) and index fund investing lend credence to this point, i.e., many investors are concluding that if only a handful of portfolio managers ever beat their benchmarks, the 0.75 to 1.00 percent (or more) paid in annual management fees is a waste; buying a "basket" of stocks that mimic an index will yield similar or better returns at lower cost.

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