Putting Teeth into the Efficiency and Effectiveness of Public Services

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■ *The Governmental Accounting Standards Board (GASB), which establishes accounting principles for state and local governments, embarked in 1985 upon a research effort which may have a profound impact on public financial management. If successful, the research could lead to the creation of accounting guidelines encouraging, perhaps ultimately requiring, state and local finance officers to include performance measures of efficiency and effectiveness in their annual financial reports. These reports, in turn, are readily available for decision making by governmental officials, taxpayers, the media, credit rating firms, and other financial institutions. This article reports on GASB's research effort, using the participation of the City of Wooster, Ohio, as well as ongoing research in the hospital field, to illustrate the details and potential impact of this endeavor. In a sense, the GASB research project is the culmination of decades of research-oriented attempts to measure efficiency and effectiveness in the public sector, to develop performance-based budget systems, and to encourage meaningful financial reporting.*

Formed in 1984 as the successor to the National Council on Governmental Accounting, the Governmental Accounting Standards Board (GASB) establishes accounting principles for state and local governments. These principles largely dictate the form and nature of the financial information which is annually disclosed by financial officers to elected officials, the public, and the media through a public jurisdiction's annual report. GASB has recently embarked upon a research project which could have a profound impact on this public reporting mechanism. Through the fuller disclosure of relevant data on performance, the changes envisioned could also bring greater pressure on governments to provide public services in more efficient and effective ways.

In May 1985, a year after its creation, the five-member GASB board passed a resolution to encourage experimentation by state and local governments in the area of "service efforts and accomplishments" reporting, the accountants' terminology for the economists' "performance indicators." In the newsletter releasing the resolution, GASB stated that "research on . . . service efforts . . . may not start for several years . . . (and) there is relatively little information on which to build appropriate (accounting) standards if standards are desirable. . . . Encouraging experimentation by governmental entities in these matters will make it clear that the GASB considers these projects to be important. Experimentation will prompt research in these areas by both the academic community and practitioners." GASB's resolution concluded: "The GASB will actively seek out those wishing to experiment. Those who are already providing data . . . or who wish to start should contact the GASB director of research."[1]

A number of entities agreed to work with GASB on the project. The City of Wooster, Ohio, with a population of about 20,000 had, since the summer of 1984, been working on a related effort, which the City dubbed its "unit cost measurement" system. The use of a single city in this article is for illustrative purposes only; many state and local governments have advanced performance reporting systems, some more advanced than Wooster's.

The GASB project took on a new dimension in the fall of 1987 when the Board decided to organize a project team for more aggressive research and field work in a number of public service areas. The team is headed by James Fountain, GASB's assistant director of research and former assistant city manager of Dallas. He is assisted on the project team by Harry Hatry of The Urban Institute and Richard Brown, one of the authors of this article. Using the project team and, on a part-time basis, a number of university professors throughout the country, the researchers are now attempting to determine the current extent of performance reporting in a variety of municipal services, higher education, and hospitals. The indicators used, the form in which the indicators are reported, and the users and uses of the data are among the issues facing the researchers.

This article describes the GASB research in more detail and places it in the larger environment of governmental performance measurement. It also analyzes Wooster's participation in the project and presents some tentative findings for hospitals, one of the service areas under study. Finally, the implications of the research for public administration are discussed.

GASB's Objectives of Financial Reporting

In a December 1986 newsletter, GASB elaborated a bit on the meaning of "service efforts and accomplishments." It stated:

> For purposes of the experiment, service efforts and accomplishments information was broadly defined as information not normally included with general purpose financial reports, including but not limited to statistical data, economic data, trend data on financial condition, *data that attempt to measure the economy and efficiency of services or programs, and data designed to measure the effectiveness and results of services or programs.* (italics added)

In the 1986 newsletter, GASB offered an example of information published by the City of New York on its street cleaning program and on the Department of Sanitation that is shown in Table 1.[2]

This New York City illustration was not intended by GASB to be a startling example of a revolutionary performance indicator, and that is not the purpose here. Rather, it is a basic effectiveness measure which has been in use for many years and which may be important because it is suggestive of the essential kind of information in which GASB is interested.

GASB's concern for efficiency and effectiveness issues becomes more apparent when one reviews GASB's release on *Objectives of Financial Reporting.* In the summary to that concepts statement, GASB states:

> The Board has identified three groups as the primary users of external state and local governmental financial reports: the citizenry, legislative and over-sight bodies, and investors and creditors. Financial reports are used primarily to compare actual financial results with the legally adopted budget; to assess financial condition and results of operations; to assist in determining compliance with finance-related laws, rules and regulations; *and to assist in evaluating efficiency and effectiveness.*[3] (italics added)

Such statements are important, of course, because they are guiding the current research work by GASB, research which could lead to the issuance of accounting and reporting guidelines for governmental controllers and other accountants to follow in their reports to elected officials, the public, and the media.

At another key point in the concepts statement, GASB ties the entity's budget, performance review, and service efforts and accomplishments together: It states: "It (the budget) may provide a basis for evaluating performance. Comparisons of actual results to the legally adopted budget can provide information to help assess whether revenues were obtained and expended as anticipated. Detailed performance evaluation, however, requires the government to establish service efforts and accomplishments goals and to accumulate actual data for comparison purposes.[4]

Finally, under the heading, "Assisting in Evaluating Efficiency and Effectiveness," the concepts statement comments:

> Citizen groups and legislators, in particular, want information about service efforts, costs, and accomplishments of a government entity. This information, when combined with information from other sources, helps users assess the economy, efficiency, and effectiveness of government and may help form a basis for voting or funding decisions. To be of value, the information needs to be sufficiently detailed to permit comparisons with other years and other governmental entitles. Grantor agencies, including higher levels of government, are also concerned with the efficient and effective expenditure of grant funds.[5]

In summary, much of GASB's concern with "service efforts and accomplishments" relates to data which help the user—including elected officials and the public—evaluate the "efficiency and effectiveness" of governmental activity. Moreover, this information could be an important part of the budgetary process, permitting periodic assessments of actual performance against the budget plan. Finally, these service efforts and accomplishments data are, at least for the foreseeable future, outside the scope of the traditional financial statements. They may, however, be a part of an entity's comprehensive annual financial report, which includes customary financial statements.

Following its standard procedures, GASB issued its original exposure draft of *Objectives of Financial Reporting* in January 1986, and it held a public hearing on the draft in March 1986. The Board received 58 written responses from a variety of representatives of the accounting and finance community. A revised exposure draft was issued in October 1986, and 51 responses were received on this draft. The final concepts statement was released in May 1987. Some respondents to the concepts statement were troubled by the ramifications of the statement. The issue most often raised by the respondents was on the broad scope of the statement, with the belief that it was perhaps too broad to achieve. Concern was also expressed about the audit implications of what appeared to be such a major change. Could such data, some asked, be audited? Other respondents argued that information needed to satisfy the objectives would not be sufficiently useful or reliable to justify the high cost of developing it.

GASB's response was guided by the majority of respondents who essentially agreed with the statement, and the objectives remained basically unchanged in the final version of the concept statement. GASB's comment on the responses is noteworthy, however, The Board stated that, first, developing standards in these more difficult areas "is likely to occur over a relatively long time;" second, an analysis of costs and benefits, while difficult, would be important in determining the contribution of developing and using data on service

TABLE 1
Citizen Perception of Street Cleanliness in New York City

Rating of Streets	1975	1980	1986
Acceptable Clean	71.3%	53.0%	74.0%
Marginal	20.7	33.0	22.1
Filthy	8.0	14.0	3.9

efforts and accomplishments; third, the data developed may not be required to be presented in the basic financial statements and may not be required to be audited; last, such data are essential to achieve true accountability.[6]

The Need for Reporting of Service Efforts and Accomplishments Data

Measuring the hard-to-measure contributions of governmental programs has preoccupied scholars and practitioners for many years. GASB explains it well in *Objectives of Financial Reporting.* GASB states that external resource providers cannot measure governmental performance in terms of profit or return on investment and that they may not be familiar with the services provided because often they are not direct recipients of them. This explains the long-standing interest in pricing (user charges) and in extending the pricing concept as far as possible, perhaps including even elementary and secondary education through an experimental voucher system. It also helps to explain the preoccupation for generations with performance measurement.

In his textbook, *Introduction to Nonprofit Organization Accounting,* Emerson Henke includes a rather revolutionary chapter for an accounting text entitled "Use of Accounting Data By Externally Interested Parties." Henke explores the linkages between the more usual accounting data and financial reports of the private sector and the unique requirements of the public sector:

> In analyzing the financial statements of pure nonprofit organizations, externally interested parties are concerned with evaluating the same basic characteristics that they are concerned with in the profit area. They want to evaluate the efficiency and effectiveness of operations. . . . However, due to differences in operating objectives and organizational characteristics, the relationships and ratios used for analytical purposes are significantly different. . . . The basic technique for measuring the efficiency of any organization is to relate its outputs to its inputs. In the profit area we do this by matching revenues and expenses and by relating net income to equity investments. The primary problem in measuring this relationship for a pure nonprofit entity is that we seldom have an objective quantitative measurement of the values of outputs. If we could objectively determine the values associated with the services provided by such an organization, we could develop a ratio of those values to the cost of providing the services, or we could quantitatively match those two sets of data to arrive at efficiency indicators. . . .[7]

Actually, the accountants' interest in measuring the benefits of governmental programs is quite recent; modern economists and others have been struggling with it for at least two generations. The early cost-benefit analysis work associated with water projects began in the 1920s and 1930s, as did the efforts in performance-based budgeting. In the 1960s much of this work was packaged as program-planning-budgeting systems (PPBS), with its emphasis on cost-benefit analysis and measurement. Some researchers and even organizations have built strong reputations around demonstrating the use of performance measurements in assessing governmental programs.[8]

Performance, or expanded-scope, auditing first appeared on the American scene in the 1950s and 1960s, and it gained considerable momentum in the 1970s. As with many other "innovations," this work too had its roots in the early performance budgeting and cost-benefit analysis activity. The essential premise of performance auditing is, of course, that governmental accomplishment can, at least to a degree, be measured. Using workforce training as a program illustration, the fundamentals of a performance audit can be described as follows:

- *Goals.* What are the program's goals? To train what kinds of people? In what kinds of skills? In what numbers? To take what sorts of jobs?
- *Measures.* How is the success of this program evaluated? The numbers of trainees completing a program? The cost per trainee? The number of trainees getting a job in the area of training? The length of time the trainees kept their jobs?
- *Procedures.* What methods are used to do the audit work to secure objective, professional answers? Interviews? If so, with whom? A partial or complete search of the files? A statistical sample of the files? A telephone, mail, or in-person survey of employers, trainees?
- *Comparisons.* What do the findings or results mean? Are results better or worse than similar programs in other communities? Than norms or standards issued by some institute or accrediting body? Than those of the preceding year?

The major obstacles in the path of successful performance auditing are both technical and behavioral. While performance auditors have been able to generate their own measures and data, the lack of accounting systems with such measures built into them often proved controversial, sometimes even fatal. Moreover, governmental managers are not accustomed to having their performance measured. They see only bad, and little good, coming from the process. Also, elected officials tend to favor performance measurement only until it adversely impacts a favorite program.

Despite the difficulties encountered, performance auditing has survived and sometimes thrived at the federal, state, and even local levels of government, and it has demonstrated the positive value of reporting information on program accomplishment. It has helped to bring recognition that merely "coming in under budget" does not say much about managerial performance, i.e., the estimate may have been too high, needed services may have been curtailed, etc. Performance auditing has also helped to instill the notion that generating and maintaining such data really is a responsibility of management.[9]

GASB's concern with levels of service efforts and actual accomplishments is opportune, building as it does on this heritage and tradition. The experimentation is also timely in indicating the need for a fully integrated financial management *system.* In such a system, the *accounting subsystem* automatically captures and reports

on the execution of the *budget subsystem,* allowing for meaningful comparison of actual expenditures to budgeted estimates. The *audit subsystem,* in turn, can rely on the accounting subsystem to test budget execution without forcing the auditors to generate their own performance measures or data. While such a *complete system* is many years off, it would be well within the reach of GASB's research work, if it proves successful.

Ultimately, the integrated financial management system must be able to do more than the current system, which reports on dollars expended vis-a-vis dollars budgeted, even if those amounts are being presented by program or subprogram. To learn, for example, that $950,000 was actually expended rather than the $1 million budgeted, is not very helpful. It suggests that the manager may retain his or her position because he or she stayed within budget, or perhaps that the manager is frugal, providing the needed level of services far under the budgeted amount. It could also suggest that the manager did not provide needed services but instead, being an experienced manager, has learned to cut services to produce the desired surplus. In reality, the current system does not allow one to know what actually transpired. A truly integrated system, based on performance-based data, would allow the citizenry to know how much work was done and at what cost (efficiency). It might even let the taxpayers know whether a good quality job was done (effectiveness).

It is interesting to note that, following on the work of earlier scholars, the U.S. General Accounting Office (GAO) in 1985 released a report outlining such an integrated system and making it a priority of the Comptroller General.[10] If the GAO emphasis will help focus on the structure of the financial system, the GASB research will focus on its content—the GASB research is assessing the importance of including performance-based data in the system as well as the specific formats in which to include and report such data.

The Wooster Experiment

Wooster's unit cost measurement project helps to illustrate the potential power and pitfalls of performance reporting. Wooster, located 60 miles southeast of Cleveland and 20 miles west of Akron, is the headquarters of nationally known companies, such as Rubbermaid, Inc., and the Wooster Brush Company, and it is also the home of the College of Wooster.

In late 1974, Wooster began a process of identifying its financial strengths and weaknesses, with the clearly identified goal of achieving financial reporting in accordance with generally accepted accounting principles and earning by 1980 the Certificate of Conformance awarded by the Governmental Finance Officers Association. This goal was ultimately achieved. The city already had a number of competent operating managers, a reasonably well-paid staff with considerable tenure, strong working relations between the council and the administrative arm of government, and a tradition of "good" government with a minimum of political rancor. In addition, while not a wealthy community, Wooster is at least "average" from an economic point of view. Median family income in 1985 was about $27,000, and unemployment averaged about 7.6 percent. The city's property tax levy has remained unchanged for several years, and its income tax is among the lowest in the state. Moody's has given the city a bond rating of A-1 in recent years. If not outright affluent, Wooster has had at least enough fiscal stability to provide the city with a degree of flexibility in focusing on and improving its internal operations.

Unit Cost Project

With a great many improvements made in its basic financial management system during a previous ten-year period, the mayor elected in 1984, a retired Rubbermaid executive, formed a task force to look into installation of unit cost measures in every city cost center. This development occurred for several reasons:

- The mayor was accustomed to having more meaningful financial data.

TABLE 2
City of Wooster, Ohio
Unit Cost Measures Adopted by Cost Centers

Cost Center	Unit Cost Measure
Police Division	Cost per patrolman hour
Fire Division	Cost per capita
	Cost per response
Community Service Division	Cost per dollar of cost of services
Planning Department	Cost per $1,000 of real property value
Maintenance Division	Cost per direct labor hour
Engineering Division	Cost per $100,000 of fixed assets
Transit Division	Cost per passenger trip
Building Standards Division	Cost per inspection
Parks Division	Cost per acre maintained
Recreation Division	Cost per participant
Community Center Division	Cost per participant
Law Department	Cost per dollar of cost of services
Finance Department	Cost per dollar of cost of services
Accounting Division	Cost per transaction
Accounts Receivable Division (City Income Tax)	Cost per dollar of tax collected
Information Systems Division	Cost per CPU hour
Personnel Division	Cost per dollar of personnel service cost
Accounts Receivable Division (Utility Billing)	Cost per bill issued
(Utility Service)	Cost per work slip
Water Treatment Division	Cost per million gallons of water treated
Water Pollution Control Division	Cost per million gallons treated

- The city charter provided for such cost accounting information.
- The project seemed to be a logical extension of the city's investment in improving its financial system.

Wooster began this effort with a pilot project to test ideas, gather information, and build interest and acceptance of the concept. The pilot project involved 7 of the city's 15 departments, with managers or assistant managers serving on a user committee. The controller, a key member of the Finance Department, was project director. The committee received considerable support from the mayor and the director of finance and assistance from two external advisors, a former controller and a former vice president of finance from the private sector, both then in retirement. A quality control team, involving the mayor, the external advisors, and key members of the Finance Department, also met periodically to discuss problems, both potential and actual.

The user committee did most of its work in the summer and fall of 1984. Members agreed on the following broad criteria for the selection of unit cost measures:

- The unit must be relevant to the department's mission statement.
- The unit must impact the decision-making process of the department.
- The unit should be measurable, objective, and verifiable.
- The unit should be selected by the department.

Ths system was structured so that initially each department would select a single measure, although the Fire Department ultimately adopted two measures. Reporting was to be on a monthly basis. The Finance Department was responsible for assembling the data and reporting back only to each department. The annual budget for the relevant expenditure area was to be broken out by unit cost measures. Year-to-date data were to be accumulated and reported for each measure to arrive at an updated cost per unit, allowing for ongoing variance analysis throughout the year and building an historical database for future analysis. The unit cost measures selected by the city departments are shown in Table 2. An excerpt from a typical monthly report is shown in Table 3 for two cost centers.[11]

1988 Status

At the beginning of 1988 the unit cost information was still collected by Wooster's Finance Department and was reported back only to each operating department. Because it was still considered to be a pilot project, the information was not systematically reported to the mayor and/or council, and it was not yet used as the basis of budget/justification discussions or other important policy meetings. The unit cost information was not verified, and it was not routinely compared to other municipalities or to any existing performance standards. However, it was compared to the beginning-of-the-year estimates.

The "system" remained only a partial one in 1988, although it had been in operation for about three years. The project was moving ahead very slowly. Having started the system, no one seemed anxious to use it to its fullest. Instead, a strategic decision seemed to have been made, at least for a while, to allow the operating managers to use the data as they alone deemed proper. Comments by city officials on the status of the project were mixed and included the following observations:

- Maybe the system has gone as far as it can. There is no need for urgency.
- The project is on hold. We have not met on it now for more than a year.
- Full use of this system is 10 to 20 years off. It will probably have to be mandated by someone outside.
- Someday this information will be included in the city's comprehensive annual financial report.
- I am not at all sure outside groups will know what to do with this information.
- Some line opposition has developed to moving ahead with the system.[12]

Similarly, those operating managers who commented on the use and usefulness of the unit cost data had mixed reactions. There was understandably some un-

TABLE 3
Unit Cost System—Wooster, Ohio
Excerpts from Monthly Report

	Current Month			Year-to-Date		
	Budget	Actual	Variance	Budget	Actual	Variance
			Community Center			
Participants	3,333	3,451	118 F	19,998	22,059	2,061 F
Cost/participant	$9.57	$6.55	$3.02 F	$10.04	$6.91	$3.13 F
			Public Transportation			
Passenger trips	15,417	15,346	71 U	92,502	83,397	9,105 U
Cost/passenger trip	$2.86	$2.09	$ .77 F	$2.65	$2.11	$ .54 F

F = favorable variance; U = unfavorable.

certainty as to how to use the data. Occasionally, some time-honored maxims would surface:

- If you stay with your overall budget, you're okay.
- Why spend too much time worrying about your costs if you can't do anything about them?

Still, however, most of the managers interviewed seemed to believe that the unit cost data would make it easier for them to spot deficiencies and correct them. Also, they did not seem to fear a misuse of the data by outside parties. They were somewhat concerned, on the other hand, that some involved in the decision-making process would not understand the reasons for variances between budgeted and actual costs. They also wanted to separate out costs outside the managers' control, i.e., any allocation of overhead costs by the Finance Department. Managers in some functional areas were satisfied that systematic reporting processes were already being used in their fields, either by the state or federal governments or by a professional or trade association, to permit valid comparisons with other entities; others were less certain of existing practices. Finally, some managers worried that if comparisons were made with other municipalities, no one could guarantee that all entities were reporting on the same basis and including the same items in their cost data.

Hospital Reporting of Service Efforts and Accomplishment Data[13]

Along with research into state and local governments, GASB is reviewing university and hospital use of performance reporting. Several things can be said of hospital reporting of performance data. First, such reporting has virtually exploded in recent years. Second, this volume of reporting is almost certain to continue and even increase. Third, while much of the current reporting is of a workload or activity nature, there is clear movement toward measuring and reporting both efficiency and effectiveness data.

The growing interest in hospital performance and quality of care are illustrated by some recent newspaper coverage of the topic. On July 28, 1987, the *Wall Street Journal* published a story about hospitals using mortality statistics in their ads to attract heart patients. Popular interest in what would seem to be a very esoteric subject was further heightened by the federal government's 1987 release of mortality data for all hospitals with Medicare patients, which includes most hospitals.[14]

Of course not all data relating to hospital performance are so dramatic, but the volume and variety of the reporting are indeed overwhelming. A given hospital is likely to report periodically to the American Hospital Association (AHA) which annually publishes a comprehensive survey called *Hospital Statistics.* If the hospital wishes to obtain a special report of these data, tailored to the hospital's needs and with comparisons to relevant peer groups, it can subscribe to the AHA's Monitrend service. State hospital associations and some regional associations perform the same type of service. The Joint Commission on Accreditation of Healthcare Organizations calls for internal quality assurance committees, and it is moving toward a more formalized system of reporting of quality of care measures.

State and federal governments are also demanding more reporting of data on efficiency and effectiveness. In Maryland and Pennsylvania, state regulatory agencies require such reporting of all hospitals. The Health Care Financing Agency (HCFA), the federal government's agency for administering the Medicare and Medicaid programs, not only requires performance-type reporting from hospitals but also uses Peer Review Organizations (PROs), private firms under contract with HCFA, to actually verify such data by on-site examination of patient files.

As indicated, much of the hospital data currently reported are "utilization" data—admissions, discharges, average length of stay, occupancy rate, outpatient visits, etc. However, the tradition of reporting such data, coupled with HCFA's requirement for an annual Medicare cost report, increasingly allows hospitals quickly to calculate efficiency and productivity measures such as cost per inpatient day, cost per discharge, or nursing hours per inpatient day. But effectiveness or quality of care now seems to attract the most attention. The Joint Commission on Accreditation, some hospital associations, and state and federal governments are either currently testing or requiring the reporting of indicators such as mortality rates, readmissions, and infection rates.

Thus, to those who would argue that it is impossible to measure the quality of health care, the retort must be: it is certainly difficult and controversial to do, but it is being done.

GASB Research in Perspective

Research to date shows, perhaps contrary to the belief of some, that an effort such as GASB's to examine the need for reporting requirements relating to service efforts and accomplishments data is evolutionary rather than revolutionary and timely rather than futuristic. While this is true in a general sense, what are the specific lessons and problems encountered in attempting to implement such reporting?

The hospital research demonstrates that within that field there is a long and established tradition of reporting performance data, both to hospital associations and accreditation bodies and to state and federal governments. While past data tended to relate to workload, the trend toward reporting more efficiency and effectiveness measures is clearly established. Given these facts, it is unlikely that great incremental costs would be associated with further formalizing the existing reporting requirements. GASB researchers find that this is often the case in most service areas.

Aside from concerns about patients' rights, three key issues are involved with hospital reporting. The first is to ensure that performance data systematically finds its

way to members of the hospital board of trustees or other policy makers. Presently, this is very much a "hit-or-miss" proposition. The second issue is one which permeates reporting in any given service area: What reporting format should be used to ensure that the material is constructively used? If information becomes a part of the larger annual financial report, it takes on the aura which is usually afforded that document. On the other hand, if it is added to what already may be a large and complex annual report, that may virtually guarantee that it will not receive useful attention. The third issue relates to the validity of the data reported. Currently, little verification of data occurs, a fact that is inconsistent with encouraging greater reliance on the information for decision making. A call for formalized, external audits, however, raises other important concerns relating to cost and to the current ability of the auditing profession to conduct such reviews.

The Wooster experiment with unit cost measures is, of course, a long way from complete. Indeed, one could say it is just beginning. Still, a number of observations can already be made. The tentative conclusion can be drawn that this measuring and reporting system, if continued, would make government more accountable by disclosing data on efficiency and effectiveness. The unit cost project has been implemented slowly with the support of top management and with the active involvement of staff and line managers through a user committee. The unit cost measures for each cost center were selected by the managers of those centers and, equally important, the city avoided the data overload and frustration which result from trying to use too many measures. Moreover, the monthly reporting of the measures has thus far been limited to the program managers themselves, thus avoiding outside criticism and possible misuse of the data in the formative stages of the project. Finally, a student of financial management would likely conclude that the unit cost measures can indeed provide essential data on operations, data which are likely to interest external parties.

On the other hand, some possible limitations are apparent. First, nearly all of the unit measures now in use are either input, workload, or efficiency measures. Useful as some of these may be, they do not address the quality of services provided. It is probably wise, however, to begin with efficiency measures (since they are more understandable and less controversial) and later to add effectiveness measures. Another question is how many performance measures are needed for a given program. Is one such measure too limited to capture the complexities of a program; are 8 to 10 so many as to overwhelm the users of such data? The answer to this question is clearly difficult, and it must be worked out on a case-by-case basis.

Eventually, costs controllable and noncontrollable by managers will have to be reported separately in order to enlist the complete cooperation of the managers. They have already indicated their concern about being held responsible for costs they cannot impact. Also, not much detailed analysis has been done of the variances between budgeted and actual unit cost measures. Ultimately, comparisons between Wooster's measures and accepted standards in the functional areas, or data for similar entities are needed. Also as historical development allows, the ***budgeted*** unit cost measures should be refined. At present they are often merely one-twelfth of the year's planned activity in any functional area. Finally, an evaluation is needed of the costs and benefits of the reporting. While the cost data are currently being collected, an evaluation of the benefits would be premature at this time. However, when one assesses the cost and benefits of generating and using such data, a part of the cost consideration must be: in the absence of such data, how can a public program be truly managed? Or, phrased differently, how can policy makers ask the taxpayers for funds *without* collecting basic data on how the funds are being used and what is being accomplished with them?

One could suggest that Wooster's experiment is wisely being implemented slowly over a period of years; on the other hand, one could conclude it is moribund. The experience in Wooster, a community with a "good-government" tradition, suggests the need for outside pressure, however subtle, perhaps in the form of reporting requirements associated with its accounting system.

Conclusion

As indicated, GASB's research in the area of service efforts and accomplishments draws on experiences occurring over several years in public organizations throughout the United States. The GASB research team is examining many aspects of performance reporting, including which and how many measures seem to be most acceptable and practical in a wide range of program areas, how such information is used in the decision processes, how might such data best be reported for disclosure purposes, and what are the costs and benefits of generating such data. Coverage is expected to extend to states, cities, counties, public hospitals, school districts, and public universities. Still, the research conducted thus far provides some useful, if tentative, lessons.

It is likely that environmental and behavioral difficulties, and not technical ones, will be the most difficult problems to overcome in integrating service efforts and accomplishments into the traditional financial management structure. Some of these have surfaced in Wooster and have slowed implementation. When HCFA released data on hospital mortality rates, the immediate reaction of many hospital officials was to explain to the media and others why such data were misleading. The literature on performance auditing is filled with references to the controversial nature of that work. That is simply the flip side of including unit cost measures in the accounting system—it is using unit cost measures for auditing purposes.

The idea of performance measurement has broad support, but it is often opposed in specific instances of practice. Measures provide powerful signals about performance. Government managers and their view of performance data are reminiscent of the old football story:

"I don't pass because, if you do, three things can happen to you, and two of them are bad." With the systematic use of performance data, government managers perceive mostly bad things happening to them. They do not foresee an era of bonuses or stock sharing; instead they can generally envision only negative uses of performance data.

The use of service efforts and accomplishment data in the governmental arena approximates the profit signals of the private sector. To simulate the private sector fully, however, considerable economic, social, and behavioral changes are needed before the system can work completely. Installing a performance measurement system may turn out to be the least difficult part of the task. The design of training, education, and incentive systems to alter the environment may be the greater challenge. On the other hand, one could make a strong case that simply generating and using data on service efforts and accomplishments will positively *change* the environment of and current behavior in government.

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Notes

The views expressed are those of the authors alone and not necessarily those of any of the organizations with which they are affiliated. Thanks are extended to Dr. James B. Tinnin who manages Kent State University's Urban University Program. Funding from that program provided Dr. Brown with the research assistance to begin the preparation of this article. Acknowledgement is also given to GASB, with which Dr. Brown works as a research consultant.

1. Governmental Accounting Standards Board, "Infrastructure and Service Efforts Reporting," *Action Report,* no. 013 (September 1985), p. 5. The announcement and resolution also dealt with infrastructure assets reporting. This article covers only service efforts and accomplishments.
2. GASB, "Service Efforts and Accomplishments Taking Shape," *Action Report,* no. 031 (December 1986), p. 2.
3. GASB, *Concepts Statement No. 1: Objectives of Financial Reporting,* no. 037 (May 1987), p. 1.
4. *Ibid.,* p. 9.
5. *Ibid.,* p. 16.
6. *Ibid.,* pp. 37-40; and GASB, "Reporting Objectives Nearing Issuance," *Action Report* no. 036 (April 1987), pp. 1 and 3.
7. Emerson O. Henke, *Introduction to Nonprofit Organization Accounting,* 2d ed. (Boston: Kent Publishing Co., 1985), pp. 475-476.
8. See, for example: Leonard D. White, *Introduction To the Study of Public Administration,* 4th ed. (New York: The Macmillan Co., 1955) Ch. 17 on Budget Procedures and Practice; Robert Dorfman, ed., *Measuring Benefits of Government Investments* (Washington: The Brookings Institution, 1965); Harley H. Hinrichs and Graeme M. Taylor, *Program Budgeting and Benefit-Cost Analysis* (Pacific Palisades, CA: Goodyear Publishing Co., Inc., 1969); Harry P. Hatry *et al., Efficiency Measurement For Local Government Services* (Washington: The Urban Institute, 1979); and Paul D. Epstein, *Using Performance Measurement In Local Government* (New York: Van Nostrand Reinhold Co., Inc., 1984).
9. For a discussion of performance auditing, see Richard E. Brown, *Auditing Performance in Government* (New York: John Wiley and Sons, 1982); and the Price Waterhouse publication by Edward J. Haller, Richard E. Brown, and Robert L. Clements, *Evaluating Operational Performance: Establishing and Managing An Operational Audit Capability* (Boston: Warren, Gorham & Lamont, 1985).
10. See Robert N. Anthony and David W. Young, *Management Control In Nonprofit Organizations* (Homewood, IL: Richard D. Irwin, Inc., 1984), especially Chapter 1; and U.S. General Accounting Office, *Managing the Cost of Government: Building An Effective Financial Management Structure* (Washington: U.S. Government Printing Office, February 1985).
11. The account of the development of Wooster's unit cost system is based on review of the minutes of the user and quality control committees and on other materials from the city's records including actual, monthly unit cost and activity reports. Special thanks to Cadillac G. Gard, Controller for the City of Wooster, for making available a copy of his report, *Application of Management Accounting to the City Government of Wooster, Ohio: A Change Process* (January 1985).
12. As a part of the research for this article, Professor Brown conducted nearly a dozen interviews with officials and managers in Wooster, Ohio. These comments come from these interviews.
13. This information is based on a research report prepared for GASB by one of the authors, Richard Brown. The research included the collection and analysis of actual performance reports and interviews with over 20 officials in the hospital field, including those in the American Hospital Association, the Joint Commission on Accreditation of Health Care Organizations, the Health Care Financing Administration, the Healthcare Financial Management Association, the American Medical Review Program, The Urban Institute, and several state hospital associations and hospitals.
14. Frank K. James, "Controversy Mounts Over Efforts to Measure Quality of Health Care," *Wall Street Journal* (December 17, 1987), p. 29; Michael Waldholz, "Report on Medicare—Patient Death Rates Draws Fire of Hospital Representatives," *Wall Street Journal* (December 18, 1987), p. 44.