

**VOLUNTARILY REPORTING PERFORMANCE
MEASURES TO THE PUBLIC:
A TEST OF ACCOUNTING REPORTS FROM U.S. CITIES**

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ABSTRACT: *This study examines performance reporting in the publicly available financial reports of U.S. cities and tests various political and economic factors that are expected to be associated with the extent of this reporting. While performance reporting is required in many jurisdictions throughout the world, U.S. cities engage in this process voluntarily. The study addresses the question of whether publicly reporting nonfinancial performance measures appears to be a “quality” reporting activity similar to following GAAP accounting or earning awards for financial reporting. The conclusion is that nonfinancial performance reporting appears to be a quality reporting activity. However, unlike the quality reporting of financial activities, two factors limit the growth of this practice: 1) variability in practice, and 2) managerial resistance. The use of the comparable data method (CDM) is introduced as a possible solution to both limitations.*

Accounting is a discipline that attempts to measure the performance of economic entities and to report those results to interested parties. While accountants may argue about the relative importance of various measures of a business’s financial performance—net income, cash flows, comprehensive income, or changes in owner's wealth—they emphatically agree that business performance should be measured in financial terms, although not necessarily exclusively so (Jones 1994). In contrast, where governmental entities are concerned, there is little or no agreement regarding either the proper units or the appropriate measures of governmental performance (GASB 1987, 1994; Hatry 1999; Anthony 1989; Zimmerman 1977; Jones 1994; Osborne and Gaebler 1995; Garcia et al. 2002; Jones and Mussari 2000; Neale and Anderson 2000; Johnsen 1999; van Helden and Johnsen 2002; GFOA 1993, 2002).

According to the Governmental Accounting Standards Board (GASB 1994), the financial reports of U.S. governmental entities provide adequate information for many decisions (e.g., bond transactions, compliance with debt limits), but are inadequate for others (e.g., benefits received by individual taxpayers, effectiveness of particular programs). In particular, the GASB concludes that it is necessary to augment financial

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reporting with nonfinancial measures of performance (GASB 1987, 1994) and that performance measures are necessary for "assessing accountability and making informed decisions" (1994,1).

The GASB has been working on performance measures under the heading "service efforts and accomplishments" (SEA)¹ since its inception in 1984. The GASB issued a concepts statement on SEA (1994) in which they defined five types of performance measures: input, output, efficiency, outcome, and explanatory. While the GASB concluded that SEA reporting was necessary, it did not issue a standard that requires state or city governments to publicly report performance measures. Instead, the GASB stated that "extensive research and experimentation" was needed before an SEA reporting standard could be developed (1994, 32).

A large number of researchers have responded to the GASB's call for research on SEA reporting (Hatry et al. 1990; GASB 2000; University of Texas 1996, 1998, 2000; *International Journal of Public Administration* 1995, nos. 2 and 3). Most of the research has involved case studies (GASB 2000; Wholey 1999; Serban and Burke 1998; Swonger and Mead 1998; Texas Governors' Office 1995; Ahnell, Davidson, and McKenzie 1995), descriptive surveys (Julnes 1998; Lee 1997; Tigue 1994; Tigue and Strachota 1994; GASB 12-part series summarized in Hatry et al. 1990; Poister and Streib 1999), or behavioral experiments (Reed 1986; Schrader 1995; Reck 2001). The primary focus of most of this research has been on the types of measures being used and the internal or external uses of the measures.

While there has been significant activity on the part of GASB and academic researchers, the push for disclosing performance measures in publicly available accounting reports has met with resistance. The Government Finance Officers Association (GFOA) has been perhaps the most vocal critic of the GASB's efforts. In both 1993 and again in 2002, the GFOA stated its opposition in the strongest possible terms to the GASB playing a role in the development of performance measure in the public sector (GFOA 2002).

The heart of the GFOA (2002) argument is that performance measures are inherently budgetary and managerial in character. Thus, using the dichotomy of reporting for 1) accountability or 2) decision making from Garcia et al. (2002), the GASB believes that performance measures are important for accountability and should be publicly reported, while the GFOA believes the measures should be used internally for decision making and there should not be an accounting requirement to report them publicly. The survey results from Poister and Streib (1999) show that top-level U.S. city officials strongly agree with the GFOA view.

While the knowledge base surrounding types and uses of performance measures has improved greatly in the last several years, a controversy remains over the need to publicly report these measures. Since reporting these measures in U.S. cities is currently voluntary, the question arises as to why governmental entities would engage in this costly practice. There are numerous individual costs associated with collecting and reporting performance measures, while the benefits are diffused throughout society. Understanding the factors that lead to voluntary SEA reporting may assist policymakers in increasing the accountability reporting of public institutions.

Objectives of the Study

The primary objective of this study is to develop and test a model of nonfinancial performance reporting as a “quality” external reporting activity. Prior research on government accounting choices (see Cheng 1994 for a review) has examined various quality reporting activities such as following GAAP (generally accepted accounting principles), winning the GFOA Award, or timely reporting (see table 2). While similar in their focus on quality external reporting activities, this research stream is widely divergent regarding the types of decisions, the types of entities, the factors that influence policy choices, and the incentives of the various parties involved with accounting policy decisions.

Prior researchers have not developed a unifying theory of governmental accounting choice, nor does this study attempt to develop one. However, prior research has developed several theoretical links between certain economic and political factors and governmental accounting choices. These theories are adapted in this study to identify factors that likely influence SEA reporting. Three additional theoretical factors that are unique to the issues surrounding nonfinancial performance reporting are developed and included in the model.

The secondary objective of the study is to briefly consider some factors that might increase or decrease the widespread adoption of this particular quality reporting activity. Two potential limitations to broader adoption are identified and the comparable data method, or CDM (Johnsen 1999; van Helden and Johnsen 2002; ICMA 2003; University of North Carolina 2003), is introduced as a possible solution to greater adoption of nonfinancial performance reporting.

Methodology

The study features a random sample of full-service, general-purpose cities in the United States. These cities were requested to provide their annual report, their legally adopted budget, and any other document containing performance measures which are readily available or targeted to the general public (see Appendix A). These documents were analyzed and catalogued to determine the dependent variable, the extent of SEA reporting. The hypothesized independent variables were gathered from publicly available sources, as well as a mail survey (Appendix B) that was included with the request for the publicly available documents. Finally, the model is tested using multivariate statistical analyses.

The choice of methodology (survey, case study, cross-sectional data analysis, etc.) impacts the relative strengths and weaknesses of what can be learned (Roberts and Bradley 2002). This study uses cross-sectional data analysis because it appears to provide the greatest clarity in relation to the prior literature on voluntary governmental accounting choices. Certainly, other research methods would be useful in learning different lessons, and following this particular study with case studies and surveys and other methods should enhance and clarify the insights that are suggested.

Contributions

This study provides two contributions to the literature on performance reporting. First, the evidence suggests that publicly reporting nonfinancial performance measures appears to be a quality reporting activity. As such, it should be encouraged to occur more frequently as long as it is cost beneficial. The second contribution is that the CDM is suggested as a historically successful and apparently cost-beneficial method to improve the adoption and usage of publicly reporting nonfinancial performance measures.

INSTITUTIONAL BACKGROUND

Traditionally, accountants have measured the performance of governmental entities in relation to how closely the entity conformed to legal restrictions, primarily those found in the budget. Recently, the shift has been to measuring operational performance through the use of SEA measures. This shift has occurred at the local level (Hatry 1999; Ammons 1995a, 1995b; Barrett and Greene 1991, 1992), at the state level (Serban and Burke 1998; Walters 1998; Barrett and Greene 1993, 1995; Texas Governors' Office 1995), and at the federal level (Wholey 1999; Gore 1993; Kettl and DiIulio 1995).

Brief History

The earliest known American treatise on municipal accounting, *The Town Officer*, was written in 1791 by a Maine judge, Samuel Freeman (Wenzel et al. 1992). Judge Freeman suggested a "plain and regular" (61) method of accounting that is strikingly similar to current municipal accounting (Wilson et al. 2001). Recently, GASB *Statement No. 34* (1999) requires some dramatic changes to how financial statements are displayed. In spite of these changes, GASB 34 did not institute any significant change in the voluntary nature of performance reporting.

Previts and Brown (1993) reviewed the accounting profession's attention to government accounting topics from 1905 to 1989. Previts and Brown investigated different forms of government (local, state, and federal) as well as different topics (financial reporting, financial auditing, performance reporting, and performance auditing). The attention to performance reporting increased dramatically in each of the three time periods they analyzed. Performance reporting topics were 4 percent of articles from 1905 to 1939, 11 percent from 1940 to 1979, and 27 percent from 1980 to 1989.

Interest in performance reporting has strongly increased since 1989 with the publication of Osborne and Gaebler's national best-seller *Reinventing Government* (1992) and the high-profile report on the National Performance Review by then Vice President Al Gore (1993). The Gore report received a great deal of attention by the press and politicians. In addition, professional organizations such as the American Society for Public Administration (ASPA), the GFOA, the National Academy of Public Administration (NAPA), the International City/County Management Association (ICMA), the Urban Institute, and the GASB have all promoted the use of performance reporting (Ammons 1995b). While measuring legal compliance is still an important aspect of measuring government performance, there has been a significant shift in focus to measuring operational performance as well.

Operational Performance Measures

Operational performance measures are defined in the GASB's *Concepts Statement No. 2* (1994, 20-24). The GASB identified four items that comprise the SEA reporting elements, three measures plus explanatory information. The three measures are:

- 1) those that measure service efforts,
- 2) those that measure service accomplishments, and
- 3) those that relate efforts to accomplishments.

Efforts are defined as the "amount of financial and nonfinancial resources (in terms of money, material and so forth) that are applied to a service" (GASB 1994, 21). The term inputs is synonymous with efforts and is used much more frequently in the broader performance measurement literature, especially in the field of public administration.

Accomplishments measures "report what was provided and achieved with the resources used. There are two types of measures of accomplishments: outputs and outcomes. Outputs measure the quantity of services provided; outcomes measure the results of providing those outputs" (GASB 1994, 21). The terms outputs and outcomes are widely used in the broader performance measurement literature; however, the popular literature (Osborne and Gaebler 1992; Gore 1993) prefers the term results in place of outcomes. The term accomplishments is rarely used except by the GASB.

There are two types of measures that relate efforts to accomplishments. Efficiency measures relate efforts to outputs, while cost-outcome measures relate efforts to outcomes (GASB 1994, 23-24). Some individuals refer to cost-outcome measures as effectiveness measures, although GASB did not explicitly adopt this usage in the concepts statement.

Explanatory information may be either quantitative or narrative. Quantitative information can be about "factors substantially outside the control of the entity" or "factors over which the entity has significant control" (GASB 1994, 24). Narrative information can "provide explanations of what the level of performance reported by the measure means, the possible effects that explanatory factors might have on performance, and actions that have been (or are being) taken to change reported performance" (24). Explanatory information is particularly important when comparisons are made among the performance of different entities.

The GASB clearly indicated that not all performance measures are of equal value for assessing accountability. Input measures simply indicate what resources were available to the entity and give very little information about the stewardship of those resources. Output measures provide information about how the resources were used, but they do not clearly show if the entity is accountable to the goals or objectives to which it aspires. It is not until effectiveness and outcome measures are provided that a user can truly assess accountability. Even then, it is often imperative that explanatory information be provided, especially in areas where the outcomes are impacted by many factors, only one of which may be governmental expenditures. Table 1 lists the types of performance measures assessed in this study and examples of each type of measure.

TABLE 1
Types of Performance Measures

Performance Measures (*Examples for a Police Department*)

INPUT	Amount of financial and nonfinancial resources applied to a service (<i>number of police cars, police stations, volunteer hours</i>)
OUTPUT	Quantity of service provided (<i>number of arrests, miles patrolled, safety presentations at local schools</i>)
OUTCOME	Results of providing services (<i>crime rate, response time, citizen responses to survey</i>)
EFFICIENCY	A ratio of inputs, outputs, or outcomes (<i>number of arrests per officer, cost per patrol mile</i>)
EXPLANATORY	Information that describes current performance levels or the actions being taken to change reported performance (<i>square miles of city, percent unemployed</i>)
AIDS	Presentation format that assists the user in understanding the performance measures. Four types of aids are: <ol style="list-style-type: none"> 1) comparisons to prior years 2) comparisons to other entities 3) charts, graphs, or tables 4) linking the measure with a goal or objective

Descriptive Research on Governmental Performance Reporting

The recent interest in performance measures has led to several efforts to obtain and catalogue descriptive statistics regarding SEA use, both internal and external. The GASB has led the effort to document external reporting while the GFOA has led the effort to document internal use. Both GASB and GFOA studies have investigated budget documents, although the GASB tends to view budgets as external reporting to users while the GFOA tends to view budgets as an internal management tool.

The GASB's interest in performance measures was an outgrowth of their first concepts statement, in which it was stated that one of the objectives of external financial reporting for governmental units is to provide "information to assist users in assessing the service efforts, costs and accomplishments of the governmental entity" (1987, para. 77c). This led the GASB to commission a comprehensive research endeavor into the status of performance reporting by state and local governmental entities. The project involved twenty-four researchers investigating twelve significant program areas.

In the overview report of all twelve service areas, Hatry et al. (1990, 4) indicated that:

The primary objective of this research was to determine whether the state of the art in SEA measurement is sufficiently developed to warrant the GASB, state and local governments, and public interest groups encouraging governmental entities to present SEA indicators as part of their financial reporting. If so, the GASB asked that the researchers provide suggestions as to the structure and the method of reporting, such as which SEA indicators to include and how they should be reported.

The answer to the first question was affirmative, and the majority of the reports identified actual and potential measures to be reported. Each research team worked independently on different service areas; therefore, the results do not provide guidance on entity-wide SEA reporting.

In the fall of 1997, the GASB received a significant grant from the Alfred P. Sloan Foundation “to enhance our SEA research and to address performance measure development needs for state and local government” (GASB 2000, 2). The GASB intends to use the research to begin considering, “whether performance measures have developed to the point at which the Board can consider requiring their reporting as part of general purpose external financial reporting of state and local government” (3).

In April of 2000, the GASB released the results of twelve case studies covering six states and six cities. GASB issued another six case studies in 2003. These case studies used in-depth interviews to assess:

1. the actual usage of performance measures,
2. the effects of using performance measures, and
3. how the governments ensure the relevance and reliability of their performance measures.

The case studies do not develop objective cross-sectional measures of the extent to which the entities publicly report performance measures.

The GFOA surveyed its members on their use of performance measures and received replies from almost one thousand members (Tigue 1994). The purpose of this survey was to “assess the extent to which (GFOA) members are using performance measures and how these measures are used” (42). Tigue found that larger entities are more likely to use performance measures than are smaller entities. She also found that almost 70 percent reported the measures in the budget, while less than 25 percent reported them in the annual financial report. She noted that output and input measures were used frequently, 70 percent and 60 percent respectively, while outcomes and efficiency measures were used less frequently, 40 percent and 32 percent respectively. The survey instrument did not inquire about the use of explanatory information. All responses were self-reported.

A second GFOA study looked at the performance measures used in budget documents that had earned the GFOA Distinguished Budget Presentation Award (Tigue and Strachota 1994). The purpose of this study was to determine how city and county governments were reporting performance measures in their budget documents. They found that practices varied widely, with one entity reporting only 79 measures, one reporting as many as 4,326, and the average entity reporting 601 measures. Output measures comprised 70 percent of all types of measures that were reported. Size of the entity was not correlated with the types of measures reported, but was positively

associated with the number of measures reported. Less than 10 percent of the budgets included explanatory information, and it was usually related to inputs or outputs.

Taken as a whole, the GASB SEA series, the GASB case studies, and the two GFOA reports contribute significantly to our understanding of the use and reporting of performance measures. Unfortunately, none of these studies provide the appropriate data to analyze the questions in the current study.

LITERATURE REVIEW AND HYPOTHESES

This study follows the governmental voluntary accounting choice (G-VAC) methodology begun with Zimmerman (1977) and reviewed in Cheng (1994) and Luder (1992). This study adopts two theoretical assumptions common in this literature: 1) all actors are rational economic agents, and 2) multiple agents influence policy choices. The next paragraphs briefly describe five commonly tested hypotheses from prior research (summarized in table 2) that should influence the extent of performance reporting.² Three newer hypotheses (media, fiscal stress and internal auditing) are developed in greater detail. The log of population is included as a control variable.

While there was a great amount of activity in the G-VAC area in the 1980s and early 1990s, hardly any voluntary governmental accounting choice studies have been published³ since 1994 outside of the auditing area. Possible reasons include the improvement and standardization of accounting choices (i.e., following GAAP and earning the GFOA Certificate) as well as the lack of any new voluntary reporting options. The extent of performance reporting is likely to vary widely across city governments and is a good candidate for extended research using the established G-VAC methodology (Laswad et al. 2002).

Hypotheses Common to Prior Literature

The first hypothesis relates to the influence of voters. Early G-VAC studies adopted Zimmerman's argument that individual voters have no influence on public policy decisions. More recently, researchers have adopted the view that the median voter has an influence on policy decisions via interest groups (Ingram 1984; Giroux 1989; Cheng 1992; Luder 1992). Since higher socioeconomic status individuals are likely to be net contributors by paying more taxes and receiving less services, it is predicted that cities with higher median income voters are more likely to be pressured to report performance measures. Also, higher socioeconomic status persons are more likely to have an information processing advantage due to higher educational attainment and thus be better able to understand performance reports (Chan 1989). Thus,

H1: Performance Reporting Is Positively Related to VOTERS.

Governmental accounting researchers generally agree that greater party competition should be associated with better reporting practices, but there have been inconsistent empirical results (see Baber 1994 for a review). Carpenter (1991) argued that the empirical results are consistent when competition is measured at the date of the policy

TABLE 2
Empirical Governmental Reporting Choice Studies

<i>Author (Year) Entity</i>	<i>Reporting Choice</i>	<i>Political Factors</i>	<i>Economic Factors</i>	<i>Method Variance Explained</i>
Zimmerman (1977) City	Length of report Who audited	Form of govt*		Regression NA
Evans and Patton (1983) City	GFOA Award	Form of govt*	Debt resid*, Prof mgr, Pop*	Probit .35 Pseudo R ²
Baber and Sen (1984) State	GAAFR fund definitions (yes/no)	Interparty*, Intraparty, Leg turnover*	Empl wages* Debt	Probit NA
Ingram (1984) State	GAAP indices (GAAFR, ASLGU, and FASB)	Urbanization*, Interparty*, Newspaper*, Govt power*, Appoint power	Urban*, Auditor select, Auditor-CPA, Exec salaries	Regression .35 Adjusted R ²
Robbins and Austin (1986) City	Disclosure quality (27 items from bond analysts)	Form of govt*, Income per capita	Debt*, Intergov rev/total rev,* Own rev per capita, Audit firm, Population	Regression .18-.20 R ²
Evans and Patton (1987) City	GFOA Award	Form of govt*, Company town, Perceived comp	Population, Debt*, Prof mgr*, Mgr salary*	Probit .14-.36 Psuedo R ²
Giroux (1989) City	CAFR and budget disclosures	Form of govt*, Income per capita*, Avg tax price*, Win%	Prop tax/total tax,* Audit opinion*	Regression .13-.24 R ²
Dwyer and Wilson (1989) City	Timeliness	Form of govt	FB/rev*, Audit opinion*, GFOA Award*, Pop	Regression .04-.29 Adjusted R ²
Banker et al. (1989) School	GAAP indices		Debt*, Rev/student, Intergov rev/total rev*, Audit-CPA*	Regression .13-.44 R ²
Carpenter (1991) State	GAAP (yes/no)	Measures of: Electoral*, Parliamentary*, Intrst group*	Pop*, Debt*, Auditor-CPA	Logit .11-.46 R ²
Cheng (1992) State	GAAP indices	Income per capita*, Political comp*, Newspaper*	Debt*	LISREL NA

* Interpreted as significant by the authors

decision rather than at a subsequent date. Baber (1994) added that the empirical results may be inconsistent due to measurement difficulties and different contexts (e.g., states vs. municipalities). Thus,

H2: Performance Reporting Is Positively Related to COMP (Political Competition).

Zimmerman (1977) argued that the council/manager form of government was more likely to adopt higher quality reporting methods than the strong mayor form of government. The reasoning is that professional city managers are more insulated from the concerns of the political market and can make decisions that are in the best interest of the city rather than in the best interest of their reelection campaign. City managers are also expected to be more formally trained in the art of public administration—a portion of which includes discussion on performance reporting. Except for Dwyer and Wilson (1989), the studies of city choices in table 2 found significant positive support for form of government. Thus,

H3: Performance Reporting Is Positively Related to CEO/FORM of Government.

A strong theoretical argument between debt and quality reporting choices has been posited by several researchers (Zimmerman 1977; Baber and Sen 1984; Ingram 1984; Evans and Patton 1983, 1987; Banker et al. 1989; Cheng 1992, 1994; Luder 1992). The empirical results have been inconsistent, with debt generally significant in studies of cities and smaller entities and not always significant for states (Evans and Patton 1983; Luder 1992; Feroz and Wilson 1992). Thus,

H4: Performance Reporting Is Positively Related to DEBT.

The quality of the CFO has been shown to be associated with higher quality reporting choices (Ingram 1984; Baber and Sen 1984; Evans and Patton 1987). The quality of the CFO has been measured by salaries. Both signaling (Ingram 1984; Evans and Patton 1987) and monitoring arguments (Baber and Sen 1984) have been used as the theoretical justification. Thus,

H5: Performance Reporting Is Positively Related to the Quality of the CFO.

Newer Hypotheses Unique to Performance Reporting

The popular literature on performance reporting and managing government (Osborne and Gaebler 1992; Gore 1993; Levin and Sanger 1994; Eggers and O'Leary 1995; Walters 1998; Hatry 1999) argues that governments face increasing demands and declining resources. Voters want government to do more with less and are unwilling to provide additional resources unless it is clear the entity will use the resources efficiently and effectively. Research on budget scarcity (Wildavsky 1979; Schick 1980; Levine 1980) suggests that governments will eschew new programs, especially something as costly as a system of performance reporting, when budget resources are limited. Together, these observations suggest a relationship between performance measurement and fiscal stress.

Unfortunately, published research on government accounting choices rarely incorporates fiscal stress as an independent variable. The only study from table 2 taking fiscal stress into account (Dwyer and Wilson 1989) does so on the basis of a logic usually associated with the corporate timeliness literature. This argument holds that firms with good news (i.e., less stress) have an incentive to report more quickly, while bad news firms (i.e., high stress) have an incentive to delay reporting. If the argument transfers to performance reporting, it suggests a negative association in that cities will be less likely to report performance measures as fiscal stress increases. Thus,

H6: Performance Reporting Is Negatively Related to Fiscal STRESS.

Prior research (Zimmerman 1977; Ingram 1984; Marks and Raman 1987; Cheng 1992, 1994) has found that the press is an important factor in determining government accounting policies. However, there are competing views as to the direction of the influence: the monitoring hypothesis and the self-defense hypothesis.

Both hypotheses share the assumption that elected officials have strong incentives to withhold information about their performance. By withholding information, officials can maximize their shirking and consumption of perquisites. The hypotheses disagree on how officials respond to the scrutiny of the press. The monitoring view assumes that elected officials will increase performance reporting when faced with a more active press, while the self-defense view assumes that elected officials decrease performance reporting when faced by the more active press.

While no studies of municipal accounting choices have included a variable for the press, several researchers of state choices tested newspaper circulation per capita as a proxy for a strong press (Ingram 1984; Marks and Raman 1987; Cheng 1992). These researchers considered both hypotheses but focused on the monitoring hypothesis. All three researchers found significant results in opposition to the monitoring explanation and in support of the self-defense hypothesis.

In attempting to explain the empirical results, Ingram (1984) and Cheng (1992) suggested that the press may be a cost-effective substitute for good reporting, i.e., the better the accounting policies, the less need there is for the press to serve as a monitor of accounting policies. Similarly, Marks and Raman (1987) suggested that politicians might be acting defensively by providing more auditing when there were higher per capita circulations. They assumed the auditing was more for the benefit of the politician than in the interests of the voters. Since there are two competing theories, a nondirectional hypothesis is adopted. Thus,

H7: Performance Reporting Is Related to PRESS Coverage.

A relatively new actor in the governmental reporting market is the internal auditor. Wheat (1991) describes the growing influence of the activist auditor. Specific examples include:

TABLE 3
Description of Independent Variables

Political Variables:

(+)	VOTERS	Median per capita income (1990)
(+)	COMP	CFO's rank of political competition (1-very low, 7-very high)
(+)	CEO/FORM	Form of government (mayor = 0, city manager = 1)
(?)	PRESS	Relative frequency of publication: 0 – no local newspaper 1 – other than daily (i.e., Sunday only, Mon-Fri, etc.) 2 – daily including Sunday

Economic Variables:

(+)	DEBT	General long-term debt divided by 1990 population
(+)	CFO	Chief financial officer salary
(+)	INAUDIT	Natural log of full-time equivalent internal auditors
(-)	STRESS	(Fund Balance for General Fund/General Fund Revenues) multiplied by (-1).

Control Variable:

(+)	LOGPOP	Natural log of the population (1990)
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1. the state auditor of the state of Washington (Sonntag 1999),
2. the auditor of the city of Kansas City (Funkhouser 2000), and
3. the city auditor of Portland, Oregon, who is now a member of the GASB (Tracy and Jean 1995; Tracy 1995; University of Texas 1996, 22-23).

In 1997, the GFOA recommended that every government consider establishing an internal audit function (Spain 1997).

Prior research on governmental internal auditors suggests several reasons why their presence should increase the development and reporting of performance measures (Brathwaite 1989; Courtemanche 1991; Malan 1991; Tracy and Jean 1995; Tracy 1995; Sonntag 1999; Funkhouser 2000). As discussed in the institutional background, cities face an increased pressure to report on operational performance in addition to budgetary compliance. This pressure has created a demand for internal auditing and improving the operational performance measures that cities report.⁴ Thus,

H8: Performance Reporting Is Positively Related to INAUDIT.

As is customary in this line of research, population is included as a control variable. Population is typically positively associated with higher quality reporting choices, but there is no compelling individual theory for this association. Table 3 provides a summary of the hypotheses as well as the variables that are used to test them.

RESEARCH MODEL AND DESIGN

The survey and a cover letter (see Appendices A and B) were mailed to the finance director or CFO of one-half of all cities in the U.S. with a population over 25,000. The

cities were randomly chosen from the ICMA *Municipal Yearbook* (1996) by selecting every other city from the alphabetical listing. At least one city was chosen from each state. The cover letter requested the cities to return a minimum of three items:

1. a completed survey,
2. the city's comprehensive annual financial report (CAFR), and
3. the city's adopted budget (BUDGET).

The cities were also asked to provide any additional documents containing performance measures (OTHER) that were sent to the general public.

TABLE 4
Sample Respondents Compared to Population Attributes

<i>PANEL A: Respondents</i>		
Total mailings sent	565	100%
Surveys returned	204	36%
CAFRs returned	128	23%
BUDGETs returned	111	20%
OTHER returned	16	3%
COMPLETE RESPONSES	107	19%
<i>PANEL B: Compare to attributes of all cities over 25,000</i>		
1. POPULATION	ALL	RESPONDENTS
	(n=1,218)	(n=107)
25,000 to 49,999	55.7%	35.5%
50,000 to 99,999	28.0%	33.6%
100,000 to 249,999	11.1%	20.6%
250,000 to 499,999	3.2%	5.6%
over 500,000	2.0%	4.7%
2. FORM	(n=1,165)*	(n=107)
Mayor	37.9%	23.4%
Council-Manager	62.1%	76.6%
3. REGION	(n=1,218)	(n=107)
Northeast	23.2%	3.7%
Northcentral	25.4%	25.2%
South	24.2%	32.7%
West	27.2%	38.3%
4. CFO SALARY	(n=786)**	(n=107)
25,000 to 49,999	66,400	72,200
50,000 to 99,999	75,500	79,000
100,000 to 249,999	84,200	85,900
250,000 to 499,999	91,100	89,300
over 500,000	99,700	103,800

Note: *Forms of government other than mayor and council-manager are omitted.

**Salary data was collected in the ICMA's annual survey; the overall survey response rate was 63%.

Three weeks after the initial mailing, a second mailing was sent to all cities that had not sent a complete response. A month after the second mailing, phone calls were made to any city that had sent at least one item, but not all three of the basic items (survey, CAFR and BUDGET). Only sixteen cities returned an OTHER document, so these documents were omitted from the statistical analysis.

Table 4 contains the final response rates for the sample and a comparison to certain population attributes. The sample appears generally representative of the population on most attributes except for region. Caution should be exercised when generalizing any results, especially to cities in the Northeast.

Developing the Dependent Variable: Extent of Performance Reporting

Prior to coding, all of the documents were reviewed by the author. Consistent with Giroux (1989), the CAFRs were very similar in their content and style while the BUDGET documents varied significantly in both content and style. The author prepared a coding guide (Appendix C) that was used to ensure consistency. The author trained three different individuals using the coding guide and obtained a greater than 95 percent agreement on the quantity of measures and greater than 80 percent agreement on the types of measures. The difficulty in reaching agreement on the types of measures has been noted by others (Tigue and Strachota 1994, 7; University of Texas 1996, 1998, 2000). Since the focus in the empirical tests is on the extent or quantity of measures (>95 percent agreement), the coding method appears reliable.

As noted in table 5, performance reporting varies considerably between the BUDGET and CAFR. The number of measures is much greater in the BUDGET, with a mean six times larger and a median three and a half times larger than the CAFR. The variability in the BUDGET is also greater, as seen in both the standard deviations and the relative difference between the means and medians. Also, the relative percentage of each type of measure is quite different. The BUDGET has more OUTPUT and AIDS and less INPUT and EXPLAN. The BUDGET also has more OUTCOME and EFFIC, but there are relatively few of these measures in both documents.

While prior research has not developed an entity-wide measure of the extent of governmental performance reporting, many researchers have developed disclosure indices in both governmental (Ingram 1984; Giroux 1989; Banker et al. 1989; Cheng 1992) and corporate research (Chow and Wong-Boren 1987; Lev and Sougiannis 1996; Botosan 1997). The items included in a disclosure index are based upon industry knowledge and theoretical factors. The primary index used in this study is a summation of all the types of performance measures (see table 1) using the coding scheme in Appendix C.

The results in table 5 are consistent with prior descriptive research. Tigue and Strachota (1994) counted an average of 601 measures and a maximum of 4,326 in award-winning budgets, which is comparable to this study's average of 555 and maximum of 6,059 for BUDGET documents. Also, Tigue (1994) found that 69 percent and 23 percent self-reported that they normally report performance measures in their BUDGET and CAFR, respectively. In this study 58 percent and 53 percent self-reported they normally report in the BUDGET and CAFR, respectively. The BUDGET number is similar, but the CAFR number is different.

TABLE 5
Number of Performance Measures Reported

<i>PANEL A: Gross Number of Measures</i>						
<i>Variable</i>	<i>n</i>	<i>Mean</i>	<i>Median</i>	<i>Std Dev</i>	<i>Min</i>	<i>Max</i>
BUDGET	107	555.5	255.0	858.4	0	6,059
B-INPUT	107	47.8	28.0	77.2	0	640
B-OUTPUT	107	160.9	61.0	265.2	0	1,969
B-OUTCOME	107	49.9	13.0	111.6	0	861
B-EFFIC	107	22.5	2.0	45.9	0	267
B-EXPLAN	107	29.7	15.0	42.1	0	261
B-AIDS	107	242.2	72.0	405.5	0	2,713
CAFR	107	92.9	72.0	83.2	0	584
C-INPUT	107	20.2	17.0	29.0	0	278
C-OUTPUT	107	11.9	8.0	15.2	0	111
C-OUTCOME	107	4.4	3.0	5.1	0	35
C-EFFIC	107	1.7	1.0	2.3	0	13
C-EXPLAN	107	34.2	24.0	35.1	0	209
C-AIDS	107	20.4	14.0	25.0	0	180
<i>PANEL B: Relative Percentage of Types of Measures Reported</i>						
<i>Type</i>	<i>BUDGET</i>	<i>CAFR</i>	<i>Difference</i>			
INPUT	9%	22%	-13%			
OUTPUT	29%	12%	17%			
OUTCOME	9%	5%	4%			
EFFIC	4%	2%	2%			
EXPLAN	5%	37%	-32%			
AIDS	44%	22%	22%			
<i>TOTAL</i>	<i>100%</i>	<i>100%</i>				

A possible explanation for the CAFR difference is the number of measures reported. A visual analysis of the data indicates a break around one hundred measures per document. Most of the respondents with more than one hundred measures indicate they normally report, while most of the respondents with less than one hundred measures indicate they do not normally report. In this study 65 percent and 30 percent of the BUDGET and CAFR, respectively, have more than one hundred measures, which is very similar to the results from Tigue (1994). Thus, an entity may report a few measures (i.e., less than one hundred) but not have an active reporting program (Poister and Streib 1999).

The validity of the dependent variables is supported by the high inter-rater agreement, the consistency with prior descriptive research and, as reported later, consistent and significant multivariate regression models. Due to the skewed nature of the raw dependent variables, BUDGET and CAFR, the log of each will be used for the statistical tests. The distributions of LOGBUDGET and LOGCAFR are much closer to normal. Table 6 reports the descriptive statistics for the variables used in the statistical tests.

TABLE 6
Research Variables

<i>Variable</i>	<i>n</i>	<i>Dependent Variables</i>			<i>Min</i>	<i>Max</i>
		<i>Mean</i>	<i>Median</i>	<i>Std Dev</i>		
LOGBUDGET	107	4.893	5.541	2.274	0	8.709
LOGCAFR	107	3.984	4.277	1.451	0	6.370
<i>Independent Variables</i>						
VOTERS (+)	107	16,250	15,424	4,500	8,377	39,708
COMP (+)	107	3.619	3.000	2.149	1	7
PRESS (+/-?)	107	1.486	2.000	0.732	0	2
CEO/FORM (+)	107	0.766	1.000	0.425	0	1
DEBT (+)	107	661	573	453	26	2,837
CFO (+)	107	79,724	80,000	16,705	45,240	120,000
STRESS (-)	107	-0.328	-0.253	0.251	-.0043	-1.734
INAUDIT (+)	107	1.636	0.000	5.840	0	43
POPULATION	107	117,334	65,250	156,901	25,910	984,309

EMPIRICAL RESULTS

The Spearman correlation coefficients for the independent variables are displayed in table 7. Twelve and fourteen of the thirty-six possible independent variable pairs are significantly correlated ($p < .05$) for the Pearson and Spearman correlations, respectively.

TABLE 7
Correlations – Independent Variables

	IV1	IV2	IV3	IV4	IV5	IV6	IV7	IV8	IV9
IV1-VOTERS	—	-.04 (.68)	-.42 (.00) ^a	.08 (.39)	.09 (.37)	.15 (.12)	-.14 (.16)	-.11 (.25)	-.25 (.01) ^a
IV2-COMP		—	.15 (.12)	-.07 (.49)	.08 (.39)	.06 (.57)	.01 (.90)	.10 (.30)	.13 (.18)
IV3-PRESS			—	-.15 (.13)	.08 (.44)	-.16 (.11)	.41 (.00) ^a	.18 (.07)	.35 (.00) ^a
IV4-CEO/FORM				—	-.06 (.51)	.11 (.24)	-.23 (.01) ^a	-.19 (.05) ^b	-.18 (.06)
IV5-DEBT					—	.06 (.53)	.02 (.84)	.22 (.02) ^b	.21 (.03) ^b
IV6-CFO						—	-.03 (.77)	.36 (.00) ^a	.46 (.00) ^a
IV7-STRESS							—	.05 (.58)	.22 (.02) ^b
IV8-INAUDIT								—	.64 (.00) ^a
IV9-LOGPOP									—

Note: The p-values are indicated in parentheses (a= $p < .01$, b= $p < .05$).

At the .01 level, nine and eleven of the Pearson and Spearman correlations are correlated. This pattern of intercorrelation is consistent with prior research (Cheng 1994). For the regression results in table 9, no variance inflation factors were larger than 3. According to Neter, Wasserman, Nachsheim and Kutner (1996), variance inflation factors less than 10 are not a concern. Thus, the observed multicollinearity does not appear to be severe.

Many of the variables are positively correlated ($p < .05$) with LOGPOP including PRESS, DEBT, CFO, STRESS and INAUDIT. VOTERS is negatively correlated ($p < .05$) with LOGPOP. Several of these size surrogates are also positively correlated with each other. While these correlations are statistically significant, they are nonetheless relatively weak in absolute terms, with only CFO and INAUDIT being correlated with LOGPOP in excess of .40. Only two other pairs are correlated at more than .40 (PRESS and STRESS as well as PRESS and VOTERS). Two variables, COMP and CEO/FORM, are not correlated ($p < .05$) with LOGPOP. COMP is not correlated with any of the other variables, while CEO/FORM is negatively correlated with STRESS and INAUDIT.

Table 8 presents the Spearman correlations for the two dependent variables and the nine independent variables. LOGPOP and CFO are significantly correlated with both LOGBUDGET and LOGCAFR in the predicted direction. INAUDIT is significantly correlated with LOGCAFR at .05 and with LOGBUDGET at .10 in the predicted direction. The only other significant association is with PRESS and LOGCAFR. These correlation results are similar with prior accounting research that size is an important determinant of reporting practices (Cheng 1992, 1994). The multivariate results will be used to look for the significance of each of the individual variables while controlling for size as well as the other predicted factors.

TABLE 8
Correlations – Independent and Dependent Variables

	LOGBUDGET DV1	LOGCAFR DV2
IV1-MEDIAN	.11	-.01
(+)	(.28)	(.95)
IV2-COMP	.05	.12
(+)	(.61)	(.21)
IV3-PRESS	.07	.30
(?)	(.50)	(.00) ^a
IV4-FORM	.10	-.04
(+)	(.30)	(.67)
IV5-DEBTPER	.05	-.00
(+)	(.61)	(.99)
IV6-CFOSAL	.31	.20
(+)	(.00) ^a	(.04) ^b
IV7-STRESS	.05	.17
(-)	(.64)	(.07)
IV8-LOGINTAU	.18	.25
(+)	(.06)	(.01) ^b
IV9-LOGPOP	.32	.32
(+)	(.00) ^a	(.00) ^a

Note: The p-values are indicated in parentheses (a= $p < .01$, b= $p < .05$).

Table 9 reports the results for the regressions of the main dependent variables and the nine independent variables. Both of the models are significant and the adjusted R^2 are consistent with prior published research, albeit on the low side. There are no individual variables significant in the LOGBUDGET regression while VOTERS, PRESS, and DEBT are significant in the LOGCAFR regression. However, DEBT is significant in the opposite direction than was predicted.

TABLE 9
Regression Results

	LOGBUDGET	LOGCAFR
N=	107	107
F-STAT	2.346	2.991
PROB F	.019	.004
R^2	.18	.22
ADJ R^2	.10	.14
INTERCEPT	-1.83 (.07)	-1.06 (.29)
IV1-MEDIAN	1.41 (.16)	2.54 (.01) ^a
IV2-COMP	-.06 (.96)	1.74 (.09)
IV3-PRESS	.40 (.69)	2.24 (.03) ^b
IV4-FORM	1.12 (.26)	1.92 (.06)
IV5-DEBTPER	-.27 (.78)	-2.10 (.04) ^b
IV6-CFOSAL	1.59 (.12)	.38 (.71)
IV7-STRESS	-.61 (.54)	-.80 (.42)
IV8-LOGINTAU	.04 (.97)	.89 (.38)
IV9-LOGPOP	1.91 (.06)	1.30 (.20)

Notes: t-statistics are across from each IV. p-values are indicated in parentheses (a= $p < .01$, b= $p < .05$).

Sensitivity Tests

Several additional regressions (results not reported in the tables) were performed on alternate dependent variables. The first set of alternate dependent variables included a TOTAL measure (BUDGET + CAFR) as well as measures for each of the types (INPUT, OUTPUT, OUTCOME, EFFICIENCY, EXPLANATORY and AIDS). The natural log was taken on all seven of these alternate dependent variables. All these

regressions are significant at the .10 level, all but one at the .05 level, and four of the seven at the .01 level. The R^2 range from .15 to .26 while the adjusted R^2 range from .07 to .19. As a whole, it appears that the models are reasonable and that the dependent variables are measuring a feature of quality reporting.

A concern with the alternate regressions is that the significance of the independent variables is not consistent. VOTERS was significant in two of the seven alternate regressions; COMP was not significant in any; PRESS was significant in one of seven and always positive; CEO/FORM was one of seven; DEBT was significant in one of seven and always negative; CFO in none; STRESS in one of seven and always negative; INAUDIT in none; and, LOGPOP in five of the seven. All of the alternate dependent measures except one had at least one significant variable. One of the alternate regressions had no variables that were significant, three had only one significant variable (which was LOGPOP), two regressions had two variables that were significant, and one regression had four variables that were significant. Thus, the pattern of significance for individual variables is very unstable across the models.

An additional set of seven categorical alternate dependent variables was created and were tested using logistic regression (results not reported in the tables). The categorical measures include:

1. an above/below the median for TOTAL, BUDGET and CAFR;
2. a self-reported measure of normally reporting performance measures; and
3. an approximation of normally reporting performance measures (i.e., number of measures > 100) for TOTAL, BUDGET and CAFR.

The Psuedo R^2 range is from .14 to .25, all of the Chi-Square are significant at .10 and all but one at .05. The pattern of significance for the independent variables is also unstable in these logistic regressions.

There are two conclusions from these two sets of additional regressions. First, it appears that the individual factors in the models are poorly specified. The lack of consistent results for individual factors supports the contention that this research methodology is fairly inadequate for purposes of obtaining a deep understanding of individual factors or interrelationships among the numerous factors. A better understanding of these factors probably requires more focus such as that permitted in a case study analysis.

The second conclusion is that the overall significance of the models is very consistent with prior government accounting choice research. Thus, in spite of the model specification problems, it appears that nonfinancial performance reporting is a quality external reporting activity in a manner consistent with prior research. As such, it is the conclusion of the author that the GASB and other similar bodies should use their influence to increase nonfinancial performance reporting to the public.

DISCUSSION

For the purpose of this section, it is assumed that reporting nonfinancial performance measures to the public is a quality and desirable activity for local governments. For countries like the United States where this reporting activity is currently voluntary, several cities are actively engaged in this activity while several others are much less

involved (table 5 and Poister and Streib 1999). This section discusses two factors that appear to be limiting the widespread adoption of publicly reporting performance measures and briefly introduces the CDM as a possible solution to these limitations.

The first factor that appears to be limiting the public reporting of performance measures is the variability in the measures themselves. While the current study did not attempt to catalog the exact names of each measure reported, it was clearly obvious that the measures varied significantly from one city to the next. Not only were the measures different across cities for similar functions (such as police and fire), many cities had a high degree of variance in the style or types of measures across functions within the same city.

The second limiting factor is the level of opposition from the management or preparers of performance measures. The feelings and attitudes evident in the Poister and Streib (1999) survey and the GFOA policy statement (2002) were noted by the researcher during several discussions with study participants. The underlying attitude from the opponents appeared to be that each entity is so completely unique that any attempt to report measures publicly will cause comparisons against other entities that will be inappropriate and misleading.

Both of these factors combine to make it very difficult to compare performance measures across jurisdictions. A key concept in the theory of accounting is the notion of comparability. In spite of recent concerns in the U.S. corporate world (Enron, Xerox, WorldCom, etc.), modern corporate accounting has a fairly amazing ability to make sensible reports of the balance sheet and operating activities of widely disparate for-profit entities. Without comparable measures and reporting styles, it is difficult to envision a significant increase in voluntary governmental performance reporting in the U.S.

The good news is that entities that work together using some kind of CDM (Johnsen 1999; van Helden and Johnsen 2002) appear to be able to reduce the variability in the measures reported as well as the managerial resistance to public reporting. Two examples of the successful implementation of this method in the U.S. are the North Carolina Benchmarking Project (University of North Carolina 2003) and the ICMA Center for Performance Measurement (ICMA 2003). In both instances, various parties within the local governmental entities agreed to work together to find the most appropriate measures, to discover better ways of performing their activities, and to become comfortable reporting these measures publicly.

As noted earlier, the GASB has been pushing to develop performance reporting standards since 1984. The time since then has resulted in a significant amount of research as well as strong opposition from the GFOA. The results from this study indicate that the GASB may wish to support the use of the CDM for local governments. The GASB could require that each governmental entity join a group of other similar local governments and develop a common set of measures and a common reporting style. It is anticipated that small governments would join groups based upon geographic lines such as the North Carolina project. Larger governments will probably not join groups along geographic lines, but along size and complexity factors such as in the ICMA project.

In terms of the timing, the GASB may wish to allow these local governments a phase-in period of a few years in order to work out various measurement, management, and political issues. However, it seems prudent for the GASB to limit this research and experimentation phase to a set number of years, such as two or three. At the conclusion

of those two or three years, it seems feasible for the GASB to consider requiring governments to publicly report performance measures.

CONCLUSION

This study uses a cross-sectional data analysis approach that is fairly common in accounting research for U.S. governments. This methodology has inherent limitations, but the results suggest that voluntarily reporting nonfinancial performance measures to the public is similar to other quality financial reporting activities and increased usage should probably be encouraged. The discussion suggests that the use of the CDM may be needed in order to substantially increase the number of governmental entities that are publicly reporting these measures.

APPENDIX A

School of Accountancy
University of Missouri
312 Middlebush Hall
Columbia, MO 65211

May 1997

CFO
City
Address
City, State Zip code

Dear Mr/Ms. xxx:

Reporting on the accountability of local government is one of the most important aspects of our profession. I am trying to determine what forms of reporting cities are using to communicate their accountability. My focus is performance measures, also known as service efforts and accomplishments.

Please answer the questions on the accompanying brief questionnaire and send me a copy of:

- a. your most recent annual financial report,
- b. your most recent budget, and
- c. any other documents containing performance measures which are readily available or targeted to the general public.

Thank you,

Ken Smith
PhD Candidate

APPENDIX B

ACCOUNTABILITY REPORTING PREFERENCES

DIRECTIONS: For each of the following, circle the number that best describes your belief. Since there are various definitions of performance measurement terms, use the following definition: 1) *Input* – resources applied to a service, 2) *Output* – quantity of services provided, 3) *Efficiency* – resources used per units of outputs, 4) *Outcome* – result of providing outputs, and 5) *Explanatory* – information that can help users understand performance measures.

1. How important is it that each of the following is publicly reported?

	Not important					Very important	
Input (e.g. total FTE)	1	2	3	4	5	6	7
Output (e.g. programs presented)	1	2	3	4	5	6	7
Efficiency (e.g. cost per program)	1	2	3	4	5	6	7
Outcome (e.g. crime rate)	1	2	3	4	5	6	7
Explanatory (e.g. miles of paved road)	1	2	3	4	5	6	7

2. How important is it to report performance measures in each of the following documents?

	Not important					Very important	
CAFR/annual report	1	2	3	4	5	6	7
Budget	1	2	3	4	5	6	7
Separate Performance report	1	2	3	4	5	6	7

3. Each of the following has been suggested as useful in helping users understand performance reporting. How important is it to include each in a performance report?

	Not important					Very important	
Describing how to use measures	1	2	3	4	5	6	7
Measures tied to objectives	1	2	3	4	5	6	7
Multiple measures	1	2	3	4	5	6	7
Tables, charts and graphs	1	2	3	4	5	6	7
Comparisons with prior years	1	2	3	4	5	6	7
Comparisons with budget goals	1	2	3	4	5	6	7
Comparisons with similar entities	1	2	3	4	5	6	7

4. Regarding the number of measures reported, what is your level of agreement with each of the following statements?

	Not important					Very important	
Fewer measures are better	1	2	3	4	5	6	7
Each additional measure is useful	1	2	3	4	5	6	7
Not everything needs to be reported upon	1	2	3	4	5	6	7

5. How do you expect your city to compare to other local governments regarding the:

	Not important					Very important	
Quantity of performance reporting	1	2	3	4	5	6	7
Quality of performance reporting	1	2	3	4	5	6	7

6. What has high potential to communicate governmental accountability to average citizens?

	Not important					Very important	
Financial reports	1	2	3	4	5	6	7
Non-financial/performance reports	1	2	3	4	5	6	7

7. When did your city first publicly report performance measures?

a. (Yr) _____ b. have never reported c. don't know

IF YOU SELECTED "a" in QUESTION 7,

How intense was the competition during the mayoral election that occurred prior to your first public performance report?

Very low						Very high
1	2	3	4	5	6	7

8. How intense was the competition during the most recent mayoral election?

Very low						Very high
1	2	3	4	5	6	7

9. From your past experience, how would you describe the coverage of *financial* reporting by your local newspaper(s)?

Very negative						Very positive
1	2	3	4	5	6	7

10. What level of interest does your local newspaper(s) have in *performance* reporting?

Very low						Very high
1	2	3	4	5	6	7

11. If your city prepared a complete performance report covering every department, would you expect the newspaper coverage to be accurate or misleading?

Misleading						Accurate
1	2	3	4	5	6	7

12. Does your city employ an internal auditor? Yes / No

IF YOU SELECTED "Yes" in QUESTION 12,

A. How many full-time equivalent (FTE) internal audit positions are filled? _____

B. How much do your internal auditors focus on internal control and financial accounting?

Very little						Very much
1	2	3	4	5	6	7

C. How much do your internal auditors focus on operational performance?

	Very little						Very much
	1	2	3	4	5	6	7

Finance Director's education and professional certifications (circle all that apply)

Associate degree - Accounting, Business, other _____

Bachelor degree - Accounting, Business, Public Administration, other _____

Masters degree – Accounting, Business, Public Administration, other _____

CPA CMA CGFM CIA other _____ Years in current position _____

Years with current city _____ Salary \$____,000

Name _____ Job Title _____

Please return this survey in the enclosed self-addressed envelope.

APPENDIX C

IS IT A PERFORMANCE MEASURE?

Is it quantified in something other than \$?	Yes
Is it quantified in something other than # of employees?	Yes
Is it recent history (within the last years)?	Yes
Is it a service provided by the government?	Yes (may be XD if No)

WHAT TYPE OF SERVICE IS PROVIDED?

S	Public Safety
W	Public Works
G	General Government
H	Health & Welfare
R	Recreation & Culture

WHAT TYPE OF PERFORMANCE MEASURE?

I	INPUT	resources applied to a service.
O	OUTPUT	quantity of services produced.
OQ ^a	OUTPUT QUALITY	quantity within some time frame.
R ^a	OUTCOME (RESULTS)	results of services provided.
E\$ ^b	EFFICIENCY	cost per ratio of any two of the above measures.
EF ^b	EFFICIENCY OTHER THAN \$	ratio of any two measures other than cost.
X ^c	EXPLANATORY	description of quality or quantity of above measures.
XD ^c	EXPLANATORY DEMOGRAPHIC	economic or demographic indicator. Also quantity of entities other than the government (education and hospitals).

WHAT TYPES OF AIDS?

L	LINKS	a goal or objective is reported for which a performance measure is also reported.
C	COMPARISONS	comparison of performance measure to other years for this same entity.
B	BENCHMARK	comparison of performance measure to other entity.
G	GRAPH	performance measures presented in a chart or graph.

Notes: ^aFor data analysis, OQ and R were combined into OUTCOME.
^bFor data analysis, E\$ and EF were combined into EFFICIENCY.
^cFor data analysis, X and XD were combined into EXPLANAT.

NOTES

1. Several academic disciplines are concerned with the operational performance of governmental entities, primarily accounting, public administration, economics and political

science. Each of these disciplines uses slightly different terminology when discussing performance measures. The terminology used by the GASB is used in this study.

2. This study is primarily concerned with the overall model rather than a detailed theoretical development of individual factors. Thus, the theoretical development will be brief. See Smith (2001), Cheng (1994), Luder (1992) or Zimmerman (1977) for in-depth theoretical developments of these hypotheses.

3. While her research has not yet been published, Angela Gore at the University of Oregon has two recent working papers in this area: Gore (2000), and Gore, Sachs and Trzcinka (2004).

4. An alternative view of: 1) the presence of internal auditors leads to an increase in performance reporting, is 2) the activity of publicly reporting performance measures leads to an increase in the number of internal auditors. While the former appears more consistent with the author's observations, the latter is not overly problematic for the goals of the current study. Even if the second view is more appropriate, the overall model should be improved with the inclusion of this factor. Future studies should investigate the direction and subtleties of the influence between internal auditors and performance reporting.

ACKNOWLEDGMENTS: The author is grateful to the Government and Nonprofit Section of the American Accounting Association for providing financial support. The author would like to thank the members of his dissertation committee, especially the chair, for their support and suggestions.

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