# Toward a Theory of Performance Reporting to Achieve Public Sector Accountability: A Field Study

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Governments in many countries are implementing performance reporting systems. Many advocates claim that performance reporting results in accountability and effectiveness. There is no theory to justify these claims and guide implementation. This paper presents five field studies of five performance-reporting systems to begin building theory.

Four locations are optimistic; one is not. Mere adoption of performance reporting is not effective. Broad involvement across all government levels is important. Communication and integration with strategic planning and agency management are essential. Two theoretical streams, accounting in organized anarchies and the constitutive role of accounting, are useful theoretical bases.

Performance reporting is widely touted worldwide as a means to achieve increased public accountability by governments with claims that it leads to greater efficiency and effectiveness. Yet there has been little significant attempt to develop a comprehensive theory that justifies these claims and provides implementation guidance. There is especially a lack of theory drawn from empirical observations. One effective way to build theory is the field study.[1] Also, methodological approaches called the method of agreement and the method of differences have recently emerged in accounting-related

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1. E.g., T. Ahrens and J. Dent, "Accounting and Organizations: Realizing the Richness of Field Research," *Journal of Management Accounting Research* 10 (1998): 4–68.

research, and are ideal to develop theory from field study results.[2] This paper, presents a field study of five governmental entities that have been using performance-reporting systems. The objective of the study is to begin developing a theory. The five research sites are (1) a federal government, Canada; (2) two local government entities and a national audit office in country with a centralized integrated government, England; and (3)–(5) three states in the United States (U.S.): Minnesota, Texas, and Virginia. This paper has four sections: First we discuss some general concepts of accountability and management control, laying the groundwork for a theory of accountability in governmental entities; then our field research methodology is discussed. Next, the results of our visits are presented. Finally we present the theoretical constructs that emerge along with concluding comments, limitations, and implications for continued research.

## GROUNDWORK FOR THEORY

Many advocates of performance reporting by governmental entities cite increased accountability and enhanced efficiency and effectiveness that they believe necessarily result when performance indicators are incorporated into management processes. This rhetoric does not define the term "accountability," but it is clear that it is linked to accounting-based controls.[3] The claims assume that improved accounting techniques, especially performance measurement and performance-based accountability, by themselves are powerful enough to cause organizational change, and inherently lead to improved accountability and "better" decision-making.[4] Performance reporting advocates usually do not distinguish between comprehensive performance reporting systems spanning essentially all of a governmental entity and ad hoc performance reporting systems that may be adopted by some agencies for specific purposes. This study focuses only on comprehensive systems.

Cunningham and Harris[5] specified a conceptual model of comprehensive performance reporting in governmental entities, and called for empirical research to further elaborate the model. Using an empirical research approach is consistent with the recommendation of Otley[6] who calls for empirical work in performance measurement systems to elaborate

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2. H. Gernon and R. S. O. Wallace, "International Accounting Research: A Review of Its Ecology, Contending Theories and Methodologies," *Journal of Accounting Literature* 14 (1995): 54–106.

3. J. Broadbent and J. Guthrie, "Changes in the Public Sector: A Review of Recent 'Alternative' Accounting Research," *Accounting, Auditing and Accountability Journal* 5, no. 2 (1992): 3–31; A. Sinclair, "The Chameleon of Accountability: Forms and Discourses," *Accounting, Organizations and Society* 20, no. 2/3 (1995): 219–37; L. Parker and G. Gould, "Changing Public Sector Accountability: Critiquing New Directions," *Accounting Forum* 23, no. 2 (1999): 109–136; G. M. Cunningham and J. E. Harris, "A Heuristic Framework for Framework for Accountability in Governmental Subunits," *Public Management Review* 3, no. 3/4 (2001): 145–65.

4. Broadbent and Guthrie, 9–11.

5. Cunningham and Harris, 159–62.

6. D. T. Otley, "A Strategy for the Development of Theories in Management Control," in *Critical Perspectives in Management Control*, eds. T. Lowe and T. Puxtey (London: Macmillan, 1989): 27.

the theoretical. Similarly, Broadbent and Guthrie, explicitly indicate that questions need to be asked about whether the accounting techniques in the public sector are as powerful as intimated.[7] Ittner and Larcker[8] raise a similar issue by explicitly asking the question whether performance-reporting systems will actually improve governmental performance.

A frequent assertion is that performance reporting by governmental entities will make them more accountable and effectively managed like entities in the private sector. A fundamental question of Ittner and Larcker[9] is whether private sector notions of performance and measurement are applicable in the public sector. They state that studies of implementation of performance reporting systems in governments provide an ideal setting to inquire whether mandated performance reporting systems explore such notions. Another question raised by this assertion is whether performance reporting in private sector entities does in fact lead to more effective performance. An extensive body of literature spanning some 30 years, which is far too voluminous to cite and discuss in detail here, examines performance-based management control systems in business organizations.[10]

At a simplified level, this body of private-sector thought begins with the premise that performance reporting, usually in the form of profit control or some other accounting-based financial control, is inherently dysfunctional and must be tempered with the deliberate introduction of moderating factors, e.g., budgetary participation, in the control system design. Many studies, both theoretical and empirical, have explored combinations of moderating factors that ameliorate the assumed dysfunction and lead to effectiveness of the performance-based control system. More recent studies have suggested that reliance on performance reporting control per se is not inherently dysfunctional but that such reporting is not sufficient by itself to lead to effectiveness of an organization. One indication is that communication aspects of performance reporting systems are the primary factor leading to effectiveness.[11]

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7. Broadbent and Guthrie, 11.

8. C. D. Ittner and D. F. Larcker, "Innovation in Performance Measurement: Trends and Research Implications," *Journal of Management Accounting Research* 10 (1998): 233.

9. Ibid., 233.

10. Good reviews of the literature can be found in L. Parker, "A Reassessment of the Role of Control in Corporate Budgeting," *Accounting and Business Research* (Spring 1977): 135–143; D. T. Otley, "The Contingency Theory of Management Accounting: Achievement and Prognosis," *Accounting, Organization and Society* 5, no. 4 (1980): 413–28; G. M. Cunningham, "Management Control and Accounting Systems under a Competitive Strategy," *Accounting, Auditing and Accountability Journal* 5, no. 2 (1992): 85–102; D. T. Otley and A. Fakiolas, "Reliance on Performance Measures: Dead End or New Beginning?" *Accounting, Organizations and Society* 25, no. 4 (2000): 497–510; D. T. Otley and R. M. Pollanen, "Budgetary Criteria in Performance Evaluation: A Critical Appraisal Using New Evidence," *Accounting, Organization and Society* 25, no. 4 (2000): 483–96. An especially thorough review and analysis of this literature is that of F. G. H. Hartmann, "The Appropriateness of RAPM [Reliance on Accounting Performance Measures]: Toward the Further Development of Theory," *Accounting, Organizations and Society* 25, no. 4 (2000): 451–82.

11. E.g., see G. M. Cunningham and L. G. Hassel, "Budget Effectiveness in Multinational Companies: A Systems Fit Approach," *Journal of Global Business Research* 1, no. 1 (2004): 61–74; Otley and Fakiolas; Otley and Pollanen.

In one of the few accounting-related empirical studies of management control in the public sector, Abernathy and Brownell[12] studied effectiveness of accounting-based management control systems in public hospitals. Their study concluded that it is equally as important to use management control systems in strategic processes as it is in ongoing management processes. This study is somewhat narrowly based covering only public hospitals in Australia, and thus cannot be generalized to performance reporting systems for government entities in the entirety.

These previous studies raise more questions than they answer and as such have been useful to guide the questions in our field studies. As indicated by Cunningham,[13] effectiveness is a nebulous concept that cannot be assessed objectively. The management control literature in the private sector explored extensively the issue of whether respondents could be expected to give adequate self-assessments of their performance and that of their organizations. Numerous studies in the private sector have concluded that respondents can be expected to give adequate self-assessments of performance.[14] There is no a priori reason to believe that persons in government entities are different from private-sector managers in their ability to make valid self-assessments of their performance and that of their organizations.

During the study, it became apparent that two existing streams of theory, the constitutive role of accounting and accounting in organized anarchies, are useful theoretical bases for performance reporting systems in governmental entities. Both streams of theory are well known and discussed in the accounting literature. They will be presented below in more detail in the analysis.

## METHODOLOGY AND SITE SELECTION

Field studies are a relatively new phenomenon in management accounting research but their use has been growing in recent years. They are especially useful in developing insight and discovering phenomena during exploratory phases of research.[15] The only significant field studies in governments that we know of are the studies by the

12. M. A. Abernathy and P. Brownell, "The Role of Budgets in Organizations Facing Strategic Change: An Exploratory Study," *Accounting, Organizations and Society* 24, no. 3 (1999): 189–204.

13. Cunningham, "Management Control . . . Competitive Strategy," 86

14. E.g., L. Hassel, "Headquarters Reliance on Accounting Performance Measures in a Multinational Business Context," *Journal of International Financial Management and Accounting* 3, no. 1 (1991): 17–38; Cunningham, "Management Control . . . Competitive Strategy"; L. Hassel, "Interaction between Reliance on Accounting Performance Measures and Budgetary Participation: A Further Test of Performance Effects," *The Journal of Applied Accounting Research* 1, no. 1 (1993): 88–106; and sources cited by them.

15. E.g., Otley, "The Contingency Theory"; Cunningham "Management Control . . . Competitive Strategy"; Ahrens and Dent; A. Atkinson and W. Shaffir, "Standards for Field Research in Accounting," *Journal of Management Accounting Research* 10 (1998): 41–68.

Government Accounting Standards Board (GASB) of the U.S.[16] These studies, while providing rich descriptive detail and a good starting point, are not adequate for building a theory and indeed were not designed for that purpose.

As discussed by Atkinson and Shaffir,[17] field research can take different forms. This study follows the approach used successfully by Cunningham[18] of semistructured but open-ended interview questions. The questions not only were designed to obtain information to describe the system, but also were primarily designed to assess perceptions about the systems' effectiveness in achieving accountability. Validity and reliability are as important for field studies as for other types of empirical studies.[19] This study uses standard conventions to establish reliability and validity such as conducting multiple interviews within an organization when possible, inviting respondents to read and comment on successive written drafts of results, and establishing a good working rapport with all interviewees.

The major criterion for selecting research sites was that a governmental entity have implemented a reasonably comprehensive performance reporting system for at least a few years. We were specifically interested that performance reporting be implemented across the entity, and not merely on an ad hoc basis in some agencies. We also sought sites in different countries, at different levels of government, and with different governmental systems. It is important to note that successful implementation of a performance reporting system was not a criterion. The first research sites were selected because one of the researchers of this study had previous professional relationships with them and thus discovered that the entities had developed comprehensive performance reporting systems. Other sites were selected by asking academic colleagues for references to specific locations where performance-reporting systems had been implemented. One research site was selected based on a recommendation during an early site visit. In total, five research locations were selected: (1) one national government of a country that has a parliamentary government in a federal system, Canada; (2) two local governments and a national audit office in a centralized government that has a parliamentary system, England; and (3)–(5) three state governments in the U.S. that have division of powers among executive, legislative, and judicial branches and which operate in a federal system: Minnesota, Texas, and Virginia. England is viewed as a single research location because performance reporting is mandated by the central government and individual local governments have little local authority. The persons interviewed perceived, not always willingly and happily, that a single integrated national performance reporting system exists.

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16. For details see http://www.seagov.org/sea_gasb_project/case_studies.shtml.

17. Atkinson and Shaffir.

18. Cunningham, "Management Control . . . Competitive Strategy."

19. E.g., see discussions by J. McKinnon, "Reliability and Validity in Field Research: Some Strategies and Tactics," *Accounting, Auditing and Accountability Journal* 1, no. 1 (1988): 34–54; Atkinson and Shaffir; J. A. Baxter and W. F. Chua, "Doing Field Research: Practice and Meta-Theory in Counterpoint," *Journal of Management Accounting Research* 10 (1998): 69–87.

*Method of Agreement and Differences*

While field studies can be used successfully to develop theory, the full potential is often not accomplished because of a lack of analytical tools. Two related analytical approaches have been recently discovered in an accounting context, although they are actually quite old, originating some 150 years ago with the classic economics writer John Stuart Mill.[20] The first approach, the method of agreement, looks for a commonly occurring variable(s) and then attempts to find a predictor variable(s) to explain the phenomenon(a) of interest. This method is especially useful when research sites differ superficially, such as the differences in geographic location, level of government, and governmental system as in this study. In the method of agreement, the research seeks to discover agreement that exists despite the differences. This method is implicit in much of the field study research to date in accounting, although it is not always expressed explicitly.[21] This method has weaknesses, although, because it would lack external validity unless the researcher located field sites that lacked the predictor variable(s). A potentially more powerful approach is the indirect method of differences. In this approach, one searches for differences among sites that are similar on many grounds in order to explain phenomena. In selecting sites, the challenge is to select sites that have both similarities and differences. Comparing sites with identical phenomena is of little interest and use of sites that are totally dissimilar likewise makes no sense. Our site selection, while fortuitous to a large degree, does provide both similarities and differences.

## FIELD STUDY FINDINGS

In this section, we present the results of our interviews at the five research locations in three groups: (1) a federal government, Canada; (2) two local government entities along with an audit commission in centralized government, England; and (3) three states in the U.S., Minnesota, Texas, and Virginia. The findings are summarized in Table 1. The purpose of this study is to gather and present information to build theory and not to present thorough, detailed discussions of performance reporting in each site per se. Please note that our references to current governments are to the governments in power when the field research was conducted and not to government in power at the time of publication of this paper.

*Federal Government, Canada*

Canada is a decentralized federal republic with a parliamentary government. Direct services to the public are mostly provided by the provinces which are essentially au-

20. J. S. Mill, *A System of Logic, Ratiocinative and Inductive* (London: Longman, 1961 reprint from 1843; discussed by Gernon and Wallace.

21. Cunningham, "Management Control . . . . Competitive Strategy."

**TABLE 1**
**Summary of Findings**

| | Canada | England | Minnesota | Texas | Virginia |
|---|---|---|---|---|---|
| **Level and system of government** | National, federal system parliamentary | Local governments in central system, parliamentary | State, federal system executive-legislative | State, federal system executive-legislative | State, federal System executive-legislative |
| **Initiative to implement performance reporting system** | Senior administration | Central government | New governor; later student and legislator | Senior administration | New governor and senior administration |
| **Breadth of involvement** | Administrative; some parliamentary | Central and local government | Executive | Extensive executive and legislative | Executive with legislative involvement |
| **Impetus for implementation** | Financial crisis; citizen impatience | Local accountability, effectiveness | Personal interest | Financial crisis; new governor | Following a trend |
| **Strategic planning** | Extensive | Beginning at local level | None | Integral | Integral |
| **Internal agency management** | Evolving | Beginning | None | Evolving | Evolving |
| **Budgets** | Limited | Beginning | Discontinued | Integral | Limited |
| **Legislative appropriation** | None | Slowly evolving | None | Partial | None |
| **Legislative deliberation** | Extensive staff; some parliament | Slowly evolving locally | None | Extensive staff; increasing legislators | Very limited; long-term policy perspective |

TABLE 1 (Continued)

| | Canada | England | Minnesota | Texas | Virginia |
|---|---|---|---|---|---|
| **Control philosophy over agencies** | Control using a few indicators to give agencies more flexibility | Increased central control | None articulated | Increased state government control | Increased accountability to state |
| **Organizational Behavior** | Evolving culture shift | Culture shirt to local public interest | None | Evolving culture shift | Change from bureaucratic to "living" culture |
| **Auditing** | Very limited test of data quality and relevance of indicators | Central audit office certifies plan and tests annually | None | Consult to develop indicators; test data | Consistency and accuracy |
| **Infrastructure** | Developing extensive information management technology | Adequate | No uniform accounting system; inadequate information technology | Uniform state-wide or compatible accounting systems | Extensive data base |
| **Types of indicators** | Evolving output to outcome; emphasis on telling performance story | Shifting emphasis to outcome | No consensus | Equal output and outcome; shift to outcome | Mostly output, efficiency, and quality; infrequent outcome |
| **Assessment** | optimistic | Cautious optimism | Uncertain | Very Optimistic | Very Optimistic |

tonomous political units. The federal government provides substantial funding and is responsible for developing policy and implementing programs. This study focused on the federal government level and included interviews with persons involved in an audit office which examines performance data; an administrative office which is responsible for implementing performance reporting throughout the federal government; and one of the agencies attempting to implement performance reporting.

The formal initiative to begin implementing a comprehensive performance reporting system in the federal government began after some nonfinancial information had been reported to the parliament for many years. The formal initiative began with senior officials in the bureaucracy, was pushed across the government, and then down into organizations. The political leadership supports performance reporting, but there is no political leadership of the performance reporting initiative. There has been no change in the political party in control of the government since the formal performance reporting initiative began.

The impetus to implement a performance reporting system was due in part to a financial crisis. Another major impetus was impatience among citizens over the federal government and the other governments not working together that led to pressure on federal bureaucrats to perform. Most federal managers want to do a good job and to be able to tell people via credible performance reports that they have delivered the services desired and promised.

A major benefit of performance reporting is not from the reported information itself, but from the discipline of the process that requires a clear definition of responsibility and the relationship of performance to an agency's objective. Another way performance reporting is perceived to contribute to management processes is the system's being a means for agencies to become involved in the management process and also provides a vehicle for organizational learning.

As a result of the performance reporting system, the internal administration has experienced a cultural shift, although senior management has sometimes been resistant and unwilling to provide resources. An issue for the bureaucracy, although, is how far the performance reporting system can be developed within funding levels. The parliament budgets programs rather than specific activities like performance reporting systems. Therefore, the performance reporting system must compete with other activities for available funding. Continuing public interest, however, is sufficient to sustain the performance reporting initiative. There has been a general tendency towards gradual evolution and avoidance of high expectations. In addition, the evolution of performance reporting into the evaluation process and its potential to be a future link to pay contributes to motivations to integrate performance reporting into internal management.

The performance reporting activity is integrated into the strategic and business plans and provides a blueprint for the plans to be achieved. The activity involves five-year overviews and two-year plans. Each agency develops a clear statement of objectives, and the head of a program must make a performance reporting commitment. An annual peer review of performance reports is a collective activity, and parliamentary feedback is sought. There is only a tenuous link between the performance reporting system and the budgeting activity. Because of the parliamentary form of government, the governing party develops the budget and there is little parliamentary debate over the budget. There is apparently little use of performance information in developing the budget. About half of the members of parliament know about the performance reports. The parliamentary staff, however, is a much larger user of performance reporting information. The audit office has begun to test the quality of the indicators that relate to agency objectives for a few independent agencies. Although the audit is informal, the office makes its views known.

In addition to enhancing management processes, the performance reporting system also has a control aspect. In particular, when an agency controls its results as reported by performance indicators, then the agency does not need to control the details of operations. As a consequence, managers have more flexibility to devote attention to policies. The move toward more flexibility has been underway for some two decades and has not been directly related to the performance reporting process. The performance reporting system contributes to flexibility, though. In addition, the mere fact that performance information is reported to the parliament and to the public is perceived as motivating managers to pay attention to the performance indicators. Having a member of the parliament grilling a minister with information disclosed in performance reports also has an impact. Some managers, however, see performance reporting only as a control device, i.e., just for the parliament, and not providing useful information for internal management.

A major contributing factor to the performance reporting system is technology that permits large quantities of data to be collected, analyzed, and reported. In addition, the technology allows information to be aggregated at different levels for different persons. For example, the parliament prefers short summary reports, while managers find more detailed reports to be essential. The availability of the technology, however, leads to an unrealistic expectation about how fast the performance reporting system can be implemented and results obtained. From an audit perspective, much information is lacking and data sources are poor. In the early stages, performance-reporting information was not available and measurement systems were not in place. Some operating-level managers perceive that they must "sneak in" the resources to support the performance reporting system, often at the risk of encountering senior management resistance.

An ongoing effort from the performance reporting initiative is developing performance indicators that reflect both agency efficiency and effectiveness. In the past, the primary effort was directed toward efficiency. Now the focus is on making information available to help manage and provide external accountability. Programs and activities must lend themselves to target measures. The stability of a measure over time is also important. A key aspect of a measure is whether it tells managers if they are getting better. Trying to measure performance is a learning experience. Performance reporting seems to work best when activities are less measurable because in such cases there is more of a learning experience. A major emphasis of the initiative is telling a credible story about performance, rather than on indicators per se.

*Centralized Government, England*

This study is based in England, not the UK as a whole, because other parts of the UK have slightly different performance reporting approaches. In England, the vast majority of public services are delivered by local governmental units, but largely funded by the central government. There are local governments for municipalities of all sizes and for counties. The two governments overlap with municipalities falling within the counties, but the two types of local governments provide different types of services. A few independent municipal governments, not part of the counties, exist for larger cities and these independent cities provide services normally provided separately by municipalities and the counties. Although England has a parliamentary system, a federal system like that of Canada does not exist there; all local governments report to the central government. Local governments are empowered by the central government with duties and powers. The central government seemingly views local governments as its agents, although many at the local level would object to this assessment. Among other things, the central government specifies services to be provided, provides 70–90 percent of the funding, and places strict limits on the amount and type of taxes that can be levied locally to cover the amount of required services that are not funded by the central government. The specific research sites are one municipality and one county; the municipality was not located in the county we selected. The central audit office was also interviewed. The persons involved perceive the performance reporting system as a single integrated system involving both the central government and local governments, although the perceptions are not always made happily and willingly. The interviews are reported together because, unlike the states in the U.S., implementation of the performance reporting system by the two local governments was neither voluntary nor independent.

The performance reporting system was mandated after a change of government occurred within the same political party. The incoming central government wanted to change the focus of the central government toward local governments from efficiency to effectiveness. Requiring local governments to measure and report performance according to several indicators, and to publish the indicators in a local newspaper, was viewed as a means to make the local governments more accountable and thereby more effective in the delivery of services. Performance indicators were developed and imposed by the central government and were mandatory for all local governments. A major impetus was to provide a means of comparing local governments. An audit office was given the task to implement and oversee the performance-reporting project as well as to audit the results, leading to an obvious adversarial relationship between the audit office and the local governments.

The current government of a different political party continues the mandatory performance reporting system, but has substantially changed its focus from centrally determined performance indicators to locally determined indicators. The mandatory performance-reporting requirement of both the current and former central governments represents an increasing degree of centralization of central government control over local governments that was begun under a previous central government. Across the country, there has been active, aggressive, and sometimes-successful opposition to this increasing centralization and this opposition has spilled over into the mandatory performance reporting system. Reports from across the country indicate that some of the opposition seems to be legitimate, but other is opposition for the sake of opposition. In the two sites visited, although, there is no indication whatever of opposition for the sake of opposition. Performance reporting activity in England is in a state of flux, but seems certain to continue in the direction of more local involvement in determining indicators, but with no significant change in the process. One area of confusion is that it is not clear whether local governments are meant to be local administrators of a national performance framework and standards, or whether local governments are responsible for local leadership requiring accountability in which performance measurement is an important part.

Initially, performance indicators were centrally determined output measures, which could be measured relatively easily—"bean counting" in the words of one local official. One reason was to allow local governments to become accustomed to collecting performance information. Indicators were published in voluminous detail in book form. There was a formal statutory legal requirement to publish the indicators in a specified local newspaper. The press was viewed by the central government in power at that time as the best place to report local performance indicators because of the belief that news media tend to pick up on effectiveness issues. Over time it became apparent that large quantities of data were being produced, but not used. The public was not interested in output measures, but instead in qualitative factors. Publication in newspapers was costly and the data were not widely read.

The approach of the current central government represents an underlying ethos of engaging the public to determine which indicators are important to the public and then implementing measures of those indicators. The emphasis is local preferences rather than national preferences, so that comparison of local governments is no longer possible. Nonetheless, local governments are being pushed to compare themselves wherever possible to the top 25 percent of similar local governments nationally. A major element of this change in ethos is a movement from output to outcome measurements, although it is recognized that many aspects of effectiveness are qualitative and cannot be measured. Each local government is expected to select the best mixture of measures, whether output or outcome, that best measures its performance. Different divisions within a local government are expected to have their own sets of measures. Measures are not static, but are expected to evolve over time. Stability of measures is important, however, to allow local governments to assess whether there is improvement over time.

Administratively, under the current approach, the audit office prepares an annual consultation document for comment from local governments, the national office, and lobbying groups. Five-year plans are also prepared. Feedback is obtained on deleting, modifying, and adding possible performance indicators. There is great pressure to limit the number of indicators being collected and where possible to link to existing databases. As a result, despite the change in ethos from centrally determined performance indicators to locally determined indicators, the local governments are sometimes dropping collection and reporting of local indicators in order to save money. Auditors certify the performance measurement plans of local governments. Local governments then start collecting data at the beginning of the fiscal years but have six months following fiscal year-end to report. Auditors check that systems are in place to gather the data, but do not verify the data themselves; a management letter is prepared.

The performance reporting philosophy of both the former and the current central government is definitely one of control. The philosophy represents a changing mind-set that local governments must become more accountable to the public, but it also reflects a government agenda of more central control over local governments. Under the immediate past government, performance indicators were used only to a very limited extent in strategic planning and management systems of local governments, and were not used by local governments in budget allocations. Performance indicators were not used by the central government to allocate money to local governments. Under the current central government, although, performance indicators must be used in planning and in local management. Sanctions can be applied for failure to adopt performance measurement. Local governments have now begun to use performance measures in strategic planning and local management. Local government administrators are beginning to integrate performance indicators into the budget allocation process. Elected local legislators, although becoming more interested in performance measurement, are still more interested in micro-management and not getting involved in strategic planning. Under the current central government, performance indicators will be used to allocate money to local governments, although the process will begin incrementally.

The performance reporting process has definitely led to a change in culture in local governments. One local administrator indicates that the persons in the local government administration have learned a great deal since the system was first introduced. As bad as the first set of performance indicators was, it was at least a start. Attitudes of local managers are changing toward the public, somewhat unwillingly, from "we are the professionals and know what is good for you" to "what do you want and need?" Local government managers are now beginning to see press reaction to performance reports and adopt a performance mentality with greater public consultation. Performance indicators also give local governments tools that can be used to challenge the central government. A perceived downside of the change in local culture is that the focus is on the process itself and not on the end results. One official indicated that the development work is focused on the intricacies of data reporting, measuring, baselines, and targets, rather than on accountability to local people and customers of the services.

### *States in the U.S.: Minnesota, Texas, and Virginia*

In the U.S., under the constitution, the states are sovereign, autonomous, and have all power that is not explicitly granted to the federal government. Thus most services are provided by the states and by the local governments within the states, e.g., counties and cities. There has been some effort towards performance reporting at the U.S. federal government level, which is not examined here. The U.S. federal government, although, cannot require performance reporting systems by state governments, as in England. The U.S. federal government does provide some funding for specific activities performed by states. Some of the federal agencies that provide funds to states can and do require performance reports for the funds allocated. The extent of this performance reporting activity, although, has not been sufficient to motivate state governments to develop and implement comprehensive performance reporting systems. Implementation of performance reporting systems by state governments in the U.S. is voluntary and the motivation to do so has been entirely at the state level. There is no central effort to coordinate and harmonize performance-reporting activities of the states, although states do collaborate and share information with each other. This section describes separately the performance reporting initiatives of three states: Minnesota, Texas, and Virginia. All state governments in the U.S. have separation of power among the executive, legislative, and judicial branches of government. The executive and legislative branches are of interest in this study. This separation contrasts with parliamentary systems in which there is no such sharp distinction between executive and legislative activity.

*Minnesota* was at a crossroads in determining where it would go with systematic performance reporting; current efforts are stalled. The comprehensive performance reporting system has always been entirely an executive branch project. Therefore, interviews were with persons in two executive branch offices.

Implementation of a performance reporting system was entirely an executive branch project personally associated with the governor at the time of its adoption. No attempt was made to involve the legislative branch in any way. Earlier, as part of an executive initiative, performance data were included in state budgets which were initiated in the executive branch. About a decade later, a separate strategic initiative was begun in which performance data were removed from the budget but were instead reported in a separate statistical document. At the same time performance reporting by agencies became mandatory.

The specific impetus for mandatory comprehensive performance reporting came from an idea developed in a student's master's thesis. The student gave the idea to a legislator who moved the idea through the legislature by statute without consultation and detailed consideration. The statute gave an executive-branch office the task of providing state agencies with guidance, a task for which the office was ill equipped and not motivated. The legislative audit office was given the task to review performance data, but balked. The executive office did not seem to provide adequate support to the audit office. After about a decade, the mandatory performance-reporting requirement was eliminated by the legislature at the instigation of the responsible executive office which apparently perceived that agencies wanted the requirement removed. A new governor's administration has initiated program evaluation which must necessarily involve performance measures, but not necessarily a comprehensive performance reporting system. It was too soon to know the attitude of the current governor's administration toward comprehensive performance reporting but there was no apparent support for reinstituting a mandatory performance reporting system.

One of the major problems with the use of performance indicators in the budgeting process was that there was no agreement on which measures would be useful in the legislative process and the executive branch did not use the performance indicators in program reviews. A fundamental question was: "What was the purpose of performance reporting?" Most perceived that output measures did not really add anything of value. Also, there was no agreement about appropriate outcome measures. There was some anecdotal evidence that a few legislative committees used performance measures successfully in budgeting, but not consistently. A basic problem is that the legislature did not know how to use performance data and there was no attempt at education. The legislature often moves between broad strategy and micro-management in a moment's time during the appropriation process. In a few instances, the legislature attempted to use performance data to cut appropriations and reduce the size of an agency. There was a perception in the executive branch, however, that it is inherently inappropriate to expect an agency to provide performance data when the primary use of the data is to cut the agency's funding. Yet another perceived problem was that 85 percent of the money appropriated by the legislature is passed through to local governments, i.e., counties, cities, and school districts, so that performance measurement at the state level would not represent a large portion of the money appropriated. The only positive feedback from the performance reporting system was that some agencies found the measures to be useful internally.

The strategic initiative was adopted somewhat later than the performance reporting system, and it specified goals in broad, general categories for the state as a whole in ways that crossed agencies. No attempt was made to be more specific and associate goals with specific agencies. The goals specified outcomes that were not linked to anything. In particular, there was no attempt to link the performance measures that had been previously used in the budgeting process to the goals that were developed. The strategic initiative led to discontinuance of the use of performance indicators in the budgeting process. This initiative is currently floundering, and its future direction cannot be determined.

When performance indicators were removed from the budget process and published as statistical information, they were prepared at two levels: detailed reporting and executive summary. Detailed reporting information was voluminous; one agency had 400 pages in an annual performance report. The detail was too great for much meaningful use by legislators. Yet, executive summaries did not give enough information for the few legislators who wanted to see performance data. The basic problem was perceived as one of information management. Yet another perceived problem is that the state does not have a single statewide accounting system. Each agency has its own system. No attempt is made to aggregate accounting information except at a broad level by the governor's office.

*Texas* implemented a comprehensive performance reporting system as a part of a larger strategic planning and performance budgeting initiative. The project has involved both the executive branch, i.e., the governor's office, and the legislative branch. Interviews were conducted with persons with executive responsibility for administration, with staff-level responsibility for legislative oversight, and with legislative responsibility for audit. Implementation of a performance budgeting system along with strategic planning was motivated by a financial crisis. A severe budget shortfall and the prospect of additional taxes coincided with the election of a new governor and lieutenant governor who were both reform-minded and amenable to new approaches. Two new initiatives emerged that required reporting of performance of measures: (1) strategic planning and (2) performance budgeting and monitoring. Both the executive and legislative branches actively embraced the two initiatives and the two branches have continued to work closely and harmoniously together. A new governor from a different political party defeated the previous governor, and control of one house of the legislature changed to the political party of the new governor. The new governor and legislature embraced the strategic planning and performance budgeting systems and have continued to support these developments. The absence of association with a specific elected official or political party is cited as a major positive factor contributing to the effectiveness of the initiative.

The fact that performance budgeting was implemented by legislative statute is widely believed to contribute to its effectiveness. The current planning, budgeting, and reporting systems are the only systems; old systems were not maintained as parallel systems. Discontinuing the old systems immediately upon adopting the new ones is another factor that several officials agree contributed to the effectiveness of the new systems, doing it "cold turkey" to use their terminology. A changing culture is evolving throughout the state government toward performance. The finance committees in both houses of the legislature ask agencies how the legislature can help in implementing performance budgeting. The state audit office is sensing a shift away from the traditional emphasis on "where did the money go" to "are performance indicators measured accurately."

State agencies submit strategic plans every two years in which goals, objectives, strategies, and performance measures are clearly identified. These goals, objectives, strategies, indicators, and performance targets then become the foundation for the state budget. The link between performance budgeting and strategic planning is viewed as crucial. Agencies report their performance to an office in the legislative branch every three months. The state audit office, a legislative office, attests to the accuracy of the reported amounts. If an agency reports a variance of 5 percent either way from the target, the agency is required to provide a written explanation. The audit office assesses the performance of agencies on an ongoing basis as well as the quality and timeliness of their reports. The legislature conducts public hearings throughout the period between legislative sessions to review the performance of performance. Administrators from the executive branch review the performance of agencies periodically for a variety of policy, budget, and other interim purposes. The performance reporting process is highly visible, and the visibility is viewed as causing agencies to be more accountable.

Even though the legislature embraced the project from the outset, the actual use of the performance information by legislators in the budget appropriation process has been an evolutionary learning process. In the legislative session that had recently ended, almost a decade after the project was implemented, some legislators made significant use of performance information in their deliberations. Newly elected legislators appeared especially willing to use performance measures in their decisions. There is still a tendency of legislators to micro-manage and to determine an agency's appropriation level based on political reality, rather than its actual or projected performance. One prominent administrator indicated that political processes in appropriation decisions are a reality and generally good; using performance measures as the sole determinant of appropriation decisions is unrealistic and not always desirable.

The initial set of performance measures and targets in the budget was set by the legislature through a legislative office. Changes in the measures, although, are initiated by agencies in each strategic plan. Legislative and executive offices work with agencies to establish appropriate indicators. Therefore, the agencies are not stuck with indicators imposed from above, although there is still a review and approval process in the establishment of indicators. The desire to drop performance measures and develop new ones must be balanced against the need for stability. Being able to compare how funding has changed and how performance has changed as a result is perceived as important.

Currently, about 40 percent of measures are output measures and 40 percent are outcome measurements, while the remainder are efficiency and explanatory measures. Historically, the emphasis had been on output measures and the relationship of inputs to outputs. Initially, agencies were concerned about being held accountable for measures they could not control. Output measures were used because of the difficulty of determining outcome measures that were controllable. Outcome measures are increasing, with some intermediate outcome indicators emerging as a step toward qualitative outcome indicators. There is still a reluctance to set outcome measures at the state level. There is generally good agreement between agencies and the legislature about the measures that are appropriate. A recent initiative puts performance indicators into contracts with private contractors, not-for-profit organizations, and local governments (e.g., cities, counties, and school districts) that perform services with state-appropriated money.

The primary motivation for implementing performance budgeting was clearly one of increased accountability of state agencies to the state government. The strategic planning and performance budgeting activities are highly centralized. There is a general sense that some state agencies may not be using performance measures to their best advantage in internal management. There is also a sense, although, that agencies are beginning to use performance measures in internal management, although not always willingly but because performance measurement is a reality and is here to stay. Performance measures are incorporated into approved strategic plans and must therefore be taken seriously, and the legislature is increasingly using performance information in the appropriation process.

Implementation of performance reporting has been facilitated by a uniform state-wide accounting system that all agencies are required to use if they do not have a compatible system of their own. Many agencies do have their own internal accounting system for internal management, but feed data into the uniform statewide system. The uniform statewide system develops information on both a cash basis and an accrual basis for external financial reporting and control over cash expenditures is to assure that agencies do not overspend appropriated amounts. A separate budget and evaluation accounting system measures performance; it reports output and efficiency measures quarterly and outcome and explanatory measures annually. A database of definitions of performance measures is included in this budget and evaluation system. This database, as well as current performance information, is available via on-line access. Officials have expressed caution, although, about using on-line virtual performance information because the information must cover a long enough period of time, usually three months minimum, in order to be meaningful. The uniform statewide system and the budget and evaluation system are not linked, but are compatible. Efforts are underway to link the two systems.

*Virginia* implemented a performance reporting system gradually. The process started in the executive branch but has involved the legislative branch. Interviews were conducted with the person in an executive office with some administrative responsibilities for the system, in separate legislative offices with staff-level administrative and oversight responsibilities, in an audit office, and in a state agency that has implemented the performance reporting system.

Comprehensive performance reporting first was started as a pilot program by executive order. Afterward, a legislative office with oversight responsibility reviewed the project as a benchmarking exercise. Over time, the performance reporting system has gained the support of the administrative elite in both the executive and legislative branches of state government and this support is sustaining the activity. The performance reporting system requirement has since been codified into law by statute, although the legislature has not specified the kind of information to be reported. Instead, agencies receive input and guidance from an executive-branch office as to which indicators to report. The personality and enthusiasm of the governor at the time of the implementation of the performance reporting system was a major factor in the implementation of performance reporting. Another governor of the same political party has succeeded and supports the performance reporting system as well. The lack of identification with a partisan political agenda is notable. The approach has been one of "go slow." Performance indicators have just recently begun to be used in contracts for services. Performance reporting is not required for local government units, i.e., cities and counties.

An executive office is the focal point of performance reporting system. The original impetus for implementing a performance reporting system was a desire for accountability and the focus of the system remains as accountability for services provided. The objectives of the performance reporting system, however, have evolved to two core objectives: to improve results of governmental activity and to communicate the results of governmental activity. Accountability is viewed as falling within these two core objectives. Focus on these two core objectives is seen as important because it lessens perceptions of punitive potential and gives support to the two core objectives. As the system evolved, periodic performance reporting was changed from quarterly to annual.

The performance reporting system is integrally linked with the executive branch's strategic planning process. State agencies usually identify three to five indicators of performance that are fed into a statewide strategic plan developed by the budgeting office in the executive branch. The plan includes both current baseline measures and desired performance targets. Performance measures must be specified when new programs are requested in order to judge subsequently whether a program is successful. For new programs, the "baseline" amount is an estimate. Tying performance measures to the strategic plan is perceived as helpful in clarifying objectives. Also, performance measures may influence the continuation of programs and may change support among programs.

In the legislative branch, one of the major perceived benefits of the performance reporting system is a long-term information infrastructure that can be used by the legislature and its offices in policy-making. A legislative-branch audit office is involved with performance information from a policy perspective. In addition, legislative committees are involved with performance information. The legislative perspective is long-term, although, and performance information is rarely used in debates of legislative committees.

Budgets are developed in the executive branch by the budgeting office. Performance data are available in budget supplements and are considered in developing the budget. Currently, the budgeting office is experimenting with new approaches to the budgeting process. Pilot projects have been conducted that have involved the use of performance information for budget decision-making. In reality, although, performance information is just another piece of information in a complex process. Another experiment involves an automated budget decision support system that would include performance information. Also, it may be feasible to link performance indicators to new projects in the budget.

Each agency generally selects three to five performance indicators to be reported. The objective is to find indicators that reflect an agency's performance over time, rather than standardization among agencies. Indicators are almost always selected from those already available within the current systems. The indicators selected by agencies are reviewed by the executive-branch budgeting office and then by the legislative-branch oversight office. The purpose is to select indicators that best reflect an agency's mission. The process in the executive budgeting office is also one of negotiation and training. The indicators are mostly output, efficiency, and quality measures; outcome measures are infrequent. Many indicators are financial, although most agencies use nonfinancial indicators. A high degree of continuous interaction among the agencies and the executive budgeting office allows views to be exchanged and performance indicators to be modified. It is important to balance the need for flexibility with the need for standardization and stability over time.

Reported performance indicators are audited by the legislative branch audit office that reports to the legislature. The office reviews performance indicators along with financial and other comprehensive audits of executive and judicial branch state agencies. The audit concern is that measures are consistently and accurately reported. The legislative audit office does not evaluate the appropriateness of performance indicators, because to do so would duplicate the efforts of the executive-branch budget office and the legislative oversight office. With respect to audits of performance indicators, the legislative audit office works closely with the executive-branch budgeting office and with the legislative oversight office. Audits are becoming continuous, rather than annual.

The motivation for implementation of the performance reporting system was one of state-level control over agencies in the sense of increased accountability. It has become apparent, although, that the agencies that use performance data in their internal management are more goal-oriented and produce better-quality performance data. The extent to which performance reporting has been implemented in state agencies varies. When the agency's performance reporting is related to internal management, the staff is more inclined to perceive the importance. At least one major agency has a highly integrated management system that ties together (1) internal and external reporting, (2) performance reporting, budgeting, and strategic planning, and (3) compensation, forecasting, and activity-based costing. A substantial portion of employee pay increases is related to performance. Within the agency, reporting is monthly; annual reporting is too late. With the performance reporting system, management is in a better position to control and reduce the workload, see trends, and make predictions. Use of performance indicators in agency management represents a changing culture from a bureaucratic to a living organization. Training and coaching are core values.

## EMERGING THEORY

The field studies reveal that in four of the locations, all but Minnesota, performance-reporting systems are perceived as progressing in a positive direction. It is premature to use the word "successful" to describe these four efforts. Instead, we assessed the perceptions of optimism about the future direction of the systems. The persons interviewed consistently felt optimistic, although in centralized England the optimism at the local level was tempered with a sense of resignation over accepting a centrally mandated performance reporting system. One location, Minnesota, lacked optimism. In the analysis, we also discovered the application of two existing streams of theory: the constitutive role of accounting and accounting in organized anarchies.

### *Agreement and Differences*

In the method of agreement, the researcher analyzes areas of agreement among sites that are different on some dimensions in order to discover explanatory or predictor variables for a characteristic of interest, in this case the perceived optimism. In this study, the sites visited are diverse in their nationality, level of government, form of government, and political climate. Nonetheless, the four optimistic sites show remarkable agreement in several factors that are perceived as contributing to the optimism. Moreover, the one site that is not optimistic shows an absence of essentially the same factors. Also the method of differences that explores differences among sites that are similar in some key characteristic(s). In this study, this method would explore differences among the four sites that are optimistic, and also look for similarities between the one site that is not optimistic and the others that are optimistic.

*Impetus and method of implementation.* Many advocates of performance reporting imply that implementation is urgent because of a strong need of governments to become accountable to citizens as well as become more effective in delivering services. This point, along with the method of implementation of performance reporting systems is not addressed at a broad-based theoretical level by these advocates, but instead is limited to prescriptions and advocacy.[22]

Indeed, in three of the four optimistic sites, all except Virginia, urgency from a crisis provided the impetus for performance reporting. It could be argued readily that a genuine crisis did not exist in England. Nonetheless, the motivation for implementing performance reporting there reflected a crisis-like situation in which the central government felt an urgent need to achieve greater control over local government expenditure and delivery of services. In the one site where there is no optimism, Minnesota, a lack of crisis or other urgent motivation was notable. Therefore, it might be concluded that a crisis-like urgency is associated with optimistic implementation of performance reporting systems because the urgency overcomes impediments to implementation, such as lethargy and inertia, and provides the motivation for diverse groups such as executive and legislative branches to work together. Virginia, where a crisis did not exist, might be viewed as an anomaly.

Under the method of differences, although, it is important to explore how Virginia differed from the other three optimistic sites in its motivation. In Virginia, the officials said specifically that the initiative to implement the performance reporting system came as a response to increased emphasis given to performance reporting in the rhetoric of the times as a means to increase accountability. The phrase "reinventing government" was widely publicized in the U.S. and elsewhere at this time. Reviewing some of the public administration literature of the era, which is largely prescriptive and advocative,[23] it is apparent that many government entities were attempting to adopt some form of performance reporting at this time. Therefore, Virginia's implementation of a performance reporting systems can be seen as possibly following a trend. Furthermore, it is widely recognized and expressed by several of the persons we interviewed that some key politicians and senior administrators in Virginia viewed implementing a performance reporting system as a means of establishing prominence. Returning to the method of agreement, this notion of establishing prominence was also apparent in the other optimistic sites, although not so strong in Canada. A crisis-motivated implementation, following trends and establishing prominence are all characteristics of management in organized anarchies, discussed in more detail below. Thus, one conclusion is that a crisis situation, while being a powerful motivator for the implementation of a performance reporting system, is not the only impetus that can lead to an optimistic implementation.

Comparing Minnesota and Virginia, which are similar in the lack of a crisis, but differ substantially otherwise, additional insights emerge. While conclusions are difficult from only two sites, it can be readily noted that the performance reporting system in Virginia, as

22. Cunningham and Harris.
23. See Cunningham and Harris for a more comprehensive discussion.

well as in Canada, England, and Texas involved the senior administration, the executive branch, and the legislative branch from the outset, but there was no such breadth of involvement in Minnesota. In parliamentary systems, such as in Canada and in England, The distinction between executive and legislative is not as sharp as in the states of the U.S. Nonetheless, it is possible to conclude that breadth of involvement across all parts of the government is a major factor contributing to optimism.

In all locations, the implementation was top down, including Minnesota. A notable difference, though, is that in Minnesota the impetus did not include senior administrative personnel and was limited almost exclusively to the political level of government, i.e., the governor. In the other locations, active involvement of the senior administration is notable. The full extent of the involvement of senior administration personnel in centralized England was neither clear nor explored, but the involvement of senior administration of the local governments was apparent. While the political level was involved in the impetus to implement performance reporting in Texas and Virginia, the lack of political-level involvement is noted in Canada and England. Therefore, one conclusion is that active political-level involvement is not important for optimistic performance reporting initiatives, but that involvement of the senior administration is crucial. In all locations, the political level at least supported the performance reporting initiative. It seems intuitive that such political-level support is important, but there is nothing to indicate the consequences of the lack of political-level support.

*Relationship to organization processes.* Most advocates of performance reporting consistently imply that performance reporting per se is sufficient to achieve accountability and that effectiveness in delivering services will result. Vague references, usually advocative, mention the use of performance measurements in internal management processes.[24] It is well known, although, especially in the private sector, that the formal reporting of performance measurements, e.g., profits, can have an impact on the behavior and processes of the organization and its components. It is also well known that the impact can be dysfunctional and fail to achieve the intended purposes. Therefore, the claims by the advocates must be examined by looking at organization processes.

In all of the locations, including Minnesota, it is apparent that performance reporting per se is not sufficient to increase accountability or to increase effectiveness of a government's delivery of services. Instead, in the optimistic sites, the use of performance measures in management processes is apparent. It is important to note that in England and in Texas the use of performance indicators in management processes came after a few years and not always willingly. Nonetheless, it is apparent that central government officials in these two locations, through an evolutionary process, recognized the need for performance indicators to be used in local management and used means to encourage or require their use. Similarly, the experiences of optimistic locations strongly suggest the need for performance measures to be incorporated into strategic planning and for performance reporting systems to be integrated with strategic planning processes. This outcome confirms the results of Abernathy and Brownell[25] who discovered an association between use of accounting based measurements to facilitate strategic change and organization effectiveness in public sector

24. For more discussion, see Cunningham and Harris.
25. Abernathy and Brownell.

hospitals. There are no significant differences among the four optimistic locations with respect to strategic processes, so it is not possible to explore theoretical implications further using the method of differences.

From another perspective, an official in Canada reported the use of performance-reporting control permitted the central government to control agencies and thus allow the agencies the flexibility to manage themselves without top-level micro-management. In England, Texas, and Virginia, the same attitude was implicit among top-level officials, although not necessarily among legislators. Thus top-level control combined with incentives to use performance measures in local management, and the flexibility of local managers to manage on their own, seems to be an optimal combination for optimism. It is interesting to note that the private sector has evolved essentially the same way and a rich body of literature exists. Thus with respect to management control, private sector practices are indeed relevant in the public sector.

All locations, including Minnesota, indicated that performance measurement information is or was included in the budget process. The extent to which performance information is used, although, varies. At one extreme, in Texas, performance information is incorporated into the budget appropriation process of the legislature as it formally approves the state budget. This inclusion is considered to be of paramount importance. From the outset, the legislature and executive developed budgets that included performance indicators. The legislative staff uses reported performance information extensively. It should be noted, although, that the process in Texas has evolved over roughly a decade and the legislature is just now beginning to use performance information significantly in the formal appropriation process. England is also in the very early stages of using performance information in formal appropriation deliberations by both central and local legislators. In Minnesota, legislators occasionally used performance information on an ad hoc basis before the reporting was discontinued. A factor contributing to the discontinuance of performance information in Minnesota's budget process was the perceived unfairness of requiring an agency to report performance information that would lead to the agency's budget being cut. In Canada and in Virginia, there has been little or no attempt by legislators to use performance information in appropriation deliberations. Administrators use performance information when the budget is prepared. The performance information, however, is only one of several important factors. Because of the variation it is difficult to develop any theoretical conclusions about performance reporting systems and budget processes per se. It is apparent, although, the performance reporting system is one important means of communication in the optimistic sites.

Despite the variation with respect to budget processes, there is a notable association of the use of performance information in other legislative processes. In all of the optimistic locations, legislative staff members use performance information, although the extent of the use varied. Further, in Canada and Texas, legislative committees frequently used performance reports in hearings and this fact was perceived as important in motivating government agencies to take performance reporting seriously. There is also some indication that England is evolving in the same direction, at least at the local level. In Virginia, however, the legislative use of performance information is primarily for long-run policy and infrastructure issues. Again, the results point to performance reporting systems as enhancing communication.

The involvement of audit processes in the performance reporting system is apparent in all the optimistic locations. In Minnesota, the lack of audit involvement was cited as a reason for the lack of optimism. The nature and extent of audit involvement in the optimistic locations varies and represents some notable differences. In England, the audit office is the primary central government instrument that implements and oversees performance reporting. In Texas, the audit office is highly involved and an integral part of the performance reporting process, although from a supportive position. In Virginia, the audit office is substantially involved and this involvement is continuing to evolve. In Canada, although, the audit office involvement is notably less than in the other locations, but is evolving toward more involvement. While it is possible to conclude, based on the sites visited here, that some form of audit involvement is necessary for the implementation of performance reporting systems, there is no clear consensus on the optimal form and extent of audit involvement. In sites with audit involvement still evolving, it seems probable that the auditor involvement will approach that in the other locations.

*Accounting, communication, and information system infrastructure.* Many performance reporting advocates apparently have some notion that accounting infrastructure exists and is adequate to implement performance-reporting systems. The descriptions and prescriptions all imply the use of existing accounting systems and information technology.[26]

Indeed, all of the optimistic locations indicate that accounting systems are at least adequate and were from the outset. In Texas, a uniform statewide accounting system is cited as contributing to the optimism. In Canada, England, and Virginia accounting systems are adequate, although not necessarily uniform, to support the performance reporting process. In Virginia, the persons interviewed said that indicators that are already measured and reported by the existing accounting systems contribute positively to performance reporting. Even though accounting systems in these locations were adequate from the outset, continuing development is occurring, especially in Texas. By contrast, the lack of a uniform accounting system in Minnesota is cited explicitly as one of the reasons for lack of optimism. Therefore the existence of a supportive accounting infrastructure as a prerequisite to implementing a performance reporting system seems essential but cannot be assumed, as advocates seem to imply.

More important than accounting systems per se, all the optimistic locations explicitly cited the commitment to and continuing investment in communication and information management technology as major factors related to the effectiveness of performance reporting systems. This technology includes not only hardware and software, but also includes the important issue of the optimal level of aggregation and frequency of reporting. All optimistic sites reported experimenting to determine appropriate frequency of reporting and the appropriate levels of aggregation for different purposes. In Minnesota, however, the lack of adequate information management, including inappropriate levels of aggregation, was explicitly cited as a major factor contributing to the lack of optimism. Therefore, a commitment to investment in communication and information management technology also seems to be essential for the implementation of performance reporting systems.

*Organization culture and learning.* Many advocates of performance reporting obviously expect that a change in organization culture would occur. Yet there is a notable lack of discussion, although, about the change in culture and any learning that might occur.

26. For more discussion, see Cunningham and Harris.

Indeed, all optimistic locations said explicitly that there has been a change in organization culture, although not entirely a willing change, as a result of implementing performance-reporting systems. This change in culture is viewed very positively by the persons interviewed in Canada and Virginia. Enthusiasm permeated all parts of Texas, although there was no explicit statement of positive culture change. In England, there is less enthusiasm because the performance reporting system is viewed as being integrally related to a transfer of power from local to central government. Nonetheless the persons interviewed expressed positive elements as local government personnel were beginning to ask what citizens wanted and needed from local government. A lack of culture change was apparent in Minnesota.

It is too soon to determine whether this organizational culture change is sustainable and desirable over the long run in optimistic sites. This study, which uses cross-sectional research techniques, was not designed to explore this issue. Nonetheless, this consequence was notable and deserves further exploration. A substantial body of literature exists about organization culture change. This literature deserves to be explored in the context of longitudinal research studies in the area.

In all optimistic locations, a positive learning process was noted. This learning resulted, in part, from the freedom to experiment and be creative, and to make changes as the performance reporting system evolved. Again, the cross-sectional research design was not intended to explore organization learning, but the process was notable. Organization learning also has a substantial body of literature that deserves to be explored. One area where organization learning is apparent in all the optimistic locations is the evolution from almost exclusive reliance on output measures to inclusion of outcome measures. All optimistic organizations began with output indicators; outcome indicators were initially avoided because they were difficult to measure and there was fear over their use by many local agencies. As local managers became more familiar with the performance reporting process they seemingly became more comfortable with the use of at least some outcome measures. In-depth exploration of this evolution using longitudinal research methods could be a fruitful area for future exploration as well.

*Theoretical streams.* As we gathered the information from the field studies and analyzed it, it became apparent that two existing theoretical streams readily apply to performance reporting systems in governmental entities. Many advocates of performance reporting in governments seemingly have a traditional and somewhat stereotypical view that performance-reporting systems are external to the organization and serve an enabling function, facilitating rational decision-making. These beliefs reflect these advocates' notions that performance reporting *per se* leads directly and quickly to accountability and thus efficiency and effectiveness of governments. The experiences of the sites studied, however, indicate this traditional viewpoint is not valid although there is obviously is optimism. By looking at two other streams of theory, more insights are gleaned that can move discussion from advocacy to theory that can guide implementation.

*Accounting in organized anarchies.* Cohen et al.[27] popularized the notion that organizations are organized anarchies rather than rational decision making units. Organized anarchies, they contend, are particularly conspicuous in the public sector, but describe at

27. M. D. Cohen, et al., "A Garbage Can Model of Organizational Choice," *Administrative Science Quarterly* (March 1972): 1–25.

least a portion of almost any organization's activities for at least a short period of time. Organized anarchies are characterized by issues looking for problems, solutions looking for decision situations, and decision makers looking for work.[28] Advocacy of performance reporting has occurred, and some applications have existed for a long time. The issue received little wide-spread attention, although, until the last decade. There is strong suggestion that the crisis-motivated implementation of performance reporting systems in Canada, England, and Texas likely reflects issues looking for problems and solutions looking for decision situations. In addition, in all locations, especially in Virginia, decisions makers were looking to establish prominence, which seems to be the "looking for work" of this theoretical stream, in the sense that some elected officials and/or senior administrators were looking for an issue on which to build reputations, at least in part. It is important to note that these factors are not intended to be negative nor pejorative. Indeed, these factors are associated with optimism in all but one of the situations studied. In Minnesota, the only characteristic present was the governor wanting to establish prominence, i.e., "looking for work," in the sense of pushing performance reporting as an item in a personal political agenda. When the governor's political future seemed assured, the issue of performance reporting was not pursued and others were not motivated to establish their prominence in a similar way.

Another characteristic of organized anarchies is that choices are made without consistent shared goals or explicit bargaining. This characteristic is strongly reflected in the implementation in England, and some element of it is present in all of the other locations. In Texas, for example, there was some degree of shared goals across the top levels of the executive and legislative branches of government. There was no attempt to determine whether these shared goals existed in the independent state agencies and there was no bargaining to seek goal consensus among agency heads before the performance reporting system was implemented. The lack of consistent shared goals and explicit bargaining also characterizes Minnesota. Therefore, it cannot be concluded that this characteristic is associated with the optimistic implementation of performance reporting systems. Nonetheless, a tentative conclusion is that the lack of shared goals can be an inherent characteristic of governmental organizations and that bargaining to achieve consensus on goals to share is not a necessary precondition to implementation of performance systems.

In designing accounting systems for organized anarchies, Cooper et al.[29] contend that, among other things, such systems should facilitate experimentation and coercion. It is important to emphasize that the term "coercion" is not to be interpreted in a negative or pejorative sense in this context, but instead represents the legitimate use of authority in the governmental structure to require a subordinate organization or agency to do the will of a higher authority. Experimentation and continued evolution of performance reporting is very apparent in the four optimistic locations. In particular, in England, the performance reporting system changed considerably over the years before it evolved into its current form. Coercion in England is also very apparent. Although changes were not dramatic, experimentation occurred in Texas until the system in its current form evolved and some

28. Ibid., 1.

29. D. J. Cooper, et al., "Accounting in Organized Anarchies: Understanding and Designing Accounting Systems in Ambiguous Situations," *Accounting, Organizations and Society* 6, no. 3 (1981): 175–91.

degree of experimentation is still occurring. Coercion, although not as strong as in England, occurred as agencies were required to adopt performance measures in their strategic plans and budget processes. Canada and Virginia are at earlier stages of development and likewise show continued experimentation. Some degree of coercion at these latter two locations is apparent. By contrast, Minnesota shows almost no experimentation. In Minnesota, if an aspect of the performance reporting initiative was not viewed as useful, it was dropped rather than changed. The new strategic goals initiative was implemented and aspects of performance measurement dropped without concern for any experimental evolution. Coercion was not only absent, but was considered to be inherently inappropriate.

*Constitutive role of accounting*. In a classic study, Hopwood[30] challenged the traditional, stereotypical viewpoint that accounting systems are neutral, separate systems that enable organizations to make decisions and that accounting systems are improved in order to make the organization better. Using extensive field studies of three companies, Hopwood[31] (1987) developed an extensive body of theory that maintains, among other things, that accounting systems are sufficiently embedded in organizations that they define and actually constitute the organizations rather than reflecting them. Furthermore, the constitutive role of accounting systems is one that evolves over time. The performance reporting systems studied here are relatively new, and research methods were not designed to explore evolution of systems over time: Nonetheless, a constitutive role of performance reporting systems was apparent, notably in Canada and Texas. In Texas, a performance mentality is taking hold in the government. As a result, the performance reporting system, which is integrated into budgeting, plays a major role in constituting almost the entire state government and senior administrators and politicians view this role positively across the executive and legislative branches of the government.

The constitutive role of accounting systems can be both positive and negative. As Hopwood[32] discusses, accounting systems can become rigid, entrenched, self-serving, and even fossilized to the point of contributing to organization decline because the system does not permit change. In England, there is some indication that performance reporting systems were in fact becoming self-serving and that performance reporting was being done for its own sake; "bean counting" in the words of one senior administrator. Because of recent changes in the performance reporting requirements, which focus on locally rather than centrally determined performance indicators, this potential atrophy seems to have been abated. Nonetheless, the characteristic is present.

In Hopwood's discussions, one of the most important aspects of the constitutive role of accounting systems, if not the most important, is that they serve as the communication channels within an organization. Such communication is more important for organization success than any specifics of accounting measurements. There is strong indication in the four optimistic sites that communication is more important than performance measurements per se. Specifically, these four systems require communication among parts of the entity that would not otherwise communicate with each other, or would communicate

30. A. G. Hopwood, "The Archeology of Accounting Systems," *Accounting, Organizations and Society* 12, no. 3 (1987): 207–234.

31. Ibid.

32. Ibid.

much less readily. By contrast, in Minnesota, the lack of communication was apparent even though the performance data were reported and available. One of the many implications of the importance of communication is that discussion over output versus outcome measurements may be moot.

## CONCLUDING COMMENTS

The results of this study indicate that there is indeed reason for optimism about the ability of performance reporting systems to achieve accountability and effectiveness in government entities, but the process is much more complex and not so immediate as many advocates would suggest. Among the most significant conclusions are that performance reporting systems per se are not sufficient to achieve the desired accountability and effectiveness and that the ability of the system to foster communication is more important than performance indicators themselves. The analysis revealed that two existing theoretical streams, accounting in organized anarchies and the constitutive role of accounting, apply to performance reporting in government entities and can be useful foundations for the theory building process. The analysis suggests that experimentation and evolution are important in developing performance-reporting systems. Performance-reporting systems should ideally be institutionalized in all management process including strategic planning and should involve a broad cross section of the government, and in particular both executive and legislative functions and senior administrators.

As with any field study with a few research sites, generalizable conclusions are not possible. Likewise the research design was cross-sectional rather than longitudinal so that the impact of developments over time cannot be completely observed. Nonetheless, the results do present a useful basis for continued ongoing research using multiple research methods.