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USING STRATEGIC INFORMATION SYSTEMS TO IMPROVE CONTRACTED SERVICES AND ASSESS PRIVATIZATION OPTIONS

Steven Cohen
Columbia University

William B. Eimicke
Columbia University

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ABSTRACT

Government officials are looking to contracting out and privatization as means to create a public sector that works better and costs less. This new approach to public service delivery is evident in the welfare to work reforms of the 1990s, low- and moderate-income housing construction and management, homeless services, economic development and job training, and the charter school movement. Contracted services require a whole new set of skills for government workers, including contract design, negotiation, monitoring, and evaluation. Sophisticated information systems are crucial to performance management and evaluation systems that are essential to effective contract management. This chapter explores the theory and practice of performance measurement and information technology (IT) in the context of outsourcing public service delivery. It discusses the use of government strategic planning and information-based performance management to plan and manage private contractors performing public tasks. While information systems are critical to the management of in-house organizational units, we believe they are even more important in managing the work of contractors.

I. INTRODUCTION

Government officials are looking to contracting out and privatization as means to create a public sector that works better and costs less. This new approach to public service delivery is evident in the welfare to work reforms of the 1990s, low- and moderate-income subsidized housing programs since the 1980s, homeless service programs, job training, the business improvement district initiative, and the charter school movement. Contracted services require government workers to develop a whole new set of skills, including contract design, negotiation, program monitoring, and evaluation. Sophisticated information systems are also needed to provide the performance measures and evaluation programs that are essential to effective contract management.

This chapter explores the theory and practice of performance management and information technology (IT) in the context of outsourcing public service delivery. It discusses the use of government strategic planning and information-based performance management to plan and manage private contractors performing public tasks. While information systems are critical to the management of in-house organizational activities and units, we believe they are even more important in managing the work of contractors.

II. ORGANIZATIONAL NETWORKS AND ORGANIZATIONAL MANAGEMENT

A. The Influence of Changing Technology on Organizational Form and Function

The need for vertically integrated, hierarchically controlled organizations has been reduced as technology has made it easier to communicate ideas and information and transport goods around the world (Cohen and Eimicke, 1998, 2002, 2003): satellite communication, cellular telephones, handheld computers, wireless Internet access, containerized shipping, and multinational organizational networks make it possible to create goods and services in a variety of locations. These goods and services can be assembled throughout the globe, from components made all over the world, and can be tailored for use in a particular location or market.

The creation of a worldwide system of production means that organizations must constantly ask and then reexamine the "make-or-buy decision." Should we do this task in-house or hire a consultant or another firm to do this work for us? The correct answer to this question is not necessarily to increase the amount of contracting out. In today's world, yesterday's decision to buy something can be today's decision to make it. Technology alone can change the basis for such a decision. Perhaps the most dramatic recent example of changing dynamics is the decision of the U.S. government to take airport security back from the private sector in the aftermath of terrorist attacks of September 11, 2001. Access to information about individuals and groups available only to public law enforcement instantaneously on a global basis is essential to airport security and cannot be shared with private vendors. In 2003 and 2004 the military discovered that some vendors refused to perform contracted tasks during the war with Iraq because they refused to put their workers in danger. The military discovered they could not outsource bravery — some functions such as food service and construction needed to remain in-house if they were to be performed on or near a battlefield. The work that each organization does can change rapidly as do the organization's structures that support that work.

Organizational form is therefore far less stable in well-managed organizations than it once was. Organizational function changes rapidly as well. There are three basic questions that organizations must ask: (1) What should we do? (2) How should we do it? and (3) Who should do it? In the past, these questions could be answered definitively and for a long period. Bureaucratic hierarchies and standard operating procedures could be built on the answers to these questions. Today, these questions must be raised constantly in a global struggle to keep current with technology and competition.

Some might wonder who is government competing with? For the most part, government has a monopoly, or at least a shared monopoly, with other levels of government within distinct functional areas. However, the best managers understand the importance of the cost of government as an element in a nation's (or region's) ability to have its goods and services compete in a global economy. Governments do not directly compete, but their cost, efficiency, and effectiveness affect a nation's or a region's economic well-being. Therefore, well-managed organizations are always asking and responding in different ways to the aforementioned three questions. This means that organizational function and form are constantly in flux.

B. Management Challenges Posed by Organizational Networks

Although well-managed, dynamic organizations find themselves undergoing constant change, one factor does not change — the need for management direction and the demand for accountability. While mayors and commissioners might try to blame a bad result on an inadequate contractor, that argument is generally not accepted by the public — especially over the long term. When programs are implemented by a variety of organizations that form a network, issues of communication, coordination, and direction are generated.

Organizations within the network need to learn what tasks they are to perform, when they should perform them, the objectives they are attempting to achieve, the customers they are being asked to serve, and the information they must provide to the agency they are working for. This requires extensive contact and information exchange. The agency contracting for the work does not perform the tasks in question, but it should determine

what tasks must be performed, by whom, at what time, and for what purpose. The agency must learn whether the tasks have been performed and what outputs and outcomes the tasks have generated. It must coordinate the actions of numerous contractors and, where contractors must interact, ensure that the interaction is working as designed.

Organizational networks, when they run well, can be more efficient and effective than vertically integrated hierarchical organizations. However, they must be managed, and such management is not cost-free or easy. It requires a new type of management that relies on creativity and innovation to fuel new mechanisms for communicating to and influencing the behavior of external organizations. Often, contract instruments must be used to exercise influence: for example, linking payment schedules and bonuses to performance. To receive these incentives, vendors must perform in certain specific ways and they must also provide the lead agency with information on their performance.

C. Performance Management

A number of researchers have noted the trend over the past decade for state and local governments to contract out, or outsource a substantial number of the services previously delivered by civil servants to private and, particularly, nonprofit organizations (Butcher, 1995; Forrest, 1995; Sclar, 2000; Cohen and Eimicke, 2002). Forrest (1995: 51) notes that agencies have thus been transformed "from direct providers to monitoring, regulation, and contract-enforcing agencies." He emphasizes the importance of new management skills necessary to guide these organizations that now have a networked contractor structure, rather than the traditional hierarchical service delivery structure. Forrest regards the increase in emphasis on performance monitoring as part of the process of contract specification and oversight necessary in these new structures.

Martin and Kettner (1996) cover the process of performance measurement in human service agencies and programs in some depth. They define performance measurement as the regular collection and reporting of information about the efficiency (inputs/outputs), quality, and effectiveness (outcomes) of programs (p. 3). They argue the chief reason to adopt performance measurement in human services is to improve the management of those programs by supplying agencies with information about who their clients are; their demographic characteristics; their service requirements; the amount, quality, and level of service received; and the outcome of receiving the service. Performance measures keep managers informed about how their program is doing and assist in oversight.

Performance measures may be used to monitor the delivery of contractors' services in the same way that they can be used to monitor agency performance. The advantage, according to Martin and Kettner (1996), is that once performance measures are in place, the agency can move to performance-based contracting, in which contractors are paid for meeting certain performance-based criteria. For example, payment to a job training and employment contractor is based on the number of people they actually place in a job, not on the number of people they are currently training.

D. Performance Management and Contracting Out

Management of interorganizational networks and contracts means that leaders cannot depend on traditional hierarchical controls to influence the behavior of subordinates who are responsible for performing particular tasks. This means that management cannot use organizational culture, personnel promotion, demotion, termination, or authoritative

command structures to influence behavior. In our view, many of these tools are of declining usefulness anyway. Given that public employees are entitled to due process rights, it is increasingly difficult to fire someone. In the professionalized environment characteristic of most government agencies, few professionals are responsive to direct command. They are more likely to behave as management requires in response to persuasion and positive incentives. Merit pay and other bonus systems can be effective in rewarding good performance, but few techniques are available to government to effectively punish poor performance.

In contrast, contractual relationships with private and nonprofit firms provide the surest way to punish poor performance: contract termination. While there are limits to the use of this technique — it is difficult to terminate contracts in midterm — it does send a message that is clearly understood by the people who work in the organizations holding the contract. Competition and the intense work environment it engenders can be created through contracting. Systems can be established with competing vendors, and contracts can be signed with incentive and penalty clauses. When the term of the contract is over, new bids are sought and a poorly performing contractor can see the contract simply come to an end. In this sense the contractor has some of the same attributes as an employee on a renewable term appointment.

One example of a contractual mechanism to enhance contractor performance was used in a New York City subway track repair project. The contractor renovating the tracks on the city's number 2 and 3 lines received a $30,000 bonus for each day the project was finished ahead of schedule (and could have been fined $30,000 for each day it was late). The project was completed about 3 weeks ahead of schedule and the contractor was paid a bonus of more than $600,000. To develop this incentive and disincentive clause in the contract the government needed to know: (1) a reasonable deadline; and (2) the appropriate level to set the reward/punishment. They also needed an operational definition of "complete project" to put in the contract. Finally, they needed to find a way to confirm when the project was completed. These extensive information requirements place new demands on government managers that must be addressed if the contract mechanism is to work.

The challenge to management is to develop contract clauses that provide them with tools to influence the behavior of the organization under contract. It is also important to ensure that the vendor does not develop a monopoly over the function it is performing. If the contractor is the only organization capable of performing the task, threats of termination can be easily ignored. We have seen this result frequently in military procurement and ironically, in the purchase of IT hardware, software, and contracting services. In our view, functions that cannot generate competitive bids should be directly performed by government wherever feasible. If sole-source contracting is unavoidable, government managers must ensure that performance criteria are clear, well-publicized, easily measured, and understood, and that penalties for missing performance targets are severe.

E.   Performance Management and Information Needs

Contract management requires that government receive timely, accurate information. When possible, contracts must be developed that require vendors to report input, process, output, and outcome measures on a frequent basis. However, self-reporting, while necessary, is not sufficient. When services are provided directly to the public, citizen service complaints and complements can serve as a useful barometer of contract

performance. It is also important to have all contract performance measures and payment generation actions verified and audited by third parties that are independent of the contractor. This can be done directly by a government agency's performance measurement unit, or can be done under contract to a consulting firm, think tank, or university.

Some members of a program's implementation network are organizations that are not under direct contract to the government. Examples of these actors include nonprofit organizations and private firms with a similar mission. The private insurers of underground oil and chemical storage tanks help the Environmental Protection Agency (EPA) enforce tank standards, but do not work for EPA. Recently, the insurance industry was credited by the federal government for the automobile industry voluntarily accelerating compliance with government requirements for passenger protections in the case of vehicle collisions.

Similarly, a nonprofit organization that advocates for the government protection of abused children may also provide shelter for such children. The nonprofit is thereby part of a city's network for protecting and providing foster care for children, but they may not be a government contractor. In these cases, collection of important performance data may be difficult if not impossible. Despite these difficulties, information about performance must be collected if the government hopes to manage the program being implemented by the interorganizational network.

F. The Use of Performance Measurement Systems to Respond to Network Management Problems

The managers of government programs that utilize networks of organizations to perform critical tasks must obtain information about the performance of these organizations if they are to effectively manage these programs. This requires strategic thinking about what information they need and how they might obtain that information. When dealing with private firms, government must overcome the issue of proprietary information. Some firms are reluctant to tell you what they are doing, as they consider their work processes and outputs to be part of the competitive edge they have over other organizations. If they are under contract to you, it is possible to use the contract as leverage to collect information. If the firm is simply in a related business to yours, information collection may be difficult, and may require substantial effort to obtain.

However difficult collection of information might be, the key first step is to decide what information is needed. This should be guided by the management needs of the program. What is the definition of success? What direct or surrogate measures can be used to determine if progress is being made? The definition of success and the appropriateness of measures to that definition is critical. One cannot manage a program unless one can measure its performance. Without a way to measure performance you cannot tell if your actions are leading you toward or away from success. You have no way of knowing if you are moving forward or backward.

Decisions on performance measures are critical management decisions. They are the ground-level, operational definition of policy. They provide real-world specificity to abstract ideas and policy and are therefore of great consequence. The information collected on performance must be an integral part of an agency's strategy for implementing a program. If the goals of a program change, the measures must change as well.

Once the information necessary to manage the program is known, a strategy is needed for collecting the information. A fundamental principle of management information systems (MISs) is that people and organizations are more likely to provide accurate

information to a system if they utilize the data themselves and they see a benefit to cooperation. If the organizations providing information think its provision can help sell the program and help them obtain additional resources they will be more cooperative than if the data are used to monitor and punish poor performance. The problems of collecting timely, accurate information can be overcome if care and strategic thought are given to developing and maintaining the performance measurement system. Information retrieval is not an automatic, mechanical process. It is a political process requiring the buy-in of those providing information.

Performance measurement is critical to overcoming the management challenges faced when using an interorganizational implementation network. The construction of a system of measurement is an important early task for a program's managers. It should not be off-loaded to a consulting firm or the organization's MIS shop. It is leaders that create partnerships and networks, not technical experts. As such, it should be treated as a subject worthy of formal negotiations and either a contractual agreement or a memorandum of understanding (written or tacit) agreement. Below we discuss, in conceptual terms, the types of measures that should be included in these performance measurement agreements.

G. Performance Measures and IT

While the nature of the system being managed is a key issue in establishing methods of performance measurement, IT itself is an influence on the feasibility, timeliness, and accuracy of performance measurement systems. Computer, communication, and transportation technology make it possible to implement public programs through interorganizational networks. This same technology makes it possible to track and manage the work of these networks (Henderson, 2003). However, technology is never cost-free and new technology is never glitch-free.

IT is crucial to the implementation of an effective performance management program (Carter, 1989; Cohen and Eimicke, 2002: 157–186) Technology must be accessible and user-friendly to ensure that data entry is accurate (Barrett and Greene, 2000). Turnaround of reports to management must also be rapid to ensure that indicators are available when management decisions are made (Buntin, 1999).

Muid (1994) discusses issues in managing the vendors that provide IT services. A key issue is the development of sufficient in-house expertise to manage technically sophisticated computer hardware, software, and management system vendors. Without sufficient in-house expertise it is impossible for the government to be an intelligent consumer of IT and its related services. While IT capacity remains essential, it is also true that simple, off-the-shelf systems are increasingly available and capable of performing more functions. Even as state-of-the-art information systems become more and more complex and expensive the price of computing power and basic systems comes down. This means that even the smallest community-based nonprofit contractor can be asked to submit performance data electronically. As recently as 5 years ago this was not the case.

III.   MEASURES OF PERFORMANCE

Most performance measurement systems incorporate four types of measures — inputs, process, outputs, and outcomes. Traditional, budget-based performance measurement systems focus primarily on inputs: What are the resources available to address the priority

problems faced by the organization? Input measures are relatively easy to identify and collect. Commonly used input measures include dollars appropriated, person-hours committed, equipment purchased, space provided, and the length of time committed to the problem or the project. Less common but other very relevant input indicators are: other funds/other organizations involved or leveraged as a result of the initial organization's actions or decisions; capital funds directly or indirectly committed as a by-product of the operating budget commitment; and external staff and consultant time dedicated to the preparation, operation, monitoring, and evaluation of the program being launched.

Input measures are frequently criticized because they tell you only how hard you are trying to do something about a problem or the extent of your commitment to reach a particular goal (e.g., how much are we willing to spend to find a cure for AIDS?). Input measures tell you very little about how well you are doing in reaching the objective — they measure effort much better than they assess results. But input measures should not be ignored. They provide an important barometer of the scope of activity, the present and future demand on overall resources, serve as surrogates of the organization's priorities, and often reflect the organization's customer preferences as well.

The process of producing work is an increasing focus of performance management systems and indicators. Total quality management's lasting contribution to management practice may be its attention to the work steps involved in producing goods and services. Measurement of these activities facilitates organizational learning and improvement. Process measures include the delineation and definition of specific work steps, measures of the amount of time it takes to perform specific tasks, error rates, and similar indicators. Requiring organizational units to report process measures can signal government's concern for the quality and efficiency of an organization's internal operations and can compel attention to these fundamental management issues.

Output measures are the third type of performance measurement indicators. Output measures seek to quantify the amount of work accomplished with the input/resources provided. Output measures can seek to measure quantity, quality, or both aspects of the work performed. Typical output measures include: customers/clients served; facility condition and cleanliness; miles of road paved; numbers of applicants trained; tons of garbage collected; wages earned; course work completed; certificates or licenses acquired; or number of products sold. In simple terms, output measures gauge the volume of activity generated by inputs. As with input measures, some outputs are more important than others. Utilizing a select number of indicators that have a direct impact on performance (particularly for customers and funding agencies) leads to a successful performance measurement system.

Since World War II, most successful performance measurement systems have been output-based. However, in the 1990s, many experts have written about the weaknesses inherent in output-based systems. Output systems tend to measure and reward work accomplished on a milestone basis. For example, interim payments are doled out as a contractor achieves preestablished targets along the way toward a completed assignment or full service to a customer.

On the surface, output measures seem to provide exactly what senior management should want — simple categories designed to encourage staff to accomplish the work desired by paying for milestones actually achieved. The key weakness of an output-based system is that it often "pays" more for the process toward the desired outcome than the outcome itself. The ultimate objective ends up being underemphasized. For example, in the welfare to work reform efforts over the past decade, we found that by the time employment

and training programs are paid for outputs, such as training, certification, resume preparation, and job interviews, only a small percentage of the contract amount remains to reward the contractor for actually placing clients in a job, keeping them employed, or assisting them up the employment ladder (Cohen and Eimicke, 1996, 1998, 1999).

This leads us to outcome or impact measures. Performance measurement experts are seeking to tie input and output measures to more meaningful program impacts and goal achievement (Eisenberg, 2003; Kaestner et al., 2003). For example, the performance of a police department is not best measured by the number of officers on the payroll (input), how many people are arrested (output), or even the reduction in the overall crime rate (output), but rather how safe people feel and how safe they actually are (outcome). In New York City, a private think tank has constructed a "Quality of Life" index to measure the overall performance of its hometown city government (McMahon, 2003).

An initial review might lead to the conclusion that properly designed outcome indicators are all a good performance management system requires. In practice, outcome measures have significant weaknesses. First, outcome data are usually the most difficult to identify and expensive to collect. Frederickson (2000) argues that because performance measures are quantitative representations of some reality, they are necessarily never as neutral and objective as they are presented. Rather, program supporters will use the same measures as program critics to come up with diametrically opposite conclusions regarding the efficacy of the initiative. In Washington, D.C., Mayor Anthony Willliams initiated an extensive system of agency scorecards that even cynics agreed produced positive results. However, with persistent problems, such as unsafe streets, high homicide rates, and poorly performing schools, critics questioned the importance of the scorecard improvements (Scott, 2002).

Second, outcomes are ongoing and the long-term impacts, both positive and negative, often do not evolve quickly. So, while in theory outcome measures are supposed to measure long-term impact, annual budget cycles and biennial elections often lead to very short-term definitions of long term. Third, it is often difficult, if not impossible, to determine the independent effect of a program or government activity on a particular outcome (Eisenberg, 2003). Fourth, even outcome measures fail to answer the question of maximum potential — "How well are we doing? Compared with what?" Some sort of comparative benchmarking exercise is required to assess how well a program or organization is performing compared with other entities doing similar work (Morley et al., 2001).

Finally, in the early 1990s, creators of the so-called balanced scorecard argued that existing performance management systems were far too limited and failed to adequately account for the need for continuous improvement, innovation, and the needs and wants of customers (Kaplan and Norton, 1991, 1993, 1996; Kaplan, 2002). The balanced scorecard sets goals and measures from four perspectives — financial, internal business operations, innovation and learning, and customers. The challenge for managers is how to create a set of measures that is comprehensive and still limited enough to focus the organization on what is most important.

IV. CASE STUDIES OF EFFORTS TO UTILIZE PERFORMANCE MEASUREMENT SYSTEMS TO MANAGE CONTRACTED OPERATIONS

A. New York City Department of Parks and Recreation

The New York City Department of Parks and Recreation (DPR) maintains a municipal park system of more than 28,600 acres, including approximately 1500 parks, 950 playgrounds,

800 athletic fields, 570 tennis courts, 63 swimming pools, 14 miles of beaches, 36 recreation centers, 13 golf courses, 6 ice rinks, 9 nature centers, 4 zoos, 4 major stadia, and 2000 "greenstreets." DPR also manages 22 house museums, 1100 monuments and markers, and 2.5 million trees.

Since 1984, DPR has made extensive use of performance measurement to achieve its core mission to "maintain a green, clean and safe park system for all New Yorkers." Over the past two decades, parks have used a variety of measures to measure their performance, including the number of crews conducting park cleanups, the number of park benches and playgrounds renovated, and the public's satisfaction with the city's parks (as measured by a random sample of park users). The DPR has also collected two sets of outcome data on the overall condition and cleanliness of an ever-larger number of its park facilities and playgrounds. While the DPR's performance measurement system, known as the Parks Inspection Program (PIP), was and is not specifically designed for measuring contractor performance, it is used citywide to measure the performance of both governmental and nongovernmental organizations involved in the maintenance and management of DPR properties.

The DPR has dramatically increased its use of contractors over the past decade. Through "requirements contracts," it uses private firms to replace playgrounds, fences, and park benches throughout the city's park system. Under these contracts, vendors bid to replace a specific number of facilities in a given period. They do not know in advance where they will be asked to work and are called on during the time the contract is in effect by parks management to install facilities in particular places. The DPR has also turned over day-to-day management of several parks to nonprofit organizations. Two of the city's most famous parks, Bryant Park and Central Park, are managed by nonprofit organizations. As contracting increases, the DPR's performance measurement system has become a critical tool of program management.

1. Measuring park outcomes: objective indicators

A key strategy utilized by New York City Parks Commissioner Adrian Benepe is the use of park inspections to increase the day-to-day accountability of on-site park managers. Similar to the Compstat program utilized by the New York Police Department (NYPD) to achieve dramatic reductions in crime (Buntin, 1999), Parks Commissioner Benepe consults parks inspection data to target problems and to direct the activities of his staff. Trained inspectors from DPR's division of Operations and Management Planning used handheld computers and digital cameras to perform 4949 inspections in fiscal 2002–2003.

The expansion of the Parks Inspection Program became feasible through the use of handheld computers to record inspection data. These handheld computers, which inspectors utilize during on-site inspections, facilitate the swift compilation of inspection results. In 1992, 1993, and 1994 combined, 1400 park inspections were filed on paper and later manually entered into the program's database. With the introduction of direct data entry of inspector reports into handheld computers, the 1995 inspection total reached 2000 and has accelerated to the current year total by 600 inspections, as parks staff completed 2000 inspections that year alone.

The increased use of performance data remains an operational imperative at DPR. Every inspected park, playground, and "greenstreet" is given an overall rating of "Acceptable" or "Unacceptable" for overall condition and for cleanliness. The overall ratings are the composite of as many as 16 separate park features. Some additional park elements are inspected and tracked but do not figure into the overall rating of a site. Hazards are noted as

needing "Immediate Attention" and must be corrected with two inspection rounds following its issuance. An immediate attention finding can fail a feature or even an entire site.

Inspections occur in 2-week cycles, with 205 sites selected at random. Park managers do not receive advance warning about inspections. Results of the inspections are presented to the commissioner, deputy commissioners, and borough commissioners at regular senior-staff meetings. The results are also posted on a bulletin board located outside the parks commissioner's office.

Site managers of inspected parks also receive inspection data on a regular basis. In addition to the general inspection rating, park managers get detailed lists of deficiencies and Polaroid photographs of their site taken at the time of the inspection. The inspection report also assesses the seriousness of each deficiency and advises what corrective action is required.

The program also has a built-in method for correcting maintenance and cleanliness problems. Any unacceptable measures from the original inspection are reinspected after 8 weeks. The results of these second inspections are presented to the first deputy commissioner and Commissioner Stern. The first deputy commissioner's staff independently track deficiencies involving potential safety hazards.

2. Measuring park outcomes: subjective indicators

An important step in the measurement of DPR's performance was the development of outcome measures. The views of park users are a critical measure of departmental performance. While it can be argued that understanding the views of nonusers is also important, if the focus of the measure is improving the facility itself, the users of those facilities are the best judges of their subjective quality. While customer surveys are not a regular element of the department's performance measurement system, DPR seeks information on customer satisfaction when it is available, affordable, and verifiable. So, during the summers of 1996 and 1997, the DPR cooperated with a pilot test and a full-scale survey of park users as a means of enhancing the performance measurement system.

A team from Columbia University and the New York City Parks Council conducted random surveys of 374 park users in ten New York City parks in the summer of 1996. In the summer of 1997 a full-scale random sample survey of 1086 park users in 19 parks was completed. The survey data indicated that the public is generally satisfied with the quality of New York City parks. In the survey we conducted in 1997, nearly 76% of park users rated the quality of the park that they were visiting as either good or excellent. Most park users were reasonably satisfied with the parks; the most common response to our question asking respondents to rate the park they were visiting was good (50%).

Central Park received the highest rating of any park. No one rated it poor, and half of those interviewed in the park gave it a rating of excellent (this park is managed under contract with a private, nonprofit organization, The Central Park Conservancy). Only one other park (Clove Lake) was rated excellent by a majority of its visitors.

If we combine ratings of good and excellent as positive ratings and fair and poor as negative ratings, 18 of the 19 parks surveyed were perceived positively by their users. This included 14 parks viewed positively by 70% or more of those interviewed. Park users were satisfied with their parks in both high- and low-income neighborhoods. In parks neighboring lower-income census tracks, 71% were rated good or excellent. While this is slightly lower than the 79% positive rating given to parks in higher-income areas, it is notable that this positive rating of parks was universal throughout the city.

Recently, New York City established a citywide 311 Information Call Line to handle citizen inquiries, requests, and complaints and free its 911 Emergency Line for true emergencies. An unexpected benefit of the 311 Citizen Service Center is that it provides continuous public feedback on how well city agencies such as DPR are meeting the needs of the citizens, as citizens see those needs. Beginning in fiscal 2002–2003, the New York City Mayor's Management Report includes 311 data for every agency.

For the first period for which 311 data were available (March through June 2003), the 311 Citizen Service Center received 8769 DPR inquiries. Among the top five categories of inquiries for DPR, three related to emergency tree/branch removal or dead tree removal (17.8% of all inquiries), about 10% represented general information requests, and 7% concerned information on DPR special entertainment events.

3. Impact of the outcome measures

The Parks Inspection Program has evolved into a highly effective performance management tool for DPR. The inspections inform park managers about what operational areas require improvement and establish their maintenance priorities. The program also provides site managers with performance incentives. Ultimately, inspection results help assess the effectiveness of park managers, borough offices, and the contractors they manage. Park managers and their vendors compete with one another for ratings and ratings improvements, and the five boroughs compete to have the best-maintained parks. Perhaps most importantly, the inspection program communicates the park's quality standards to park personnel and contractors and evaluates how well they uphold these quality standards.

Citywide, overall condition ratings increased from 39% acceptable in the spring of 1994 to 43% acceptable in the spring of 1995. They improved again to 69% acceptable in the spring of 1997 and 80% in the spring of 1998. Since then, overall acceptable ratings have been no lower than 85% and reached 87% for 2003. Despite these excellent results, like many performance measurement systems, PIP could itself be improved, and over the past several years the authors have worked with the New York City Parks Council and the Parks Department to do so. DPR has also aggressively pursued expansion of the PIP to new areas by raising its own performance targets.

The inspection system is conducted at the places used most frequently by park users. These sites only comprise a relatively small percentage of the system's total acreage of 28,600 acres. Natural areas, trails, ball fields, and other less utilized facilities were not inspected. In the summer of 1998, we worked with the New York City Parks Council and the Parks Department to develop a methodology for inspecting these other park resources and conducted a pilot test of the new system. We found that 56% of the facilities we inspected were of acceptable quality, as compared with 80% in the areas of the park that were traditionally inspected. We also found that personnel resources tended to be allocated to the areas that were inspected. Both these findings demonstrated the impact of performance measurement on management decision-making and organizational performance. Inspected facilities got more personnel and were in better shape.

Despite our own work in developing subjective outcome measures, there is little question that the most important performance measures are those output data on condition and cleanliness that the DPR collects regularly. They provide a check on all contracted and government-performed activities and have a direct impact on management decisions. In addition, the system has led to tangible improvements in the quality and condition of the most heavily utilized park facilities.

B. New York City Department of Homeless Services

The New York City Department of Homeless Services (DHS) provides and oversees the provision of shelter-based services to homeless people in New York City. The population served consists of both single individuals and families, so a variety of services are offered through different types of shelters. Three broad categories of shelter reflect a continuum of care: (1) basic drop-in shelters without beds that provide shelter for a night and minimal counseling services; (2) more structured shelter programs providing beds, counseling, and referral services; and (3) single-resident occupant (SRO) and commercial hotels providing a more independent experience of living. The DHS seeks to move its clients through this continuum of care, with the ultimate aim of moving them into their own public or private housing (Cohen and Eimicke, 1995).

When Mayor Michael Bloomberg appointed Linda Gibbs to become the commissioner of DHS, she was aware that she was inheriting a department that was in transition and still struggling to deal with its prime objective — alleviating the levels of homelessness in New York City. When Gibbs ended up taking office in January 2002, the rate of homelessness in New York City was at an all-time high, as more than 30,000 men, women, and children were in shelters. The rising cost of housing, coupled with the unemployment in the wake of the attacks of September 11, 2001, were the main causes of this. It did not help that New York City itself was in an economic recession, thereby subjecting every city agency to massive budget cuts.

Out of all those who were homeless, the largest subdivision was composed of homeless families. While New York was scrambling to find solutions to this problem, the number of homeless families was rising while the housing facilities in which they were to live were filling up. Rather than being in the shelter system for a short period of time before moving on to some sort of permanent housing, homeless families were now facing stays of up to 10.5 months in the system. It cost the city an average of $28,657 per year for each family in the system, whereas if they were put into permanent housing, the annual housing subsidy provided by the city would be $12,000. Rather than depleting the DHS of its already stringent budget, Gibbs determined to help solve this problem in a way that would rapidly increase the number of permanent housing facilities for the city's homeless families and at the same time tackle the problem of homelessness. What she proposed was the Performance Investment Program (PIP), which would reward nonprofit city contractors for the number of people moved out of homelessness into permanent housing. Gibbs hoped that this system would expedite the permanent housing opportunities available to homeless families.

1. The Performance Investment Program[1]

The DHS was created under Mayor David Dinkins, and showed results before being severely curtailed by the administration of Mayor Rudolph Guiliani. During Guiliani's tenure, the department suffered budget reductions and a policy created by the Guiliani Administration that tried to discourage homeless people from requesting city services. However, a major facet of the DHS that Guiliani did carry on from the era of Dinkins

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[1] This section of the chapter is based in part on original research conducted by Columbia University MPA students. See "New York City Department of Homeless Services: A Comprehensive Case Study of the Performance Investment Program (PIP)" by Diana Glanternik, Dana Krieger, Amy Shefrin, and Hong Yin, Unpublished Manuscript, December, 2003.

was to continue the process of privatizing homeless shelters through the use of nonprofit vendors. The city actively pursued a contracting strategy which resulted in a system of increasingly cost-effective service delivery. The goal of the Performance Investment Program (PIP) was to add a performance-based element to this contracting process.

The PIP pilot program began in June 2002. It was to be based on two main factors — housing targets and result cards. Housing targets were assigned to shelter providers, with the targets based on historic statistics compiled by policy analysts at DHS. The agency's annual target was to move a total of 9250 families into permanent housing. The result cards were used to measure each shelter's population and performance data. Overall, the goal of PIP was to move more homeless families into homes. Once evaluations were completed, each shelter would be given a grade out of a maximum of 100 to determine whether they would receive bonuses based on their performance. If they failed to reach their target they would be penalized. Such an incentive helped to rally the shelters to increase the number of homeless families they placed into homes, as it would benefit the shelters as well as the city.

Result cards were issued monthly. They reflected each shelter's population and relevant statistics. The way in which DHS tracked each client's basic identifying information was through its main computer database, the Client Tracking System (CTS). Once a client was input into DHS's system, DHS would search for that name in the Human Resources Administration's (HRA) database to find out whether the client received public assistance. However, the system contained some level of inaccurate data. DHS began to work with shelter providers every month to identify discrepancies between data sets and to verify correct information. The CTS would then be updated. PIP forced the agency to better ensure the accuracy of its data, and to reconcile it with that of the shelter providers.

Although the main goal of PIP was specifically geared toward getting housing for families, it functioned as a tool to improve DHS as a whole. It made the shelters accountable for their clients through housing targets and result cards. These helped DHS focus on the common goal of permanent housing. The development of a hard-data, performance-based system helped to dramatically improve the services offered by shelters as well as the overall way in which the DHS functioned. Constant evaluation helped DHS to gauge what measures needed to be implemented in order to fix specific problems. Placement rates had reached a low of 2943 in 2001 and 3531 in fiscal 2002 but with PIP, 5289 families were placed in permanent housing in 2003 (DHS website, Office of Policy and Planning). While this still fell short of the goal of 9250, it demonstrated a remarkable turnaround and highlighted the fact that a program of strategic planning coupled with performance-based contracting could be effective.

2. Analysis

The case of homeless services in New York City indicates the importance of strategic thinking when contracting services. DHS set a clear strategic goal of placing homeless people into permanent housing. They worked with their contractors to focus their attention on the ultimate goal of moving people out of the homeless system. As a result, we see dramatic improvement in outputs from 2001 to 2003 The small improvement from 2001 to 2002 is greatly accelerated in 2003. While we do not have definitive proof that this is a result of PIP, it is difficult to see what else would have caused this change.

V. CONCLUSIONS

The two local government agencies discussed in this chapter have begun the process of measuring the performance of services delivered with the assistance of contractors. In the case of the New York City DPR, this effort is simply folded into their overall performance measurement system. In the case of the DHS, it focused on a performance-based reward system that required contractors to provide data and evidence of goal-oriented performance.

What is striking about these cases is the degree to which computer-based information systems are now fully integrated into the standard operating procedures of these municipal agencies. Even paper forms are now e-mailed and the use of standard spreadsheets that are easily downloaded into off-the-shelf data systems has significantly reduced the costs of collecting, reporting, and analyzing data. Performance data are now routinely and rapidly collected from vendors and when connected to a tangible reward system are considered a central tool of contractor management.

Performance is measured and incentives are beginning to be based on the reports of performance. In the case of community-based, nonprofit organizations, the issue of staff capacity and resources used to limit the ability of government to require participation in a particular electronic performance measurement system. Today, those limits have virtually disappeared in even the smallest nonprofit organization.

As the technology of personal computers, networked both locally and through the Internet, expanded through society, ease of access to these systems had made their use more commonplace. It is increasingly easy to construct performance measurement systems that connect and track the accomplishment of all the organizations involved in implementing a particular program. This in turn has increased the tendency for organizational networks to be constructed to deliver services such as parks and homeless services in New York City.

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REFERENCES

Barrett, K. and Greene, R., Powering Up: How Public Managers Can Take Control of Information Technology, Congressional Quarterly Press, Washington, D.C., 2000.

Buntin, J., Assertive Policing, Plummeting Crime: The NYPD Takes on Crime in New York City, Kennedy School of Government Case Program, Cambridge, MA, 1999.

Butcher, T., *Delivering Welfare: The Governance of Social Services in the 1990s*, Open University Press, Buckingham, 1995, pp. 107–136.

Carter, N., Performance indicators: "backseat driving" or "hands off" control?", *Policy and Politics*, 17, 131–138, 1989.

Cohen, S. and Eimicke, W., Managing Reinvention: Contracting with Non-profits in New York City's Homeless Program, paper presented at the Annual Research Meeting of the Association for Public Policy Analysis and Management, Washington, D.C., 1995.

Cohen, S. and Eimicke, W., Assessing the Cost Effectiveness of Welfare to Work Programs, SIPA Occasional Paper, Columbia University, New York, 1996.

Cohen, S. and Eimicke, W., *Tools for Innovators: Creative Strategies for Managing Public Sector Organizations*, Jossey-Bass, San Francisco, 1998.

Cohen, S. and Eimicke, W., The Indianapolis Independence Initiative, The Rockefeller Foundation, New York, 1999.

Cohen, S. and Eimicke, W., *The Effective Public Manager*, Jossey-Bass, San Francisco, 2002.

Cohen, S. and Eimicke, W., The Future of E-Government: A Projection of Potential Trends and Issues, 36th Annual Hawaii International Conference on System Sciences (HICSS'03) January 6-9, Big Island, Hawaii, 2003.

Eisenberg, D., Evaluating the effectiveness of policies related to drunk driving, *Journal of Policy Analysis and Management*, 22, 251–274, 2003.

Forrest, R., Contracting housing provision: competition and privatization in the housing sector, in *Markets and Managers: New Issues in the Delivery of Welfare*, Taylor-Gooby, P. and Laws, K., Eds., Open University Press, Buckingham, 1995, pp. 38–53.

Frederickson, H.G., Measuring performance in theory and practice, *PA Times*, 23, 8, 2000.

Henderson, L., The Baltimore CitiStat Program: Performance and Accountability, IBM Endowment for the Business of Government, Arlington, VA, 2003.

Kaestner, R., Korenman, S., and O'Neill, J., Has welfare reform changed teenage behavior?, *Journal of Policy Analysis and Management*, 22, 225–248, 2003.

Kaplan, R., *The Balanced Scorecard and Nonprofit Organizations*, Harvard Business School Publishing, Cambridge, MA, 2002.

Kaplan, R. and Norton, D., The balanced scorecard — measures that drive performance, *Harvard Business Review*, 1, 71–79, 1991.

Kaplan, R. and Norton, D., Putting the balanced scorecard to work, *Harvard Business Review*, 5, 134–142, 1993.

Kaplan, R. and Norton, D., Using the balanced scorecard as a strategic management system, *Harvard Business Review*, 1, 75–85, 1996.

Martin, L.L. and Kettner, P.M., *Measuring the Performance of Human Service Programs*, Sage, Thousand Oaks, CA, 1996, pp. 3–10.

McMahon, E., City journal's quality-of-life index, *City Journal*, 13, 82–85, 2003.

Morley, E., Bryant, S., and Hatry, H., *Comparative Performance Measurement*, Urban Institute, Washington, D.C., 2001.

Muid, C., Information systems and new management — a view from the centre, *Public Administration*, 72, 113–125, 1994.

New York City' Department of Homeless Services Web Site: Data on Placement of Families into Permanent Housing.

Sclar, E., *You Don't Always Get What You Pay for: The Economics of Privatization*, Cornell University Press, Ithaca, NY, 2000.

Scott, E., Mayor Anthony Williams and Performance Management in Washington, D.C., Kennedy School of Government Case Program, Cambridge, MA, 2002.