

Using Performance Data for Accountability: The New York City Police Department's CompStat Model of Police Management



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The PricewaterhouseCoopers Endowment for
The Business of Government

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Foreword

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On behalf of The PricewaterhouseCoopers Endowment for The Business of Government, we are pleased to present this report by Paul E. O’Connell, “Using Performance Data for Accountability: The New York City Police Department’s CompStat Model of Police Management.”

The report by Professor O’Connell presents an informative case study of the New York City Police Department’s well-known CompStat (computer statistics) program, which collects crime statistics from every precinct in the city. A key distinguishing element of the CompStat program is the use of the data by the department to monitor the performance of each precinct and to hold precinct commanders personally accountable for decreasing crime in their area. While other studies have focused solely on the New York City Police Department’s CompStat program, this report is unique in that it documents the proliferation of the CompStat model in other organizations and jurisdictions: the New Rochelle, New York, Police Department; the New York City Correction Department; the New York City Department of Parks and Recreation; New York City’s HealthStat; and the city of Baltimore, Maryland.

This report is another in the Endowment’s *Managing for Results* series, which addresses the major challenges facing government—at all levels—in moving to results-oriented management. A recent Endowment report by Patrick Murphy and John Carnevale, “The Challenge of Developing Cross-Agency Measures: A Case Study of the Office of National Drug Control Policy,” addresses the challenge of developing government-wide and national performance measures to monitor and improve the performance of crosscutting programs. Together with the Murphy and Carnevale research, the O’Connell report describes the state of the art in performance management from the front lines of government.

We trust that this report, like others in the *Managing for Results* series, will prove both useful and helpful to government executives at all levels—federal, state, and local—in meeting the challenge of managing and improving the performance of public sector programs.

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Executive Summary

Over the past decade, the quest for accountability in public service has led to the development of a variety of innovative management strategies at the municipal government level. This study investigates one such strategy—the CompStat management model—developed by the New York City Police Department (NYPD) in the early 1990s. In its purest form, CompStat is a sophisticated performance measurement system that reorders an organization’s day-to-day operations, as well as its overall orientation toward its core mission and goals. CompStat is based upon the compilation, distribution, and utilization of “real time” data in order to allow field managers to make better-informed and more effective decisions.

The NYPD continues to use the CompStat system to assess its performance against specific “crime fighting” goals and objectives. CompStat has received a great deal of attention from public administrators and scholars alike, since it has demonstrably improved accountability and bottom-line performance within the NYPD for nearly eight years. The NYPD’s success led to the early adoption of similar CompStat systems by other law enforcement agencies at the municipal level. Now, due to its continued popularity and success, the CompStat system has transcended the field of law enforcement and has been successfully implemented in a variety of other public service contexts. It has reaped similar benefits for these agencies and continues to be implemented by organizations looking for an effective program of performance assessment that can improve productivity and ensure accountability.

Based on a review of the CompStat models being utilized by the various municipal organizations discussed in this report, certain fundamental, essential principles have been identified:

- Articulation of organizational mission/vision and realignment of organizational structure to facilitate the meeting of goals and objectives;
- Identification of business practices and key performance indicators;
- Collection of accurate and timely information;
- Meaningful data analysis and dissemination of results to all levels of the organization;
- Development of effective tactics and rapid deployment of resources; and
- Relentless follow-up and assessment.

An integral part of each organization’s CompStat process is the regularly scheduled “CompStat” meeting. These meetings bring together all levels of management within the organization and draw upon their collective expertise to develop collaborative tactics or strategies for achieving the specific goals and objectives set during the CompStat process. Ultimately, the CompStat meeting and process yields an opportunity for the organization to have an open and honest dialogue to address and respond to the myriad challenges that face modern public service organizations.

This report will examine the diffusion and replication of the NYPD innovation known as CompStat

by examining five public service agencies/departments that have successfully implemented their own version of the CompStat model. The research methodology used consists primarily of a series of in-depth personal interviews, field observations, and extensive document review. These methods appear to be particularly well-suited to a research project that seeks to trace the introduction and movement of a management innovation into and through public organizations.

Based on the research conducted and physical observations made, the report then seeks to provide the reader with guidelines for the development and implementation of a “Stat” model including:

- A practical model incorporating 12 major steps in the CompStat process; and
- The author’s observations and suggestions for the implementation and successful continuation of the CompStat process within an organization.

CompStat represents a watershed event in the history of municipal management. Most recently, CompStat has moved into the field of federal service (i.e., the Inspector General’s Office of the United States Department of Justice). CompStat is consistent with the practices and principles outlined in the Government Performance and Results Act (1993) and should therefore continue to spread throughout the federal government. What began as an innovative and effective police management model has rapidly developed into one of the most promising new tools for unleashing the creativity of managers at all levels of government. At the core of any successful implementation of CompStat must be an organization’s fundamental belief that change is beneficial and that performance can always be improved.

The New York City Police Department's CompStat Program

In 1994, the New York City Police Department (NYPD) began a carefully planned and well-executed redesign of its entire organizational structure. Under the leadership of Commissioner William Bratton, and with the backing of Mayor Rudolph Giuliani, the department employed a variety of corporate strategies designed to reengineer its business processes and create a “flatter” organizational structure based on geographic decentralization, teamwork, information sharing, and managerial accountability (Bratton, 1998). This rapid redesign of the department’s organizational architecture was based upon the concept of continuous improvement of performance (benchmarking and the sharing of best practices) and the ability to manage and control change. In other words, the department was seeking to institutionalize the organizational learning process.

As a result of strategic policing initiatives, the overall rate of reported violent crime in New York City declined dramatically and far outpaced reported crime drops across the nation. From 1993 to 1998, New York City experienced a precipitous drop in the burglary rate (53 percent), a 54 percent drop in reported robberies, and an incredible 67 percent drop in the murder rate (Silverman, 1999). These extraordinary achievements were realized in large part due to the department’s innovative model of police management, known as CompStat.

A Shift in Organizational Mind-set

Historically, the NYPD, like most police organizations, was addicted to formal rules and procedures and subject to an occupational culture that had proven itself to be particularly resistant to change. It was characterized by strict hierarchical structures, organizational rigidity, and a culture that was generally unreceptive to change (Silverman, 1999). Such organizational constraints are common within police organizations. As Maurice Punch explains:

There is an overwhelming preference for regulatory supervision in policing—it is a natural and unavoidable consequence of some deeply ingrained assumptions regarding the nature of police work that are shared by the overwhelming majority of people inside and outside the police establishment (1983).

In accordance with classic bureaucratic structure, the overall orientation of managers within the department was downward rather than outward (toward the external environment) or upward. Precinct commanders “did not see crime reduction as their foremost responsibility” and were “essentially on their own in combating crime” (Silverman, 1999, p. 98). Commissioner Bratton quickly altered this mind-set by redefining the department’s overall purpose and mission.

Mayor Rudolph Giuliani on CompStat

The CompStat program is ... [a] program that has had a big impact on the level of crime. I used to be the associate attorney general. I was in charge of dissemination of national crime statistics. So, I've been involved in crime numbers for 20 years. And it seemed to me that we were doing something wrong in the way in which we measured police success. We were equating success with how many arrests were made. A police officer was regarded as a productive police officer if he made a lot of arrests. He would get promoted. A police commander in a precinct would be regarded as a really good police commander if his arrests were up this year. This wasn't the only measure of success, but it was the predominant one.



Arrests, however, are not the ultimate goal of police departments or what the public really wants from a police department. What the public wants from a police department is less crime. So it seemed to me that if we put our focus on crime reduction and measured it as clearly as we possibly could, everybody would start thinking about how we could reduce crime. And as a result, we started getting better solutions from precinct commanders.

We have 77 police precincts. Every single night they record all of the index crimes that have occurred in that precinct and a lot of other data. We record the number of civilian complaints. We record the number of arrests that are made for serious crimes and less serious crimes. It's all a part of CompStat, a computer-driven program that helps ensure executive accountability. And the purpose of it is to see if crime is up or down, not just citywide, but neighborhood by neighborhood. And if crime is going up, it lets you do something about it now—not a year and a half from now when the FBI puts out crime statistics. After all, when you find out that burglary went up last year, there's nothing a mayor can do about it because time has passed and the ripple of criminal activity has already become a crime wave.

Now we know about it today. And we can make strategic decisions accordingly. If auto theft is up in some parts of the city and down in others, then we can ask why. And that will drive decisions about the allocation of police officers, about the kinds of police officers.

This is one of the reasons why New York City has now become city #160 on the FBI's list for crime. Which is kind of astounding for the city that is the largest city in America. Think about the other 159 cities: Many of them have populations that are 300,000, 400,000, 500,000. And on a per capita basis, some of them have considerably more crime.

CompStat is an excellent system, but at the core of it is the principle of accountability. Holding the people who run the precincts accountable for achieving what the public wants them to do, which is to reduce crime.

(From "Rudolph W. Giuliani on Restoring Accountability to City Government," *The Business of Government*, Summer 2000.)

An emphasis was placed upon the realignment of organizational resources. An ambitious reengineering effort shifted the department from being a centralized, functional organization to a decentralized, geographic organization. A number of centralized, functional units were broken up, with their functions (and personnel) redistributed to new geographically decentralized units (precincts). Functional specialists were placed under the command of newly defined geographic managers, thereby moving decision making down the organizational hier-

archy. This resulted in greater empowerment and participation in decision making, and more open, less hierarchical communications within the organization. The "information silos" through which managers had been able to hoard information and thereby suboptimize organizational performance were dismantled.

Bratton clearly described the direction in which he intended to move the organization, and highlighted with specificity the more particular pieces of man-

agerial work that were strategically most important to achieve. To accomplish these goals, a variety of proactive crime-reduction strategies were developed and utilized. The instrument used to implement and monitor these strategies is known as CompStat.

CompStat

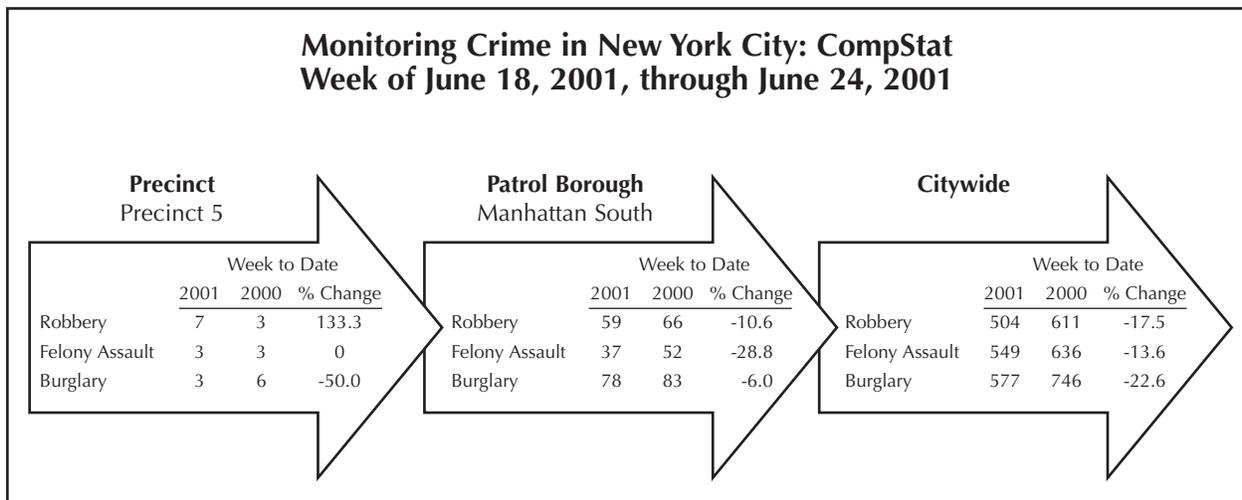
Upon taking office, Bratton immediately shocked his subordinates by establishing new, exacting standards of operational performance. He and his top aides recognized that data needed to be gathered and analyzed in a timely manner if effective crime-reduction strategies were to be implemented. Therefore, periodic meetings were scheduled at headquarters whereby precinct commanders were required to report and react to crime data generated from their areas of responsibility (i.e., their commands). Over time, these data-based informal discussions between department executives and field commanders developed into formal twice-weekly strategy meetings (known as CompStat meetings) whereby *all* levels of the department participate to identify precinct and citywide crime trends, deploy resources, and assess crime control strategies.

Bratton has credited CompStat with moving the department “from a micro-managed organization with very little strategic direction to a decentralized management style with strong strategic guidance at the top” (Bratton, 1995). Rudolph Giuliani has praised CompStat’s many accomplishments, stating that it stands as one of the highlights of his administration that has contributed to the development of

a “new urban paradigm” (Giuliani, 1999). By utilizing a system of internal benchmarking and the open transfer of best practices, CompStat has transformed the department into a learning organization that can “analyze, reflect, learn, and change based on experience” (O’Dell and Grayson, 1998).

Today, CompStat has become synonymous with a more effective and proactive style of public management. Visitors from around the world travel to New York to participate in CompStat conferences or to sit in on the department’s regularly scheduled CompStat meetings (Gootman, “A Police Department’s Growing Allure: Crime Fighters From Around World Visit for Tips.” *The New York Times*, October 24, 2000). CompStat has proliferated widely and has been replicated in a variety of public service venues. It has been reproduced in whole or in part by police agencies in the following jurisdictions: Abilene, Texas; Baltimore, Maryland; Charlotte, North Carolina; Durham, North Carolina; Indianapolis, Indiana; Los Angeles County, California; Mount Vernon, New York; New Orleans, Louisiana; New Rochelle, New York; Newark, New Jersey; Philadelphia, Pennsylvania; and Prince George’s County, Maryland.

Perhaps most interestingly, the CompStat management model has now transcended the field of policing, and has been successfully implemented in a variety of other public sector organizations, such as New York City’s Department of Correction (TEAMS), Department of Parks and Recreation (“ParkStat”), Traffic Division (“Trafficstat”), and



Human Resources Administration ("JobStat") ("JobStat Works for Welfare," *Daily News*, October 4, 1999. p. 34). The city of Baltimore is presently using "CitiStat" to monitor many of its largest departments and agencies.

Public managers and academics alike have recognized CompStat's utility as a public management device. In 1996, CompStat was awarded the prestigious Innovations in American Government Award from the Ford Foundation and the John F. Kennedy School of Government at Harvard University.

The Essential Features of CompStat

The meeting: The term "CompStat," in its simplest form, generally refers to the strategic planning meetings that have been taking place within the NYPD every two weeks since early 1994. Precinct commanders are now regularly summoned to headquarters to respond to pointed questions posed by senior administrators about concrete operational issues that arise in the field. They stand at a podium facing a large dais, and engage in lively dialogue with individuals occupying the uppermost echelons of the organization. Large projection screens display real time data obtained from sophisticated geographic information system (GIS) software. These data relate to crime complaints, arrests, trends, and patterns. They enable all participants to "work off the same page" when reviewing organizational performance, allocating resources, and forecasting and reacting to a changing organizational environment. The CompStat Unit is chiefly responsible for gathering information from the field, analyzing it, and disseminating it back to field commanders and senior administrators so that it can be *used* effectively.

At first glance, one might be tempted to characterize these meetings as mere "staff meetings." Such a description would not only be inaccurate, but also would obscure one of the most significant features of the process. At CompStat meetings, *all levels of the organizational chart* are represented and actively participate. This is a significant distinction.

Drawing an example from the field of health care, one would properly characterize a meeting between a chief of surgery and the surgeons under his/her supervision as a "staff meeting." In other

words, individuals with the same general job description and responsibilities would meet periodically to review their group's performance and to discuss issues of concern to them. By contrast, CompStat would call for physicians from *all* medical services (pediatrics, emergency medicine, etc.) to periodically meet with representatives from the nursing department, housekeeping, maintenance, security, and others, to address common issues, goals, and challenges that face the entire organization. In other words, a more comprehensive meeting would be necessary to view overall performance from the perspective of the larger organization, and to ensure open lines of communication and coordination of effort. During such meetings the hospital would in effect be talking to itself, thinking out loud, weighing options, and monitoring the overall performance of the entire organization. CompStat forces the organization to engage in a productive form of self-reflection that enables it to discern environmental changes and to react accordingly. In sum, CompStat provides a holistic approach to administration.

The NYPD has clearly benefited from the collaborative nature of these meetings. Today, if a discussion between a chief and a precinct commander happens to touch upon a legal issue, representatives from the department's Legal Bureau are present and available to participate and provide guidance and expertise. Similarly, if a problem relates to the department's information technology system, individuals with appropriate expertise are available at each meeting to narrow the issues, clarify them, and possibly rectify the condition.

CompStat has opened existing lines of communication within the organization but, perhaps more importantly, has also created new ones. People familiar with the hierarchical and bureaucratic nature of the department prior to CompStat were astounded in 1994 to see the chief of patrol (an administrator who is literally situated at the pinnacle of the organizational chart) engaging in lively and in-depth conversations with precinct anti-crime sergeants or detective squad commanders (individuals who rarely had direct access to upper-level managers at headquarters). Operational questions and concerns that typically required a flurry of memos from the field to headquarters, and back again, could now be addressed immediately via

candid discussions between those at the top and bottom of the organizational chart.

CompStat has quite simply resulted in *more* communication taking place within the organization. While the NYPD formerly had many official reporting requirements and mandated notifications, these communications were typically the equivalent of a series of one-way streets running parallel to one another. Today, thanks to the CompStat meetings, these communication channels have been converted to two-way streets—broad two-way highways with several lanes of traffic running in many different directions at the same time.

The process: CompStat meetings are in fact the final stage of a detailed and collaborative process of data gathering and analysis. The “stat” process is predicated upon the gathering and intelligent use of timely and accurate information (see, generally, Maple, 1999). CompStat meetings would be virtually useless without a mechanism for assembling real-time data and an adaptive structure for data interpretation, strategic decision making, and prompt action. The CompStat model includes each of these features.

The NYPD’s CompStat Unit is chiefly responsible for assembling and analyzing necessary data. It incorporates a sophisticated process of oversight, auditing, and inspections to ensure the accuracy of information that is generated and input from field commands. In an elaborate system of internal checks and balances, the department also requires a variety of other units to conduct random inspections and audits of this information, as well as of the means by which it is obtained and compiled. The precincts themselves must also continually perform self-audits, in what sometimes appears to be a neurotic obsession with accuracy. This meticulous attention to detail is required, however, to allow senior administrators to *rely* on the information obtained. It allows them to view the relative progress of each of the component parts of the organization, which, in turn, provides them with an accurate and immediate assessment of the overall health of the organization.

Perhaps the most significant feature of CompStat is the fact that information is not just meticulously compiled, it is *used*. It is openly shared for the

express purpose of collaboration and the development of effective new strategies. By analyzing the relative performance of each operational unit, upper-level managers can determine, relatively promptly and accurately, whether or not a planned course of action is succeeding. It informs their efforts with regard to strategic planning and problem solving and provides them with a direct and effective means of setting and communicating organizational goals, and then monitoring and evaluating performance vis-à-vis those objectives.

CompStat is therefore far more than an efficient performance monitoring system. It is a knowledge management device that enables the agency’s chief decision makers to tap into and use the intellectual capital of the entire organization. This includes not only what is expressly known by the organization and its key administrators (“explicit” knowledge), but also what is known and understood intuitively or instinctually by the individuals who actually perform the work (Cook and Brown, 1999). CompStat is the perfect mechanism for the identification and harnessing of individual competencies, successful practices, skills, and routines. It is a particularly effective form of internal benchmarking that enables senior management to identify top performers, to analyze and pinpoint any significant distinctions that contribute to superior performance, and to communicate and/or adapt them to the entire organization.

CompStat also facilitates the transfer of knowledge among sub-units (by the sharing of best practices) and also corrects factors and/or structures that inhibit the transfer of knowledge. CompStat draws together otherwise disconnected groups and facilitates both the vertical and horizontal transfer of knowledge. It also confronts the powerful forces “that oppose productive dialogue and discussion” within the organization (Senge, 1990, p. 237). CompStat encourages teamwork and collaborative responses to problems and challenges.

The CompStat process enables administrators to take a holistic view of the entire organization. It views the organization as an open system and discourages “linear thinking.” Rather than merely reacting to what is perceived as simplistic “cause and effect” chains, CompStat encourages administrators to continually search for the interrelation-

**Monitoring Crime in New York City: CompStat
The Year 2001 (through June 24, 2001)**

Crime Complaints	Year to Date			2 Year	8 Year
	2001	2000	% Chg	% Chg	% Chg
Murder	289	335	-13.7	-11.0	-67.6
Rape	934	986	-5.2	-7.1	-40.0
Robbery	12,547	14,890	-15.7	-23.5	-68.3
Felony Assault	10,951	11,950	-8.3	-11.0	-42.5
Burglary	14,572	17,661	-17.4	-26.4	-68.9
Grand Larceny	21,202	21,713	-2.3	-8.1	-45.7
G.L.A.	13,459	16,512	-18.4	-26.2	-74.8
TOTAL	73,954	84,047	-12.01	-18.88	-63.17

ships of events and processes that hinder or facilitate peak performance. Senge (1990) refers to this as “systems thinking.” Rather than basing one’s managerial decisions on a series of random snapshots or glimpses of the performance of isolated parts, this management approach enables decision makers to keep the “big picture” in focus at all times.

CompStat also serves as a means of managing tension, strain, stress, and conflict within the organization. All organizations experience tension caused by the discrepancy between current reality and the desired state (vision) (see, generally, Fritz, 1996). CompStat enables an organization to *use* this tension to *redirect it* toward desired goals. It entails a continuous process of analysis, action, reevaluation, and adjustment that keeps the organization continually moving forward. Jack Maple, the NYPD official who is credited with creating CompStat, describes four basic principles that form the cornerstone of the CompStat process: accurate and timely intelligence/information; rapid deployment; effective tactics; and relentless follow-up and assessment (Maple, 1999, pp. 32-34). By proceeding in this manner, the organization learns, reacts, and gets smarter each time around.

The philosophy: Perhaps the most significant aspect of CompStat is the fact that it can change the overall orientation of the entire organization. CompStat is not merely a meeting or a process; it is a distinct management philosophy. It is based upon the need for continuous performance improvement and a general dissatisfaction with

the status quo. CompStat is founded upon the belief that “things can always be done better.”

This philosophical shift was accomplished within the NYPD by the decentralization of decision making and the wide distribution of authority and accountability. CompStat empowered field managers (i.e., precinct commanders) and encouraged them to sense and create opportunities. This sense of entrepreneurialism is quite distinguishable from the philosophies of traditional hierarchies (and of the NYPD in particular), which are often characterized by “timidity and caution on the part of subordinates who fear criticism from superiors and thus fear to pass unpleasant information up the line” (Perrow, 1979, p. 39).

CompStat released the creativity in NYPD managers by promoting innovation and experimentation. By pushing decisions down the organizational chart and distributing power more widely, it encouraged fresh thinking and expanded possibilities. Thinking “outside the box” quickly became the norm. In essence, each field command began to formulate and assess new methods and approaches to routine tasks, as well as unexpected challenges.

Although the overall direction of the organization was still monitored and controlled by senior administrators and policy makers at headquarters, CompStat enabled most “field decisions” to now be made “in the field.” Field units began to perform functions that would ordinarily be reserved for a “research and development” section or a

“skunkworks” unit. Commanders were encouraged and empowered to “try new things” and to take necessary steps to address the needs and challenges of their particular commands. The innovation, creativity, and experimentation that resulted yielded significant results in the form of rapidly dropping crime rates and enhanced organizational performance.

CompStat enabled the NYPD to manage change, but it also taught the organization to welcome, rather than fear, change. It also served to institutionalize a general dissatisfaction with the status quo and resulted in an organizational philosophy based upon the continuous search for “better,” rather than “best,” practices.

The Proliferation of the CompStat Model

The New Rochelle Police Department

The City of New Rochelle, New York, is a city of 70,000 that is situated approximately 25 miles north of Manhattan. Its current police commissioner, Patrick Carroll, is a seasoned police administrator who formerly commanded several New York City precincts as a member of the NYPD. When he was hired by New Rochelle in 1993, he continued to maintain many of his professional and personal contacts with the NYPD and its personnel. "I first heard of CompStat in late 1994," he states. "I heard they were holding these meetings and doing some very creative things." He believes he first learned of CompStat through "word of mouth," then began to read about its many accomplishments in the press and in professional publications.

Commissioner Carroll was invited to personally observe a CompStat session, and he attended the NYPD's first CompStat Conference, which was held in Manhattan. He not only brought a number of his staff with him to the conference, but even invited a number of other city commissioners to join them.

His first impressions of CompStat were quite positive. "This was something we all wanted to do, to get everyone on the same page," he recalls. He distinguishes what he observed from his own experiences within the NYPD. "We were held accountable for

our commands, but often had little or no control over resources." CompStat struck him as an intelligent and useful approach to police management. He believed that field commanders could be held accountable for their command's performance only if they were provided with adequate resources and a certain degree of moral support.

He quickly decided that he wanted to replicate the CompStat model in his own agency. However, due to the dramatic contrast in overall size of the two agencies, several significant alterations had to be made.

First, since the 186-member police force pales in comparison to the NYPD (which currently has about 40,000 uniformed members of the service), the meetings held by the New Rochelle Police Department take place in a relatively modest conference room and are based upon the comparison of shifts or tours, rather than commands (i.e., precincts). This format lends a more "personal" flavor to the meetings and encourages a considerable amount of interpersonal interaction. The commissioner, who is seated at the head of the table, takes a leading role in these meetings and is intimately aware of virtually all significant issues and concerns of his agency. As with the NYPD, performance data are compiled, analyzed, and displayed on a projection screen. However, what differs most is the "comprehensive" nature of these discussions,

the constant references to the “big picture,” and the discussion of issues that face the entire organization. All discussions concern the same geographic area (the entire city), which is understood to be the shared responsibility of all individuals in the room. Rather than scrutinizing the operations of two or three precincts at a time in a city of 8 million people, New Rochelle’s CompStat meetings always address citywide issues and trends.

Despite these adaptations, the New Rochelle Police Department’s version of CompStat remains consistent with the NYPD model. New Rochelle has adopted and incorporated the underlying philosophy of CompStat. This is particularly true with regard to the issue of accountability. In many ways, Commissioner Carroll views this as the linchpin of the entire process:

We let them [all members of the department] know what it is that we intended to accomplish. We then gave them the resources, showed them how to reach out to one another and how to get together, then monitored their performance and held them accountable for the results.

It got them thinking. We said, “If you’re having a problem, you think up the answers. Don’t come looking for answers from above. You have the necessary resources. If you don’t, come and ask for more.”

Commissioner Carroll recalls that this new management philosophy “got them thinking” and facilitated a departmentwide approach to problem solving. The lines of communication were also opened, as our commanders, patrol officers, and members of detective and specialty units all began to interact more openly with one another. The department also held classes to develop the problem-solving skills of both management and rank-and-file officers. Carroll believes that these efforts opened the door to more creative solutions for pervasive problems, and enabled the department to identify and react to problems more quickly and effectively. CompStat, he notes, can also help to coordinate crime prevention and community affairs efforts.

He explains:

Say, for example, we notice that we are experiencing a spike in the number of cell phones stolen from autos, and we see that these larcenies seem to mostly occur in commuter parking lots by the train station. We can immediately do something about it, like sending our cops through the lots looking for phones left in cars. We can leave a note telling the owner to be more alert next time, and can actually prevent future problems.

Commissioner Carroll cautions that the information obtained through CompStat must be intelligently used. To do this, he believes that all members of the organization must continually keep the “big picture” in mind. Each CompStat meeting begins with a review of the department’s overall goals and ongoing initiatives. This enables all members of the department to understand how all of their specific efforts are interconnected for the purpose of accomplishing several overriding goals (such as improving overall quality of life or reducing the overall rate of reported crime):

We want everyone to be knowledgeable about all the problems we might have, all the key issues facing the department. From patrol cop, all the way up to the captains, they all need to understand what it is we’re trying to do. They might only be officially responsible for one sector, but they need to see why their efforts are so important, if we are to accomplish our goals.

They should also ask themselves, is there anything else I could do, should we be cooperating with other agencies? Maybe we should be working with the Fire Department or the Department of Buildings, in order to use their code enforcement capabilities to help us do our job. The CompStat philosophy encourages them to use all available resources, to look to other agencies, and even the public. We can then track their progress and share successful strategies with one another.

For CompStat to work, Commissioner Carroll believes that meetings must take place frequently. He feels that this “puts them on notice, it tells them we’re going to meet regularly to discuss these issues, and that they’ll be challenged....” He feels that CompStat forces his personnel to have a proactive, forward-looking perspective while performing their daily activities. He also believes that CompStat has significantly changed the way his people see themselves. “Today, they see themselves as managers, not just cops.”

The New Rochelle experience indicates that the CompStat model can be successfully adapted in smaller police departments. Perhaps the most important lesson learned, however, is that an agency attempting to adopt this mechanism should accept the philosophy as well. Commissioner Carroll believes that the basic philosophy of CompStat is a simple but positive one. “Everything is doable,” he states. “No problem is beyond solution. It’s not overwhelming if we can just work together.”

The New York City Correction Department (TEAMS)

At the same time that CompStat was being developed and implemented within the NYPD, a similar phenomenon was occurring in the New York City Correction Department. While police officials, with the express support of their mayor, were attempting to regain control of New York City streets, officials within the Correction Department were charged with regaining control of the city’s jails. In January of 1995, Mayor Rudolph Giuliani appointed Michael Jacobson as commissioner and appointed Bernard Kerik as first deputy commissioner (by late 1997, Kerik took over the Correction Department and is currently serving as commissioner of the New York City Police Department). Both men critically examined the department’s most fundamental practices and procedures in an effort to drive down inmate violence, improve employee morale, and enhance productivity in virtually all of the department’s operations. They began with an extensive overhaul of the organization’s management processes, with an eye toward creating a culture of continuous performance improvement and accountability. Quite naturally, they looked carefully at the CompStat management model and decided to adopt and modify it to meet their

agency’s own unique requirements. Their version is known today as TEAMS (which stands for Total Efficiency Accountability Management System).

The first TEAMS meetings took place as “division meetings” in May of 1996. These meetings were initially patterned after the CompStat model, insofar as the forum was similar (i.e., field commanders standing at a podium, responding to pointed questions from a dais comprised of the department’s highest levels of management). Timely and accurate performance information was assembled, shared, and analyzed at these meetings, so that the department could set goals, act, and react as a cohesive whole. The meetings initially centered around the discussion and examination of 16 primary performance indicators, all of which related directly to the problem of inmate violence. These indicators included total number of slashings and stabbings, use of force by correction officers, overtime and manpower availability, etc.

Curbing inmate violence and reestablishing control of the jail system was the most immediate concern of department officials in 1996. Therefore, most (but not all) of the original indicators reviewed in these meetings related to the issue of violence. According to current Commissioner William Fraser, this was done in recognition of the fact that no proactive steps for improvement could (or should) be undertaken until such time as a safe and secure environment was re-established. Only then would the department be in a position to focus upon more proactive measures. The department’s efforts paid off almost immediately. By 1998, departmentwide violence had dropped nearly 80 percent. Performance in a variety of other key areas improved as well during this period.

However, TEAMS was not designed solely as an effective violence reduction mechanism. From its very inception, the TEAMS process maintained an orientation that was considerably broader in focus than CompStat. This stems from the fact that the Correction Department has a particularly unique mission. Not only is the department charged with securing and providing for the physical safety of inmates, it must feed them, house them, transport them, provide medical treatment, etc. Therefore, the range of performance indicators that were monitored through 1996 was broad, and continued to

grow rapidly. Today, the TEAMS Unit (the unit charged with assembling and analyzing all performance data) monitors nearly 600 indicators ranging from religious service attendance by inmates to the number of maintenance work orders completed in inmate housing units.

The diversity of information that is now available to and used by department officials is indeed remarkable. As Commissioner Fraser explains:

I am always struck by the intimacy of knowledge [wardens and their staff] have. Now, when we ask a warden, “You had one serious food service violation in October, what was it?” they’ll give us the details; they have them at their disposal and you can tell they’ve been thinking about it, talking about it with their people, and working on it.

Today, wardens can talk to us about inmate council meetings, because they have to attend them. They will tell us what the inmates are talking about, how many gangs are in their facility, who the members are, who the leaders are, and which housing area they live in.

Commissioner Fraser credits TEAMS with opening old lines of communication within his department and creating new ones. Rather than waiting for a quarterly or monthly report to indicate a problem in performance, managers can now observe “spikes” of aberrations in their daily numbers and immediately begin asking questions and taking corrective action. The commissioner praises this ability to access real-time data and contrasts it to the time before TEAMS, when headquarters would often only find out about a significant operational problem in the field several days after it had occurred.

Commissioner Fraser also explains that the expansion of the number of indicators has occurred naturally, in response to particular demands:

Often, the presentations themselves would lead to the creation of new indicators, for purposes of explanation and clarification. For example, when [presenting wardens] started to explain their overtime numbers

to us, they did so in terms of people who were actually available to them. Due to long-term illness or some other factor, an officer might be carried on the official table of organization as “available” when he or she really is not. We saw the need to differentiate these cases from personnel actually available for assignment, so we created new categories.

Similarly, when we examined the number of searches conducted in our facilities, we saw that some facilities reported very few. When we questioned our personnel, however, we found that “scheduled” searches might have been down a bit, but that the units were conducting a lot of unscheduled searches, or canine searches, instead. It really was just an issue of interpretation, so we began to record these types of searches as well. Once we broke it down, everybody began to record it the same way. The information actually broke itself down, so that it could be made more understandable.

Unlike CompStat, TEAMS does not rely upon GIS software. This is because the Correction Department needs only to identify locations within its various facilities, and this can be displayed adequately on TEAMS’ data spreadsheets. The NYPD, on the other hand, had an obvious need to track criminal incidents across a broader geographic landscape (i.e., precincts and boroughs throughout the entire city). Such capabilities are therefore critical for them, but not for Commissioner Fraser’s department.

Like CompStat, the TEAMS meetings are actually the culmination of a very tedious and thorough process of record keeping and analysis. As Commissioner Fraser states, “The accuracy of the numbers is paramount; we always have to ensure the integrity and accuracy of our information.” To do so, the department has designed a complicated system of checks and balances—several levels of auditing and inspections ensure that information is being gathered and input properly. At the core of the TEAMS philosophy is a fundamental belief that performance can always be improved.

The TEAMS process continues to evolve. Each month, the department adds, subtracts, or refines indicators as necessary. Recently, a new indicator was designed to track the performance of personnel who had been subjected to the department's new "civility tests." These tests are random inquiries that are made to check the professionalism of personnel who respond to inquiries or civilian complaints. Wardens are now reviewed according to how well their personnel performed on these tests. Important new programs or initiatives can easily be tracked in this manner.

TEAMS is used to reinforce organizational goals and to ensure that managers are in fact working toward them. It allows the highest levels of the organization to interact with wardens and their staffs and to publicly praise or reprimand them. It helps to identify the department's future leaders. To assist newly appointed managers, the department created the "Leadership Institute." This executive development program is designed to provide managers with the requisite skill set and prepare them for their future responsibilities. "Mini" TEAMS meetings are also held for training purposes.

TEAMS performs additional functions. As Commissioner Fraser explains, "In addition to being a management and training tool, it has helped us to document our use of resources and to explain our needs. For example, just recently we knew we were short maintenance staff, but we documented that need. TEAMS helped us to do that. By tracking work orders, we were able to show OMB (the city's Office of Management and Budget) our data and they saw the need. They agreed with us and authorized the hiring of additional maintenance personnel."

Perhaps the most significant contribution of the TEAMS process has been the shift in organizational culture and philosophy that has taken place. Commissioner Fraser believes "... the key is really the way that it assists us in using proactive and creative management. It expands possibilities and gets more people involved in the decision-making process. Our people don't just think of themselves as corrections officers anymore. Now they see themselves as managers."

Commissioner Fraser agrees with Mayor Giuliani that the TEAMS process has now become "institutionalized." He expects the TEAMS process to endure for two very simple reasons: Most of the managers who have been promoted in the past several years are now quite familiar with the system; and, most importantly, the system works. Commissioner Fraser adds, "Anyone who comes into this agency and sits in my chair but doesn't continue this process would be very foolish. As long as they follow this model, we should continue to have considerable success."

The New York City Department of Parks and Recreation (ParkStat)

The New York City Department of Parks and Recreation is currently responsible for the maintenance and operation of 28,287 acres of property within the five boroughs of New York City. Beginning in 1984, the department began to internally monitor its performance by means of the Parks Inspection Program (PIP). From 1984 through 1995, summary reports were produced three times per year and served as the primary mechanism for inspecting and auditing the department's most fundamental functions. In March of 1995, the system was changed to include 24 biweekly reporting periods per year. Today, each two-week "round" will include the review of 162 locations throughout the entire system that are randomly selected for inspection. These locations include ball fields, buildings, walking trails, etc., that are scattered across the city. Results of these on-site inspections are recorded in hand-held computers by inspectors in the field, and are later uploaded on the Operations and Management Planning ("OMP") database upon returning to the office (*Park Inspection Program Manual: Guide to the Parks Inspection Program & Official Inspection Standards*. Operations & Management Planning, City of New York Parks & Recreation, July 11, 2000). These data are analyzed and disseminated to top administrators and field staff for purposes of quality control and planning.

This pre-existing inspection program proved to be a natural fit with the "stat" process, when officials from the department visited the NYPD and personally observed the CompStat process in action. They concluded that CompStat meetings would be a valuable supplement to the PIP program and would

enable them to “use” the information gathered in a more intelligent and efficient way. According to Derek Lombard, former director of OMP, “It was a natural fit. We wanted to supplement it, make it work better.” Several “modifications” were made initially, but as Lombard describes, “it evolved on its own. We adopted CompStat’s core design but modified it to our own purposes.”

The first ParkStat meeting was held in March of 1997. At that time, only one district presented. By July of 1997, two districts attended each meeting and were required to discuss the results of their inspections and work with senior administrators to enhance performance.

Today, the department’s upper management—represented by the director of OMP and the director of Field Operations—meet with District Maintenance and Operations (M&O) supervisors from the field to review their performance as reflected in their district’s current “park ratings.” Meetings are designed to focus analytical attention on what is occurring in the field (i.e., within the city’s many public parks). ParkStat meetings are held each month and typically involve two districts (from two different boroughs). An effort is made to balance the number of times boroughs are called into ParkStat meetings (in other words, there is an informal rotation system in place to prevent one particular borough from being called in repeatedly). Initially, specific districts were invited to ParkStat meetings if their ratings were considered to be poor. Today, the system is designed so that every district cycles through the system. Year-to-date ratings are used to select districts for these meetings, and districts are typically informed of their selection three weeks in advance.

Districts are represented by their chief of operations, manager, PPS, and PS’s. Junior-level personnel also attend, as necessary. Districts are brought in no more frequently than once every six months, and usually no more than once a year. Meetings take place at 7:30 a.m. in the Arsenal Building in Central Park, Manhattan. (*ParkStat*. City of New York/Parks & Recreation, Operations & Management Planning, July 3, 2000.)

Meetings typically last two hours, with approximately one hour devoted to each district. Data are displayed on a projection screen and form the basis

of all discussion. Photographs of “unacceptable conditions” are also displayed (as Powerpoint presentations) and discussed. Photographs are taken as part of the routine inspections process. The discussions chiefly revolve around why these problems are occurring and what, if any, corrective actions may be taken. A chief concern is to correct localized problems before they can evolve into boroughwide, or citywide trends.

Presenters and their support staffs sit along one side of a large table, while the operations coordinator, the director of OMP, and a technical operator sit opposite them. Spreadsheets display specific ratings in the areas of overall condition and cleanliness of structural features such as benches, fences, sidewalks, play equipment, and landscape features such as trees, athletic fields, and water bodies. After the first district has completed its presentation and responded to all questions, there is a brief break. The second district then presents as the first one observes. At the conclusion of the second meeting, representatives from both districts are provided time to question one another.

Each meeting begins with a brief introduction of all individuals in attendance and a review of the overall purpose of ParkStat. At the beginning of one recent meeting, the director of OMP stated, “This serves as a good opportunity to review information and look for trends that have led to declines in performance.” She indicated that the meeting was designed to “lend constructive conversation” and to “foster innovation.”

There is a wrap-up period at the conclusion of each meeting. Follow-up memos are later forwarded to the districts concerning issues that arose during the meetings. Managers are given about 30 days to respond to these memos. The ParkStat team meets after each meeting to review the session, decide upon follow-up issues for the districts, and critique the process (i.e., the relative effectiveness of each session).

Specific discussions are “scripted” to the extent that specific questions are designed well in advance of each meeting and are often communicated in advance to presenting districts. This is done to ensure that presenters appear with intelligent explanations for their performance and are able to fully

participate in all discussions (i.e., there should be very few real surprises at these meetings). The director of OMP and the operations coordinator typically lead the discussions, focusing on operational innovations and management strategies. Despite the “scripting,” much spontaneous interaction takes place as a thoughtful and candid dialogue ensues. The director of OMP began one meeting by asking one district, “What do you think are your most problematic features?”

As with CompStat and TEAMS, an emphasis is placed upon pattern or trend identification. All performance data are viewed through three lenses, which look for districtwide trends, boroughwide comparisons and trends, and citywide comparisons and trends. The use of histograms (bar graphs) is extremely helpful in this regard. The department is currently working toward implementing a GIS mapping system to track performance even more carefully. These techniques help to visualize performance and to identify significant facts that could otherwise be missed by simply slogging through long sheets of statistics.

Once variations (increases or decreases) in performance are noted, they must be understood and explained. A threshold question seems to be, “Is this variation significant?” A secondary but nonetheless necessary question is, “What is causing it?” Once the answers to these questions are obtained, corrective action or steps to maintain positive trends, conditions, and practices can be taken. This facilitates strategic planning for field units, as well as the entire agency.

ParkStat serves many functions, not the least of which is the fostering of organizational learning. Senior administrators learn about what is occurring in the field at the same time that districts are learning from one another. Effective practices are openly shared and disseminated throughout the entire organization. For example, at a recent ParkStat meeting, a manager from one district indicated that he was having difficulty cleaning up ball fields due to heavy use by groups without appropriate field permits. He also indicated that many groups that did have properly issued permits were simply failing to clean up after themselves (and this, consequently, was affecting his district’s performance rating). In response, the director of OMP stated, “I suggest you

do what Flushing Meadow [Park] does, issue color-coded trash bags to groups with permits, see who is cleaning up after the games and who is not.” This technique had apparently been quite successful for the other district. The suggestion was taken under advisement by the presenter, and was written down by several other people in attendance.

ParkStat also serves a more critical function. It can immediately communicate or reinforce directives that require immediate attention. For example, one photo displayed at a recent meeting showed a pool of standing water in one of the parks. Referring to this, the director OMP stated to the entire audience, “Because of West Nile [disease], I can’t emphasize this enough, you’ve got to address this!” The clarity and concern conveyed in a personal communication of this type is difficult to reproduce in a memo.

ParkStat is the perfect mechanism for gathering necessary budget information, such as asking a manager, “How much would it take to correct that problem? Did you get an estimate?” It also facilitates resource allocation by ensuring that necessary resources are not only sent out to the field, but are actually used. For example, when discussing the photograph of a broken swing set, the director of OMP asked, “Do you need any additional tools?” The district manager responded that he had a “wish list” that included a cordless drill and vise grips for his crew. He explained their utility and described how work orders (like the swing set) could be processed more efficiently with them. His request was noted and taken under consideration by OMP.

The process does not focus upon minutiae, nor does it result in micromanagement. Rather, it is a collaborative learning process based on attention to detail. ParkStat fosters a constructive dialogue in which senior management communicates its requirements and expectations directly to the field, and field personnel explain their particular accomplishments, obstacles, or difficulties to personnel at headquarters. This dialogue is critical. It is important for senior management to understand how the job gets done. For example, at one meeting the director of OMP inquired, “Do you have a formal [grass-] cutting schedule, a rotation?” The presenter responded, “No. It depends on how much rain we get, what the supervisor sees when he inspects the area.” This response seems reasonable enough and

conveys a fundamental understanding of how work is being performed in the field. Clearly, for senior management to create reasonable performance standards and expectations, they need to have and understand this type of information.

The successful implementation of a process such as ParkStat can not only improve the overall performance of the adopting agency, but also can benefit other neighboring agencies. For example, at one ParkStat meeting, a manager responded to a photo of graffiti by stating, "There's a gang moving into that section of the park." This particular manager knew the first name of the commanding officer of the local police precinct, and had worked with the police in the past to address criminal conditions. The manager stated, "We have to go back [and clean] every day" and explained that the police were attempting to "read the tags" [i.e., the content of the messages] in order to determine who was responsible. The manager described a boroughwide anti-graffiti task force that was available to assist in the cleanup and stated that he would avail himself of these additional resources.

During another ParkStat presentation, a photo of a damaged roadway was displayed. Apparently, this particular area was not the responsibility of the department or this particular manager. The manager explained, "I've reported this to DOT (the city's Department of Transportation)." Since this situation was a continuing condition, and since it was unknown whether or when DOT would be able to address it, he asked, "How can we put more pressure on DOT—what can be done at the higher level?" ParkStat enables field personnel to solicit the assistance of senior administrators whenever they encounter resistance from outside agencies. This type of support from above has a positive effect on morale and can facilitate field operations.

ParkStat is therefore a useful mechanism for the coordination of efforts between city agencies. Today, in-depth discussions about graffiti or gang activity in city parks are being held within the NYPD at CompStat meetings and in the Department of Parks and Recreation at ParkStat. Public managers in both agencies are being encouraged to seek out creative solutions for recurring problems. This often results in managers look-

ing outside of their agencies for new ideas and support. The "stat" process has transformed both of these agencies and has provided an unprecedented opportunity for collaborative problem solving in the public sector.

The ParkStat program is continually developing. Indeed, the department recently renamed it "ParkStat Plus" and has expanded it to include a broader range of performance measures. The department now regularly monitors information relating to personnel, vehicle maintenance, resource allocation, and enforcement activity to ensure superior service delivery. ParkStat stands as an excellent example of how the CompStat model can be adapted and successfully implemented outside the field of criminal justice.

Utility as a Management Device for Citywide Initiatives (HealthStat)

In a speech delivered on June 16, 2000, New York Mayor Rudolph Giuliani announced his intent to have all eligible New Yorkers, particularly children, become enrolled in available state and federal health care programs. At that time, it was estimated that 1.8 million New Yorkers had no health care insurance. One quarter of those were believed to be children. ("A Healthy Start for New Yorkers," *Daily News*, June 18, 2000.) The mayor made it a priority to enroll these people as quickly and efficiently as possible. To do so, he announced the development of "HealthStat," a citywide initiative that would draw upon the resources of more than 20 city agencies in a massive community outreach effort.

Under the plan, the city was divided into eight regions, each run by a manager. Within each area, a variety of city departments and agencies now work toward identifying and enrolling eligible individuals. (Bumiller, E., "Citing Own Cancer, Giuliani Offers Plan on Health Coverage," *The New York Times*, June 15, 2000.) Deputy Mayor Coles serves as moderator/supervisor of the process.

The most critical aspect of HealthStat is the outreach component. Simply identifying and graphing eligible populations does not address the underlying problem. The key is to make personal contact with these individuals, to inform them, and to steer them to such

programs. HealthStat calls for placing outreach personnel in police stations, schools, and other points of contact between city employees and the public.

HealthStat was patterned after the TEAMS/CompStat model. It is distinguishable, however, in one essential aspect. It is the first time that the stat model has been used to coordinate the efforts of *several New York City agencies at once*. Representatives from the city's Department of Health, Housing Authority, Human Resource Administration, and Board of Education (to name just a few) now regularly meet to discuss their respective efforts at identifying and enrolling uninsured New Yorkers. Deputy Mayor Coles and Anne Heller, executive director of the Mayor's Office of Health Care Access, take leading roles in the questioning that takes place at HealthStat meetings and provide direction to all citywide outreach efforts.

By dividing the city into specific, geographically defined areas of responsibility, researchers could identify target areas with high numbers of eligible, but uninsured, individuals. School principals, police commanders, and other city officials assigned to those areas were then charged with developing innovative and effective outreach methods. Obviously, a large-scale initiative of this type progresses slowly, due in large part to the myriad difficulties associated with interagency cooperation. Interestingly, while various city agencies were charged with making such referrals, it was the Department of Correction that distinguished itself by making a particularly large number of referrals within the first weeks of the initiative. The progress made by the Department of Correction far outpaced the early progress of other city agencies.

Deputy Commissioner Kurtz attributes this to a very important fact: "We immediately included the number of enrollments or HealthStat contacts as one of our TEAMS performance indicators. The TEAMS infrastructure was already in place, so we simply began to monitor how effective a particular warden or facility was in identifying enrollment opportunities and following up on them." Arguably, if the TEAMS system had not been in place, the department's efforts might have lacked focus or might not have been perceived as a priority.

One would think that the amount of contact the Department of Correction has with the community at large would be minimal. On the contrary, Department of Correction officials immediately recognized that they were uniquely situated in relation to many of the individuals who were identified as the beneficiaries of HealthStat. As Deputy Commissioner Kurtz explains:

Each day, large numbers of New Yorkers pass through the halls of Riker's Island [the city's principal jail facility] as they visit family members. Many times, these are the very same people who need to be reached. So additional Department of Correction personnel were trained and stationed at the visitor center at Riker's Island. They asked the visitors if they would like some information about the program. Immediately, we began to enroll large numbers of people, particularly children. We even offered additional visitation privileges if people would cooperate. It proved to be very effective.

The HealthStat initiative has been praised by local health care policy experts as an effective means of solving this serious problem "without creating a new, expensive health insurance program from scratch." (Bumiller, A1, June 15, 2000.) Experts describe this as a very complex and labor-intensive social problem, but note "a level of intensity in terms of signing up for public programs" that is not often seen. The Department of Correction has certainly taken a leading role in these efforts.

At a recent TEAMS meeting, Edward Galvin, the commanding officer of the Department of Correction's TEAMS and HealthStat Unit, described a variety of initiatives that had been established to facilitate his agency's outreach efforts. He cited numerous examples of collaborative efforts with the private sector, such as a number of "enrollment events" that were hosted and jointly sponsored by McDonalds restaurants. During these events, parents or children who enroll in HealthStat receive a free meal, courtesy of McDonalds. Several of these events were also jointly sponsored by the NYPD and the Housing Bureau. Other city departments and agencies are currently developing similar outreach efforts.

HealthStat marks a critical point in the development of the stat process. Not only has the stat process proven to be an efficient method of managing a large urban agency, it is now also being used as an effective means of coordinating and directing the efforts of many diverse agencies in a comprehensive citywide initiative.

The stat process continues to move within New York City government in a very collaborative fashion. Today, adopting agencies no longer need to rely solely upon the personal observations of key personnel to attempt to create their own version of CompStat. They can now draw upon the considerable expertise of individuals who have had great success using it in their own agencies. For example, at the direction of the Office of the Mayor, Deputy Correction Commissioner Deborah Kurtz has been working for the past two years with several other city agencies that wish to develop a management model similar to TEAMS. Her expertise has been critical to the development of the stat process in a variety of settings. In essence, Deputy Commissioner Kurtz serves as a mentor or consultant to these agencies to guide their efforts in reviewing organizational goals and strategies, selecting key performance indicators, and developing an appropriate monitoring system. The Office of the Mayor directs these efforts and coordinates interagency communication and planning.

Deputy Commissioner Kurtz has most recently been working with the New York City Department of Transportation, the New York City Fire Department, and the city's Probation Department. The TEAMS model has been successfully modified and adopted by DOT, which has developed a comprehensive system of management that now monitors such key performance indicators as: 1) the number of broken traffic signals; 2) average time required to respond to complaints of broken traffic signals; 3) percentage of operable parking meters; 4) total number of parking spaces available; 4) number of potholes; and 5) the results of periodic inspections. These indicators were compiled as a result of a series of in-depth discussions between representatives of DOT, personnel assigned to the Mayor's Office, and Deputy Commissioner Kurtz.

A recent *New York Times* article (Goodnough, April 22, 2001) describes the city's current efforts to

institute the stat process into the Board of Education, an organization that has traditionally been criticized for a host of chronic "bureaucratic pathologies." It describes Mayor Giuliani's intentions to "hold superintendents and principals accountable in the way that precinct commanders are under CompStat ..." and describes the efforts of Deputy Mayor for Education Anthony Coles, who is working to develop what city hall aides call "LearnStat" (p. 35). The article quotes current Schools Chancellor Harold Levy as follows: "From my first day here, I have been focused relentlessly on getting better, more reliable data more frequently and using those measurements to improve the management of the system (p. 35)."

The feasibility of creating a stat process for the city's Board of Education remains to be seen, in light of the many deeply entrenched bureaucratic practices, policies, and procedures of the organization. What this effort does demonstrate, however, is the mayor's intention to implement the stat process into as many of the city's agencies and departments as possible prior to the end of his administration. He will be able to guide the stat process only so far, however, given the limited amount of time he has left in office.

The feasibility of a citywide stat system in New York is questionable, due to the enormous size of New York City government, but it is not out of the question. The considerable success of the HealthStat initiative and the unprecedented level of interagency cooperation and collaboration associated with it suggest that it is at least possible that someday a citywide stat system might be developed for most, if not all, of the agencies and departments within the New York City government.

The City of Baltimore (CitiStat)

CitiStat marks another significant development in the evolution of the stat process. CitiStat represents the first time that a major American city has attempted to coordinate all of its major services and to formalize the process of interagency cooperation through the stat system.

Baltimore's current police commissioner, Edward Norris, is a former NYPD official who was chiefly responsible for coordinating that agency's CompStat meetings over the past several years. He brought the

CompStat model with him to Baltimore, successfully implemented it, and has significantly improved the overall performance of his new agency. Perhaps the most significant result of his new approach to policing has been the reduction of Baltimore's homicide rate to a 10-year low. (Clines, "Baltimore Gladly Breaks 10-Year Homicide Streak." *The New York Times*, January 3, 2001.) Baltimore Mayor Martin O'Malley, the man who hired Norris, was apparently so impressed by Norris's use of CompStat that he has adopted it as the primary management tool for several other of his city's departments and agencies. Jack Maple, the former NYPD official who created the concept of CompStat, was retained as a consultant and charged with developing a program that would function on a citywide basis. This unprecedented move has yielded immediate results. Similar improvements have been noted in several of the other departments that are now monitored by CitiStat. For example, over an initial three-month period, Baltimore experienced a reported 25 percent drop in overtime in the Department of Public Works (DPW), Water and Waste Division. Unscheduled leave in that agency also fell by more than one-third during this period.

Today, CitiStat is used to evaluate performance and to coordinate efforts on a citywide basis. City supervisors are now summoned to appear before the mayor's cabinet every two weeks to discuss the overall performance of their departments. Previously, city managers met only quarterly to discuss goals that were established the year before. Now managers can plan, allocate resources, and engage in lively discussions with city hall based upon "real time" information (obtained and analyzed by the CitiStat Unit). This has had a dramatic effect upon the organizational culture of the city's major departments. As Mayor O'Malley explains, it has served to "replace a culture of delay and avoidance with a culture of accountability and results—monitored by technology" (<http://www.ci.baltimore.md.us/mayor/speeches/index.html>).

CitiStat is now used to monitor such diverse social services as drug treatment, trash collection, vacant housing, and lead paint abatement. It closely resembles CompStat in that information is not just compiled and analyzed, it is *used*. During a recent budget address, the mayor stated:

City governments collect an enormous amount of information. But it isn't used very much or very well. CitiStat will employ CompStat's principles to put that information to work. For the first time, the information we collect will become a blessing rather than a burden. (FY2001 Budget address, available at <http://www.ci.baltimore.md.us/mayor/speeches/index.html>.)

The forum is similar to CompStat in all essential details. Upon initially entering the room in which CitiStat meetings take place, one's eyes are immediately drawn to the large six-by-ten-foot projection screens on the wall, which serve as the centerpiece for detailed discussions. During CitiStat meetings, projectionists in a rear control room display graphs that track the performance of each department. A commercially available geographic information system software package allows senior administrators to access databases and obtain real-time statistics regarding agency performance. Performance data are displayed on these screens for all to see, and trends, both good and bad, are often quite easily identified. Histograms and global positioning system maps are used to make the data "come alive."

At the beginning each meeting, one screen displays and reinforces the "mayor's goals," which serve as an overriding mission statement for the entire city government. Another screen displays the four tenets of the CitiStat process, which are derived from the four basic principles of the CompStat model: accurate and timely intelligence; rapid deployment; effective strategies; and relentless follow-up. The logo chosen for the CitiStat process is quite appropriate—a magnifying glass. It suggests an enhanced level of scrutiny and attention to detail that might otherwise be unfamiliar to civil service agencies.

During CitiStat meetings, managers provide explanations and respond to pointed questions about operations and performance. They rely heavily upon their aides and support staff, who are often themselves called to the podium to provide more detailed responses to specific inquiries. Manager profiles are also projected on the screen during each presentation. These profiles provide informa-

The New York Times on CitiStat

Modeled on CompStat, the New York City Police Department's breakthrough computer program that tracks crime and management response street by street, Mayor O'Malley's CitiStat program is an 11-month-old effort to see if real-time tracking of the full range of urban problems can be a management tool reaching far more deeply into the warp and woof of a troubled city.

Already hailed by government specialists as a pioneering innovation in across-the-board, eye-on-the-sparrow management, CitiStat is attracting officials from other cities and counties to the sessions here in which municipal managers, harried or not, must return every two weeks for a fresh round of accountability.

"One of the best things about it is we can expect movement on a problem in those two weeks," said Mathew D. Gallagher, the program director, who previously worked in the Philadelphia municipal government. In the typical city hall, the severest scrutiny for change occurs only once a year at budget time, Mr. Gallagher said, while CitiStat does this twice a month, with memorandums on supervisors' commitments after each session.

(Francis X. Clines, "Baltimore Uses a Databank to Wake Up City Workers," *New York Times*, June 10, 2001)

tion about each manager, such as the date of appointment, specific title, responsibilities, etc.

The fluidity of the process is quite apparent to even the casual observer. At the outset of one recent meeting, First Deputy Mayor Michael Enright suggested to the assembled group that the analysis of one particular agency should include a comparison of data obtained over four (rather than two) two-week periods. He explained that this would enable "better analysis." Alterations such as this are apparently common. Once the data is assembled by the CitiStat Unit, it is relatively easy to look further back to gain a better appreciation of trends that might otherwise not be observed.

The following exchange illustrates how the standards for comparison can change as necessary:

First Deputy Mayor Enright: I see overtime is up, why?

Manager: Our personnel were engaged in a lot of weekend activities during this period.

Enright: Do you have any idea as to where we were this time last year?

Manager: No.

Enright: Let's try to get that information and follow up on this.

It should be noted that positive trends, as well as negative ones, are identified and discussed. The CitiStat philosophy is premised on the belief that much can be learned from the in-depth analysis of positive performance:

First Deputy Mayor Enright: How did we get that decrease (in one particular performance category)? That looks like a good trend. How did we manage to knock that down?

Enright: I want to find out the story behind these numbers.

Enright: Any ideas—any reason for this? We've discovered some interesting things in the past when we've looked into these things.

The potential training benefits of CitiStat are therefore obvious.

Another exchange during one particular meeting was also quite interesting, and led to an impromptu presentation by a woman who was seated in the audience. After noting that one particular unit's performance had been well above average for several periods, the first deputy mayor asked the supervisor, "What are some of the techniques you've used to keep such high productivity levels?" The supervisor began to respond, but eventually referred the question to the woman in the audience. She was apparently a senior inspector for DPW who had been requested to attend and

observe the meeting. She explained in detail that it had been her practice to “personally assign” work to her inspectors and to use a “mentor system—to show inspectors how to make their stops” and to “emphasize teamwork.” Her explanations clarified several issues for the audience and illustrated the potential training benefits of the CitiStat method.

CitiStat is premised upon a collaborative approach to public management, designed to break down the various information silos that are often quite common in city governments. Information is not hoarded by any one department or office. Rather, it is openly shared and made available to all interested parties. In other words, the inner workings of city management become quite transparent. CitiStat also enables administrators to draw upon the expertise of a broader array of professionals, who attend and actively participate in CitiStat meetings. For example, at one meeting, an issue arose concerning communications between one city agency and the private physician of an employee on sick leave (restricted duty). Upon learning of the need for such communication, the first deputy mayor was able to make a suggestion and have the commissioner of personnel verify that such a course of action was appropriate. These types of exchanges save time and are indicative of the impact CitiStat has had on the flow of information within the city government.

Members of the CitiStat Unit and others actively assist those who serve on the dais during these meetings. Indeed, at times the process seems quite similar to a congressional hearing, as aides whisper into the ear of a deputy mayor, or pass a note, during the course of a dialogue. Meetings progress in a methodical fashion, while retaining a spontaneous quality that encourages open dialogue and the search for creative solutions to pressing problems.

Some of the performance categories do appear at first blush to relate to minutiae and can oftentimes seem quite comical. Prolonged discussions at CitiStat meetings might relate to the number of “grass and weed” complaints that are received or the total number of baited traps set to catch vermin (such as rats). These indicators, however specific, are actually a necessary and reasonable way to operationalize the broad array of services delivered by a particular agency. These indicators describe the work that is actually being done in the field.

The Four Tenets of CitiStat

- Accurate and timely intelligence to ensure the most complete analysis possible
- Rapid deployment of resources to quickly address city problems
- Effective tactics and strategies to ensure proactive solutions
- Relentless follow-up and assessment to ensure that problems do not reoccur

They are the means to an end—the overall mission and goal of all city agencies being to create and maintain clean and safe neighborhoods.

As CitiStat develops and expands, city managers should become more comfortable with the process. Now that the process has become institutionalized, it appears that the stigma of being “called on the carpet” (to visit and respond to questions at city hall) is gone. CitiStat meetings, and the necessary process of data collection and analysis, are now an expected and ordinary part of doing business in Baltimore.

Perhaps the most interesting aspect of CitiStat is its potential for creating a positive synergy based upon interagency collaboration. As each department attempts to solve its own unique problems, managers will undoubtedly find themselves reaching out to other managers in different departments, in an attempt to craft innovative and effective solutions. This now appears more likely, as CitiStat has clearly opened new lines of communication within and between city agencies. During one meeting in which the DPW was presenting, an issue came up concerning a possible duplication of effort between DPW and Housing and Community Development (HCD) (the department that was scheduled to appear at that afternoon’s CitiStat meeting). Noting an opportunity for correcting overlapping efforts and responsibilities, the first deputy mayor suggested, “We’d love you (a senior DPW official) to attend the next CitiStat meeting, to talk to HCD; it could save a lot of time, memos, and talking back and forth.” His offer was taken up and an informal

“side bar” was later observed in a back corner of the room. CitiStat also has great potential as an aid to communication between city government and the public. Mayor O’Malley has publicly stated his intention of making CitiStat meetings more “public” and of someday publishing CitiStat data on the city’s official Internet website.

government functions on a citywide level. CitiStat illustrates the very real potential for taking the stat process to the next level. If a number of city agencies can work collaboratively in this manner, the stat process might prove to be a viable alternative to more traditional methods of city administration.

CitiStat appears to have institutionalized the organizational learning process. All meetings are well attended—by members of presenting departments, as well as others who anticipate being called at a later date. One presenter pointed to the audience and identified his colleagues, stating, “One of the reasons I brought my superintendents here today was that I want them to see what you’re asking and what you are looking at.” The spectator gallery in the CitiStat meeting room is typically filled with city employees from a variety of departments who are there to listen and learn. It is not unusual to see many of them taking notes. It seems as if every observer is generally interested, attentive, and willing to add their own insight or input if called upon to do so. This was graphically illustrated during a presentation at one recent meeting when a manager from DPW began his presentation by stating, “The list of ... ahhh ...” As he briefly paused and attempted to collect his thoughts, three people in the audience finished the sentence for him by loudly shouting, “Eligibility!”

Interestingly, “mini” stat meetings are now being held in the field, prior to the official meetings. One supervisor noted, “We talked about this together last night [he and his subordinates], one particular case.” Deputy Mayor Enright inquired, “Do you have pre-CitiStat meetings?” “Yes,” the supervisor responded, “on what we anticipated your interest would be.” Such informal meetings have recently become more routinized and have actually become part of the process.

Baltimore is continuing its efforts to gradually extend CitiStat and to include more city agencies and departments into the process in the future. The success of CitiStat serves to highlight two important issues. First, that the stat process is a fungible concept that can successfully be replicated in other American cities. Secondly, and perhaps more importantly, it confirms that the stat process can be used to coordinate a particularly wide variety of

Guidelines for Successful Implementation

Based upon many field observations and numerous interviews with administrators who have now successfully used the stat process to spur productivity, the following guidelines have been developed so that an adopting organization can create and sustain an effective version of the stat system.

Design Stage

1. Articulate organizational mission/vision and realign organizational structure to facilitate the meeting of goals and objectives. To maximize effectiveness, the stat process must be pervasive. It must be the prevailing management philosophy throughout the entire organization. There could be a tendency to limit employee “buy-in” to those individuals and units working within the areas of auditing, inspections, and discipline. Every effort must be made to ensure a top-down buy-in by all members of the organization. This typically involves an emphasis on the transition process. Too rapid a shift in organizational philosophy and management approach could do more harm than good, particularly in a struggling organization. The actual length of time for transition depends upon a variety of factors, not the least of which is organizational culture. Proper implementation, therefore, entails knowing or anticipating how this change will affect your personnel.

Adopting agencies must be sure to utilize a sufficient number of motivated and creative administrators who are both students of, and believers in, the process. The success of both CompStat and TEAMS has been attributable, to a large extent, to a series

of high-level personnel changeovers that provided continuity and strong leadership while also continuing to provide opportunities for creativity and innovation. To that end, the purpose and practices of the stat process should be incorporated into the current and future training curricula of all personnel. This would include training for new personnel at the time of appointment (initial hiring), as well as ongoing in-service training for current personnel. Additionally, an effort should be made to develop the public speaking and critical thinking skills of individuals who will be expected to present at stat meetings; this can be done by creating an executive development program or by engaging outside consultants to develop necessary skills for managers and administrators.

2. Have a modern organizational and information technology (IT) infrastructure in place prior to implementation. GIS capabilities might not be necessary if analysis is not going to be based upon geographic comparison. Commercially available software packages with modern spreadsheet capabilities might be sufficient to produce the descriptive statistics, graphs, etc., that are required for meaningful analysis and comparisons. IT infrastructure would also include a sufficient number of well trained personnel, as well as a distinct auditing and inspections unit to ensure the timeliness and accuracy of the data.

Implementation Stage

1. Select performance indicators through a collaborative and fluid process. There must be an open

and authentic dialogue, otherwise administrators might yield to the temptation to merely “measure the measurable.” As Senge (1990) explains, “focusing on what’s easily measured leads to ‘looking good without being good’” (p. 304). All performance measures must therefore be meaningful, and must address the core mission and basic goals of the organization.

When selecting indicators, it is important to address core business practices first, identifying the organization’s most important functions and focusing on those first. The list of performance indicators can always be expanded and refined at a later date.

2. Identify equivalent units for comparison. At the outset, it is important to identify “equivalent units” (e.g., caseloads, libraries, precincts, etc.) to have effective comparisons. There is always a need to compare apples to apples.

3. Review and refine indicators. Performance indicators must also continually be reviewed and revised. It is imperative that all members of the organization understand the *meaning* of each of the indicators and that they use a common definition for each. For example, if a correctional facility records the number of inmate searches (and uses this as a performance indicator), it should be clear to everyone in the organization whether “unscheduled” or “random/spontaneous” searches should be included.

4. Compile timely and accurate data. If the accuracy of the information relied upon is questionable or “stale,” it gives presenters “wiggle room” to explain away poor performance (e.g., “Those numbers are not up-to-date; we’re actually doing much better than that today!” or “We’ve already corrected that condition.”).

5. Share all data and information compiled by the stat unit with field units well in advance of the stat meetings. Preparation is the key. Comments, questions, and concerns from top administrators should be relayed to field units prior to the scheduled meetings. That is not to say, however, that everything will be scripted at the upcoming meeting. Only major issues (i.e., those that cause significant concern or are anticipated to take up some time at the meeting) will be communicated so that thoughtful responses can be formulated.

6. Hold “mini” CompStat meetings. To prepare thoughtful responses, field units must engage in “mini” CompStats to organize their thoughts for the larger, more comprehensive meetings. Meeting with one another well in advance of the scheduled stat meeting allows field units to properly address anticipated areas of inquiry.

Meeting Stage

1. Hold stat meetings at a convenient time and place. Meetings should be held at “headquarters,” away from the many distractions that arise in the field. This serves a symbolic purpose, and also draws upon the additional resources (personnel, equipment) that are available at headquarters but rarely available in the field. Stat meetings should be scheduled early in the workday, preferably at 7:00 or 7:30 a.m., so that participants will not be distracted by other issues and matters.

2. Require key personnel to attend and participate. At all meetings, the entire organizational chart must be present (i.e., have representation). There must be a competent and creative chief inquisitor—a top-level administrator who leads the discussions and questioning at all meetings. Failure to have such a focal point during meetings could lead to confusion. The dais will be made up of top-level managers, but must also include one or more “operational” people (i.e., individuals with extensive field experience and, hopefully, the respect of those in the field). Young, “corporate CPA types” with little or no operational background can be stonewalled or more easily misled. It is imperative to “know the job” first to properly monitor the work and move the organization forward. Also, non-presenting units or agencies should send a representative to attend stat meetings if it is anticipated that issues addressed by other agencies might be pertinent to them. Ideally, all stat meetings could be available online and made to be interactive so that the entire organization or city could observe and perhaps participate.

3. Schedule meetings frequently. To maximize effectiveness, stat meetings must be scheduled frequently, based upon the needs of the specific organization. In many respects, the stat process is the equivalent of the organization checking its own pulse. Better organizational health depends upon proper monitoring. Hopefully, if the process is

implemented and carried out properly, departments and subunits should be obtaining useful information and direction, and should actually look forward to these meetings.

4. Record all meetings. Meetings should be recorded (if not actually broadcast). Managers who make presentations and respond to pointed questions at stat meetings should be sent back with a tape or stenographic record of what exactly was said. This is necessary both for follow-up purposes and to critique one's own performance.

5. Prepare profiles for each presenting unit. All presentations should include a profile of the department/unit, as of well as its highest ranking administrator. Typically, this information is projected on a screen for display during the meeting or is contained in the hard copy spreadsheets that are distributed to those in attendance. The profile would include the supervisor's date of appointment, geographic area(s) of responsibility, a brief description of the personnel and resources under that person's command, etc. This alleviates the need to have introductions at the beginning of all meetings. Introductions are often redundant, take time, and generally detract from the overall quality of the presentations. Profiles would obviously not be necessary, however, in smaller departments or agencies, such as the New Rochelle Police Department.

6. Maintain a professional and productive atmosphere. It is critical that decorum be maintained throughout the entire meeting. A business-like atmosphere must always be maintained, characterized at all times by mutual respect. During these meetings, listening to one another is just as important (often far more important) than speaking at one another. Dais members should constantly be alert for personal attacks or unwarranted criticisms.

The stat process should not be viewed as a disciplinary tool—there is a need always to address successes as well as failures. A negative connotation for these meetings is bad for morale and counterproductive. Positive comments must be communicated with the same level of sincerity and concern as criticisms. Positive trends or increases in productivity must be sustained and thoroughly examined. It is also important to not only praise the presenters, but also the individuals who actually perform

the work. The city of Baltimore actually gives out pairs of Orioles baseball tickets to presenters and their subordinates.

7. Engage in meaningful and constructive dialogue.

There must be an authentic and spontaneous dialogue during these meetings. It should take the form of a lively discussion, not an inquisition. The entire process is akin to the Socratic method of inquiry used today in most American law schools. It involves point, counterpoint, and thoughtful responses to insightful questions. The process should not be conducted like a deposition, where the respondent is grilled or battered with questions. Managing a stat meeting is an art as well as a skill. Competence develops over time.

8. Use the stat process to manage organizational knowledge.

The stat process is the organization thinking out loud. It allows the organization to detect and analyze information obtained from the internal and external work environments. The process enables the organization to weigh its options, reflect, and select the most rational and effective course of action available. The process draws upon all organizational resources, which include the practices and opinions of key personnel. The flow of information, therefore, must be in two directions. All participants teach and all can learn.

One of the greatest strengths of the stat process is the fact that it not only relies upon information that is compiled in the ordinary course of business, but also draws upon "tacit" knowledge within the organization. That is, information that is possessed by individuals in the field who work at the point of service delivery. This type of knowledge is more generally associated with skills or know-how (Cook and Brown, 1999). In every version of the stat process observed, presenters were often called upon to describe their standard operating procedures, to explain how they did things. Commissioners generally know and understand the ends (organizational goals) but not always the means (how things actually get done in the field). This process provides a perfect opportunity for bridging the knowledge gap between management and the rank and file. The stat process can therefore greatly enhance the body of useful knowledge available to the organization and "generate new knowledge and new ways of knowing" (Cook and Brown, 1999, p. 381).

9. Encourage active participation in the meetings by all members of the dais. It is recommended that someone on the dais be chiefly responsible for recognizing instances of micro-management (i.e., detailed discussions that are not pertinent to the entire organization and that should be taken up in greater detail, at a later time, by the interested parties). Similarly, questioners should always be on the lookout for training opportunities (indeed, the director of training or his/her representative should be present at all stat meetings) to identify potential topics for additional in-service training. If a mistake is made by one manager, it is often likely that others will do the same. Negative trends can be stopped before they begin if administrators always have one eye on training.

Top-level administrators should also be aware not to get bogged down in retrospective analysis. Decision makers and planners need only to look as far back as necessary (to explain what's going on now and what can be expected in the future). Too much attention on the past will actually prevent progress. Participants also should always be on the lookout for collaboration opportunities with outside agencies, since they typically present themselves throughout the entire process.

10. Review and utilize all information compiled. To be truly meaningful, *all* data must be reviewed by senior management (both positive and negative performance information). Managers should not view performance indicators in a vacuum. Numbers do not have a meaning unto themselves; they must be interpreted. Effective managers must at all times have a global perspective to truly understand the overall health and performance of each unit, as well as the health of the entire organization.

11. Understand organizational ends as well as means. When measuring an agency's efficiency, a key question is, "Efficient for whom?" Administrators must have a thorough understanding of the needs of their end users and stakeholders (i.e., the public). It is important to understand that an efficiently performing public service organization can nonetheless be "inefficient" if it fails to meet the basic needs and expectations of the public.

12. Interpret data intelligently. Top-level managers or individuals on their staff should have a working knowledge of statistics. They should know how to use and interpret basic comparative statistics (i.e., understand mean, median, and mode). They should also have a fundamental understanding of the phenomenon of regression toward the mean (i.e., the fact that performance improvements will slow over time; for example, a 20 percent drop followed by an 18 percent drop does not mean that the organization is "going backwards"). Similarly, they should be familiar with the terms *correlation* and *causation*, as well as the distinction between the two. For example, if numbers show that ice cream sales in the United States increase as the rate of drownings do, does this mean that ice cream causes drowning? Or that people consume large amounts of ice cream after a drowning occurs? Obviously not. We should always be on the lookout for what statisticians refer to as a "lurking" third variable, such as temperature, which in this case is the true cause of the variation in both variables, the real explanation. Data must be delved into and truly analyzed. There should be a constant search for statistically significant variations and possible correlations. Managers should carefully draw their own conclusions and be hesitant to accept simple explanations.

Managers should also understand that numbers can always be interpreted a number of different ways. For example, if sanitation trucks are completing their routes more quickly, one would assume that to be a good thing. Perhaps not. Maybe they are coming in too soon, not making all of their pickups. Sometimes quality is far better than quantity. It depends upon what is being measured. Managers need to always see the big picture and not focus on any one performance category. They need to use and understand the entire constellation of performance measures for the entire agency or city. That's where the true story is.

Managers should always be aware of similarities and distinctions between field units. Maybe a garbage route in a downtown area is inherently more difficult and slower than many others. It is unreasonable to assume that baselines will be the same for all units, although one would expect them to be substantially similar. Managers obviously

need to know their own agency, the nature of the work, and their people. Once appropriate baselines are established (means, medians, and modes), they will have a proper frame of reference. Then they will be in a position to judge the overall performance of different units.

13. Engage in a continuous process of inquiry. Top-level administrators must continually ask questions like: *How* did this happen?; *Why* did this happen? (What is causing it?); *When* did this happen (and how long has it been like that?); and *What* can we do to change (or sustain) it? Presenters should be dissuaded from responding with statements such as, “We’re working on that,” or “We’ll take that under advisement.” It is imperative that such platitudes be discouraged since this terminates the dialogue and is nonproductive. They should be told, “Please get back to us with an action plan that outlines the steps you will be taking to correct this situation.” The burden is on upper management to keep the momentum moving in a positive direction. Follow-up questions should be encouraged, and used as necessary. For example, a stat meeting in one city resulted in the following exchange:

Q: “What about working with the [adjacent] school personnel? Can’t you work with them to come up with a creative solution?”

A: “They don’t help us at all.”

Not being satisfied with this response, the supervisor asked, “Well, have you reached out to them at all? And if so, tell us how.”

It also appears that there is a generic fiscal response that may be used by presenters to deflect criticism. This entails saying, “I’m aware of that [condition or deficiency], but I don’t have the resources available to address that. I have more important issues to address.” Such a response could stifle further discussion. In effect, it insulates the party from further criticism and justifies deficiencies in performance. Instead, budgetary constraints should be no surprise to any party. If a particular corrective measure cannot be undertaken for fiscal reasons, it should be discussed in detail, either during the stat meeting or at a later time, with interested parties in attendance.

14. Ensure accountability of field managers.

Managers who are being reviewed should be “geographically accountable.” That is, they should have a proprietary interest or specific responsibility for the work being performed in a particular area or by a particular group of people. They need to have a stake in the work being performed if they are to be held accountable. Accountability only goes so far, however. There will always be instances where a crime wave spontaneously occurs despite the best efforts of the police, or where a school district’s test scores will drop precipitously due to the rapid influx of immigrants. The stat process is based upon the creation and use of institutional memory. These otherwise unexplained events are explainable and understandable if we can see them in context and use the information provided by the stat process. Statisticians refer to these unforeseen situations as “outliers.” There will always be unusual situations that fall on the extreme ends of the bell curve. The key is to understand the uniqueness of these situations and to learn from them.

15. Conduct a review after each meeting. One of the more obvious recommendations associated with the successful implementation of the stat process is to have a recap, “what we’ve learned today,” at the conclusion of each meeting. This simple step performs an obvious training function and clearly articulates and records who is going to be following up with whom.

It should be understood that implementation is only the tip of the iceberg. A considerable amount of time and energy must be expended in connection with assuring that the mechanism survives. When properly developed and implemented, the stat process can be transferable to, and sustainable by, the next generation of administrators. Short-term success is simply not sufficient. As Robert Fritz (1996) puts it, “All organizations have success, but not all success succeeds in the end” (p.xv). The stat process should always be understood as being evolutionary. The process itself should never remain stagnant, but must constantly be modified and perfected. The entire philosophy and practice of the stat process is based upon the search for “better practices,” not “best practices.” There is always room for improvement.

Conclusion

The stat process has proven to be a fungible and malleable management process that holds great promise for public administrators. As New York City Deputy Mayor Joseph Lhota states, "It [the stat process] can be used in any area of government. The fact that it was developed in the public safety area does not mean that it has to stay there." The concept continues to spread to a variety of organizations. Most recently, it has made the leap into the area of federal service.

Beginning in 1998, Dr. Frank Straub, who was then special agent in charge of the Research and Analysis Unit within the Inspector General's Office of the U. S. Department of Justice, began to develop a version of the stat process that could be adapted to the unique requirements of an organization with nationwide responsibility. From its very inception, the system (known as "SACS") differed substantially from its predecessors. Thomas McLaughlin, current deputy assistant inspector general for investigations, explains:

We use the system to monitor work being performed in our many field offices. Since they are located throughout the country, it was difficult to bring all of our managers to one central location for a meeting. Rather, we circulate key performance data for all offices, but have extended, office-by-office phone conversations in order to explore the relative performance of each.

McLaughlin personally traveled to New York and visited both CompStat and TEAMS meetings prior

to the development of SACS. He believes in the utility of the SACS system and feels that it has proven to be quite effective for his organization. He describes the value of being able to assemble and understand a broad range of performance data, and to make meaningful comparisons:

Once we assembled and interpreted our stream of numbers, we were able to identify certain areas that needed attention. We were then able to focus our attention and bring these areas down into a more normal range.

The potential benefits associated with the stat system are therefore not reserved exclusively for managers in local government. The philosophy and practices associated with the stat process are consistent with those outlined in the Government Performance and Results Act (1993). The stat process should therefore continue to be viewed as a viable option for all federal agencies looking to enhance productivity and ensure accountability.

Perhaps the most important lesson to be learned here is one of caution. The stat process is not a panacea. It is not a magical cure-all that will transform a poorly run and inefficient organization into a model of public service excellence. Rather, it is an additional tool that can be used by public administrators to enhance performance by means of careful measurement and planning, and effective allocation of resources. As these case studies show, it has been used with great success in a variety of venues and appears to hold great promise for the future.

Bibliography

- Abrahamson, Eric and Lori Rosenkopf. "Institutional and Competitive Bandwagons: Using Mathematical Modeling as a Tool to Explore Innovation Diffusion." 18 *Academy of Management Review* no.3, (1993) pp. 487-517.
- Bennis, Warren. *Changing Organizations: Essays on the Development and Evolution of Human Organization*. New York: McGraw-Hill (1966).
- Bennis, Warren, Kenneth Benne, and Robert Chan. *The Planning of Change*. New York: Holt, Rinehart and Winston (1969).
- Bratton, William J. *Great Expectations: How Higher Expectations for Police Departments Can Lead to a Decrease in Crime*. Paper presented at the National Institute of Justice Policing Research Institute Conference, Washington, D.C., November 28, 1995.
- Cook, Scott D. N. and John Seely Brown. (1999). "Bridging Epistemologies: The Generative Dance Between Organizational Knowledge and Organizational Knowing." 10 *Organization Science* no. 4 (July/August), pp. 381-400.
- Davenport, Thomas. *Process Innovation: Reengineering Work Through Information Technology*. Boston: Harvard Business School Press (1993).
- Fritz, Robert. *Corporate Tides: The Inescapable Laws of Organizational Structure*. San Francisco: Berrett-Koehler (1996).
- Giuliani, Rudolph W. Presentation at the Manhattan Institute Conference, June 21, 1999.
- Goldstein, Herman. *Problem-Oriented Policing*. Philadelphia: Temple University Press (1990).
- Goodnough, Abby. "For Schools in a Torpor, Shock Therapy." *The New York Times*, April 22, 2001), pp. 33, 35.
- Gootman, Elissa. "A Police Department's Growing Allure: Crime Fighters From Around World Visit for Tips." *The New York Times*, October 24, 2000.
- Ingraham, Patricia W. "Of Pigs and Policy Diffusion: Another Look at Pay-for-Performance." 53 *Public Performance* no. 4, pp. 348-356.
- Kraatz, Matthew S. "The Role of Interorganizational Networks in Shaping Strategic Adaptation: Evidence From Liberal Arts Colleges." *Academy of Management, Best Papers Proceedings*, pp. 246-250.
- McEwen, Tom. "NIJ's Locally Initiated Research Partnerships in Policing—Factors That Add Up to Success." *National Institute of Justice Journal*, January, 1999, pp. 2-10.
- Moore, Mark. *Creating Public Value: Strategic Management in Government*. Cambridge, Mass: Harvard University Press (1995).

Moore, Mark H. and Robert C. Trojanowicz. "Corporate Strategies for Policing." 6 *Perspectives on Policing*, U.S. Department of Justice, National Institute of Justice (November, 1988).

O'Connell, Paul E. and Frank Straub. "Why the Jails Didn't Explode." 9 *City Journal* 2 (Spring 1999a), pp. 28-37.

O'Connell, Paul E. and Frank Straub. "Managing Jails with T.E.A.M.S." *American Jails* (March/April 1999b), pp. 48-54.

O'Connell, Paul E. and Frank Straub. "For Jail Management, Compstat's a Keeper." *Law Enforcement News*, September 30, 1999c, p. 9.

O'Dell, Carla and C. Jackson Grayson. "If Only We Knew What We Know: Identification and Transfer of Internal Best Practices." 40 *California Management Review* 3 (1998), 154-163.

Perrow, Charles. *Complex Organizations: A Critical Essay*. Glenview Ill.: Scott, Foresman (1979).

Punch, Maurice. *Control in Police Organizations*. Cambridge, Mass: MIT Press (1983).

Rogers, E. *Diffusion of Innovations* (4th ed.) New York: The Free Press (1995).

Senge, Peter. *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday (1990).

Silverman, E. and P. O'Connell. "Revolutionizing the Police: Fighting Crime in New York City," No. 9 *Security Journal* (1997), pp. 101-104

Silverman, Eli and O'Connell, Paul, "Changing Decision-Making in the New York City Police Department," 22 *International Journal of Public Administration* 2 (1999), pp. 217-259.

Sparrow, Malcolm K., Mark H. Moore, and David Kennedy. *Beyond 911: A New Era for Policing*. New York: Basic Books (1992).

Straub, Frank and Paul O'Connell, "Managing With T.E.A.M.S.," *American Jails* (March/April 1999), pp. 48-54.

Straub, Frank and Paul O'Connell, "Why The Jails Didn't Explode," *City Journal* (Spring 1999), pp.28 - 37 (reprinted in 17 *NarcOfficer* 3 (May/June 1999), pp 18-26; excerpted in *The American Enterprise*, (September/October 1999), pp. 86-87.)

Terry, Larry D. "Administrative Leadership, Neo-managerialism, and the Public Management Movement." 58 *Public Administration Review* 3 (1998), 194-213.

Appendix

A practical model for implementing CompStat should include the following specific steps:

I. Review Organizational Mission/Vision

- Develop a new one or redefine the old
- Attempt to establish an adequate level of “buy-in,” both at the top levels of management and throughout the entire organization

II. Adjust/Realign the Existing Organizational Structure (to accommodate the stat mechanism and utilize it properly)

- Institute a comprehensive training program to introduce employees to the concept
- Create a “CompStat Unit” or some equivalent that will be chiefly responsible for data collection, analysis, and distribution (make additional personnel shifts as necessary)
- Implement an appropriate information technology system

III. Select Performance Indicators

- Identify core business practices (determine “what exactly it is that you do”)
- Identify specific (desired) goals, based upon organizational goals and mission
- “Operationalize” these goals (break them

down into specific tasks and functions: what will need to be performed to accomplish these goals?)

- Develop a “preliminary” set of performance indicators for the organization (select the most important or fundamental functions first)
- Analyze (compare preliminary performance indicators to goals and overall mission of the organization to ensure consistency)

IV. Distribute Preliminary List of Indicators to all Stakeholders

- Provide list of performance indicators to all employees (including individuals in non-managerial positions, since their efforts will ultimately be monitored through this process)
- Provide preliminary list of indicators to external stakeholders (e.g., members of the public who will be provided services)

V. Solicit Feedback from all Stakeholders (authentic dialogue)

- Convene meetings with managers (or focus groups) to obtain feedback and recommendations

- Convene focus groups with stakeholders (i.e., members of the general public, public interest groups, members of other organizations, etc.) to obtain feedback and recommendations
- Revise indicators as necessary (obtain consensus/agreement of all stakeholders, both internal and external constituent groups and clients)
- Create new indicators (secondary, tertiary) as necessary

VI. Collect and Analyze Data

- Design a process for the collection and analysis of data
- Gather data (current, as well as historical, if available)
- Input data
- Analyze data (simple spreadsheet analysis might be sufficient)
- Set baselines for current performance
- Begin to examine historical data for trend analysis and long-term strategic planning
- Examine baselines and make comparisons of equivalent units
- Set reasonable (and obtainable) goals
- Identify significant distinctions in performance between units

VII. Distribute Data throughout Organization

- Disseminate results of initial analysis
- Solicit individual feedback from field units (i.e., their interpretation of the data and explanations for performance)

VIII. Prepare for Meeting

- “Mini” Compstat meetings take place in the field; each field command meets to discuss indicators and prepare for anticipated questions and comments at upcoming (organizationwide) Compstat meeting

- CompStat Unit meets to compile information and prepare questions for upcoming meeting

IX. Hold Meeting (to discuss data, trends, make inferences, and facilitate long-range strategic planning)

- Assemble top-level managers and representatives from all segments of organizational chart
- Presentations made by selected field units
- Questioning by dais, brainstorming for new ideas, techniques, etc.
- Decisionmaking, long- and short-term strategic planning for field units as well as entire organization

X. Recapitulation

- Post-meeting re-cap (memorandum) to be communicated to entire organization, outlining future goals and strategies
- Conduct post-meeting follow-up with individual units as necessary
- Field units will conduct their own (internal) post-meeting assessment (and preparation for next scheduled stat meeting)
- Post-meeting review of list of indicators and performance baselines
- Revise or include additional indicators as necessary
- Training and follow-up for systemic problems or organizationwide recommendations for improvement

About the Author



Paul O'Connell is an Associate Professor and former chair of the Department of Criminal Justice at Iona College in New Rochelle, New York. He teaches undergraduate and graduate courses in law, criminal justice, and public administration.

His recent research has focused upon the areas of program evaluation, and police administration and training. He is currently engaged in a project entitled, "An Intellectual History of the CompStat Model of Police Management." He has published articles in the *International Journal of Public Administration*, *City Journal*, *American Jails*, *Law Enforcement News*, and a variety of other journals and publications.

Prior to joining Iona College he served as a New York City police officer, an NYPD Police Academy law instructor and curriculum coordinator, and a civil trial attorney for the firm of Cummings & Lockwood in Stamford, Connecticut.

He is a graduate of St. John's University (1981), and holds an M.P.A. and an M.Phil. from City University of New York, John Jay College (1984, 2000), and a J.D. from St. John's School of Law (1989). He is currently completing his doctoral dissertation in criminal justice.

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CompStat

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www.ci.nyc.ny.us/html/nypd/home.html

New Rochelle Police Department

Commissioner Patrick Carroll
New Rochelle Police Department
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www.nrpd.com

ParkStat

Jeremy Peterson
New York City Department of Parks and Recreation
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nyc.gov/html/dpr/home.html

CitiStat

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www.ci.baltimore.md.us/news/citistat/index.html

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Office of the Mayor
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(212) 788-2898
www.ci.nyc.ny.us/html/hia/home.html

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