
Making Sense of COMPSTAT: A Theory-Based Analysis of Organizational Change in Three Police Departments

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COMPSTAT, the latest innovation in American policing, has been widely heralded as a management and technological system whose elements work together to transform police organizations radically. Skeptical observers suggest that COMPSTAT merely reinforces existing structures and practices. However, in trying to assess how much COMPSTAT has altered police organizations, research has failed to provide a broader theoretical basis for explaining how COMPSTAT operates and for understanding the implications of this reform. This article compares two different perspectives on organizations—technical/rational and institutional—to COMPSTAT's adoption and operation in three municipal police departments. Based on fieldwork, our analysis suggests that relative to technical considerations for changing each organization to improve its effectiveness, all three sites adopted COMPSTAT in response to strong institutional pressures to appear progressive and successful. Furthermore, institutional theory better explained the nature of the changes we observed under COMPSTAT than the technical/rational model. The greatest collective emphasis was on those COMPSTAT elements that were most likely to confer legitimacy, and on implementing them in ways that would minimize disruption to existing organizational routines. COMPSTAT was less successful when trying to provide a basis for rigorously assessing organizational performance, and when trying to change those structures and routines widely accepted as being "appropriate." We posit that it will take profound changes in the technical and institutional environments of American police agencies for police departments to restructure in the ways anticipated by a technically efficient COMPSTAT.

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When a process is reengineered . . . practically every aspect of the organization is transformed beyond recognition.

(Michael Hammer and James Champy, *Reengineering the Corporation*)

But it is not by what is, in this life, but by what appears, that you are judged.

(Thomas Hardy, *The Mayor of Casterbridge*)

COMPSTAT, a management and technological system, is the latest in a long line of attempts to make American police agencies better organized to fight crime (Bittner 2003; Fogelson 1977; Kelling & Moore 1988; Mastrofski 1988; Reiss 1992).¹ Combining cutting-edge crime analysis and geographic information systems with state-of-the-art management principles, COMPSTAT burst onto the scene when it was first implemented in 1994 by then-Commissioner William Bratton of the New York City Police Department (NYPD).

It consists of four principles believed to give police organizations the capacity to reduce crime by making them more responsive to management direction: (1) accurate, timely information made available at all levels in the organization; (2) the most effective tactics for specific problems; (3) rapid, focused deployment of resources to implement those tactics; and (4) relentless follow-up and assessment to learn what happened and make adjustments (McDonald 2004; Safir n.d.). These features are most visible in the NYPD's twice-weekly COMPSTAT "Crime Control Strategy Meetings," during which precinct commanders appear before the department's top echelon to report on crime in their districts and what they are doing about it. This occurs in a data-saturated environment. Crime analysts collect, analyze, and map crime statistics to spot trends and help precinct commanders identify underlying factors that explain crime incidents. Top administrators use this information to quiz precinct commanders on the crime in their beats and to hold them responsible for solving the problems. Failure to provide satisfactory responses to these inquiries may lead to stern criticism or removal from command.

Two theories have been suggested for why COMPSTAT is adopted and how it is supposed to work: technical/rational and institutional. According to the technical/rational perspective of its originators and supporters, COMPSTAT's elements work like a well-oiled machine to form an efficient, transformative, and goal-driven organizational system (Bratton 1998; Giuliani 2001;

¹ There is some disagreement about what the acronym *COMPSTAT* actually denotes. Bratton suggested it stands for "computer-statistics meetings" (Bratton 1998:233), but according to Silverman, its name arose from "compare Stats," a computer file name (1999:98). Some have collapsed these meanings and argue that COMPSTAT refers to "computer comparison statistics" (see <http://www.nalusda.gov/pavnet/iag/cccompst.htm>).

McDonald et al. 2002; Shane 2004a, 2004b, 2004c). Their promises of a new “paradigm” or “sea change” in policing have ignited attention from policy makers, media outlets, police leaders, and scholars across the nation (Henry 2002; McDonald et al. 2002; Walsh 2001; Walsh & Vito 2004). Others are skeptical, claiming that COMPSTAT behaves in unpredictable ways and is most successful at reinvigorating the traditional hierarchical structure of the military model of policing, a structure that has been under attack for the last two decades by a powerful wave of community policing reform (Manning 2005; Weisburd et al. 2003; Willis et al. 2004b). In response to these criticisms, commentators have speculated on the value of an institutional framework for explaining COMPSTAT’s rapid diffusion and organizational effects (Klinger 2003; Moore 2003:479), but to this point the potential benefits of such an approach for COMPSTAT have not been empirically tested.

This article, the third in a series stemming from the first national assessment of COMPSTAT programs conducted at the Police Foundation (Weisburd et al. 2001), applies these two theoretical approaches to a qualitative analysis of COMPSTAT in three police departments.² The two previous articles described COMPSTAT and its diffusion using a national survey (Weisburd et al. 2003) and its operation in a case study of a “model” police organization in Lowell, Massachusetts (Willis et al. 2004b). This article, which adds two police agencies, identifies patterns that explain why COMPSTAT was adopted and how it operated. Drawing from what those who developed COMPSTAT have written (Bratton 1998; Maple 1999), as well as what those who have studied COMPSTAT have observed (Henry 2002; McDonald et al. 2002; Silverman 1999), our prior research identified six key elements that have emerged as central to the development of COMPSTAT programs: mission clarification, internal accountability, geographic organization of operational command, organizational flexibility, data-driven problem identification and assessment, and innovative problem-solving tactics (Weisburd et al. 2003). We use these elements here to ask, “Are the features of COMPSTAT’s adoption and implementation more consistent with a technical/rational or an institutional approach?” The answer is important because it explains where implementation problems are likely to occur, why they occur, and the processes underlying popular reforms such as COMPSTAT. Before

² The Lowell (Massachusetts) Police Department adopted the nomenclature of the NYPD, but a different name was used at the other two sites we visited. Minneapolis’s program was called “CODEFOR” (Computer Optimized Deployment—Focus on Results) and Newark’s (New Jersey) “Comstat” stood for “Command Status Report.” For the sake of convenience, we use the generic term *COMPSTAT* to refer to these programs at their respective departments.

turning to that analysis, we describe these two perspectives on organizations and the evidence that would support each.

The Technical/Rational and Institutional Models of Organizations

Both the technical/rational (hereafter called “technical”) and the institutional perspectives are premised on the notion that organizations are self-interested and generally try to respond to demands in their environments in ways that benefit themselves by acquiring resources, domain, and other forms of support (Mastroski 1998; Scott 1987:125–34). However, based on their differing assumptions about an organization’s environment, these perspectives suggest distinctly different explanations for why an organization adopts particular structures and practices, and the purposes these are supposed to serve.

Technical/Rational Perspective

According to the technical model, an organization’s environment is characterized by precisely specified products or services. These are exchanged in a market, and organizations operating in these environments are rewarded for effective and efficient performance (Scott 1987:31). In response to these technical pressures, the organization develops formal structures to organize work processes rationally: positions, policies, programs, and procedures (Ritti & Mastroski 2002).³

COMPSTAT’s implementation in the NYPD closely resembled the technical perspective’s conception of technical or functional rationality. When Bratton assumed command, his vision for the organization appeared to be predicated on the assumption that the department operated in a market economy and was impelled to be as productive as possible by market mechanisms:

We began to run the NYPD as a private profit-oriented business. What was the profit I wanted? Crime reduction. I wanted to beat my competitors—the criminals—who were out there seven days a week, 24 hours a day. I wanted to serve my customers, the public, better; and the profit I wanted to deliver to them was reduced crime (Bratton 1996:5).

³ Many of the key tenets of the technical/rational perspective are recognizable in Max Weber’s principles of bureaucracy and Frederick W. Taylor’s scientific management approach. Since research and theorists have long noted that organizations do not behave according to simple and rational prescriptions, this perspective is unable to account for a great deal of organizational practice (Hall 2002:97–105).

COMPSTAT was the centerpiece of his reform efforts (Silverman 1999). Bratton focused on developing structures and practices to enable his organization to maximize efficiency and drive crime down. Along with his advisors, he thoroughly assessed the agency's problems by reviewing existing policies and operations, and by identifying key issues and obstacles through focus groups and surveys. Next he assembled management teams to gather and evaluate all this information before making recommendations (Henry 2002:187–234).

To optimize operations, Bratton borrowed state-of-the-art management doctrines from organizational development experts in the private sector, Michael Hammer and James Champy (Bratton 1998:224; Silverman 1999:82). The thrust of their “reengineering” approach is that successful organizations respond to uncertain environments by reprioritizing their goals and revamping core structures for the accomplishment of results. This involves several principles: developing a management commitment and capacity to establish priorities, securing the allegiance of employees, finding novel ways for accomplishing tasks, and using information scientifically to drive decisionmaking (Hammer & Champy 1993:32–47, 85). Bratton based his COMPSTAT strategic problem-solving model on these principles (Bratton 1998:224; Safir n.d.).

Institutional Perspective

Developed from an open systems conception of organizations and from Berger and Luckmann's (1966:53–67) emphasis on institutions as products of human activities and commonsense knowledge, the institutional perspective challenges the view that organizational structures emerge from rational processes (Meyer & Rowan 1977; Scott 1995). According to this model, the structures and practices of organizations are not only influenced by rational calculations and technical imperatives, but also by the cultural features of their environments (Scott 2004:6). Certain organizations operate in environments that are not well-developed technically: their products or services are not well-specified, methods for their production are not well known, and competition is weak or non-existent. Many public service organizations (Wilson 1989), including the police, tend to fall into this category (Crank 2003; Mastrofski 1998).

Rather than being driven to perform efficiently, these organizations are judged by how well they respond to wider beliefs about what such organizations *should* look like and what work they *should* be doing. Meyer and Rowan refer to the taken-for-granted cultural expectations that suffuse the organization's institutional

environment as “rationalized myths.” These myths stipulate the “social purposes” of the organization and operate as formal prescriptions for their accomplishment (1977:343–4). Since these social constructions of reality may emanate from and be enforced by politically salient actors or “sovereigns” in the external environment (typically the press, community groups, and public officials), organizations are under considerable pressure to incorporate them into their formal structures and activities (Crank & Langworthy 1992:342). By closely integrating their internal structural arrangements to myths of what is the “proper” or “natural” way to behave, institutionalized organizations gain legitimacy, thereby improving their prospects for resources and survival (Meyer et al. 1983:46; Suchman & Edelman 1997:919; Tolbert & Zucker 1983:25).

This is not to suggest that highly institutionalized organizations experience only one set of pressures through which structural conformity (isomorphism) occurs. DiMaggio and Powell (1983:150–2) distinguish three mechanisms of isomorphism: mimetic, normative, and coercive. Organizations confronting a great deal of uncertainty in their environments are especially prone to mimetic isomorphism. To help ensure their survival, they copy other organizations that have received recognition and support for appearing effective. Alternatively, an organization may seek approval and resources by adopting measures that rest on the authority of professionals and experts in the field (normative isomorphism), or by putting certain structures in place in response to pressures from another organization (coercive isomorphism).

Whatever their source, the cultural forces exerted on organizations can result in the implementation of structures that conflict with technical demands for efficiency (Meyer & Rowan 1977:356). Thus, unlike the technical model, the institutionalized organization benefits from decoupling its structures from its core routine tasks so that its structures can be more closely aligned with institutional values (Meyer et al. 1983:47). This allows the organization to focus on its functional activities while simultaneously employing means that have little to do with its actual day-to-day work (Maguire & Katz 2002).

We have distinguished between the specific aspects of each type of environment, but it is important to remember that the technical and institutional perspectives are not opposites on a continuum but rather different conceptual dimensions (Scott 1987:126). Organization structures, such as those that constitute COMPSTAT, may respond either to technical or institutional pressures, or to both simultaneously (Meyer et al. 1983:61–2). “The fact that a structure is perceived to produce a technical/rational result, does not preclude it from serving an institutional function as well, and vice versa” (Mastrofski & Ritti 1996:293). At issue here is how much

structures are directed toward the achievement of a valued goal (“rational”), and how much they are understood to produce the desired results (“technical”). Just as decoupling suggests an institutional function, so too does an organization’s unwillingness or inability to assess critically existing organizational factors and the promise of enhanced technical performance.

There is a small but growing literature on the applicability of institutional theory to police organizations (Crank 2003), but much of it asserts the superiority of institutional theory in accounting for police structures and practices without conducting an empirical analysis that compares the strength of this perspective to the technical model. The institutional perspective has been applied to explaining certain police organization structures and practices, the emergence of community policing and racial profiling, the practices of anti-gang units, and accounting for the effects of police training on drunk-driving enforcement (see Crank 2003 for a review). While this literature offers an intriguing and provocative perspective of the structures and practices of policing, it does not offer thorough and conclusive empirical tests of the superiority of institutional theory. Indeed, the popularity of the technical model as a driving force among researchers is evidenced in the proliferation of studies designed to test the effects of police practices on crime and disorder, and to identifying “best practices” through scientific study (Crank 2003:189). A survey of police research during the latter half of the twentieth century found that by the 1990s, evaluations of the effectiveness of police strategies had come to dominate police research, especially research that was government-funded (National Research Council 2004: Ch. 2). COMPSTAT is currently one of the most touted crime control police innovations, yet its dynamics remain untested. Because it is far from obvious how technical and institutional processes may influence the general direction of organizational change (Scott 1987:156–7), our comparative empirical analysis of these two models better explains COMPSTAT and also assesses the utility of these theoretical approaches.

Sources and Consequences of Structural Reform

Based on the review of these two perspectives, we can anticipate the sources contributing to COMPSTAT’s adoption and the consequences of structural changes in police departments implementing COMPSTAT. Next, we identify factors that should affect COMPSTAT’s implementation and consider the likely structural changes under COMPSTAT in both technical and institutional terms.

From the technical perspective, we would expect COMPSTAT's adoption to be a rational response to increasing crime pressures in each department's technical environment. Furthermore, COMPSTAT's innovative structures should result in a radical transformation of existing organizational arrangements. Departments should be highly focused on reducing crime and commit significant resources to accomplishing this goal. In addition, to have the greatest effect on the organization's technical work, most of which is carried out by patrol officers, a high level of accountability should be experienced by all members of the organization, including those at the bottom. Because COMPSTAT prioritizes generalists who specialize in territory rather than function, we expect COMPSTAT's implementation to result in more police operations being geographically based. Moreover, COMPSTAT's strategic emphasis suggests that the organization will constantly scan its technical environment, detect changes, and respond effectively. An effective response demands that technical criteria determine resource allocation and that the coordination and control of work activities is closely linked to changes in the technical environment. To minimize uncertainty and improve performance, the organization should also try to assess the effectiveness of its responses and make a concerted attempt to locate relevant knowledge on crime control and prevention. It should then use these data to achieve the selection and implementation of the most effective crime reduction approaches. Technical criteria, such as poor planning or inadequate training, should account for implementation failures.

By contrast, institutional theory predicts that COMPSTAT would be adopted because of its capacity to satisfy powerful sovereigns with appearances. Because technical considerations are less important than giving the impression that COMPSTAT is up and running, core organizational routines should be little changed by COMPSTAT. Each department should adopt a crime-fighting focus to gain legitimacy, but we expect this goal to be decoupled from organizational structures, enabling the organization to align its activities with broader expectations in the institutional environment. Moreover, we predict that each organization would respond to strong institutional forces by demonstrating accountability and effectiveness but, due to weaker technical pressures, it would expend little effort to measure outcomes and to link accountability to actual performance. Nontechnical considerations about the appropriate role of top leadership and the legitimating value of functional specialization should also limit the geographic organization of operational command (Mastrofski 2002). Similarly, other conventional considerations should constrain strategic decisions about how resources are allocated and how work is organized and performed. Finally, this model predicts that institutional expectations about

what constitutes a legitimate police response should result in departments favoring traditional, not innovative, crime reduction practices.

In what follows, this discussion of how COMPSTAT should behave from technical and institutional perspectives provides a basis for considering which of these models is most consistent with our observations on COMPSTAT's implementation and operation. We ask, "Which of these perspectives can best account for the processes underlying COMPSTAT's adoption and for the particular structures that subsequently developed?"

Study Sites and Methods

We selected three police departments—Lowell, Massachusetts (LPD); Minneapolis, Minnesota (MPD); and Newark, New Jersey (NPD)—for intensive site research. We wanted to examine departments that had advanced furthest with COMPSTAT. Each site had implemented COMPSTAT between 1996 and 1998, so these programs were well underway when we visited in 2000–2001. The Police Foundation's national survey revealed that each department had scored high on self-reported COMPSTAT implementation, helping to ensure that what we observed was not due to an incomplete COMPSTAT model.⁴ We also wanted to see what happened at other departments that adopted the NYPD's hallmark program. Finally, we wanted to assess COMPSTAT in different contexts to capture a range of experiences. Not only did these three departments differ in size, organization, and region, but this made them more representative of America's larger police departments than the behemoth NYPD.

According to the FBI's 2001 Uniform Crime Reports (UCR), Lowell's 260 police officers served a population of 105,668; Minneapolis's 919 officers served 386,726; and Newark's 1,445 officers served 275,823. In the 1980s and 1990s under community policing, each department had decentralized geographically by partitioning into individual districts. Lowell's three districts, Minneapolis's five, and Newark's four operated relatively autonomously. Crime levels and types differed across sites. Based on the UCR for 1995–2001, serious (index) crime was generally highest in Minneapolis and lowest in Lowell. In 2001, the violent crime rate was highest in Newark (1,391 per 100,000 population), while the

⁴ Terminology varied among the sites. To minimize confusion, we refer to each department's chief executive officer as "chief," to precinct commanders as "middle managers" or "district commanders," and to all geographic areas of command as "districts," unless otherwise stated.

property crime rate was highest in Minneapolis (5,875 per 100,000; FBI 1986–2004).

Research Design

The main field research techniques were participant-observation and formal interviews. At each site, researchers observed weekly or biweekly COMPSTAT meetings and interviewed city leaders and police department personnel. We attended 36 department-level COMPSTAT meetings and eight shorter district-level or pre-COMPSTAT meetings, and we conducted 70 formal interviews. By guaranteeing interviewees (except chiefs) anonymity and confidentiality, we tried to gain the trust of department members. There was some initial suspicion, but most of those interviewed engaged in lengthy and candid discussions about COMPSTAT. In addition, we attended other meetings to help us situate COMPSTAT within a larger context.

After observing department-level COMPSTAT meetings, we debriefed the major participants. The aim of these 15-minute debriefings was to identify crime problems in each district and track responses to these problems over time. We also collected documents that could further our understanding of COMPSTAT, including internal department memos, research grants, community handouts, newspaper and Web articles, and the COMPSTAT maps, spreadsheets, and crime analyses provided to district commanders.

Finally, to assess the effect of COMPSTAT on those at the bottom of the organization, we distributed an anonymous, voluntary survey to patrol officers who regularly attended roll call on the day, early night, and late shifts. Researchers distributed the survey on separate days across all shifts to ensure a representative sample of patrol officers who attended roll call. The survey was completed by a total of 450 officers (97 in Lowell, 136 in Minneapolis, and 217 in Newark); on-site researchers estimated that less than 5 percent of officers offered the survey refused to answer.⁵

Analysis of COMPSTAT's Adoption

According to the technical perspective, organizations will adopt new structures as a rational response to technical pressures from their environment.⁶ Because police effectiveness is generally

⁵ Respondents were asked to complete the survey before leaving.

⁶ *Environment* refers to “all phenomena that are external to and potentially or actually influence the population under study” (Hawley 1968:330). We acknowledge that police agency environments are complex and differ across jurisdictions, but the environments of large metropolitan police departments, such as those studied here, also share many

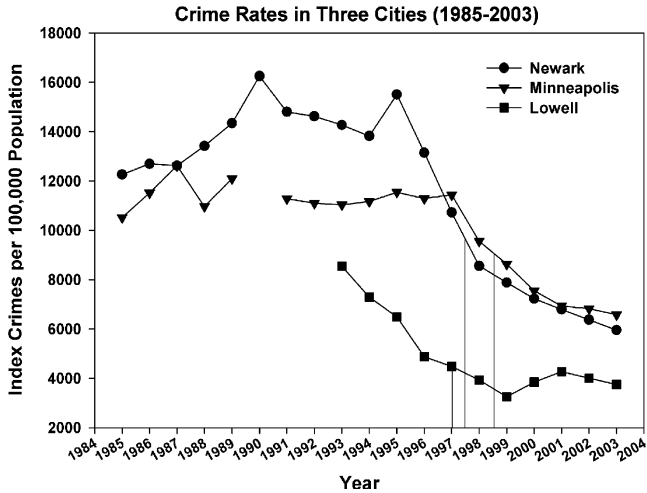


Figure 1. Crime Rates in Three Cities (gaps are due to missing data).

measured in crimes reported to the police or public perceptions of safety, rising crime rates or increases in citizen fear levels will lead police organizations to find new structures that more effectively achieve crime control. From this viewpoint, we would expect the Lowell, Minneapolis, and Newark police departments to implement their COMPSTAT programs in response to “market” demands for improved crime performance.

An analysis of UCR index crimes known to the police (1985–2003) shows that none of our sites had experienced an uncommonly high crime rate in the years preceding COMPSTAT (Figure 1). The crime trends in Minneapolis and Newark were fairly stable over a 10-year period (1985–1995), and while UCR data for Newark show a modest crime spike in 1995, crime was actually in decline for at least a year before COMPSTAT was implemented in these cities. In Lowell, which first began reporting crimes in 1993, the crime rate had been declining for at least four years before COMPSTAT. Nor does this pattern change when we distinguish between violent and property crime rates. An analysis of these categories for each city reveals a similarly stable or declining trend (not shown). It appears unlikely that increasing crime pressures, at least as measured by UCR data, drove these departments to adopt COMPSTAT.

relevant elements including other parts of the criminal justice system, the media, politicians, funding organizations, business associations, urban crime problems, and racially/ethnically diverse communities (Maguire & Uchida 2000:515). Where relevant, we note variance in the environments of our three study sites, but our main focus is on the “central tendencies” of this class of police organizations (Mastrofski & Ritti 2000:186).

Of course, police and citizens' perceptions of crime may differ from what is presented in official sources. Although crime rates might not have increased dramatically, city residents, politicians, or police could have decided that crime levels were unacceptably high or not declining fast enough. This could account for why crime concerns appeared to influence COMPSTAT's adoption in Minneapolis and Newark, but not in Lowell, where crime had been declining steadily. At each site we asked the chief and other key personnel why they chose to adopt COMPSTAT. A Minneapolis supervisor explained that he promoted COMPSTAT to the chief due to the city's high murder rate (confirmed in an interview with the mayor's staff), and UCR data lent some support to this rationale. The mean murder rate for Minneapolis for the three-year-period immediately preceding COMPSTAT's implementation (1995–1997) was 22 per 100,000 population, compared to 16 per 100,000 between 1992 and 1994. Although only a modest increase in murders, this nonetheless represented a 38 percent increase in the murder rate. Similarly, Newark's chief identified crime as a factor in his decision to implement COMPSTAT. He told us he attended a 1996 meeting with community members who told him they "wanted to fight the war on drugs; they wanted us [the police] to clear the corners and deal with quality of life issues." Only a year earlier, frustrations over Newark's crime rate and police mismanagement under a former chief were so high that a citywide referendum resulted in a vote of no-confidence in the police department (Santiago 2001). Lowell's chief adopted COMPSTAT due to its overall fit with his vision for the department, not because of crime concerns. Nevertheless, he acknowledged COMPSTAT's potential for reducing crime as an obvious benefit.

All three departments anticipated that COMPSTAT would help them reduce crime, but from a technical perspective, a rational response requires that key decision makers place high value on reliable technical evidence of COMPSTAT's effectiveness. If it is unclear that COMPSTAT really works in making communities safer, then "external or ceremonial assessment criteria" are probably more important than technical standards of performance (Meyer & Rowan 1977:348). A technical response also requires that each organization consider carefully specific demands in its environment and adapt COMPSTAT accordingly. Because technical structures and activities are supposed to "vary with specific, unstandardized, and possibly unique conditions," there is no reason to assume that a model designed to fit the NYPD and the setting in which it operates will work equally well elsewhere (Meyer & Rowan 1977:355; Meyer et al. 1983:64).

None of our respondents voiced reservations about COMPSTAT's crime effectiveness and the veracity of its supporters' crime

reduction claims—a pattern inconsistent with the tenets of the technical model. When these cities adopted COMPSTAT, there were no studies available offering a rigorous test of its effectiveness, but instead descriptive testimonials affirming its potency based on simple pre/post-implementation comparisons (Kelling & Bratton 1998). A more sophisticated and disinterested analysis noted that a decline in gun-only homicides in New York City (NYC) followed closely on the heels of COMPSTAT's implementation but found it impossible to parse the effects of other police interventions introduced at about the same time: “broken-windows” policing, the infusion of additional police resources, and gun-oriented interventions (Fagan et al. 1998:1322).⁷ Top leaders at our three sites showed no awareness of or interest in considering the implications of such a cautious conclusion.⁸

Moreover, while Bratton implemented COMPSTAT after a lengthy diagnostic of the NYPD and the city's specific crime problems (Bratton 1998:209), none of our sites pursued a similarly intensive process of assessing COMPSTAT's fit with existing organizational structures and tethering reform efforts strongly to the “distinguishing characteristics of [their] appropriate environment” (Crank 2003:190). Some minor changes were made (e.g., less-confrontational COMPSTAT meetings), but all three sites faithfully attempted to reproduce the NYPD model.

The MPD invested the greatest amount of time and effort in planning COMPSTAT, but this was focused on how to implement COMPSTAT *within* the organization, not on matching COMPSTAT to specific external contingencies. Despite long-standing tensions between the police and minority residents, the MPD still implemented the same aggressive law enforcement tactics that had sparked complaints in NYC (Judith Greene 1999). In fact, shortly after its implementation, some members of Minneapolis's African American communities, including NAACP representatives, expressed concerns about COMPSTAT unfairly targeting minorities (J. Walsh 1998). The department, one strongly committed to police-community partnerships, did respond to these fears by holding neighborhood meetings, but not by making fundamental changes to COMPSTAT's structures and practices. Without taking its own

⁷ A number of recent studies have attempted to make inferences about NYC's cluster of interventions, most of which have emphasized the aggressive order maintenance or law enforcement of minor crimes (Conklin 2003; Harcourt 2001:90–4; Joanes 2000; Karmen 2000; Kelling & Sousa 2001) and none of which have been able to distinguish the effects of COMPSTAT from other interventions.

⁸ More recently, most of the evidence available on NYC's COMPSTAT effects has failed to generate a sufficiently reliable knowledge base for social scientists to conclude that COMPSTAT reduces crime (National Research Council 2004:230). See also Rosenfeld et al. 2005.

constituents' concerns about COMPSTAT into account, the MPD jeopardized support among the anxious segments of the community, who remained critical of the program (Stewart 1998; Bos 1999).

The MPD's community outreach efforts clearly sought to ameliorate residents' fears, but the department's reluctance to adapt the NYPD's COMPSTAT to its own circumstances demonstrates the institutional power of this trademark model. This appeal is testimony to the efforts of COMPSTAT's originators, who have been adroit at marketing their model in the United States and abroad (Bratton 1998; Dewan 2004; Giuliani 2002; Webber & Robinson 2003). Since its introduction, crime statistics touting COMPSTAT's contribution to impressive crime reductions in NYC were collected and publicized in the national media (Giuliani 2001; Pooley 1996; Silverman 1997; Tapellini 2001), and COMPSTAT was awarded a 1996 "Innovations in American Government Award" from Harvard's Kennedy School of Government and the Ford Foundation. The implication is that should a department implement a COMPSTAT program that does not closely resemble what COMPSTAT is *expected* to look like (the NYPD model), it risks forfeiting the innovation's legitimating value. Thus it appears that one important rational calculation made by the MPD regarding COMPSTAT's adoption was that the institutional benefit of broadening public legitimacy outweighed the technically undesirable outcome of threatening specific police-community relationships.

The institutional appeal of the NYPD's COMPSTAT is further revealed through the effort these departments exerted in learning what the NYPD did to achieve acclaim compared to assessing claims about the actual crime control efficacy of the NYPD's COMPSTAT program. The departments sent emissaries to the NYPD or conferred with department personnel. Lowell's chief learned about COMPSTAT from a chat with Bratton during a visit to NYC. From Minneapolis, several officers attended a conference at the NYPD and then toured precincts to learn how COMPSTAT operated at the ground level. Sold on the idea, they convinced their chief, a close friend of Bratton, to introduce COMPSTAT. Finally, Newark's chief replicated the NYPD's COMPSTAT model, having contracted with two of its principal architects, Jack Maple and John Linder. Thus, as with the adoption of community policing, the main question was not *whether* to do COMPSTAT, but only *how* (Ritti & Mastroski 2002).

Once adopted, COMPSTAT was promoted by all three chiefs as integral to their department's strategic focus on crime, and their efforts were generally met with widespread approval from powerful sovereigns. The Lowell and Minneapolis chiefs credited much of their city's crime drop to targeted policing through COMPSTAT

(Iven 1999; Powell 1999), and in his 2001 presentation to the Heritage Foundation, Newark's chief stated that COMPSTAT was part of a "100-day plan" to convert his department into a "high-performance, high-integrity program" (Santiago 2001: n.p.).⁹ Although COMPSTAT was met with less fanfare in Newark, both the Lowell and Minneapolis COMPSTAT programs received positive assessments in the local press and were endorsed (in Minneapolis's case very strongly) by each city's mayor (Iven 1999; Powell 1998, 1999).

Our observations of COMPSTAT's adoption at these three sites are consistent with the process of mimetic conformity, a process of organizational copycatting facilitated by a myth-building process that has been called *organizational-institutional reactivity*. This is where highly visible police leadership plays a central role in an innovation's diffusion (Crank & Langworthy 1992:353). Technical pressures seemed to exert some effect in Minneapolis and Newark, but demands for demonstrations of technical performance were sufficiently weak that no site deliberated on whether COMPSTAT actually reduced crime, or how to adapt a program best-suited to its own unique circumstances.

This pattern of wholesale adoption of a reform lacking empirical validation has been observed in the literature on institutional theory. Tolbert and Zucker (1983) observed that early adopters of civil service reform were attracted to it for technical reasons, but these considerations became less relevant to adoption as reform popularity increased over two decades. It was the snowballing legitimacy of the reforms themselves that increasingly accounted for later adopters. In the next section we shift our attention from using the technical and institutional perspectives to make sense of COMPSTAT's adoption toward using these perspectives to help us understand COMPSTAT's consequences. Here we are interested in explaining the operation of each of COMPSTAT's key elements: Did COMPSTAT transform existing police organizations, or was it more form than substance?

Assessment of COMPSTAT's Elements

Mission Clarification

For police agencies to be strategic, COMPSTAT assumes that they must have a clear organizational objective. This runs counter to the ethos of another powerful police reform already well under

⁹ The fact that all three chiefs were featured speakers about their COMPSTAT efforts at Heritage Foundation events attended by nationally visible policy makers and police leaders further indicates the kind of recognition and support that a department stands to gain from implementing COMPSTAT.

way: community policing. Community policing seeks to complicate the mission of the police—to pursue diverse goals and constituencies simultaneously (Jack Greene 2004; Moore 1992). However, COMPSTAT seeks to narrow the organization's goal to a sharp focus on crime control, to set a rational measure or benchmark for success, and to establish a *single* belief system to which all members are strongly committed (Bratton 1996, 1998). When he assumed command of the NYPD, Bratton announced the objective to reduce crime by 10 percent his first year, and 15 percent the next (Bratton 1998:202). In addition to stating one core value and promoting high expectations, the power of the mission as a belief system rests on making its message highly visible and underpinning its symbolic importance with practical mechanisms for its achievement (Bratton 1998:202; Silverman 1996:4).

According to the technical model, patrol officer commitment to the organization's core objective of fighting crime should have been highest in Minneapolis, where a specific strategy was used to guide decisionmaking. The MPD set a precise crime reduction goal to decrease crime by 10 percent in 2000, announced this goal in daily roll calls and weekly COMPSTAT meetings, publicized it in the local press, and reinforced its importance with a day of departmentwide training on COMPSTAT. The mission was further supported with the widespread implementation of a specific strategy: zero-tolerance policing facilitated through the practice of directed patrol. In Minneapolis, line officers were expected to spend their uncommitted time patrolling problem areas identified by the district commander. They were directed to enforce the law for minor offenses in order to reduce serious crime. Although establishing high expectations for performance, Lowell's mission to become the "safest city of its size in the United States" was more visionary and less specific than Minneapolis's. Newark's chief did not establish a specific benchmark, preferring a more general announcement that everyone in the organization was to focus on "crime and service citizen's complaints," and that COMPSTAT was a means of refocusing attention on this "core responsibility."

Although Minneapolis's mission statement was "concise, value-laden, and inspirational" and buttressed with a variety of goal-directed mechanisms to ensure that it could not be dismissed as an empty slogan (Simons 1995:82), rank-and-file officers showed the *weakest* buy-in to the department's redefined mission. Only about half said the organization's crime reduction goal was "very important" to COMPSTAT, compared to more than three-fourths in the other two cities (see Table 1). Institutional theory can help explain this paradox by anticipating conflict between COMPSTAT's simple crime-fighting mission and the diverse set of values and approaches embraced by community policing (Roth et al. 2004:20).

Table 1. The Importance of Reducing Violent Crime to the Department's COMPSTAT Strategy

	Importance of Reducing Violent Crime in City*			
	% Very Important	% Somewhat Important	% Not At All Important	% Don't Know
Lowell	77	15	6	2
Minneapolis	52	38	6	4
Newark	82	10	5	3

Chi-Square	DF	Significance	N
48.626	6	* $p < 0.001$	446

All three departments supported community policing, but Minneapolis had allocated the greatest share of department resources to this approach. This included decentralizing its crime prevention bureau to the districts and implementing a program to make management responsible for officers' relationships with community members (Willis et al. 2004a). Thus, Minneapolis did the most to infuse both community policing and COMPSTAT into its structures and practices, and to the extent that it did so, it created an environment where the competing approaches would create conflict and dissension. Comments from our line officer survey illustrated this conflict. Some officers felt that COMPSTAT devalued important police services, such as fulfilling citizen requests for help. As one officer put it, "Answering 911 calls is not a priority," while another stated, "[COMPSTAT] focuses on the minor offenses hoping for it to turn into something bigger . . . wasting time to stop people for loitering and not answering calls." Others felt COMPSTAT denied residents equal access to police services by allocating more patrols to high crime areas, thereby reducing patrols in other areas.

These statements reveal how community partnerships and service competed with crime control through surveillance and law enforcement, and how answering calls for service, though valuable to community policing, conflicted with directed patrol. Hence, the MPD sent conflicting signals. By contrast, neither Lowell nor Newark had made a significant attempt to reallocate resources to crime control and continued to stress the general service function. By decoupling COMPSTAT from other core operations, the rank-and-file at these other two sites experienced less disconnect between community policing and COMPSTAT.

The undesirable outcome in Minneapolis and the absence of significant change in Lowell and Newark both reveal the limitations of a technical explanation for what we observed. COMPSTAT's emphasis on goal specificity and formalization ignores powerful

political and cultural trends valorizing a multifaceted police mission (Mastrofski 2006). In its narrow restructuring of the police mandate, COMPSTAT clashed with community policing. Moreover, the strength of the institutional environment helps explain why Lowell and Newark failed to change existing structures to support COMPSTAT's crime-fighting focus. These departments coped with the pressure of having to provide a wide variety of police services by decoupling COMPSTAT's focus on crime fighting from the "realities of the workplace" (Wasserman & Moore 1988). In doing so, their officers were buffered from the same kinds of competing demands that were a potent source of frustration in Minneapolis.

Internal Accountability

Bratton reasoned that for a department's mission statement to be effective, there needed to be a mechanism to hold police officers responsible for accomplishing the goals that it espoused (Bratton 1998). Regular COMPSTAT meetings provide a rational inspection and evaluation system for identifying middle managers' primary responsibilities, monitoring their activities, and providing positive or negative consequences for their performance (McDonald et al. 2002).

Our fieldwork showed that regular COMPSTAT meetings did make district commanders feel directly accountable for being well-informed about crimes in their beats and taking action. Across sites, these meetings closely resembled the NYPD. The top brass asked probing questions about crime problems and expected immediate answers. District commanders acknowledged that it was their responsibility to come to COMPSTAT fully prepared with responses to the chief's queries. For example, a district commander in Lowell commented that COMPSTAT was a way of "keeping them honest," since "having things up there on a map can show you how bad things are, and you cannot say, 'Ooh, I missed those reports; I did not see them.'" District commanders at other sites told us they spent several hours poring over police reports and maps in preparation for the upcoming meeting—a significant change from past practices. Our observations also suggested that COMPSTAT's efficacy as an accountability mechanism depended upon district commanders not wanting to perform poorly before their peers and other high-ranking personnel.

These changes notwithstanding, the technical model's promise of sweeping reform was unfulfilled. COMPSTAT's accountability mechanism was limited in its scope and effect on the quality of police work. Its exclusive focus on middle managers, especially at COMPSTAT meetings, meant that lower-ranking officers did not experience a similar degree of accountability. About 40–50 percent

Table 2. The Importance of Holding Officers Accountable for Crimes in Their Beat to the Department's COMPSTAT Strategy

	Importance of Holding Officers Accountable for Crimes in their Beats*			
	% Very Important	% Somewhat Important	% Not At All Important	% Don't Know
Lowell	18	38	38	6
Minneapolis**	7	44	47	3
Newark	11	35	44	10

Chi-Square	DF	Significance	N
15.354	6	* $p < 0.05$	445

**Does not sum to 100 percent due to rounding

of patrol officers responded that holding officers (as opposed to district commanders) accountable for crimes in their beats was not at all important to their department's COMPSTAT program (see Table 2). That this feature was significantly more important to patrol officers in Lowell may be attributed to the department's size. Here patrol officers were more likely to feel visible to the top, hence personally responsible for good performance, than in the two larger departments where responsibility was shared by many.

Furthermore, in none of these departments did COMPSTAT reforms include efforts to get the rank-and-file to respond to the direction of middle managers. It is here in the less visible aspects of organization structure that the accountability chain remained unchanged and tenuous. When asked "How often does your supervisor discuss what happened at COMPSTAT meetings?" 61 percent of those officers we surveyed in Lowell responded "never" (43 percent) or "every few months" (18 percent); for Minneapolis, 34 percent responded "never" (14 percent) or "every few months" (20 percent), and for Newark it was 42 percent (8 and 34 percent, respectively).

In addition to its limited range, internal accountability was a dull instrument for encouraging major improvements in police performance. District commanders were assessed primarily on their ability to provide a response to the chief's inquiries, not on the quality of that response. They demonstrated their competence by providing details of individual crime problems, including where and when crime occurred, and the age, race, and sex of any suspects. In comparison, they spent little time explaining the decisionmaking process that led them to choose a particular crime strategy. Indeed, most of the middle managers focused on having facts and figures at their fingertips for the formal meeting, rather than finding ways to prevent and control crime in their districts on a day-to-day basis. Furthermore, COMPSTAT did not strengthen

control over lower-ranking officers who continued to exercise the same high level of discretion long recognized as a characteristic of police work (Muir 1977; Reiss 1971).

The technical model cannot easily account for these deficiencies, or each department's lack of attention toward making accountability more effective. At minimum, it appears that a rational response to improving control over the quality of police work would require the systematic collection and analysis of crime data. These could then be used as specific performance indicators of the effectiveness of a particular district commander's or police officer's response. However, we did not observe any site using this more rigorous form of assessment. From an institutional perspective, this makes sense. As highly institutionalized organizations, police departments are likely to minimize inspection and evaluation of their work and output. A more rigorous assessment mechanism could well uncover inconsistencies and failures that undermine the organization's legitimacy (Meyer & Rowan 1977:359). Moreover, the discrepancy between internal accountability and actual day-to-day activities illuminates COMPSTAT's considerable ceremonial value, or "dramaturgic" appeal (Manning 2003:123). While none of the respondents at the three sites could recall a district commander actually losing his or her position for subpar performance, this did little to assuage the perception among all ranks that COMPSTAT meetings were punitive. In reality, COMPSTAT meetings were rarely confrontational, but COMPSTAT's reputation sent a powerful message to the community, just as it did with the rank-and-file, that key personnel were being held strictly accountable, even though the results of their efforts were unclear (Manning 2001).

Geographic Organization of Operational Command

To speed communication and to minimize coordination problems between functionally specialized units, COMPSTAT delegates primary decisionmaking to commanders with territorial responsibility (districts). District commanders are also given a larger share of the department's resources to control. Specialist units are placed under the district commander, or arrangements are made to facilitate their responsiveness to the commander's needs. The empowerment of district commanders to make decisions about how best to reach objectives and use resources to "customize and implement their own crime-fighting plans" is a significant change (Silverman 1999:85). Under the traditional model of police organizations, commanders of functionally specialized units have tended to operate independently, with organizational resources divided between them (Reiss 1992).

All three departments had already decentralized geographically after adopting community policing. A commander exercised 24-hour responsibility over each district. However, in the MPD, COMPSTAT resulted in districts being further subdivided into sectors, each of which was headed by a sector lieutenant. Although Minneapolis had attempted to devolve decisionmaking authority farther down the chain of command, district commanders, as with the other sites, were ultimately responsible for overseeing operations and settling disputes within their districts.

All the district commanders believed that they possessed significant autonomy. They were ultimately responsible for choosing and implementing crime strategies, and they rarely had to justify their decisions. In Lowell, the district commanders were largely responsible for redrawing their beat boundaries during the department's bid process, and one district commander described his overall sense of independence as feeling "like the captain of my own ship." Our observations suggested that this sentiment applied more generally to the MPD and NPD.

Though noteworthy, these attempts at streamlining decision-making did little to change the existing command-and-control structure of each department. This is not surprising: strong institutional pressures validate the existing organizational hierarchy, particularly at the highest levels. Because elected officials and the public hold top management accountable for subordinates' actions, administrators are extremely reluctant to cede too much control. Doing so increases the possibility that middle managers will engage in risky behavior, jeopardizing the well-being of the organization (Simons 1995). Across sites, district commanders were encouraged to take initiative, but top management was willing to exercise decisionmaking authority over them, especially when it came to making critical decisions about resources. For example, Lowell's chief, under pressure from the community and the city to increase the total number of walking routes, overturned a district commander's decision to cut one of his officer's walking times in half. Similarly, officers walking the beat were sufficiently important to Newark's top brass that they made it almost impossible to cancel a walking post. In Minneapolis, only the chief or deputy chief had authority to move each district's community response team across districts.

Similar institutional pressures constrained the geographic redistribution of resources and at least in one department contributed to much resistance to change. In Lowell, Newark, and Minneapolis, some detectives were reassigned to the districts where they fell under a district commander's direct command, but nearly all the specialized units, including the central investigations units (CIUs), continued to operate physically out of headquarters and independently from the district commanders. In fact, in Lowell,

detectives had successfully stymied department efforts to decentralize the CIU to the districts. The ensuing compromise had three to four detectives reassigned to each district, while approximately 11 detectives maintained their traditional autonomy and prestige by continuing to handle the most serious cases out of headquarters.

One explanation for why Lowell's CIU was able to resist decentralization is obvious: detectives were interested in preserving their independence. Group interests were undoubtedly an important motivating factor, but these alone do not provide a satisfactory reason for why a small unit could oppose a well-respected, resourceful chief with a track record of reform (Lehrer 2001; Thatcher 1998). It seems likely that the power of Lowell's detectives to resist change derived from a culturally contingent concept of detective units as autonomous and centralized. There are no studies linking traditional investigative structures and practices to crime reduction (Eck 1983; Greenwood et al. 1977; Weisburd & Eck 2004:50), but criminal investigation units are infused with values about what criminal investigations should look like. Getting rid of them makes police organizations more vulnerable to claims that they are "negligent" or "irrational" (Meyer & Rowan 1977:350). Thus whatever technical benefits decentralization might have offered (such as improving communication between investigators and patrol officers), institutionally derived pressures about the "appropriateness" of a centralized CIU did not favor change in Lowell.

In Minneapolis, a greater shift toward geographic management had been achieved, but not by reducing the number of specialist units (as predicted by the technical model). Minneapolis's shift toward decentralization came in the form of *increasing* the level of functional specialization. Under COMPSTAT, the department's CCP/SAFE unit ("Community Crime Prevention, Safety for Everyone"), responsible for problem-solving and community-building, was decentralized to the districts. Furthermore, each district was provided with two new community response teams (CRTs) tasked with tackling prostitution, narcotics offenses, and other quality-of-life crimes. The creation of extra units did not reduce the amount of attention district commanders had to pay to coordination issues. Now they had to pay added attention to coordinating crime responses within their district with the work of their new CRT and CCP/SAFE teams. In addition to increasing potential coordination problems, intradistrict specialization diverted resources from other core functions, especially patrol. Several of the rank-and-file suggested that giving a larger share of the department's resources to the districts undermined organizational performance. One officer commented that COMPSTAT failed to reduce crime since "more and more officers [were] taken off the street for 'special' units,"

while another stated simply, “Too many specialized units—911 calls go unanswered.”

The failure across sites to shift away from a functional division of labor indicates the power of institutional over technical pressures on organizational change. The only department to improve significantly the resources available to district commanders did so by increasing the role of specialized units, albeit at the district level. Such an approach to the geographic organization of operational command failed to reverse the kinds of coordination and performance problems COMPSTAT claims to overcome. This anomaly can be explained by the powerful attraction of specialized units as a highly touted aspect of police work. These units signal to the wider community that police are taking a particular problem seriously, thus playing an important role in conferring legitimacy on police departments (Crank & Langworthy 1992:343–4; Katz 2001).

Organizational Flexibility

COMPSTAT promises a rapid and effective response to incipient problems. Since these are unpredictable and a department's resources are insufficient to staff for all contingencies, the organization needs to be adaptable to changes in its environment. This requires that the organization develop the capacity to change or disrupt existing structures and routines in response to nonroutine work demands.

Our three police agencies showed significant variation in the levels of organizational flexibility, but in general they struggled with the need to create a more flexible organization. In Lowell, the most common practice of reallocating resources outside of normal patterns was for district commanders to do so on an ad hoc or informal basis. This minimized disruptions to department routine. The most likely occurrence was for the district commander to direct a patrol officer or detective away from more routine activities during their shift and to ask them to pay particular attention to a specific area.

This ad hoc reallocation was also a common feature in the NPD and MPD, but these departments had taken greater strides to increase organizational flexibility through reliance on task forces and “taxi squads” (portable in where and when they work). The NPD and MPD's increased capacity for organizational flexibility can be attributed to their larger size, thereby having more resources to allocate to emerging crime problems. In Newark, the department constantly formed and disbanded special task forces to respond quickly to major problems as they arose. The chief and his deputies, not the district commanders, directed these task forces. However, flexibility was greatest in Minneapolis, which had facilitated

flexibility through the assignment of community response teams to the districts, and district-level directed patrol.

Each district was permanently assigned a community response team that did not have a specific geographic assignment but was available to the district commander to use when and where she or he pleased in the district. Freed from responding to 911 calls (unless specifically requested to do so), the CRT provided each district commander with, as one officer stated, “fluidity of resources.” Similarly, an important feature of the department’s COMPSTAT program was directed patrol. District commanders responded to crime patterns by assigning their patrol officers to these problem areas and encouraging them “to vigorously enforce misdemeanor (quality-of-life) crimes.” Given the high priority accorded directed patrol within the department, district commanders were less constrained by the “tyranny of 911” (Sparrow et al. 1990). Consequently, they were able to allocate more patrol resources to proactive and preventive strategies than under more traditional policing models.

These changes indicate, as the technical model suggests, that some organizational routines were changed and structures implemented as a rational response to technical or crime pressures. Following this reasoning, we would expect each organization to have used COMPSTAT in the way that it was intended, namely as a rational mechanism for the more effective allocation of personnel, overtime funds, and equipment between districts. In this way, up-to-date crime data would have driven resource allocation. According to our observations, however, this was not the case. In Lowell and Newark, department resources were divided between districts roughly in proportion to their population and/or the area they covered, while in Minneapolis, multiple measures (calls for service, reported crime, and 911 calls) were used in allocating staff. Since COMPSTAT comprises crime data, Minneapolis was the only department to use, in part, COMPSTAT data to draw beat boundaries.

Nonetheless, none of the departments relied upon COMPSTAT data available to determine the resource allocation process among districts. When a Lowell commander suggested that COMPSTAT be used more “scientifically” (that is, rationally) as a means of allocating manpower, he provoked little response. Our observations suggested that district commanders favored workload equality over the rational, yet discriminatory, allocation of resources in pursuit of the crime control mission. More important, shifting significant portions of the organization’s resources would play havoc with the stability of units, the established hierarchical structures, and the efficient delivery of noncrime services important to the public. Consequently the sharing of officers between districts was infrequent and planned well in advance.

Organizational flexibility was not only hindered by conventional considerations about the distribution of officers to patrol, but it was also shaped by other nontechnical criteria. City politics powerfully influenced officer deployment. A Lowell city councilor expressed concern about drug-related crimes in one area. He argued for increased police visibility in this neighborhood and told the chief and city council that he wanted to see “more cops walking.” Placing a higher priority on walking routes reduced the number of cruisers available in other areas of the city where crime was higher. In addition to the city council’s position on foot patrol, the police department was under pressure from powerful sovereigns, such as the editor of the local newspaper and local business owners, to maintain a high level of police visibility in the downtown area. In Minneapolis, the district that served the downtown business area received a similar level of resources as more crime-ridden districts. We can speculate that this was due to pressures on the department from businesses, politicians, and other special interests. Although we did not observe this directly, one commander was clearly disappointed that the reallocation of resources was so dependent upon these concerns. He could not understand why these decisions relied on “taxpayers as opposed to victims or people who live on a block with drug dealers.”

In sum, random preventive patrol and the calls-for-service apparatus that dominate the organization of patrol work in most urban police departments were largely unchanged by COMPSTAT reform. Even the creation of CRTs in the MPD only afforded a modest increase in flexibility, given how small a percentage of the uniformed force these in fact represented. In order to fulfill its pledge to increase organizational flexibility, COMPSTAT needs to do much more than just decentralize some resources to district commanders. It requires a fundamental change in deeply held beliefs about the efficacy of preventive patrol and standard workload measures that largely determine who will work where and when. It also requires that powerful sovereigns no longer constrain police managers to allocate resources to places and jobs that would not have received priority according to the dictates of the COMPSTAT process. At these sites, COMPSTAT’s technical features did nothing to buffer the organization from the pressure that sovereigns exerted to affect the distribution of services. Absent these changes, institutional objectives supersede the technical requirements of police reformers.

Data-Driven Problem Identification and Assessment

Crime statistics are crucial to COMPSTAT as a more efficient way to structure management decisionmaking, inasmuch as they

shift the focus from selective, anecdotal accounts of individual cases (Safir n.d.:2). This is accomplished through the collection and analysis of timely crime data. These data are also used to reassess police strategies. Underlying this element is the belief that crime can be reduced more effectively through proactive policing and an attack on underlying sources of criminal activity than through arresting perpetrators after a crime has occurred. Data-driven decisionmaking is a highly touted feature of COMPSTAT and one that appropriates elements of another widely recognized and accepted policing reform—problem-oriented policing (POP) (Goldstein 1990; Silverman 1999:123–4).

Before COMPSTAT, these departments merely conducted an annual review of index crime rates collected for the FBI's UCRs. Compared to this practice, all three departments made significant advances in the speed that data were organized, aggregated, and analyzed. The primary sources of crime data were police incident and arrest reports and CAD (computer-aided-dispatch) data. Members of each department's Crime Analysis Unit (CAU) selected the data on those crimes regularly presented at COMPSTAT meetings and entered them into a database using a data management program. These data were generally available the following day. A day or two before a COMPSTAT meeting, the CAU distributed summary tallies and computerized maps to the district commander to help prepare for the upcoming meeting.

The crimes presented at COMPSTAT meetings varied across sites, but they generally included a range of the most serious index violent and property offenses. The data entered by crime analysts included field report number, district, day of the week, and location. Additional information that could also be useful in identifying crime patterns was also entered (e.g., point of entry for a burglary). Minneapolis differed from Lowell and Newark in that within 24 hours of entering a police report, the department mapped the location of the incident on the department's mainframe. District commanders could then access these maps and try to discern crime patterns or hot spots (concentrations of crime in specific geographic areas) as they emerged. COMPSTAT did produce substantial changes in the timeliness by which crime data were made available to police in all three locations, and it heightened sensitivity to the geographic distribution of crime, but it did not otherwise alter the nature of that information in ways that would meet the needs of POP. Crime classifications remained based on statutory definitions rather than those that would facilitate identifying the causes of a problem and devising the most effective interventions (Goldstein 1990:38, 67). Meeting those expectations would have required profound changes in the ways that the organizations gathered and classified crime information, and that

would have also undermined the standardized approach that COMPSTAT took to ensuring internal accountability at its periodic review sessions.

Timely crime data are intended to improve the technical environment of police, moving departments toward an empirically driven problem-solving approach. Still, the capacity of this data-driven approach to produce results does not depend on the availability and impressive presentation of crime data, but on how much these data are used to restructure daily decisionmaking. Police managers should thus know how to analyze crime data; if not, they should be trained to do so. According to COMPSTAT's supporters, learning how well and why a particular strategy works allows the organization to become smarter, more adept at reaching its objectives (Silverman 1999:192). And systematic follow-up helps the organization use its resources more intelligently because it can re-deploy resources quickly once a problem has abated (Safir n.d.:2).

Our fieldwork showed that COMPSTAT data did improve the speed and focus of each organization's response to emerging problems but did not result in the police doing things they had rarely or never done. Under COMPSTAT, district commanders, now highly sensitized to knowing what was going on in their areas, read officer reports daily to familiarize themselves with crime problems, identify crime trends, and mobilize resources. But they did not use the more sophisticated tools available to search for and characterize patterns in crime; they continued to rely on the traditional tools of the trade—personal knowledge of people and places, serially reviewing individual officer reports, and forming impressions directly from these undifferentiated data (Rubinstein 1973; Van Maanen 1974). Daily crime maps were not available in Lowell and Newark, but this did not trouble the district commanders. Many responded that they could map crimes in their heads as they were occurring. Even in Minneapolis, where daily crime maps were available, we observed only one district commander use them frequently.

Taken-for-granted organizational routines and practices were not the only limitations on crime analysis. Middle managers were not recruited based on their analytical skills, and those who were selected were not given much training in crime analysis, nor were they provided with support staff trained in criminology, research methods, statistics, or crime mapping: they were simply expected to learn a complex, new technical task on the job. This explains why we did not observe any district commanders conducting an in-depth analysis of crime data to determine the underlying causes of problems, or *how* to mobilize (that is, deciding exactly what to do). The tendency toward superficial crime analysis that we observed at these three sites was replicated in 16

other police departments observed by the Police Foundation team in brief site visits (Greenspan et al. 2003) and has also been reported in an in-depth case study of problem-oriented policing (Cordner & Biebel 2005) and in a national survey (O'Shea & Nicholls 2003).

Finally, contrary to the technical model, follow-up was not intensive. All three sites relied on using maps or crime statistics at COMPSTAT meetings to identify whether crime activity had stopped or diminished. If a crime pattern disappeared, it was considered resolved. Identifying the short-term disappearance of a crime pattern and conducting simple pre-post comparisons of crime data did not provide rigorous assessment of why a particular strategy worked (Mastrofski 1998:176). This lack of follow-up across sites greatly impeded the capacity of each organization to learn much about the long-term effects of any intervention.

In many ways COMPSTAT had just shifted traditional reactive policing to a higher level. Police did not respond to individual crimes, but they reacted to crimes in the aggregate, producing a "whack-a-mole" phenomenon of placing highest priority on doing *something* quickly whenever a crime spike surfaced (Willis et al. 2004a). The knowledge-based approach, held by COMPSTAT's architects as essential to its effectiveness, would have taken each organization far from customary practice. Although more police are becoming college-educated, the majority are not, and regardless, the vast majority do not have extensive training in crime mapping (National Research Council 2004:90). Significant time and resources would have to be invested in developing managers' analytic skills for any chance at realizing the vision of COMPSTAT's supporters. This extensive training regime would take district commanders from their other numerous and necessary tasks, placing a considerable burden on the organization. And it would disrupt traditional career advancement avenues that place a high value on learning the craft on the street before advancing to higher rank.

As a result of these limitations, the institutionalized response of all three departments was only a weak alignment of data structures with actual activities. This lack of coordination allowed our three sites to use data in ways that corresponded with the powerful institutional myth, one accepted and promoted generally by police themselves, that the police are highly trained and effective crime fighters (Manning 2003). Improvements in data management systems, an intense focus on serious crime and noncrime problems, and the appearance of expert crime analysis signified that COMPSTAT was a sophisticated means of tracking and solving crime when in reality little had been done to transform existing decisionmaking processes.

Innovative Problem-Solving Tactics

The application of innovative responses to crime problems is arguably the most highly publicized feature of COMPSTAT and one that also overlaps with POP (Goldstein 1990; Silverman 1999:123–4). Under COMPSTAT, middle managers are expected to select crime solutions that offer the best prospects of success, not because they are what has always been done, but because a careful consideration of a number of alternatives has showed them to be the most effective (Sherman 1998). This is a radical departure from the traditional model of policing, which is almost wholly reliant on random patrol, rapid response to calls for service, and a standard set of law enforcement powers (National Research Council 2004). The best police response *might* include traditional enforcement tactics, but this should only be determined after considering other possibilities, such as altering the physical environment, mediation, mobilizing the community for social control, and so on. Thus under COMPSTAT police are expected to solve the underlying causes of crime problems by looking beyond their own experiences, by drawing upon knowledge gained in other departments, and by applying innovations in theory and research about crime control and prevention.

The technical model could not explain our findings that COMPSTAT had done very little to change existing crime-fighting strategies. We did witness some innovation, such as Lowell's successful use of a problem-oriented approach to shutting down a dilapidated, crime-ridden rooming house, but this was the exception, not the norm. The vast majority of problem-solving approaches identified at COMPSTAT meetings relied on traditional police strategies—in particular, asking patrol officers to identify suspects and keep an eye on things, saturate an area, and increase arrests. This is consistent with recent findings on problem-solving in San Diego (Cordner & Biebel 2005) and a recent national survey of COMPSTAT (Weisburd et al. 2001). For example, during a COMPSTAT meeting in Lowell showing that the street-side windows of several parked cars had been smashed, the chief asked, "What kinds of things have we done in the past?" His deputy suggested they had clamped down on motor vehicle violations: "You know, chief, sometimes you just get lucky. You catch a kid and they just talk." Similarly, when we asked a district commander in Newark what he had done regarding a spate of violent crimes, he told us, "Good old police work," which included increasing police visibility.

There appeared to be some small but observable differences between these organizations regarding their capacity to facilitate innovation. Lowell's chief strongly encouraged his command staff to share ideas on crime strategies, and Newark task forces provided

a similar forum. Opportunities for innovation were most limited in Minneapolis, where the importance accorded the combination of directed patrol and zero-tolerance policing, and the department's focus on crime numbers (not strategies), stifled the exploration of problem-solving alternatives. Elsewhere it has been suggested that this lack of innovation can be attributed to COMPSTAT itself, most importantly its accountability mechanism (Weisburd et al. 2003; Willis et al. 2004b). This pressures district commanders to identify crime problems quickly and to implement speedy responses. Such an approach discourages the careful sifting of and deliberation about patterns of crime, and a careful review and discussion of the benefits and drawbacks of various approaches.

However, our comparison between the technical and institutional models provides a broader theoretical explanation for the disparity between COMPSTAT's prescriptions and how it was practiced. From a technical perspective, the reluctance of middle managers to use evidence-based strategies instead of those based on their own experiences could be attributed to the underdevelopment of policing's technical environment. Because there is much uncertainty about the effectiveness of various crime control techniques, middle managers would be unlikely to implement the more innovative ones. The trouble with this explanation is that it fails to account for middle managers' failure to take advantage of advances in departmental crime analysis and consult published research on promising alternatives. Mobilizing this knowledge may have provided a better basis for choosing the strategy most likely to produce desirable results than drawing conclusions based on personal experiences. A growing body of evidence suggests that the standard police responses are generally less effective than focused strategies tailored to specific problems (Weisburd & Eck 2004).

Pressure from the highly institutionalized environments of police organizations provides a more compelling explanation for why innovation was so rare. Politicians and local citizens expect the police to respond to crime and disorder immediately, with appropriate, "effective" methods that have received widespread legitimacy regardless of their actual efficacy. Meanwhile, powerful beliefs among police about the value of personal experiences hinder the systematic mobilization of information to guide police practices (Bayley & Bittner 1984). In this context, the time-consuming search for equally unproven but less legitimate alternatives is an extremely unlikely outcome. A police department that pursues experimentation and accepts the risk of failure associated with such trial and error seriously jeopardizes its external support. Thus the current institutional environment undermines the kind of experimentation on which the development of long-term knowledge about what works depends.

Making Sense of Change Under COMPSTAT

We have used the technical-rational and institutional models of organizations to make sense of COMPSTAT's adoption and its uneven implementation in three police departments. Our observations suggest that the emergence of an entrepreneurial police leader in an internationally visible police agency (the NYPD) generated strong incentives to adopt COMPSTAT. Unfortunately, due to funding constraints we had to make do with a rather limited set of interviews that did not enable us to elaborate on other aspects of the national, and especially the local context, that would have made the adoption of COMPSTAT both so appealing and compelling. Future research might explore the origins and forms of the cultural pressures surrounding COMPSTAT that shape the institutional responses of police departments. One approach would be to conduct more extensive interviews with various local sovereigns, to learn what expectations they attempt to communicate to the police and how they go about getting the police to acquiesce. It would also be helpful to learn more about how the police themselves attempt to shape the views of local sovereigns, because the police are far from passive in their efforts to mold their institutional environments. It would be especially useful to learn how adopters of COMPSTAT integrate pressures from professional sovereigns (e.g., nationally influential police leaders) and local sovereigns.

Regarding COMPSTAT's actual operation, those who feel that COMPSTAT provides a mechanism to achieve technical performance and accountability will find some evidence to support their view. Compared to past practices, COMPSTAT did appear to reinforce the police mission on fighting crime, to hold middle managers more accountable for their performance, and to advance the use of crime data in decisionmaking. In other words, there was some evidence of reform. These findings comport with results in a recent national survey (Weisburd et al. 2001). However, these departments' uncritical acceptance of a standard, untested COMPSTAT model will suggest to more skeptical observers that COMPSTAT is merely a shift from one set of institutional forms to another—not an actual reengineering. This skepticism is likely to be deepened by our observations that are far more consistent with an institutional rather than a technical model. The modest changes to mission clarification, internal accountability, and data-driven problem identification and assessment offered the greatest symbolic worth and were the least disruptive to existing organizational structures.

Across sites, the greatest collective emphasis was on incorporating those structural characteristics most likely to resonate with popular sentiments about how to fix the ailments of modern

organizations. Promises of an increased focus on crime, the spectacle of weekly performance evaluations, and impressive accounts of new computer technologies showed how each department was doing *something* to allay crime problems even though existing structures were fundamentally unaltered in ways that may have strengthened the innovation technically. The adoption of such image-relevant structures is precisely the response predicted for organizations operating in a strongly developed institutional environment. Under pressure to conform to institutional norms and procedures, these organizations responded by adopting those characteristics of COMPSTAT that were most likely to confer legitimacy.

Highly visible assessment and accountability mechanisms are currently in vogue for public-sector organizations (Osborne & Gaebler 1992; Hammer & Champy 1993). Over the past decade, a set of strongly held beliefs has emerged about the need for public officials to be more responsive to the citizens they are supposed to serve. By incorporating those COMPSTAT elements most likely to meet rising public expectations about how a government agency should be organized, our three study sites demonstrated they were acting properly. The symbolic worth of these elements is reflected in the comments of Lowell's mayor, whose favorable impressions were strongly influenced by COMPSTAT's visual qualities, especially its maps.

An additional advantage of these COMPSTAT elements is that they could be transplanted in ways that required a minimal amount of change to existing structures. Should they have operated according to COMPSTAT's blueprint, their rational operation would have been disruptive and likely to spark resistance from within the organization. For example, maximizing inspection and evaluation would have (1) lowered officer morale and confidence by violating the assumption that middle managers were acting competently, (2) required substantial changes to civil service laws to facilitate removal from command for consistently poor crime results, (3) demanded the diversion of scarce resources from other core police functions toward creating expertise in data analysis, and (4) disrupted traditional paths for advancing one's career in the department. The successful decoupling of these structures from work activities preserved existing routines and made these organizations less vulnerable to failure in readily observable ways. Where one site failed to organize around its institutional elements and buffer its technical core, it experienced a high level of internal discord. Minneapolis's implementation of directed patrol and zero-tolerance policing conflicted with broader expectations about the "proper" role of the police under community policing.

In comparison to the three COMPSTAT elements discussed above, these organizations placed less emphasis on geographic

organization of operational command, organizational flexibility, and innovative problem-solving strategies—those elements that conflicted strongly with rules embedded in the institutional environment. Powerful myths regarding the efficacy of functional specialization, standard measures for delivering patrol services, and traditional crime responses constrained change under COMPSTAT. Moreover, while the effectiveness of these existing structures at reducing crime may have been unclear, they did produce the functional consistency and temporal stability necessary for the successful operation of a large administrative apparatus. Changing these basic structures to streamline decisionmaking, increase responsiveness, and encourage experimentation may have seemed beneficial, but not if it exposed the organization to high levels of uncertainty and risk. Thus when it came to these three core elements, there were good institutional and technical reasons favoring the status quo.

Aside from accounting for the nature of change under COMPSTAT, institutional theory also explains COMPSTAT's internal contradictions, which cannot be explained by the technical model. Institutional environments are not monolithic but embody a variety of cultural values and beliefs emanating from the wider relational networks in which an organization is embedded. Some of these institutionalized understandings conflict with one another, and as a result, organizations seeking to maximize external support end up incorporating "all sorts of incompatible structural elements" (Meyer & Rowan 1977:356). COMPSTAT's accountability mechanism conflicted with those POP structures that currently enjoy widespread legitimacy among police leaders. The tremendous pressure on district commanders to take prompt and decisive action impeded the kind of time-consuming analysis of crime data necessary to identify the underlying causes of problems, to tailor specific responses to these problems, and to assess the effectiveness of responses. Accountability also shrank the buffer of good faith or will necessary for encouraging district commanders to experiment with new strategies. Innovation is fraught with uncertainty, yet COMPSTAT substantially lowered tolerance for the risk of failure. Strict accountability for performance was a strange and uncomfortable bedfellow with the sort of deliberative, collaborative, and experimental POP processes that presumably make COMPSTAT effective technically, as well as legitimate it institutionally.

Conclusion

These three cases do not necessarily represent the experiences of all departments that have implemented COMPSTAT, but the

patterns we observed do provide some valuable insights into why COMPSTAT operated the way it did and into police reform more generally. Moreover, our findings are consistent with the processes of organizational change in other public bureaucracies (Wilson 1989). COMPSTAT supporters might argue that we have overstated the applicability of the institutional model to our observations, and that a technical model might account for much of what we observed. Perhaps the limitations of COMPSTAT's implementation derive from failures of *these* particular organizations to execute COMPSTAT properly rather than from the dynamics of an institutional model (Silverman 2006). A high degree of variability in implementation would support such an argument. For example, limitations in data-driven analysis and innovative problem-solving may have been overcome by more-effective preparation of middle managers and their staffs to engage in crime analysis and problem-solving. But we observed little variability in our small sample and have noted similar findings in our short site visits to 16 other COMPSTAT police agencies, and in other studies on crime analysis and problem-solving (Greenspan et al. 2003). Of course, police departments *could* attempt to build their structures and operations around COMPSTAT technology, but this would require radical changes. Police managers would be selected and trained based on their ability to engage in applied science, not the craft work of policing, thus altering the long-traditional pathways of career advancement for police leaders. And managers would be held accountable for actually using crime analysis and problem-solving technologies to fashion solutions to problems. That is, there would be a tight coupling of the technology to the core operations of the police service.

Research on other government bureaucracies such as criminal courts, schools, community colleges, and public utilities shows how similarly formidable constraints to those we discuss here limit these organizations' ability to change (Hagan et al. 1979, Ritti & Silver 1986, Brint & Karabel 1991; Hanson 2001). Whereas private companies are driven by the material forces of efficiency, profit, and market competition, public administrators must attend to wider ideological expectations about what the organization should look like, how resources should be allocated, and what goals should be served. In short, "[g]overnment management tends to be driven by the *constraints* on the organization, not the *tasks* of the organization" (Wilson 1989:115; emphasis in original). In response to these multiple, vague, and often conflicting external demands, government bureaucracies, like the police, assign more importance to agreed-upon procedures than uncertain outcomes, exist as loosely coupled organizational systems, and are characterized by decisionmaking practices that tend to be more ceremonial than substantive.

Still, by understanding the processes that make fundamental change so difficult, we can illuminate the conditions in the organization's external environment under which significant change may actually be able to take place. Our finding that improvements in the technical core, although modest, are possible has important theoretical implications. The technical environment did appear to influence COMPSTAT's operation when we consider that its crime-fighting, accountability, and data analysis elements aligned with those aspects of the technical environment that appeared most well-developed. Just as in other industries, recent advances in computer technology and information processing have influenced policing and provided the means to change existing goals, structures, and work processes (O'Shea & Nicholls 2003). Thus our observations suggest that institutional processes do not render all aspects of the implementation of reforms such as COMPSTAT entirely irrelevant to the internal operations of a police agency. While our findings lend considerable support to the institutional perspective, they should also caution researchers from overgeneralizing about the effects of a particular police reform. Both institutional and technical pressures influence police organizations, and the resultant organizational arrangements will reflect the relative strength of these dimensions of the police environment. While we recognize that policing's technical environment remains weakly developed, the changes to these three elements suggest there is some reason to think that police *could* bring the practice of COMPSTAT closer to the technical model's ideal.

What then are the conditions that could alter the findings of future research? We can imagine several that could make a technical model more applicable. First is the need for greater environmental support for a *focused* mission for local police in America. For example, citizens' heightened fears of terrorist attacks on American soil may require local police to reconsider the eclectic role they have traditionally embraced and instead focus laser-like on the new threat. However, American police seem to have simply added this responsibility to the traditional list of crime control, peacekeeping, and service functions. Police leaders' complaints about post 9/11 shifting of federal funding from community policing to terrorist-oriented policing suggests a reluctance to move boldly to focus on a single function (Kerlikowske 2004). This is unsurprising, given the many tasks localities demand of their police (Thacher 2005). Repeated catastrophic acts of terrorism in the United States might change the degree of emphasis local police are willing to place on this mission, but after crises recede, widespread expectations that the police are responsible for a more complex grab-bag of "missions" seem sure to emerge.

A second condition is even more difficult to imagine in the short term: the establishment of reliable and well-understood

crime-control technologies that the police will employ. That is, the technical environment of policing must become much stronger. Social scientists are producing some encouraging findings that suggest the value of certain focused and innovative police strategies, such as hot-spot patrols and problem-solving (National Research Council 2004; Weisburd & Eck 2004). Nonetheless, police leaders either have insufficient faith in these methods or cannot reallocate their resources radically to generate large-scale crime reductions. The vast majority of police resources are still allocated and deployed based on responding to calls for service, patrol officer whim and initiative on when and where to intervene, and investigating crime reports after the fact. Of course, researchers are making progress. Recent systematic studies on crime reduction strategies conducted under the auspices of the International Campbell Collaboration have produced promising results.¹⁰ But science still remains a long way from validating techniques that yield the substantial and highly reliable results that can be achieved in industries that are dominated by technical concerns.

Related to the need for more fully developed and validated crime control methods is the need for policing to immerse itself in the crime analysis technology that makes it possible to select the right police intervention at the given place and time—what presumably makes COMPSTAT a technical innovation. Our observations suggest that crime analysis remained a peripheral feature directing what most police did most of the time. For COMPSTAT to be incorporated into the culture of policing requires restructuring the industry. The traditional bedrock elements of police craftsmanship need to change to those of applied science (Bayley & Bittner 1984; Sherman 2002). Understanding theory and research, using data and statistics, conducting evaluations, and mobilizing and coordinating resources outside the police agency need to become central concerns in the recruitment, training, and socialization of police.

Although some have found certain of these elements ascendant in contemporary policing (Ericson & Haggerty 1997), our observations do not support such a conclusion. Our research on COMPSTAT in three police departments suggests that trends in policing emphasizing institutional responses remain ascendant. But that is not to say that such changes are impossible in American policing more generally. The practice of American medicine has come a long way in overcoming strong resistance to advances in science and technology, but it took many decades, deft leadership, and persistence (Barry 2004), and even still, evidence-based medicine

¹⁰ Campbell Crime and Justice Coordinating Group, <http://www.campbellcollaboration.org/CCJG>.

remains a work in progress (Sherman 2002:222–6; 2004:159). Perhaps it is expecting too much too soon for the achievement of a well-developed technical environment in policing that would result in the kinds of transformations of police practices anticipated by a technically efficient COMPSTAT. Until there are profound changes in police agencies' technical and institutional environments, police departments will continue to be more concerned with appearances than with restructuring in response to what works most effectively. Such changes cannot be achieved in a few years, and if they occur at all, they will require many decades.

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