

THE "BOTTOM LINE" OF POLICING

What Citizens Should Value (and Measure!) in Police Performance

> Mark H. Moore with Anthony Braga



This publication was funded by Grant No. 2000-IJ-CX-K003 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

It is also based on work generously supported by the Alfred P. Sloan Foundation.

This book is published by the Police Executive Research Forum (PERF) as a service to its members and the public. The opinions expressed in this document are those of the author and do not necessarily reflect those of the PERF membership or staff.

This paper is a companion to the 2002 publication Recognizing Value in Policing: The Challenge of Measuring Police Performance, by Mark Moore with David Thacher, Andrea Dodge and Tobias Moore. It is available from the Police Executive Research Forum. For more information on this and other publications see www.policeforum.org.

Copyright 2003

All rights reserved.

Printed in the United States of America

Library of Congress Number 2003108466 ISBN 1-878734-77-6

Cover based on a design by Marnie Deacon Kenney Interior design by Elliot Thomas Grant, etg Design Tables by Tobias Moore

CONTENTS

Acknowledgementsvii
 Introduction: Police Departments as Important (and Accountable!) Government Agencies
Meeting Citizens' Demands for Accountability
 Defining the Mission and Publicly Valuable Dimensions of Policing
 Measuring Performance on the Seven Dimensions

- Measuring Success in Calling Offenders to Account
 Measuring Fear and the Subjective Sense of Security
- Measuring the Level of Safety and Civility in Public Spaces

•	Measuring Fairness and Economy in the Use of Force and	
•	Authority Measuring Economy and Fairness in the Use of Public	
•	Funds Measuring the Quality of Police Service to Clients and Customers	
U	in the Future of Police Performance Measurement: le for Investment	
Reference	es	
About PE	RF	
Related T	itles	

ACKNOWLEDGEMENTS

THIS PROJECT HAS HAD THE USUAL AMOUNT of labor pain associated with its delivery. It would easily have aborted had I not been helped by the generosity of an outstanding staff of attending physicians.

Among them, I am most deeply indebted to Ted Greenwood of the Sloan Foundation who provided the funding and the encouragement that got me started on a sustained investigation of the question of how best to measure police performance. I am also very indebted and grateful to Phyllis MacDonald who managed to keep interest in these ideas alive in the National Institute of Justice, and who was extraordinarily generous with her ideas, comments, criticisms, and (most important) energetic encouragement.

In addition, I owe a great deal to the professional staff at the Police Executive Research Forum who have worked so hard to help these ideas come to life. On one hand, I am deeply indebted to the editorial staff—Martha Plotkin who kept pressing me to finish the document, and Ellen Dollar who helped me complete the document not only with editorial comments and fixes, but also by noting and rectifying some important substantive errors. On the other, I have been greatly encouraged by Lorie Fridell's willingness to take these ideas into the field in the kind of field experiment carried out in Lowell, Mass. That experiment was given the appropriate amount of cover by one of the nation's leading police executives, Lowell's Chief Ed Davis.

Finally, I am indebted to two close colleagues who helped me get this document over the finish line. Anthony Braga utilized his encyclopedic knowledge of policing to help me avoid making important substantive errors. My son, Toby Moore, assisted me once again by developing some simple graphic devices that help my overly complex ideas become a bit more accessible. I hope I will be able to work with these colleagues for some time to come since they always improve the quality of the work I do by an enormous amount.

I hope I have at least partially met the expectations of these people who believed in this project.

INTRODUCTION: POLICE DEPARTMENTS AS IMPORTANT (AND ACCOUNTABLE!) GOVERNMENT AGENCIES

Police departments are significant, even essential, public agencies. They are important in the practical results they try to achieve, the social relations they seek to secure, the specific actions they take as the means to their desired ends, and in the quantity and character of the assets they deploy as they go about their work.

The Police as the Guarantor of Ordered Liberty

As the organizations that enact the state's "monopoly on the legitimate use of force,"¹ the police are counted on to protect life, liberty, and property from criminal attack. In doing so, they help ensure that life will not be, as Hobbes described it, "nasty, brutish and short" (*The Leviathan*. Part i. Chap. Xviii). But the police aim to do more than keep citizens free from threats of criminal attack; they also seek to protect their political and civil rights, and help commerce proceed in an orderly way. In short, the police are a key part of the state apparatus that helps to "promote domestic tranquility" and "assure justice" (Preamble to the U.S. Constitution).

Because we are so fortunate that the United States has both a well-settled political culture and well-developed professional organizations, it is easy to take the police contribution to the creation of "ordered liberty" for granted. But it doesn't take much experience in a foreign country with less well-developed traditions and less competent and honest police organizations to discover how much is lost from the quality of individual, political, and economic life if the police cannot be relied on to be honest, fair, and effective.

What the Police Produce: The "Outputs" of Police Agency Operations

The police are important not only because they embody the state's efforts to achieve important practical results and assure just relationships among free citizens, but also because they generate a particular set of concrete activities and

¹ See, e.g., Weber 1994.

services.² They patrol the streets, respond to calls for service, investigate crimes, arrest suspected offenders, regulate traffic, respond to citizen requests for assistance, handle crowds and demonstrations, and provide a variety of emergency medical and social services (Goldstein 1977). These concrete activities—often involving specific transactions between police employees and citizens—could be described as the "outputs" of policing. By "outputs," I mean the particular concrete actions the police take right at the boundary of the organization.

Viewed from one perspective, these individual transactions between individual police and individual citizens can be important and valued as ends in themselves. Their quality can be directly observed and evaluated. If the police are courteous, resourceful, and skilled in responding to requests for assistance, we can say (as we do about commercial organizations) that the police have succeeded in satisfying their customers. Similarly, if the police are successful in apprehending those they suspect of crimes, and in doing so, respect the rights of those accused, then, without knowing anything more about the consequences of police action, we can say that the police have helped society in *producing justice*—the kind of justice that requires individual offenders to be called to account for their crimes, as well as the kind that requires the police to respect individual rights as they go about their business. Thus, simply by looking at the outputs of policing, we can say something about the value of police operations. We can say that the police have or have not produced "customer satisfaction." And we can say that the police have or have not "produced justice," and done so in more or less just ways.

What the Police Produce: The "Outcomes" of Police Agency Operations

Viewed from another perspective, however, the outputs of policing are valuable not as ends in themselves, but instead as the means to achieving other desired results that occur farther down a chain of causation. To many, it is these results

² The distinction I am making here is between organizations whose value relies primarily in their ability to enforce laws and regulations, and those whose value lies in the production of goods or services. The first might be viewed as legal organizations, the second as producing organizations. With legal institutions, we tend to focus attention on the goal of ensuring fairness and justice. We are not after more material consumption, but rather the just resolution of disputes, and the proper ordering of relationships in society. People are supposed to get what they deserve, and justice is the intended result. We note that such institutions use state power as a key resource, but tend to look past the fact that they also use state money, because we think they should have whatever money is required to ensure the just handling of cases. The logic that guides

that constitute the ultimate justification for policing, and the ultimate basis for evaluating police performance. For example, among the reasons citizens invest in public policing is that we think that police activities and outputs (such as patrolling the streets, responding to calls for service, investigating crimes, regulating traffic, and dealing with social and medical emergencies) are steps along a path toward the production of a set of desired social outcomes. We believe that the police can control crime and reduce criminal victimization by both threatening and actually arresting criminal offenders.³ We believe that the police may be able to save lives not only by controlling crime, but also by reducing traffic accidents, and/or operating as part of a general emergency response system. We believe that reducing the risk of criminal victimization can enhance the sense of security that citizens feel, increase the usefulness of public spaces to citizens, and even raise individual property values. We believe that if the police act fairly and effectively in investigating crimes and arresting offenders, the overall quality of justice in society might be enhanced. And so on.

The *desired outcomes* of policing differ from the *observed outputs* of a police organization in that *desired outcomes* occur farther down a chain of causation than *organizational outputs*. They are more distant in space and time from the police activities that occur right at the boundary of the organization. *Organizational outputs* are the specific things that the police do; *desired social outcomes* are the valuable results that occur in society as a *consequence* of what the police

expenditure decisions and activities is the logic of principle, not of utility. When we think about producing organizations, in contrast, we are much more interested in the relationship between expenditures and results. We focus on precisely how they do their work, and search for improved technologies that can improve the relationship between the quantity and quality of results, and the cost of inputs used to produce those results. The ends are evaluated in terms of their impact on social well-being and individuals' satisfaction, not on justice or the structure of relationships that have been reinforced or altered. Of course, once one looks closely at this distinction, it begins to break down. It is quite possible to look at legal organizations as producing organizations. They are interested in producing results, including but not limited to fairness. They use money as well as authority to accomplish their results. In contrast, many producing organizations in the public sector have to be interested in justice and fairness as well as efficiency and effectiveness. Getting comfortable moving across these conceptual and linguistic divides is one of the challenges in beginning to think accurately and usefully about how we should measure police performance.

³ For a review of the empirical evidence about whether and how the police are successful in controlling crime, see Sherman 1995.

do. (An important implication of that fact is that the police may have more control over *outputs* than they do over *outcomes*, because police organizations control many of the factors that create outputs, while many of the factors that shape outcomes lie outside the boundaries of the organization.)

Outcomes also differ from outputs in that outcomes are often *directly valued* by society as ends in themselves, while outputs are more often conceived of as means to an end. This doesn't mean that outputs aren't valued directly. As noted above, certain characteristics of outputs—for example, the quality of the experience citizens have when they call the police and ask them for service—might be valued intrinsically. But the point is that outcomes are *always* valued as ends in themselves, while outputs are sometimes valued as means to important ends, and sometimes as ends in themselves.

Police Legitimacy as a Means and an End

One particular social result of policing must be viewed simultaneously as an end in itself as well as a means to other desired ends. It must also be viewed as both an output and outcome of police operations. That quality of policing could be described as *police legitimacy*—the standing that the police enjoy in the minds of the citizens and the community that they police.⁴ Such a quality could be measured through surveys that ask citizens about their perceptions of the police. Such surveys would allow a community and its leaders (including the leaders of police departments) to gauge whether individual citizens (differentially situated in the society) judge their police department to be fair, honest, or competent, and whether they feel that they can trust the police to deal fairly and justly with an issue that concerns them.

To a degree, police legitimacy can be viewed as a desired ultimate result of police operations. It is not hard to imagine that the specific quality of individual transactions between police and citizens can, across many transactions, strengthen or erode the legitimacy the police as a whole enjoy with the

⁴ There is a second, different definition of legitimacy. In that definition, police legitimacy lies in the degree to which the police conform their operations and activities both to the spirit and the letter of the law that regulates their conduct. We can call this idea of legitimacy "objective legitimacy" to indicate that it relates to how closely the police conform to external, social and legal standards of conduct. We can distinguish this idea from the more "subjective" idea of legitimacy used above that finds legitimacy not in the relation of the behavior of the police to objective standards, but instead in the subjective feelings that citizens have about the police. In an ideal society, of course, the two concepts would be virtually identical. That is, citizens would form their subjective

citizenry as a whole (Moore 1997). If police services are offered courteously and responsively, then those who receive the services will presumably value the police more than they would if the police services were rude and/or ineffective. If the police do their enforcement work in a way that feels fair to the citizens who are the focus of the police operations, those who are witnesses to them, and those in whose name the police act, then the police are likely to enjoy a greater degree of legitimacy than if they are seen as brutal or callously indifferent to the rights of those suspected of crimes (Tyler 1990). In essence, the thousands of individual transactions that the police have with individual citizens can aggregate up to a social perception of the police as a legitimate or illegitimate force. That, in turn, is valuable as an important social result of police operations. All other things being equal, society is better off if the police are viewed as a legitimate and fair instrument of justice than if they are viewed as illegitimate and unfair.

But it is also important to note that however valuable it is for the police to enjoy legitimacy with citizens as an end in itself, police legitimacy is also valuable as a *means* of becoming more effective in controlling crime. The reason is simply that the success of the public police in preventing and controlling crime depends crucially on assistance from individual private citizens. If citizens do not trust police motives or capabilities, they will withhold their support. They will not call when they are victimized, they will not cooperate in investigations, and they will not show up as witnesses in court hearings. That, in turn,

views of the police based on how closely their conduct corresponded to the objective standards set by the society. And to a great degree, empirical evidence shows that citizens form their views of legitimacy in rough accord with the spirit of the general standards. Citizens want fairness in the sense of like cases being treated alike, and in the sense that the use of force and authority should in some way be proportional to the magnitude and urgency of a given situation. These ideas seem to lie in our shared moral intuitions as well as in our laws. But we must also acknowledge the difference between the objective and subjective views of legitimacy-particularly if we are going to measure the legitimacy of the police. The reason is that the different ideas impose quite different measurement burdens. To determine the subjective legitimacy of the police, we have no choice but to ask citizens. To determine the objective legitimacy of the police, we have no choice but to observe their detailed activities and to compare what we can see to established legal standards. The first requires surveys of citizens. The second requires field observations of police operations. For further discussion, see the forthcoming publication by the Committee on Police Policies and Practices (Skogan and Frydl eds.).

will weaken the overall effectiveness of police operations. As a result, the police have to be interested in the quality of the individual transactions with citizens as both a valuable end and as a valuable means.

In short, the police are important not only because of their general contribution to the state's efforts to achieve justice and tranquility by regulating social relationships, but also because they produce specific outputs and outcomes valued by those citizens who support the police with their tax dollars. Insofar as the police produce certain outputs and outcomes valued directly or as means for achieving valued ends, they can be viewed as "producing" organizations that "create public value," as well as "regulating" or "rule-enforcing" organizations that ensure just and appropriate relationships among citizens (Moore 1995).

The Assets and Resources of the Police: Money and Authority

To produce the valuable results of policing—reduced crime, enhanced security, a certain kind of justice, physical safety, economic progress, and political freedom—the police use resources and assets entrusted to them by the citizens who authorize and support their operations. Police departments are expensive enterprises to create and maintain.

The most obvious cost of the police is the tax dollars used to support their operations. The police chew up public assets as they train intensively to do their jobs; maintain a capacity to respond to calls for service 24 hours a day, seven days a week; meet strict demands for accountability through close supervision; and maintain an expensive infrastructure of cars, communication equipment, and information systems that support their investigative and administrative efforts. The average taxpayer in a metropolitan area pays about \$250 annually for police services, and police departments account for about 10 percent of the budgets of local municipalities (U.S. Census Bureau 1999a). This is more than what taxpayers pay to support parks and recreation, ensure public health, or care for the poor and needy, but it is less than they pay to support public education.⁵

A less obvious cost of the police is the claims that they make on individual liberty and privacy. This cost arises because we citizens give the police something more than our money; we give them the right to interfere with our private lives. As the Philadelphia Police Study Task Force (1987) observed,

⁵ Both police and parks are local functions, while health, welfare, and education often have a large component of state funding. To see total state and local expenditures, see U.S. Census Bureau 1999b.

The police are entrusted with important public resources. The most obvious is money: \$230 million a year flows through the Philadelphia Police Department. Far more important, the public grants the police another resource—the use of force and authority. These are deployed when a citizen is arrested or handcuffed, when an officer fires his weapon at a citizen, and when an officer claims exclusive use of the streets with his siren.

Just as the money that public police use comes from money that would otherwise be used for private consumption, so the extensive authority that the police use in their work comes from the stock of private liberty that we, as citizens, enjoy as a matter of right. We are as reluctant to part with our liberty as we are to part with our money.

The fact that the police can abuse as well as properly use the power of the state makes police departments important for another reason: We all understand in our bones that the police can do as much harm as good. Badly managed, the police can become as great a threat to life, liberty, and property as the criminals from whom they are meant to protect us.⁶

MEETING CITIZENS' DEMANDS FOR ACCOUNTABILITY

Because the police are fundamental state institutions, because they produce much that is publicly valuable, because they use valuable public assets, and because they have the capacity to threaten as well as protect social welfare, it is natural for citizens and taxpayers to demand accountability from them. On one hand, citizens have the *right* to demand accountability. After all, it is their money and liberty that is being used by public police departments to make the community safe and just. As a matter of principle, then, police departments owe citizens an accounting of the resources they use to operate, and the results they produce.

On the other hand, citizens and their representatives might also think it *useful* to demand accountability from their police departments. The demand for accountability becomes an important instrument for creating the pressures and incentives that lead to improved overall performance and fewer egregious errors in police operations.

⁶ For a discussion of problems associated with police corruption and brutality, see Geller and Toch 1995; Delattre 1996.

Citizens' demands for accountability are now satisfied through several different mechanisms (Moore 2002). For example, elected representatives review both the policies and procedures of the police, as well as their performance in particular incidents that become notorious. They try to understand whether the police are using "profiles" to guide decisions to stop suspected offenders, and, if so, whether that is an effective or ineffective, good or bad, just or unjust practice (Ramirez, McDevitt, and Farrell 2000). They review the ways in which the department uses overtime, and make judgments about whether it is being misspent or used appropriately to give the police the flexibility they need to do their work. Alternatively, the media publicize notorious incidents, e.g., the failure to solve an important crime, a botched operation that leads to the escape of suspected offenders, a brutal attack on an offender in custody, and so on. Finally, criminal courts prevent illegally gathered evidence from being presented at trial, and civil courts hear complaints when the police have abused the civil rights of citizens (Walker 1992a).

These ways of holding the police accountable, powerful as they are, have an important weakness. They typically focus attention on *single incidents*, or particular *policies and procedures*. They do not seek to summarize (through numbers and statistics that constitute some kind of a "bottom line") the overall performance of the department as a whole. Furthermore, they provide a picture of the department at one point in time, rather than an account of how the organization has been performing over the long run. As such, these anecdotal methods of holding the police accountable do not work particularly well to meet citizen demands for accountability; they give an uncertain picture of the overall performance of the organization as a whole. Nor do they work very well to create appropriate incentives for managers; they encourage managers to avoid dramatic errors rather than to work hard to improve the average, overall performance of the enterprise.

To hold the police *effectively* accountable, then, citizens, taxpayers, and their elected representatives want and need something analogous to the private sector's famed "bottom line." They need some relatively simple and accurate ways of numerically summarizing the accomplishments of the police, and the price they are paying to produce the observed results.

The purpose of this paper is to take a step toward accomplishing this goal. My aim is to identify the appropriate terms in which the police should be held accountable, and to suggest some measures that would allow citizens to do so effectively. In this, I am trying to take both inspiration and technical instruction from how the private sector makes organizations accountable to their shareholders and owners.

Difficulties in Constructing a "Bottom Line" for Policing

While I take both inspiration and technical advice from the ways in which both investors and society as a whole hold private sector firms accountable, I recognize important differences between public and private sector enterprises. These differences, in turn, pose serious difficulties when one seeks to transfer useful managerial concepts from the private sector to the public sector.

The most obvious problem is that it is difficult to capture the "value" produced by a police department in financial terms. We can measure the *financial costs* of policing as easily as any private organization can measure its costs. We can find out how much we are spending on what activities through standard cost accounting systems. The difficulty comes when we try to assign a financial or economic value to the outputs and outcomes of a police department's activities. Exactly how much is it worth in financial terms (either to an individual victim or the society as a whole) to have made efforts to avoid a criminal attack, or to catch the person who did it?⁷ We lack this information because individuals do not pay directly for these services as they do in the private sector.

A less obvious, but equally important problem is that it is by no means clear what the valued outputs and outcomes of policing are, or should be. Obviously, we are all interested in preventing and controlling crime, and in deterring and apprehending criminal offenders, and we rely heavily on the police to help us achieve these objectives. But the police do more than accomplish these goals (Goldstein 1977). They reassure us by their presence when we are merely afraid, not actually victimized. They keep public spaces—including roads, parks, shopping districts, and places of public assembly-safe and civilized so that they can be used with confidence. And, as a mobile public agency operating on a 24/7 schedule, they inevitably end up providing a wide variety of emergency medical and social services. The value of these activities is not fully captured by either the crime statistics, or the operational measures that the police use to record their activities (Moore 2002; Alpert and Moore 1993). Yet, in evaluating and managing the police, it is important to decide whether these activities are valuable in themselves, or valuable only insofar as they contribute to the crime control activities of the police, or some combination of the two.

Least obviously, but perhaps most importantly, it is not at all clear who should be considered the "customers" of public police departments—i.e., the

⁷ For efforts to estimate the "costs" of crime and therefore, presumably, the value of preventing crime, see Cohen 1987.

people whose values, preferences, or desires should be seen as the important ones to satisfy in managing a public police department. Is the important "customer" of the police the "client" who calls for service and wants a fast, attentive response? Or, is it the taxpayer who is interested primarily in minimizing taxes, and therefore wants a limited police service? Or, is the "customer" the crime victim who wants the police to catch the offender who attacked him and recover his property? Or, are the "customers" those citizens who are swept up in police investigations and operations-those who are stopped and questioned, the suspects who are interrogated, or those who are arrested for offenses? Presumably, these particular "customers" would have preferred to avoid contact with the police altogether! Or, is the "customer" of policing some disinterested "citizen" who has some general idea of what good and effective policing would be, and just wants the police to behave consistently with this ideal? Obviously, individuals in these different positions (or, more precisely, individuals who are viewing the police from these different vantage points) might want and value quite different aspects of police performance.⁸ An important question for those who would measure the value that police create for their communities is which of these different stakeholders' preferences should be honored as the important arbiters of value in judging the overall performance of the police.

In a monograph that is a companion to this paper, I work my way through the questions of who should be considered the important "customers" of the police (Moore 2002). In that paper, I conclude that the most important "customer" of the police, whose values ought to be reflected in police operations, is a particular notion of a "citizen"—a member of society who decides what kind of policing would be valuable to his or her community without considering what particular position he or she will occupy in the society: a victim or an offender or a taxpayer.

In that monograph, I also work my way through a discussion of the many important kinds of contributions that public police agencies can, should, and do make to their communities. An important conclusion is that, while controlling crime is the single most important core function of the police, there are many other dimensions of performance that are valued and should be measured. Those readers who want to understand the basis of the ideas I offer in this paper about how best to measure the performance of the police should refer to that monograph (Moore 2002).

⁸ For a more extended discussion of these issues, see Moore 1995.

In this paper, I take up the difficult task of outlining a set of measures that could be constructed to monitor police performance on seven different dimensions that seem important. In some cases, the measures can be constructed from information that is already available, but not widely analyzed or reported. In other cases, the measures require efforts to collect new information as well as report and analyze old information. I offer these ideas to help communities, municipal leaders, and police chiefs decide whether and how they can move to improve the measurement of police performance, and in doing so, increase the accountability of the police, the legitimacy they enjoy with the population, and their own performance over time.

I begin with a brief review of how we might best understand the mission and valuable purposes of the public police, and how that might be translated not into a single "bottom line" for policing, but instead into a "public value scorecard" that includes multiple measures of police performance. I outline seven dimensions of police performance I think ought to be measured as the important dimensions of value in public policing. I then explore the possible ways of measuring these seven dimensions of performance. I conclude with a summary of the kinds of investments that police departments could make in their measurement systems, offer my views about the most valuable of those investments, and outline a plan for incrementally improving police performance measurement.

DEFINING THE MISSION AND PUBLICLY VALUABLE DIMENSIONS OF POLICING

To many people, particularly those impatient with academic quibbles, the mission of the police is simple and straightforward: it is to reduce crime. Period. Full stop. To talk about any other valued purpose of the police, or to focus attention on the costs required to achieve this objective, is to distract the police from their central mission, and their ability to achieve it.

Defining the Mission of the Police: Strategic Planning in Public and Private Sectors

For most citizens and their elected representatives, there is no doubt that reducing crime is the single most important purpose of the police. In business parlance, controlling crime is job number one.Yet, in my view, to measure the value of the police only in this single dimension is to make a serious mistake.

The most important mistake is to fail to recognize that we have a strong interest in the *costs* that the police impose on us in pursuit of this mission, as

well as the *benefits* we gain from their success. As noted above, the police use up valuable resources in the pursuit of this mission. The resources include money that could otherwise be used for private consumption or for other public purposes such as schools, public health, fire protection, or economic development. All things being equal, we would like the police to focus on keeping costs low, or at least staying within budget, as well as reducing crime and catching offenders.

But the police use public resources beyond money to achieve their results. They use the authority and force of the state—the right of the state to interfere with our individual liberty. Again, all things being equal, we would like the police to focus carefully on just how they use our freedom, as well as how they use our money. Just as it would be wrong to think that private sector firms should maximize revenues without paying any attention to costs, it would be a mistake to monitor the crime control effectiveness of the police without also paying attention to the costs of achieving that result.

A second mistake is to fail to recognize that the purposes of the police—the contributions that they can, should, and do make to the quality of our individual and collective lives—go beyond their ability to control crime. Herman Goldstein (1977:35), for example, defined eight important functions of the public police:

- 1. To prevent and control conduct widely recognized as threatening to life and property (serious crime).
- 2. To aid individuals who are in danger of physical harm, such as the victim of a criminal attack.
- 3. To protect constitutional guarantees, such as the right of free speech and assembly.
- 4. To facilitate the movement of people and vehicles.
- 5. To assist those who cannot care for themselves: the intoxicated, the addicted, the mentally ill, the physically disabled, the old, and the young.
- 6. To resolve conflict, whether it be between individuals, groups of individuals, or individuals and their government.
- 7. To identify problems that have the potential for becoming more serious problems for the individual citizens, for the police, or for government.
- 8. To create and maintain a feeling of security in the community.

An important question for those evaluating police performance is whether these various police functions should be considered potentially valuable results that ought to be measured and managed for—in effect, important components of the *mission* of public policing—or whether they should be viewed as dangerous distractions from a public police department's "core mission" of reducing crime. One can answer this question through two different methods.

The first relies on history and tradition to decide whether these activities should or should not be part of the police mission. In the case of public policing, this method gives an unequivocal answer: such activities have long been considered important parts of the mission and goals of public policing (Monkkonen 1992). Indeed, the man who is widely recognized as the architect of modern policing, Sir Robert Peel, held a broadly expansive view of the police mission. In his view, the job of the public police was to do those things that any citizen would do to make the society safe and just if they had the time to do so (Walker 1992b). More contemporary writers also agree that the functions of the police are broader than simply reducing crime (Goldstein 1990; Bayley 1994; Skogan and Hartnett 1997; Skogan et al. 1999). In short, society has long seen value in public policing that goes beyond crime control. Indeed, it is only relatively recently that the police have given as much emphasis as they have to the crime-fighting aspect of their mission, the ultimate goal of reducing crime, and crime statistics as the proper measure of their performance

The second method for considering whether these wider effects and diverse activities ought to be part of the police mission is to rely on "strategic planning models" that have been developed to help both public and private sector managers find the highest value use of their organizations in particular environments. The idea behind these models is that the right mission or strategy of an organization is not a fixed, permanent thing. It is, instead, something to be chosen by those who own and lead the organization in light of environmental circumstances—both the "task environment" of problems that the police confront, as well as the "authorizing environment" of public expectations and demands of the police (Moore 1995). The challenge for such stewards of the organization is to find the highest valued use of an organization's capabilities in its existing environment, not to assume that its mission and strategy remain what they have always been. It is worth noting, however, that there is an important difference between the way that public and private sector managers are advised to think strategically.⁹

⁹ For further discussion, see Moore 1995. Also Kaplan and Norton 1996:37, or Bayley 1994.

In the public sector, strategic planning typically begins with the organization's mission already defined and established. It is assumed that this is written in some statute, or is sanctioned by some tradition. The goal of public managers, then, is to stay true to that mission, and to build and operate an organization that is efficient and effective in pursuing it. Indeed, strict adherence to the mission is considered the sina qua non of public sector performance. Once a mission is created, it becomes the goal of public sector managers to achieve that mission, and only that mission. The organization's value is judged entirely in terms of its ability to achieve the particular results specified in the mission. If the organization happens to be producing valuable effects outside the boundary of its assigned mission—for example, a public library happens to be useful in providing after-school programs to latchkey children-that effect goes unvalued, unmeasured, and unmanaged (Moore 1995). If the organization happens to have a set of capabilities that would make it valuable in an alternative use-for example, if a national defense radar system happens to be capable of identifying drug smugglers—that is viewed as a dangerous distraction, an unwelcome opportunity for "mission creep" to set in (Dickert 1992). In short, in the public sector, an obsessive focus on mission is considered key to success, and it is only success in achieving the established mission that counts.

In the private sector, on the other hand, maintaining a focus is also considered important. But the focus is on sustaining profitability over time. That result is achieved by finding ways to exploit the "distinctive competence" of the firm in the face of changing circumstances (Andrews 1980). One way to do that is to get better and better at producing the same thing. But that strategy can fail if market conditions change so that consumers no longer want the firm's current product. A different way for a private sector firm to succeed is to engage in constant efforts to "reposition" the firm in its market environment. The aim is to find the best use of the firm's assets and capabilities in changing market conditions. That often requires firms to *stop* producing some things they used to produce, and *begin* producing new products and services that are within their distinctive competence but more highly valued than their old products and services. Thus, the characteristic of a successful private firm is not that it keeps the same products and production processes and refines them over time, but that it keeps changing what it is producing as well as how it is producing its products and services (Peters and Waterman 1982).

Given the importance of being able to adapt to changing environments, the private sector begins with a lesser commitment to a particular set of products and activities. Instead of starting with fixed, well-defined purposes that are used to value the organization's performance, private sector organizational strategists begin with the idea that their task is to find valuable uses of an organization that exists, and has acquired a certain *distinctive competence* (Andrews 1980). To be sure, the firm's distinctive competence is based on the things that the organization is now doing—the particular products and services it now offers, the particular technologies it relies on, the particular managerial systems it uses to manage its work. But the organization's distinctive competence is also seen as something larger and more abstract than what the organization is now doing. It is seen in the ability of the organization to use what it now knows how to do and is good at doing in exploiting new market opportunities. In effect, instead of starting with well-defined purposes and then building an organization that stays confined to those purposes, a private sector manager begins with an organization that has a certain distinctive competence, and then asks how many valuable things could be made by exploiting that distinctive competence (Kaplan and Norton 1996: 37).

Private sector models also take quite seriously the idea that there might be important "synergies" among an organization's diverse "product lines." (These are also called "economies of scope" as distinguished from "economies of scale.") The synergies might lie in being able to take advantage of a production process created for one purpose that turns out to be valuable in an alternative purpose. For example, many organizations that have developed computing capabilities to service a large customer network as part of their core mission—say, the telephone company, a large retail operation, or an airline—have found it relatively easy to convert that capability into the ability to offer credit cards linked to their core business as a new product line. Or, the synergies might lie in exploiting a relationship that is developed with a particular customer. For example, once a designer has developed a reputation with a customer for providing stylish clothes, that firm might go on to produce perfume or other toiletries as part of an effort to support the customer's commitment to a particular lifestyle. Of course, a company can fail by diversifying too much, and straying too far from its distinctive competence. But the point is that there might be many different products and services a company could provide that are within its distinctive competence, and that one product line might help another product line succeed.

To understand the significance of the distinction between these ideas, consider two different views of a police department. In the traditional public sector conception, we might start with the idea that the important mission of the police department is to reduce crime by arresting and threatening to arrest criminal offenders. In pursuit of that goal, we might then build organizations that consist of a very large, well-trained, mobile force, carrying the authority of the state, available to citizens for the price of a phone call 24 hours a day, seven days a week, and able to reach any location in the city in less than five minutes. We might then value that organization only in terms of its impact on crime.

The problem from a public sector perspective, however, is that once society had built such a capability, it would soon discover that the organization's distinctive competence was broader than simply controlling crime or calling offenders to account. The society would recognize that the police department could be valuable in a wide variety of other uses. The force could end up enforcing traffic and parking laws, settling disputes, generally reassuring citizens, and providing both immediate emergency services and referrals to longer run treatment for troubled individuals.

Moreover, there might be some important synergies among these different activities. The relationships that the police could build with citizens by performing some of these other roles could have value in supporting their crime control function. Because the police depend on the help of citizens in controlling crime, it could be very important to build good will among the citizens. Because responding to these other demands helps to build good will, the efforts could be understood as contributing to the overall goal of crime control.

From a private sector perspective, the fact that the capability one had built to control crime had value in other uses would hardly be viewed as a problem. It would, instead, be viewed as a significant opportunity. It would be good news, not bad, that the police were both *valuable* and *valued in uses other than controlling crime*. Moreover, the extent to which there were important synergies among the varied uses of the police would make the varied activities even more valuable.

If the police were to be guided by private sector principles, then, they would not hesitate to respond to the many demands made on them. Each would be considered an opportunity to create value, and an opportunity to build a valuable relationship for the future. So, wisdom from the private sector in helping managers position their organizations suggests there are many reasons for the police to accept the public expectation that they perform these other functions, and to begin managing themselves to ensure that they perform these additional functions well. Indeed, observations such as these provide a large part of the justification for community policing as an overall philosophy or strategy of policing (Sparrow, Moore, and Kennedy 1990).

Seven Dimensions of Value in Police Performance

In the companion paper to this one (Moore 2002), I develop the argument that to avoid embracing too narrow a view of the benefits that the police produce for society, and to recognize that the police impose costs on the society as well as produce benefits, communities should evaluate police departments along seven different dimensions, each observed for the department as a whole, over time, and (ideally) in comparison with other departments. Each of these dimensions is meant to suggest a broad concept invoking some important dimension of value that can and should be used by citizens to evaluate their police departments. To help keep these different dimensions of performance in mind, I have suggested an icon for each dimension. The seven dimensions and their icons are summarized in Table 1 (see next page).

Reducing Crime and Criminal Victimization. The first dimension of performance, symbolized by the image of a wounded victim, is the concept of safety from criminal attack, or reduced criminal victimization. We all want the police to act in ways that reduce the real, objective risks of criminal victimization, i.e., the crime rate. This is the most important and the most distinctive contribution that the police make to our individual and collective well-being. And even though we understand that the police cannot accomplish that important social goal alone, it is important to keep their attention focused on doing what they can do (with others) to achieve that result.

Calling Offenders to Account. The second important dimension of performance, symbolized by an offender with his hands raised, focuses on the police role in achieving a particular idea of justice—namely, holding offenders to account for their crimes. As noted above, many citizens think of this value as being virtually identical with the first goal. In this view, what is important about calling offenders to account for their crimes is that such actions are thought to be the principal way that the police can reduce crime. Citizens believe that these actions deter and incapacitate criminals (Blumstein, Cohen, and Nagin 1978).

It is worth keeping in mind, however, that to many citizens, *justice* is as important as achieving the practical effect of controlling crime. To many, the idea of justice includes the idea that people ought to be held accountable for their crimes. It would be wrong for them to be excused, even if we could be assured that offenders would commit no future crimes. Conversely, to many it seems fundamentally unjust to put people in jail on the basis of some kind of prediction that they will commit crimes, even if such an act would be successful in reducing crime. In short, one kind of public value produced by a police

Table 1. Valuable Dimensions of Policing



department is ensuring the kind of justice that holds individuals accountable for their crimes.

It is also worth noting that there are many things that the police can do to reduce crime that do not necessarily depend on calling offenders to account, or threatening to do so. In recent years, the police have broadened their repertoire of responses to crime problems. They now do a great deal more than threaten offenders with arrest and imprisonment. Through "situational policing," they find ways to prevent as well as respond to crimes. There is not much justice at stake in persuading bartenders in bars that have reputations for aggravated assault to substitute plastic glasses for traditional mugs and bottles. Nor is there much justice in "ticketing" drivers who leave their cars unlocked when there is property to be stolen. But both have been shown to reduce crimes without necessarily producing any additional arrests. They work through mechanisms other than arresting, deterring, and incapacitating offenders.

Reducing Fear/Enhancing Personal Security. The third important dimension of performance, symbolized by a cozy home, is the idea that the police should be interested in reducing fear. Again, many citizens might object to this as a distinct dimension of performance on grounds that this effect will occur as a natural consequence of achieving the first two objectives of controlling crime and calling offenders to account. But what the police have learned (to their discomfort) is that reducing crime is neither necessary nor sufficient for reducing fear.¹⁰ We have learned that the things that trigger fear are different than the objective risks of crime (Skogan 1990). Citizens react to signs of disorder-things that they associate with increased risk, such as public drunkenness, prostitutes openly soliciting, and rowdy groups-rather than to real objective risks of victimization. Furthermore, we have learned that the police can do things that are successful in reducing fear even if they leave the objective risks untouched.¹¹ Because reducing crime turns out to be somewhat disconnected from enhancing the sense of security that citizens feel, whether the police should take responsibility for reducing fear in addition to controlling crime becomes an important strategic question.

¹⁰ Reducing fear is different from reducing crime. See Moore and Trajanowicz 1988; Skogan and Hartnett 1997.

¹¹ For a discussion of how police foot patrols can reduce fear but not reduce crime, see Police Foundation 1981.

Citizens might object to the idea that the police should be responsible for reducing fear on several grounds. First, they might be concerned that if the police focus on reducing fear rather than real victimization, the police might be tempted to fall back on mere "feel good" measures that make citizens feel safe while leaving them no safer than before. Although one can argue that reducing fear is an important objective in itself, it seems wrong to encourage the police to produce that result through any other method than the old-fashioned way—actually reducing crime. Alternatively, citizens could object to including reduced fear as an important measure of police performance on grounds that it is technically difficult to measure subjective levels of fear. Finally, both citizens and the police might object to this measure on grounds that the levels of fear are influenced by many things other than what the police do, and therefore that they should not be held accountable for helping the citizenry feel secure.

I include this dimension despite these objections because I think that the subjective experience of security from criminal attack is one of the most important ultimate objectives of the police. We want the police to produce a sense of security as well as the reality of reduced risk of criminal victimization. If they produce real, objective security, but leave us feeling afraid, they have not accomplished what we really want them to do—allow us to go about our lives with a reasonable degree of security. Further, the relationship between reduced crime on one hand and increased security on the other is complex, not simple. It is important for us to explore the relationship between success in controlling crime and in enhancing security, and we cannot do that if we do not analytically distinguish and separately measure the two distinct goals.

Ensuring Civility in Public Spaces. The fourth dimension of performance, indicated by a park bench, is the idea of safety and civility in public spaces. Again, one might say there is no difference between this idea and those that have come before. But what seems important and distinctive about this idea is that the public police might have some special responsibility for our "commons"—the places where we meet as members of the public with responsibilities to one another, and strong interests in being sure that we will live up to those responsibilities. The crime control function of the police draws them into private, intimate spaces as well as to the public streets. After all, many crimes happen in private domains. But, under our constitutional rules that give extraordinary protections to private spaces, the police enter those private spaces only to enforce society's strictest rules, and only when invited or legally authorized to do so. In public spaces, in contrast, they have a somewhat different role. There, they operate with greater freedom, and focus on lesser as

well as more serious problems. They do so to protect the safety and civility of these spaces, and in doing so, protect the quality of our public and collective, as well as our private and individual lives.

Including this performance dimension is necessary if for no other reason than to recognize and accommodate the important role that the police have long played in producing traffic safety and regulating the use of other public spaces. I would go further, however, and say that such a concept is important because it helps citizens understand the important role the police play in keeping parks, schools, public transit, even shopping malls safe for strangers to be with one another. In today's anonymous cities, where the informal social controls of years past no longer operate, we need the police to provide assurances that the reasonable expectations we have of one another will be reliably filled. Whether such a concept can be measured will be discussed below.

Using Authority and Force Fairly and Economically. The fifth dimension of performance, symbolized by a nightstick, is meant to capture our concerns with the ways that the police use the force and authority of the state. On one hand, it is important to recognize that state authority is one of the most important assets we citizens grant to the police. Indeed, we give them this power precisely because we think it is crucial to their ability to accomplish the important purposes we want them to achieve. We need them to have certain kinds of investigative and arrest powers so they can achieve the objectives of reducing crime, calling offenders to account, enhancing the subjective experience of security, and ensuring that public spaces are civil and accommodating to citizens.

Because I think of authority as an asset available to policing, however, I believe it is important to think quantitatively in terms of *how much* authority police are using as well as whether they are using it properly or not. Ideally, a police department would make minimum use of force and authority in accomplishing its purposes. If it can find means of preventing crime that do not depend on arrests, then that would be more valuable than using arrests to reduce the same number of crimes.¹² If it can find ways to arrest offenders that make less use of physical force and pose fewer risks to defendants, police

¹² Lawrence Sherman once proposed that we impose a limit on how many arrests the police would be allowed to make. His aim was not to save money, but instead to avoid overwhelming the courts and jails. Still, his proposal points to the same idea—that we might assign more value to a police department that kept crime low with fewer arrests, and less value to one that kept crime low with lots of arrests. See Sherman 2002.

officers, and citizens, then those ways are preferred to those that rely on more force or pose greater risks to those involved in arrest situations.¹³

In addition, the fact that police use state authority means that we have to be committed to certain kinds of fairness and equality in the way the police do their work as well as efficiency and effectiveness in the results they are trying to achieve. We have to be sure that there is some *proportionality* in the way they use force and authority—that they do not use much more force and authority than seems necessary to deal with given criminal events or larger crime problems. We have to be sure that like cases are treated alike, that officers are neither suborned nor bribed in their efforts to enforce the law, and that no individual or group is discriminated against (Mashaw 1985).

The commitment to producing objective fairness in the way that the police use the force and authority of the state must also be accompanied, I think, by a concern for sustaining citizens' *subjective* belief that the police are operating in a fair and restrained way (Moore 1997; Tyler 1990). This subjective component of legitimacy is different from the kind of objective legitimacy the police might have by virtue of following proper procedures in all that they do.

Measuring subjective legitimacy, and holding the police accountable for producing it, has many of the same problems as measuring fear. The reason is that subjective legitimacy describes a feeling that citizens have. Many things other than the concrete behavior of the police may produce that feeling. Thus, just as in the case of fear, it is not clear that subjective legitimacy can be objectively measured. Nor is it clear that the police should be responsible for producing it.

Yet, I want to include the idea of subjective legitimacy as a potentially important dimension of police performance for two different reasons mentioned in the introduction to this monograph. First, a higher level of subjective legitimacy is valuable in itself. All other things being equal, citizens would prefer to live in communities policed by organizations they trust to be fair, rather than by organizations they think are biased. Second, subjective legitimacy is valuable as an operational asset to the police in their primary tasks of reducing crime, apprehending offenders, and enhancing security. If citizens trust the police, they will be more likely to cooperate, and that, in turn, will make police operations more effective. If citizens trust the police, the police will allow citizens to cross at least one worry off their lists—namely, that they have to be as afraid of the police as they are of criminal offenders.

¹³ It is this idea that justifies searches for more effective nonlethal weapons, and for more effective means of keeping reluctant arrestees under restraint.

Using Public Funds Efficiently and Fairly. The sixth dimension of police performance, symbolized by a piggy bank, is meant to capture our interests in having the police operate economically as well as fairly and effectively. We want the police to spend as little as possible to achieve their objectives, and, in any case, not to spend more money than they have been authorized to expend. We want them to control discretionary expenditures on such things as overtime and payments to informants, and make sure that they are not spent for purposes other than those that were intended. We want them to experiment with new methods of organization, new kinds of staffing, and new technologies that reduce the costs of providing the services and producing the results that they now achieve. Such aspirations are nothing more than those that we have for any organization in which we are an owner or shareholder.

Producing Quality Service to Clients. The seventh dimension of performance, symbolized by a smiling face, focuses on the quality of service delivered by the police. On one hand, treating this as a separate dimension of performance reminds us that there are many services the police render that cannot be viewed directly as crime fighting. These are the moments when the police respond to the medical needs of heart attack victims, offer shelter to homeless citizens sleeping on freezing park benches, respond to calls of frightened elderly people who need reassurance, or simply provide information to tourists who need directions. Such services are valuable at least in part because doing them well might help the police develop the kinds of relationships with citizens that allow them to become both more effective and more legitimate in controlling crime. But they are also valuable as contributions to social welfare in and of themselves. It would be a shame not to recognize such value when the police produce it.

A more interesting question is whether we should be concerned about the "satisfaction" that those who are "obliged" by the police as well as those who are "served" by the police. Arguably, the "satisfaction" of those who are stopped, cited, or arrested by the police in the course of their enforcement activities should not be a concern. The police are certainly not obligated to make such people happy. But it does seem important to recognize that the police engage in "obligation" encounters with citizens as well as in service encounters, and that the quality of those obligation encounters might be measured in part by whether those obliged felt they had been treated fairly and respectfully. This is important as a matter of right—we want the police to respect the civil liberties of citizens even as they enforce the law. (Indeed, we allow those who have been wrongfully obliged to sue the police.) It could also be important as a way of ensuring that the person being obligated "complies" with the officer's requests

without resistance (which increases the risks and economic costs to everyone). Or, it could be important in producing the overall sense of legitimacy that a democratic citizenry might have for its police. It is very hard for citizens to accord the police much legitimacy when they have been badly treated by the police in a personal encounter. Any of these reasons might be sufficient to motivate citizens to measure the "satisfaction" of those individuals who are *obligated* by the police as well as those who are *served*.

These seven dimensions, I suggest might be useful to citizens as they try to get an accurate and comprehensive picture of the value that public police departments are producing for them as citizens of a local political community. If citizens focus on these dimensions of performance, and demand that the police continually improve their performance with respect to these attributes of policing, that intense outside scrutiny might actually help police managers insist on and get improvements in performance along these various dimensions from the organizations they lead. One can add or subtract from these seven dimensions, of course. But, I would argue that the price of subtracting any one of these dimensions is to ignore a dimension of police performance that is arguably important in weighing the overall contribution that the police make to the society. It would be wrong to ignore the important role the police play in calling offenders to account, wrong to ignore the important col using the authority and force of the state with economy and fairness, and so on.

At a minimum, ignoring one or another of these dimensions means failing to recognize an important value that the police are contributing to the society. At worst, it means skewing the incentives of the police so that the police focus on producing one attractive result at the expense of another. For example, the police could become so focused on reducing crime that they fail to notice the costs they are inflicting on the society, and the hostility they are generating. Alternatively, the police might become so afraid of corruption or other abuses of their power that they forget all about the important jobs of controlling crime and calling offenders to account.¹⁴

¹⁴This might seem unlikely, but an anecdote from the NewYork City Police Department (NYPD) following the investigations of the Knapp Commission illustrates how officers can adopt this perspective. An NYPD police captain who attended the Kennedy School recalled an incident when he was a sergeant and observed two patrol officers standing idly on a street corner. He asked them what they were doing. They quickly said, "Nothing, sir!" as though inaction was the preferred state of the NYPD.

On the other hand, the price of *adding* dimensions of performance to this set is to increase the overall conceptual complexity of the system, and the costs of measuring and analyzing police performance. Because a measurement system works best when it is conceptually simple and straightforward, one cannot continually add measures without hurting the performance of the measurement system itself in guiding police performance.

In the end, then, I think it is useful to think of a police department as an organization that

- reduces crime,
- calls offenders to account,
- reduces fear,
- ensures civility in public spaces,
- uses the force and authority of the state both economically and fairly,
- uses public funds efficiently and fairly, and
- delivers quality service to its clients, both those who call the police, and those who have duties imposed on them.

A Bottom Line or a Public Value Scorecard?

The fact that police departments can produce many different kinds of value for citizens and the communities in which they live makes it technically difficult—indeed, virtually impossible—to construct a simple "bottom line" for policing. By a "bottom line," I mean a single, simple, summary measure of the net value that the police create for their communities. The difficulty in creating a simple bottom line for policing lies in four important observations about the value produced by public policing:

- First, the police produce value along *multiple dimensions of performance*, not just one. While much of the value of policing lies in their efforts to prevent and control crime and call of-fenders to account, police departments also make important contributions to reducing fear, guaranteeing the safety and civility of public spaces, and providing emergency medical and social services.
- Second, the important dimensions of performance sometimes *seem to conflict with one another.* It seems that the goals of reducing crime and enhancing security conflict with the goals of

reducing the financial costs and overall intrusiveness of police operations; it seems we cannot get more of one valuable effect without taking a loss on some other valued result.

- Third, the different dimensions of performance seem *difficult to measure* in both objective and quantifiable ways. It is not obvious that one can objectively measure subjective experiences such as fear, nor such an abstract concept as the use of state force and authority.
- Fourth, even if one can find ways to develop measures or indicators of these different dimensions of performance, it is impossible to know how to add the positive and negative effects together to get a net bottom line *because the values are incommensurable*. Even if one could measure units of crime reduction that could be achieved by allowing the police to use somewhat more coercive and intrusive investigative methods, it is not clear how one could decide whether such a change was, on balance, worth it.

The good news, however, is that these difficulties do not make it impossible to construct a performance measurement system for policing that can serve the important functions of helping police departments become accountable to their citizen/owners, and improving their performance over time. Indeed, on close examination, it turns out that private sector firms have faced and resolved similar problems. All we have to do is borrow their experience in constructing measures for policing.

Take first the issue of multiple, and potentially conflicting values. We sometimes imagine that the goals of private sector firms are comfortably aligned. We say, for example, that private sector enterprises seek to maximize profits as though that were a consistent goal. But profits are themselves a function of two values that, in principle, compete with one another. On the one hand, the firm wants to generate significant revenues by making and selling products at high prices. On the other hand, to *make* money, they have to *spend* money and incur costs. They have to buy materials and pay employees to build the products and services. They have to buy advertisements to make their products known and desirable. They have to pay for outlets, each with their own expensive inventories, to ensure that customers will find their products accessible. They have to decide how much quality to put into their products, and the kinds of guarantees they are willing to offer. And so on. Each of these decisions is designed to *make* money, but each decision also *costs* money. In making these decisions, they often do not know how much any of these costly decisions will add to their revenues, and whether the expenditure will be adequately rewarded with higher prices or brisker sales. But they know for sure that their expenditures will show up negatively as costs when it comes time to calculate their profits. And that seems inconsistent with the goal of maximizing profits.

The way we harmonize the values of increasing revenues on one hand and reducing costs on the other into a simple, coherent statement of purpose is by specifying a particular functional relationship between these two competing values; namely, profits equal revenues minus costs. The goal of a private sector firm is not really to maximize revenues nor to minimize costs; it is to maximize the *difference* between revenues and costs.

In principle, in policing, we can find things that are analogous both to revenues and costs. The equivalent of revenues are the valuable results of policing such as reduced crime, more offenders called to account for their crimes, enhanced security, and improved services to callers. The equivalent of costs are the financial costs of providing the service, and also the amount of state force, authority, and scrutiny engaged to produce the results. The functional equivalent of "profit" would be the "net public value" produced. That would consist of the difference between the value of the desired results achieved by the police on one hand, and the costs of producing it on the other.

In principle, then, all we need do to create a functional equivalent of profit for the police is to specify a function that describes the rate at which we are prepared to exchange units of performance on one dimension with units of performance on other dimensions; more concretely, how much we would be willing to pay in both money and diminished liberty to secure a 10 percent reduction in crime, or a 20 percent increase in the level of security we all feel. The way that we can transform a set of multiple measures into a single "bottom line" is simply to write down a "social utility function" that describes not only in what direction we value different dimensions of police performance (crime rate down, financial costs down, use of authority down, sense of security up), but also at what rate we are prepared to trade units of improvement in one dimension to another (Hammond, Keeney, and Raiffa 1998).

While such a thing is logically possible, as a practical matter, constructing a clear "social utility function" that values the different dimensions of police performance relative to one another is extremely difficult. It is particularly hard to do in the abstract. Typically, the way that we make such choices is not to decide in advance how much we value each of the dimensions of performance. Instead, we react to different conditions we confront, and move incrementally toward a satisfactory conclusion. At one moment, it seems that we are experiencing too much crime and insecurity, and we ought to be willing to give up more money and freedom to enhance our security. At other times, we feel pretty secure from criminal attack, but have become a bit indignant about corruption and/or brutality in our local police department. In short, it is only by reacting to certain conditions that we can reliably learn what we, as a polity and community, value (Lindblom 1965).

But this discussion makes it clear that the problem in constructing a "bottom line" for policing is not just multiple and potentially conflicting values. It is also the importance and difficulty of 1) being able to measure real performance along the different dimensions of value, and 2) finding a currency that can be used to make the values commensurable. Because revenues and costs are both easily measured in the private sector, and because they are measured in the same currency, it is relatively easy to measure the important relationship between these variables. We can simply subtract the costs from the revenues to determine the profitability of a business enterprise.

This is much harder in policing. We can calculate *financial costs* of policing readily enough. But it is much more difficult both to *quantify* and *monetize* the valuable *results* of policing. And it is extremely difficult even to quantify, let alone monetize, the value of such abstract ideas as the use of force and authority, or the overall fairness and legitimacy of the police. We cannot simply tote up the amount of value we got from policing and subtract from that value the costs we incurred to produce the result and show the net value. In short, the problem of measuring police performance is not just that there are multiple values, not just that they seem to compete with one another, but also that they are hard to measure and combine together in a simple bottom line.

The difficulty of finding a common metric to use in relating the different dimensions of value to one another may seem to be an insuperable obstacle to efforts to construct a useful set of police performance measures. But the problem of incommensurability is less important than it might first seem. While we cannot measure one variable against another, *we know in which direction we would like each variable to move.* That is, although we can't measure in financial terms the *net* value we get from spending more of our money and liberty to reduce crime, we know that, all other things being equal, we would like to have less crime, and spend less money, and use less forceful and intrusive measures. In short, we know what constitutes an *improvement* in performance, even if we

don't know whether on balance the results we are getting are worth more than the costs we are expending, nor whether we are operating "optimally."

Now, to many, it seems unreasonable to imagine that we could simultaneously improve on all dimensions of performance. It seems that, in principle, there ought to be tradeoffs among at least some of these values. We cannot simultaneously have less crime, more civil liberties, more offenders called to account for crimes, less use of force and authority, and more fairness.

Yet it is important to remember that that is precisely what Detroit thought when it was challenged by Japanese competition to produce cars that were both higher quality and lower cost. They thought there was a tradeoff between quality and cost, that they would have to decide whether they wanted to produce high-quality, high-price cars, or lower quality, lower priced cars. They thought they couldn't produce a high-quality, low-cost car.

What they discovered, however, when they began looking closely at the ways they were working, was that there were many things that could be done to improve their performance on *both dimensions simultaneously*. They found that they could produce "quality for free." They didn't need to argue about whether quality or cost was more important; all they needed to do was examine and change their processes to produce more of *both* valuable results.¹⁵

This means that while in *principle* there is always a tradeoff that must be faced among competing values, in *practice* that tradeoff might not exist. While one has to make such choices when one is operating with a fixed set of operational procedures or technologies, it is possible that there are better methods that would allow the organization to perform better on both dimensions simultaneously. The challenge in holding organizations accountable and helping improve their performance is to find ways to keep them focused on improvement *on as many dimensions of performance as seem valuable*.

Thinking and acting in this way might be a valuable approach to measuring police performance as well. Instead of arguing about how much we should value crime control over the protection of civil liberties, we might be wise to concentrate our efforts on developing operational policies and procedures that could do better than our current approaches in producing *both* valued results. Ideally, a high-performing public police department would keep improving with respect to *all* these values; i.e., it would find ways to be more cost effective in reducing crime, calling offenders to account, reducing fear, and providing

¹⁵ I am indebted to my colleague Robert Leone for this observation.

responsive services to individual callers, as well as to economize on the use of force and authority, and earn support and legitimacy for the way that they operate with as many members of their communities as possible (Senge 1990). An ideal performance measurement system would focus public and organizational attention not only on the extent to which the police department is achieving these values, but also whether and how it is improving over time.

While it seems difficult to rely on many nonfinancial measures rather than the single financial measure represented by the bottom line, we ought to take heart from the fact that private sector companies are shifting away from simple measures of profitability, and increasingly relying instead on a large set of nonfinancial measures organized in a "balanced scorecard" (Kaplan and Norton 1996). The "balanced scorecard" includes measurements that focus on the efficiency of operational methods and the quality of customer and employee relations, rather than single measures of financial performance. They focus on these measures because the measures help them look behind their financial performance to find the reasons for their success, and keep them focused on the things they need to do to ensure their success in the future. Presumably, there are all kinds of complicated, unknown tradeoffs among these different measures. But the important thing about each of these measures is we know in which direction we would like them to move.

Following the lead of the balanced scorecard in the private sector, I think that we could use the seven dimensions of policing as a "public value scorecard" with which citizens could monitor police performance. The ideal performance measurement for a police department does not record performance on only one dimension, but reliably measures multiple, nonfinancial dimensions of performance.

So, the crucial difference between accounting for organizational performance in the private and public sector is not the fact that one has to move from a single financial measure to multiple, nonfinancial measures. The private sector has to do this, too. The greater problem is finding ways to quantify the organization's performance on the different dimensions of performance. That is the effort we make below.

MEASURING PERFORMANCE ON THE SEVEN DIMENSIONS

At a conceptual level, the seven dimensions of performance answer the question of what citizens *should value* in policing. For these ideas to be practically useful to citizens in holding the police accountable and guiding improvements in police operations, however, it must be possible to develop concrete performance measures for these conceptual dimensions. Ideally, it would be possible to construct just one, perfect measure for each of the seven dimensions, and that measure would say precisely how well the police were performing with respect to that dimension of performance. Fortunately, however, this ideal state is not a necessary condition for constructing practically useful measures of police performance. (If it were, we would be in real trouble, for this seems well beyond our current capabilities or future imaginings!) In fact, for each conceptual dimension of value, there might be several operational measures that could be used to suggest whether the department was getting better or worse on that particular dimension of performance. In short, we don't need one precise measure for each dimension; we can get along with several less precise measures that might give us some rough sense of whether things are getting better or worse with respect to that particular dimension of performance.

Because citizens have long held the police accountable for their performance, a significant amount of work has already gone into the construction of operational measures for some of the most important dimensions of value in policing. Importantly, however, the measures and systems that now exist are rooted in a relatively narrow (some might say properly focused) view of the important ends and means of policing (Alpert and Moore 1993; Moore and Poethig 1999). These established measures include

- 1) crimes reported to the police,
- 2) crimes cleared by arrest, and
- 3) (more recently) response times to calls for service.

It is clear that these measures reflect a particular strategic idea of policing. The end of policing is to reduce reported crime. The principal means for achieving this result is making arrests of offenders through investigation, patrol, and rapid response to calls for service (Alpert and Moore 1993; Moore and Poethig 1999).

It is also clear that these measures can and should be incorporated in the broader framework I have suggested here. Reductions in crimes reported to the police can be an important indicator of police effectiveness in reducing criminal victimization. Increased success in solving crimes can be an important indicator of police success in producing a certain kind of justice—the kind we associate with calling offenders to account. We can view rapid response to high-priority crime calls as an element of high-quality service to citizens who call for police assistance, as well as a feature of policing that we think increases the likelihood that they will succeed in calling offenders to account. The important difference between these three measures and the framework I am developing, however, is that these three measures neither fully reveal the value produced by police departments, nor exhaust our curiosity about police performance. For this reason, I propose that the police report *additional* measures to present an accurate picture of the benefits they produce and the costs they impose on local communities.

The data to construct many of these additional measures already exist. The new work, then, is often nothing more than to collate existing data into reports, and make the reports more regularly and widely available. This strains the reporting and analytic capacity of a police department (as well at its political courage), but does not unduly strain its pocketbook.

Other measures, however, require *new* data collection efforts by the police that go beyond their current administrative practices. This requires the police to spend money to design, build, and continuously operate new systems of data collection and reporting. This is a more ambitious and expensive enterprise, but potentially quite rewarding for police departments that wish to be accountable and to improve their performance.

In discussing how the various dimensions of performance could actually be measured, I will point out where I am talking about using *existing* measures, and where I am proposing *new* measurement systems. At the end of the section, I will indicate which of the proposed *new* systems of measurement would be particularly valuable and not too difficult or expensive to develop, and which of them would be useful but less valuable and more expensive. That should give citizens an "investment schedule" to consider as they reach for improved—more complete, more accurate, more useful—measures of police performance.

Measuring Criminal Victimization

Because reducing crime is the core function of the police, citizens have long demanded that the police develop and report some measure of their success in achieving this objective. They want to know how much and what kinds of crimes are being committed in their communities, and whether the objective risks of criminal victimization are going up or down.

Historically, the easiest way to answer that question was simply to record the crimes reported to the police. This local interest was given a federal boost in the 1930s when the Federal Bureau of Investigation (FBI) sought to develop a picture of the national crime problem (Senna and Siegel 1993). Instead of developing a separate system for collecting this information at the national level, the FBI decided to rely on the network of police agencies that already existed. To make the information useful at the national level (and incidentally, to help citizens of local communities compare the performance of their police with the performance of others), it was necessary to standardize (at least to some degree) the definition of crimes, and the organizational systems that ensured the consistency and validity of the data collection efforts. This was a delicate matter because it required the federal government to impose standards on local governmental agencies.

Nonetheless, over several decades, the system of Uniform Crime Reports (UCR) was developed.¹⁶ This system is in place today, and gives us detailed and consistent information about crimes as they are reported to the police. It provides basic information on levels of crime reported to police jurisdictions throughout the country. It has been operating more or less continuously and consistently for more than half a century. It allows each city to analyze levels of crime at citywide, district, and even street address levels (Sherman, Gartin, and Buerger 1989). It is a cornerstone, but not the entire edifice of a useful system of police performance measurement.

In addition, the FBI in collaboration with the federal Bureau of Justice Statistics recognized the limitations of the Uniform Crime Reporting system. As a summary or 'snapshot' of only the most *serious* crimes known to the police, it provides limited information (although it does give an easily understood glimpse of crime). During the 1980s, a new system was developed to address the new information needs that both police and policy makers had for more comprehensive information. This system, the "National Incident Based Reporting System" ("NIBRS") collects incident-specific crime data on a wide range of offenses.

The data reported to state and federal authorities contains information on the date, time and location of the incident; basic demographics on victims, offenders and arrestees; and specific information on the type and value of property stolen and recovered. With this detailed data set, more useful types of administrative analysis are possible. The system, in contrast to the old summary UCR system, also allows updating of already submitted data as new information comes to the attention of the police (property recovery at a later date, arrests that occur after the initial data submission, etc).

¹⁶ For critiques of the UCR system at conceptual and operational levels, see Biderman and Lynch 1991.

By 2002, according to the FBI,¹⁷ 22 state crime reporting programs were certified by the FBI, signifying that they have met the Bureau's data quality standards for the collection and submission of local agency data to the national program. Within these 22 states, 3,479 police agencies were submitting all of their crime data in the NIBRS format.¹⁸

As noted above, the most important limitation of these ways of measuring objective risks of criminal victimization is that they measure only those crimes that are reported to the police. The most important supplement to this measure of performance would be the addition of citywide crime victimization surveys (Biderman and Lynch 1991). This new measurement system would provide a more accurate picture of all crimes—not just those reported to the police. While there are some important practical and technical difficulties in using victimization surveys to produce accurate estimates of criminal victimization, used in combination with the UCR data,¹⁹ they get us closer to an estimate of real criminal victimization than the UCR alone (Biderman and Lynch 1991). (Note that observed differences between crimes reported to the police on one hand, and crimes reported on victimization surveys on the other provide an indirect measure of the confidence that citizens have in police responsive-ness—particularly if we record information about the reasons that citizens give for not reporting their victimization to the police.)

The principal reason to resist citywide victimization surveys as a supplement to the UCR data is simply cost. Importantly, the police get information about reported crime as a routine part of their operations, just as business firms get information about the value that customers assign to their products and services as a routine part of their business. Of course, it takes effort to *record* the information, even more to *organize* it in specific reporting formats, and still more to *analyze* the reported crime numbers to determine what is happening to crime in a given community. But one doesn't have to pay extra money, or organize special efforts to *collect* the information on reported crime in the first place. It comes in willy-nilly as a result of routine operations.

¹⁷ Telephone conversation by Daniel Bibel with Mr. Christopher Enourato of the Education, Training and Support Unit, FBI, Clarksburg, West Virginia, April 8, 2002.

¹⁸ For more information on the efficacy of NIBRS, see Faggiani et al. 2002.

¹⁹ To simplify matters, all references in the text to the UCR would also apply to NIBRS.

A victimization survey, on the other hand, has to be specially designed and fielded. The costs of doing this will be highly visible—at least in part because it is most commonly done through a contract rather than through department personnel. Of course, once one has designed the survey, the department can simply repeat the effort over and over again and make it routine. Moreover, there is no particular reason why a unit of the police department couldn't be charged with the responsibility for conducting the survey on a routine basis. This suggests that victimization surveys could eventually come to look as routine to the police as the reporting of UCR data now does.

But the fact still remains that if local police decide to survey the general population to determine victimization rates, they will have to make an explicit expenditure decision to do so. That decision will be highly visible. Its most immediate effect is nothing more than increased information, not any immediate operational impact. Absorbing a significant cost that produces information but not certain service gains is a hard pill for most communities to swallow. Why spend money just to collect information when one could spend the same money to provide higher levels of service?

There is an answer to this question, of course. It is simply that we cannot be sure that the police department is, in fact, providing useful or valuable services if it does not collect information about the impact that the organization is having. Moreover, it is quite possible that the increased focus and productivity that could be produced if we had accurate information about results (produced through some combination of increased effort due to increased accountability, and increased performance due to continuous learning about what works) would more than pay for the cost of collecting and analyzing the new information. But we cannot be sure that either of these claims is correct. So, an investment in this information is something of a gamble.

It is also worth noting that the private sector pays an enormous amount of money to produce information about their operations and results. They now measure quite intensively. And they do so despite the fact that they routinely get for free the crucial information that is missing from police departments—namely, the revenue information that records the value that individual consumers attach to the products and services the private firm offers.

Given that police departments are missing information about the impact they are having as well as some important characteristics of the ways they are now operating, one might expect police departments to spend even more on measurement than private sector enterprises to compensate for this weakness. To meet the demands for accountability, to reveal the value of what they are doing, and to learn how to perform better, they have to work harder at gathering information than private firms do. And yet, it seems that police departments actually spend less on measurement than private sector firms.

None of this makes the political decision to spend money on special efforts to measure police department performance any easier. Such expenditures still look like wasted overhead rather than value-creating operational expenditures. Moreover, the problem gets worse if one plans to use these surveys not on an *ad hoc*, one-time basis, but instead as a regular part of a performance management system that monitors conditions over time, and at the district level as well as the citywide level.

To go from a one-shot survey to a regular series, one has to make a much different kind of commitment. The commitment to do a *series* of such surveys over time (say five to 10 years) increases the anticipated costs of a one-time survey by approximately the number of years one plans for the series (in this case, by a factor of five to 10). If one wanted the information to come in on a quarterly basis so that there would be more consistent and rapid feedback about how the police were performing, that also would increase the costs by a factor of four for any given year, and by a factor of 20 to 40 for the five- to 10-year series. In short, the commitment to continue the surveys over time, and to do them more frequently, transforms a small *project* decision into a large *investment* decision—analogous, perhaps, to buying a new computer system.

A commitment to use the surveys to measure levels of crime at *district* as well as citywide levels, to allow citizens and department management to make comparisons across neighborhoods within a city, also increases the total number of people who must be surveyed each year, and does so by a substantial amount.²⁰ If, for example, one wanted to have a sample of about 250 people in each of five districts to produce a reasonably accurate measure of the most

²⁰ One of the major ideas in community policing is that police ought to respond to problems that are smaller than citywide problems, but larger than individual, one-time problems. That is, they ought to respond to problems affecting particular neighborhoods within the city. To a degree, the police are administratively set up for looking at neighborhood-level problems. They have geographically defined units at the "district" or "precinct" levels. Unfortunately, the boundaries of these administrative units do not always correspond to citizen perceptions of their neighborhood boundaries. In any case, to be able to both respond to neighborhoods, and to hold district commanders accountable for performance, it is generally valuable to look at conditions and activities for areas smaller than the city as a whole. This always entails additional costs.

common crimes, then the total number of people interviewed would be 1,250 people. If one wanted to look at 10 smaller districts, the total number of people interviewed would increase to 2,500. So, the difference in the cost between a one-shot citywide victimization survey on one hand, and a continuous victimization survey that has enough resolution to tell us what is happening at the district level, is probably two orders of magnitude—or roughly 100 times more expensive. One could pay \$60,000 for a one-time citywide survey, and \$6 million for a continuous, district-level survey.

For this reason, the idea of using a continuous victimization survey capable of showing performance at the district rather than the citywide level is probably unfeasible. Note, however, that the cost increase is a function of two characteristics: 1) a commitment to continuous rather than one-shot surveys, and 2) district-level resolution rather than city-level resolution. Facing budget restrictions, it would probably make sense to stay with the idea of continuous surveys and forego the district-level resolution. The reason is that it is very important to have continuous measures so that we can observe trends over time at the citywide level. It is simply too expensive to make the same observations at the district level. And, there are other ways we can both observe performance, and provide incentives for improvement at the district level. On the other hand, failure to produce continuous measures of victimization at the citywide level leaves us with only the reported crime measures to go by—a dangerous situation.

There is one other way we could improve our estimates of the overall level of criminal victimization in a city. It does not provide an overview of all kinds of crime (including property offenses), but affords a special insight into the nature of physically violent criminal victimization. The method depends on capturing information from coroners' offices and hospital emergency rooms. As it turns out, the United States Department of Public Health monitors deaths from all causes through the system that records the nation's "vital statistics" (see, e.g., Fingerhut and Kleinman 1990). In some places, these public health surveillance systems have been extended to focus on traumatic injuries such as gunshot wounds and knife attacks that show up in emergency rooms. Of course, it is a bit difficult to distinguish criminal attacks from self-inflicted wounds resulting from suicide attempts or accidents. But one could get a better look at criminal violence—particularly that occurring within families, and in communities where victims are afraid to report to the police—if we reported this public health data along with the reported crime or victimization data.

To summarize: Measuring overall levels of criminal victimization, and observing how those levels are changing over time, at both the city and the district level, is probably the single most important performance measure for police departments to collect. Currently, police departments rely heavily on *reported* crime numbers to accomplish this goal. These numbers have the great *advantages* of being inexpensive to collect, and of providing a continuous series that can be observed at citywide, district, and street address levels. They have the great *disadvantage* of revealing only the criminal victimization that victims and witnesses decide to share with the police. To get at the "dark figure of crime," one must go to victimization surveys, or to public health data systems (Biderman and Reiss 1967).Victimization surveys are expensive, particularly if one tries to use them as a routine management system for observing conditions at the district level. But they are not too costly if one commits to doing them at a citywide level on an annual basis.

One additional important point about victimization surveys: Much of the cost of the victimization surveys is associated with setting up the system and carrying out interviews with a representative sample of citizens. That cost is probably justified if it does no more than tell us more than we now know about the character of criminal victimization. But, as we will see below, once we have invested in developing a system that allows us to interview a representative sample of citizens, we can use that system to answer many other important questions about policing. Specifically, we can learn a great deal about citizens' fears and their self-defense efforts, as well as their criminal victimization. We can learn about their general attitudes toward the police and how those attitudes are formed. So, in deciding whether a community can afford an investment in victimization surveys, that community should remember not only that such information is crucially important in producing an accurate picture of criminal victimization, but also that the same kind of survey is essential for measuring other important aspects of police performance. Finally, it is important for the police to make use of the public health surveillance systems in their communities to get an accurate picture of the physical attacks that happen behind closed doors, or are otherwise not reported to the police.

Measuring Success in Calling Offenders to Account

The principal measure the police rely on to characterize their success in calling offenders to account is their "clearance rate." This number records the fraction

of all crimes reported to the police that are successfully "cleared" by the arrest of an alleged offender. It measures how many crimes are "solved."²¹

Conceptually and practically, the clearance rate is a very important number because it reveals the effectiveness of police patrol, rapid response, and investigative activities in solving crimes and apprehending offenders. Such activities are considered very important in the current strategy of policing, both as a means for controlling crime, and as an important end of justice in itself. The clearance rate might also serve as an important indirect measure of the strength of a police department's relationship with a community, because it is often citizens' willingness to call the police and cooperate in criminal investigation that spells the difference between success and failure in solving any given crime.

Despite the importance of this number, and despite its ready availability, it is not much discussed when considering police performance. This is a puzzle. Three reasons why the number is not much discussed come quickly to mind.

- 1. Has the investigation definitely established the identity of the offender?
- 2. Is there enough information to support an arrest, charge, and turning over to the court for prosecution?
- 3. Is the exact location of the offender known so that the subject could be taken into custody now?
- 4. Is there some reason outside law enforcement control that precludes arresting, charging, and prosecuting the offender? (UCR Handbook, p. 42)

²¹ Part I offenses reported on the Return A of a UCR report can be cleared either by arrest or exceptional means. (UCR Handbook, p. 41) An offense is "cleared by arrest" or solved for crime reporting purposes when at least one person is (1) arrested, or (2) charged with the commission of the offense and turned over to the court for prosecution (whether following arrest, court summons, or police notice). Although no physical arrest is made, a clearance by arrest can be claimed when the offender is a person under 18 years of age and is cited to appear in juvenile court or before other juvenile authorities.

Several crimes may be cleared by the arrest of one person, or the arrest of many persons may clear only one crime.... (UCR Handbook, Pgs. 41–42)

In certain situations, law enforcement is not able to follow the steps outlined under "clearance by arrest" to clear offenses known to them, even though all leads have been exhausted, and everything possible has been done in order to obtain a clearance. For crime reporting purposes, if the following questions can all be answered "yes," the offense can then be cleared "exceptionally."

One is that the numbers are discouragingly low. Nationally, we solve about 63 percent of the murders, 26 percent of the robberies, and 13 percent of the burglaries reported to the police (Federal Bureau of Investigation 2000). Perhaps clearance rates are not widely discussed because they offer too much reassurance to offenders. They make it seem as though crime might, in fact, pay, and that offenders will not have to face the consequences of their offenses. This could lead to increased crimes.

An alternative explanation is that clearance rates make the police look less effective in this crucial aspect of their role than we need them to be, and than they would like to be. If our expectation is that every crime will be solved, it is hard for the police to report that they routinely fail to achieve this result. We all agree not to discuss this number to avoid embarrassment and worry.

A third reason not to discuss the numbers, however, is that the clearance rate numbers are not very accurate, and therefore not worth talking about. The reason the numbers aren't particularly accurate is that they reflect a police department's policies and judgments, rather than real information about how many crimes are going unsolved, and how many offenders go unpunished. In many police departments, clearance rates can be artificially improved by persuading offenders who have been caught red-handed in one crime to confess to other (previously uncleared) crimes with the understanding that the offender will only be charged and prosecuted for the original crime. This improves the clearance rate, but with uncertain implications for whether the other crimes have really been cleared or not.

Other times, the police will be content to file the charges against an offender that will guarantee an effective prosecution, and not make much additional effort to find out whether that offender committed other offenses. The police know that the additional crimes will not necessarily be charged, and that even if the offender is charged, prosecuted, and convicted for these additional crimes, they will not necessarily affect sentencing very much. If the police have solid evidence to convict an offender of a robbery, they have enough to get him off the street for a long time, and they do not need the additional work or additional complication of investigating, charging, and prosecuting other crimes that the offender might have committed. It is only the very rare police department that will make a serious effort to investigate, solve, charge, and prosecute offenders for all the crimes they might have committed rather than focus on the one that seems ripest.

The casual stance the police take to clearing offenses makes practical sense. They get the result they want (an offender off the street) with less effort and less complexity than if they actually tried to prove other crimes against the offender. Moreover, they know that most repeat offenders do not "get away" with their crimes. They will not necessarily be successfully prosecuted for every crime they commit. They will, however, spend large parts of their lives in jail or prison, because sentences are long enough for individual offenses to ensure that result even if the offender is successfully arrested, charged, and prosecuted for only a fraction of his offenses (Moore et al. 1984).

Over the long run, however, there are two bad consequences of not taking clearance rates more seriously. The first is that the public cannot determine how successful the police really are in solving crimes, and apprehending and successfully prosecuting those who commit offenses. Because this is an important function of the police, ignorance about how successful the police are in achieving it makes it hard for them to be held accountable, and hard for them to get better at this important part of their job.

The second consequence is that, by failing to try to clear all crimes, the system as a whole loses some capacity to distinguish frequent and chronic offenders from those who are only intermittent and short-lived (Moore et al. 1984). If we can't tell the difference between a "dangerous offender" who commits 20 robberies or street muggings a month when he is free on the street, from a person who "repossessed" his TV from an estranged wife by threatening to hit her if she didn't let him take the TV to his new bachelor pad, then the system will lose some of its capacity to do justice and to control crime. While some of the differences among these offenders will be visible from the character of individual incidents in which they are charged, far better information will be obtained through a more serious investigation into how many other crimes they might have committed.

The fact that police departments take much different stances toward the importance of clearing offenses, and have much different standards for judging when an offense has been cleared, means that it is very hard to compare departments on this important dimension of performance, or to observe improvements within a given department over time. What is needed, then, is much clearer, more consistent standards for judging whether a crime has been cleared, and an audited review of clearance reports to determine what portion of the crimes have actually been cleared. Of course, one does not have to have a single threshold to be used in distinguishing a cleared crime from one that has not been cleared. One could, for example, report that a crime was charged to a particular offender with strong evidence and successfully prosecuted; or that a crime could have been charged with strong evidence, but was not to avoid complicating the case; or that the police strongly suspected the offender of other crimes and had evidence to support their suspicions; and so on. In effect, the police could create a system in which they could get "partial" as well as "full" credit for clearing a crime. But the point is that they ought to be able to tell us something important about how many crimes are more or less successfully cleared by investigation, arrest, and prosecution.

Note that the best evidence of whether a crime has been cleared is not simply whether the police think they solved the crime, but also whether a prosecutor, a court, and a jury think so too. Thus, one might say that cases are cleared not just when an arrest is made, and not just when a prosecutor agrees to file the charge, but also when an offender is *convicted*. Imposing this standard on the police would probably be unreasonable. One reason is that the police cannot control what the police and prosecutors and juries do. All they can do is to make the best case they can against an offender. Another reason is that the standard of proof that a court demands for a guilty conviction is quite different than the standard that the police need to make an arrest, or the prosecutor needs to charge. A court is supposed to find guilt "beyond a reasonable doubt;" the police may arrest on "reasonable suspicion"—a distinctly lower standard. So, the police may be doing their job well even if the prosecutors don't charge and the courts don't convict in the cases that the police bring forward.

What these observations remind us of, however, is that the police ought to be interested in and held accountable for the *quality of their investigations and arrests* as well as for the ultimate results of these activities. By quality, I mean three somewhat different things: first, the professional skill the police show in developing evidence and making arrests; second, the extent to which their methods of investigating and arresting can stand up to legal scrutiny, and therefore count as a "good bust;" and third, the extent to which the investigation and arrest can be expected to produce a conviction.

Again, while it might be difficult to construct such a measure, there is research showing that it can be done for both robberies and burglaries—by far the most common crimes (Eck 1992; Eck 1983; McElroy, Cosgrove, and Farrell 1981). Further, there is evidence showing that if the police are *managed* to produce quality investigations, they can, in fact, increase the quality of their investigations (Eck 1992). Further, there is evidence that increased quality translates into higher rates of conviction (Eck 1992). So, the important question is whether the police will make an effort to measure the quality of their investigations, and use those measures to grade the extent to which they are successful in clearing all crimes, as well as the ones that are charged and proceed to prosecution.

There is one last idea to be discussed that fits within the concept of calling offenders to account. One of the best-kept secrets about the criminal justice system is the number of offenders that are free in the community despite the fact that they have outstanding arrest warrants against them (Howe and Hallissy 1999). This can occur for many different reasons. The most common is that defendants fail to appear for trial. Another is that offenders have been indicted, and arrest warrants issued, but the police have not yet been able to find them.

In the past, it was not considered a particularly high police priority to arrest those with outstanding warrants. If the police happened across such offenders in traffic stops, or in conducting investigations, they would execute the warrant. But it was rare for the police to focus specific efforts on arresting those with outstanding warrants.

More recently, special efforts have been made to step up the success of warrant enforcement (Martin and Sherman 1986; Marx 1988; Hermann and Youssef 2000). Special "warrant squads" have been created who are charged with this responsibility. Special operational methods—such as sending letters to those who have warrants against them announcing that they have won a prize and should come to a certain location to accept it—have been developed that have been successful in netting many scofflaws (O'Keeffe 1998; Marx 1988). And the U.S. Marshals have found a special role in controlling crime throughout the nation by enforcing warrants against "career criminals" and "dangerous offenders" (Nadelmann 1993).

Such efforts are valuable precisely because they seem so close to the principle that offenders should be called to account. It makes no sense to ordinary citizens that, the police having done the hard work of attributing a crime to a particular individual, and having brought legal proceedings against that person, the person is still free to move about the community and go on with his or her life. Conversely, the more effective the police are in successfully executing arrest warrants, the more effective the department seems to be in holding offenders to account for their crimes. Again, this seems important both as a matter of principle (people ought to pay for their crimes and have justice visited upon them), and as an important way of controlling crimes (bringing offenders to justice reduces crime through the mechanisms of deterrence and incapacitation).

To summarize: The police can measure their ability to call offenders to account through improved measures of clearance rates, improved measures of quality investigations and arrests, and measures of their success in enforcing outstanding warrants. All of these measures can be constructed from existing records with new systems installed for grading and evaluating the activities of the police. Whether improving these measures is worth the investment depends a great deal on how important the goal of calling offenders to account seems to be, and how much improvement can be made in the way that police departments do this work. Because this is an important dimension of performance, and because there are reasons to believe we could make substantial improvements in our efforts to hold offenders to account, it seems hard to imagine that the investment in improved measures wouldn't be valuable. But only experimentation will tell the tale.

Measuring Fear and the Subjective Sense of Security

Enhancing personal security, including the subjective experience of how safe people feel against the threat of criminal attack, is surely one of the most important goals of a police department. Indeed, one can reasonably argue that producing a widespread sense of security against criminal attack is the true outcome of policing—the result that comes from arresting offenders and reducing crime, and that constitutes the ultimate purpose of the police. To be rid of the fear of a criminal attack is to live much more happily than to live with an ever-present or intermittent fear.

The difficulty, of course, is that fear, as well as a sense of security, are subjective states. They exist in the minds of citizens, not necessarily in the objective conditions they confront. Even worse, levels of fear are probably affected by many conditions over which the police exercise little control. For these reasons, it seems difficult to measure levels of fear, and to hold the police accountable for the goal of reducing fear.

Despite the difficulty, over the last decade or so, we have made significant strides in constructing measures of the subjective experience of fear (Ferraro 1995). Principally, the measures rely on asking individuals about how safe they feel in relative terms—whether they feel safer this year than last, whether they feel safer in their own neighborhoods or in more alien territory, and so on. We have to worry, of course, that these measures lack some of the properties we would like them to have.

It is not at all clear, for example, that we can compare one person's fear with another's, any more than we can compare one person's happiness with another's. This makes it difficult to add subjectively reported levels of fear up into some total amount of fear that a population experiences. But even though it is difficult to add up levels of fear across individuals, it is possible to determine whether a population as a whole seems to be getting more or less fearful. Somewhat more problematic is that the subjective experience of fear (or security) is highly unstable in individuals; it changes from day to day, and it is difficult for individuals to report on their average level of fear over the last month or quarter or year. A related problem is that fear may not be consistently salient. Citizens do not check in on their level of fear each day. They do so intermittently, when something happens that increases or relieves their fears, or when someone asks them questions about their fear.

Finally, citizens may use their responses to questions about levels of fear not to report accurately on how they feel, but instead strategically to accomplish a goal. They may want to send a message designed to get them more policing. Or, they may use the question as an occasion to show how brave they are, or how self-reliant they can be. Such features tend to increase the variability in reports of fear, and make them less useful as measures than they otherwise would be.²²

While all these problems exist, it still seems to be important to get some measure of the fear of crime in a community, whether it is going up or down over time, and whether it seems greater in some parts of the community than in others. This follows simply from the fact that enhancing the sense of security from criminal attack has to be one of the important reasons to have a public police department. Still, the technical problems are sufficiently daunting that it might not be worth doing this work if it could not easily be piggy-backed onto other measurement efforts. Fortunately, it can be.

As noted above, if a city decides to do an annual criminal victimization survey to gauge overall levels of victimization, and uses those numbers as a supplement to the information they get from the Uniform Crime Reports, it would not add much to the cost of the survey to add questions about levels of fear. Indeed, in many victimization surveys, questions about victimization and fear are already combined. As important, questions could be asked about the level of effort that citizens make to protect themselves from crime, and the form that such efforts take. This provides useful information about whether citizens are fearful enough to actually act on their fears as well as simply report them. It also helps the police understand how much of the burden of self-defense citizens are taking on, and the form that such efforts take. To the extent that the society as a whole would like to lighten the burden of self-defense, and shift the form of self-defense to

²² An example of the complexity of the police role in this context is provided in Kenney et al. 1999 in regard to conflicts at abortion clinics.

more collective rather than individual forms, it would be possible to see how successful the police were in producing these results.

To summarize: The technical problems involved in turning an individual subjective state (fear of crime) into an objective aggregate measure (the level of community security) are such that any objective observer would have to take each answer from each citizen with a large grain of salt—perhaps even a kilogram! But the responses of thousands of citizens, taken over time, should provide a useful indication to the police of whether their efforts to control crime and call offenders to account are producing the effect they ultimately desire—a widespread sense of security against the threat of criminal victimization. There remain other threats in the world that are worth worrying about—accidents, disease, fire, hurricanes, and layoffs. But one of the most important values created by police departments is freedom from fear of criminal attack, and a reduced burden on individuals to defend themselves against such attacks. Both of these can be measured.

Measuring the Level of Safety and Civility in Public Spaces

Closely related to the idea of reducing individuals' fears of criminal attack is the idea that the police have a special responsibility for reducing fear in "public spaces." Of course, the police know that the greatest threat of a criminal attack on citizens does not come from strangers in public locations, but from those near and dear to the victim in private spaces. Moreover, the police are duty-bound to respond to such intimate attacks when called in to do so, and increasingly even when the victim prefers that the police remain uninvolved (Sherman 1992). There are, after all, mandatory reporting laws for those who observe the abuse and neglect of children, and many police departments have adopted mandatory arrest policies in instances of domestic violence (National Research Council 1993; Sherman 1992).

Yet, despite the importance of private, domestic crimes, it remains true that such crimes are, in many ways, harder for the police to deal with than the crimes that occur in public spaces among strangers. There are important rules that keep the police from going into private spaces until called in to do so (Walker 1992b). Both society and the police feel properly reticent about intervening too much into private, domestic affairs. The proper handling of such cases is more complex both legally and technically than the handling of crimes committed among strangers in public locations.

In contrast, the police have much more capacity to deal with the crimes that occur among strangers in public locations. They are not only allowed, but expected to monitor and patrol public spaces. They have the right to stop individuals and ask them questions about their business (Kamisar 1980). They are set up to respond quickly to situations where one individual sees another individual attacking a third. And so on.

Further, the police may have some special responsibilities for protecting the public infrastructure of a city, and making it available for easy, safe use by citizens. We need the roads to be safe and passable, and the police play an important role in producing that result. If they did not, the sizeable public investment in roads would be less valuable than when the police do their work. We would like our public transportation also to be safe and convenient. The transit authorities do part of this work. But the police play an important role in keeping subways and stations, buses and bus stops safe for citizens to use (Clarke 1996). In doing so, they help amortize the huge investment that cities have made in such efforts. Parks, too, are made increasingly valuable to citizens if they seem secure, so that parents with children, teenagers interested in basketball, and elderly people interested in birds can all use the park together without fear. Public housing can be a nightmare for its residents if the housing becomes dominated by drug-dealing gangs, and a real oasis for needy citizens if the police can keep the violence out (Weisel 1990). And among the most important sites to keep safe are public schools, playgrounds, and the routes to the school traveled by children and their parents (Kenney and Watson 1998). It is one thing to feel safe in one's home; it is quite another to feel safe in moving freely about a community and taking advantage of its publicly owned and operated assets.

Finally, the police have an important, but intermittent and rarely noticed impact on a different kind of public space—the public space in which politics are conducted. Police responsibility in this domain shows up in the vestigial requirement that the police guard polling places on election days to ensure that voters can cast their votes without intimidation, and prevent partisan violence from breaking out. It is often a bit more visible when the police do or do not grant permits for parades and demonstrations, and then police the mass gatherings that occur. It is also apparent when riots occur, and the police are called in both to restore order, and explain the causes of the disorder. The political role of the police is very important when the police deal with extortion or terrorism justified by some political ambitions. A democracy depends on individuals being able to settle their deeply held political disagreements peaceably, and it is among the most important challenges facing police to play an important role in keeping public deliberative spaces open and safe, as well as keeping public physical and recreational spaces safe. If preserving the safety of public spaces for commerce, recreation, and politics is an important goal of policing that deserves special recognition and attention, it is worth thinking a bit about how one might measure the level of safety in public locations. One can start, of course, with the crime statistics, and make a distinction between crimes committed in private spaces by people who know one another from crimes committed in public spaces by strangers. One can also use the victimization survey to learn whether people feel safe in public locations, and which particular public locations seem particularly safe and which unusually dangerous.

It would be possible to go beyond these already collected data, however. In some cities, the police have used changes in residential and commercial property values to indicate changes in the overall level of security enjoyed by a city, on grounds that security is a highly valued attribute of a physical space, and its perceived level will show up in market-assigned property values (Moore and Poethig 1999).

Performance in some other nonpolice functions—for example, the repair of streets—has been monitored by direct observational studies. New York City has a vehicle fitted with a measuring device that goes over the roads and records the number and size of potholes it finds. In principle, it might be possible to pay individuals to walk a city's streets, play in a city's parks, or use a city's subways and record how afraid they feel at any given moment.²³ Alternatively, one could simply have individuals monitor levels of use of key public sites, and/or interview those who use the public locations about their levels of fear. With respect to the police role in keeping a public space open for democracy to occur, we could ask the police to report on the policies and procedures they use in granting permits for parades and demonstrations, and ask them to file after-action reports on what happened in these affairs. We could also ask for after-action reports on their responses to spontaneous demonstrations and riots.

All of this has a dissatisfying *ad hoc* quality. It is *ad hoc* in two different senses. First, the measures are quite imperfect. Second, it is not clear how one should define the universe of public spaces to be monitored, and how that universe might usefully be sampled to ensure that the spaces being monitored are, in fact, representative of all such spaces in the city. Should we place a "recorder"

²³ This method was suggested to the New York City subway as a method for observing levels of fear.

in all streets, parks, schools, and public housing projects, or just some? If only some, how should those sites be selected? Should observations be continuous, or only intermittent? If intermittent, how should we choose the periods in which we observe?

At the outset, these seem like daunting technical questions. Over time, however, if we thought this was an important performance characteristic of policing, the measurements could undoubtedly improve and become more systematic. Then, we could see whether the police were getting better or worse at creating conditions of "ordered liberty" in our public commons. In my view, this would be an important piece of information to add to our overall evaluation of the police.

Measuring Fairness and Economy in the Use of Force and Authority

So far, we have been looking principally at the "goods" that a police force can produce for its community—its success in controlling crime, enhancing the security that citizens feel, and ensuring the safety of public places. We have also looked at one important aspect of justice—namely, the success that the police are having in calling offenders to account for their crimes.

What we have so far avoided, however, is some of the "bads" that a police department can do to a community. We have also avoided any recognition of a police department's special responsibilities to use its resources and powers fairly and justly as well as effectively. As noted above, because police departments use the authority of the state as well as money raised through taxes to produce their results, they are obligated to use their resources fairly and justly as well as efficiently and effectively. Citizens may and do properly demand an accounting of how fairly and justly the police behave, as well as how efficient and effective they are in using public funds for controlling crime and reducing fear.

Let's begin with the idea of fairness. Fairness is a complicated idea. On one hand, we can talk about fairness as a quality that is or is not present *in an individual transaction* between a particular police officer and a particular citizen. Did this particular citizen get the kind of service from the police that he or she deserved? Did the particular individual who was stopped and questioned by the police deserve to have his or her life inconvenienced and intruded upon by the official inquiry? And so on.

But we can also talk about fairness as a more *aggregate* characteristic associated with the *overall policies and procedures of a department*. Does this department allocate its resources and services fairly among neighborhoods? Does this department enforce the law equally across a city's diverse population? We can also talk about fairness as a quality that exists *objectively*, independent of peoples' perceptions (e.g., we did this the right way, so that it was fair regardless of what those involved in the police operation felt). Or, we can think of fairness as (at least partly) a subjective impression (e.g., I *felt* fairly treated by the police without really knowing whether they followed all the procedures designed to ensure fairness). It might be useful to think of the objective part of fairness as the "procedural rectitude" of the police, and the subjective part of these judgments as the "perceived legitimacy" of the police.

The police feel mostly accountable for producing procedural rectitude, because that is both the right thing to do, and the one that they can control. They hope and expect that procedural rectitude in their actions will produce perceived legitimacy in the minds of citizens. But this does not always or necessarily occur. Indeed, if citizens do not believe police accounts of their procedural rectitude, or if they think the procedures are themselves biased or unjust, then a wide gulf will remain between police confidence in their procedural rectitude and public views of their legitimacy.

In principle, of course, these different ideas should all be closely linked. The way that we produce aggregate fairness should be ensuring that each individual encounter is fair. The way that we produce perceived legitimacy is by ensuring the procedural rectitude of each encounter. But the fact of the matter is that these concepts differ slightly from one another and need to be measured separately.

Three different aspects of fairness at the aggregate level seem particularly important to consider, and to find the means for monitoring them.

Fairness in the Allocation of Resources. First, it seems important to measure the extent to which the police fairly allocate their resources across a community. For the most part, when we talk about fairly allocating police resources, we follow the principle that police resources should be allocated according to "need." This idea found its concrete operational expression in the creation of "hazard formulas" that measured the differential "need" for police services across different parts of the community, and allocated police department personnel and equipment accordingly (Police Executive Research Forum 1981). It was also important in establishing the dispatching rules that determined which kinds of calls would be treated as high priority (Farmer 1981). In both cases, the police were systematically opposing two other principles that could determine the allocation of police services. The *market* principle says that police services should go to those with the means to pay for them (regardless of their need). The *political* principle says that police resources should go to those who have the power and political influence to command them.

The decision to create *publicly* supported police departments (rather than rely on individual self-defense and private security measures) has to be seen at least in part as an explicit decision by citizens to reject the idea that the level and distribution of security against criminal victimization should be determined by market principles. If we had thought it fair to use market principles to provide security from criminal attack and access to justice, we would not have created publicly financed police departments. We would have left the work of defending against crime, and finding and prosecuting offenders, to private individuals, as we did up until the mid-nineteenth century.

The decision to create a *public* police department was not simply a decision to achieve economies of scale in producing community security, and not just to increase the even-handedness with which justice was dispensed. It was also, arguably, a decision to *provide at least a minimum level of security to everyone in a community regardless of their ability to defend themselves, or to pay others out of their own pockets to defend them from criminal attack. At that moment, the idea that it was fair to provide public police services according to one's ability to pay was set aside in favor of an alternative principle that it was fair to provide at least a minimum amount of protection to all at public expense.*

It was an equally important moment in police history when the police gradually succeeded in insulating themselves from the kind of political interference that would allow powerful politicians to claim more than their fair share of police resources for the benefit of their constituents. In the reform era, the police increased both their determination and their ability to resist political interference, and developed the technical systems that directed resources to need and desert rather than to political ambition.²⁴

Of course, there continue to be pressures to allocate police resources to specific geographic districts, or to distribute particular kinds of services on the basis either of "ability to pay" or "political influence" rather than "need." We often hear now, for example, that taxpayers ought to "get the level of service they paid for." The idea is that support of public police is much like a private market transaction in which the taxpayer pays for a certain level of service, and

²⁴ Kelling and Moore (1988) have suggested that the history of policing can be divided into three "eras"—the political era, during which the police were controlled by political machines and became famous for corruption; the reform era, during which the police developed policies and procedures that could ensure both fairness and effectiveness; and the community era, in which the virtues of having the police be accountable and responsive to citizens were rediscovered.

is allowed to stop paying for the service if he is dissatisfied with the benefits he individually received. This contrasts rather sharply with the nonmarket idea that the entire community is interested in controlling crime and producing ordered liberty, and that there are both economies of scale and improved prospects for justice if we agree to tax ourselves to produce a public police department. We also note that the "squeaky wheel" does continue to "get the grease" when it comes time to allocate police resources to specific districts, or to commit police resources to special units devoted to dealing with problems that are of concern to special, and specially influential, political constituencies. But it is precisely for these reasons that it is important to monitor the allocation of police resources across districts, across special units, and in responding to particular kinds of calls to make sure that a public resource is not being used primarily to advantage the rich and powerful against the poor and weak.

Specific measures that might be important in monitoring the level of fairness in the allocation of police resources include 1) reports on police staffing and spending relative to demands for police service by neighborhoods, and 2) reports on different levels of service in different communities. It might also be important to periodically review special units that have been set up, or special operations that have been conducted, to see whether these important resource allocation decisions respond more to citywide need, or the influence of particularly wealthy or influential groups. It might also be important for the police to focus some of their attention most specifically on the question of what they have done to protect their community's weakest and poorest citizens from criminal attack, as that might be one of the particularly important responsibilities of a *public* police department.

Fairness in the Use of Force and Authority. Second, in examining how fairly the police use their authority to intrude into private life, it would be important for the police to examine their policies and procedures to ensure that they were fair both on their face and in their effect. It would be important to consider the department's policies governing proactive police methods such as field interrogations, traffic stops, and arrests for quality-of-life offenses. It is possible that the "profiles" used to guide such activity are unfair.²⁵ For example, the police may have explicitly adopted racial characteristics as part of the "profile" that guides drug enforcement efforts. Or, it may be that a given

²⁵ For a preliminary discussion of the statistical and ethical issues related to profiling, see Applbaum 1996.

profile doesn't explicitly use race or class characteristics, but relies instead on characteristics that turn out to be highly correlated with race and class characteristics (such as wearing a particular type of clothes, or driving a dilapidated car), making the policy appear biased even though it is not explicitly so. It is also possible that the explicit policies are fine, but that they are ineffective in guiding or controlling actual conduct in the field, and that the real practices are objectionable even if the policies are not (Fridell et al. 2001).

It is also clear that one would want to be able to say something about how the police were controlling police corruption. Importantly, there are at least two kinds of police corruption. The first (which we could somewhat imprecisely call "bribery") involves situations where the police fail to arrest someone that they could have and should have in exchange for a cash payment to overlook the offense. The second (which we could also imprecisely call "extortion") involves situations where the police threaten to arrest someone whom they are not legally entitled to arrest, and demand money from the citizen to escape the undeserved arrest. Both kinds of corruption result in the unfair enforcement of the law. The difference between them, however, is that in the first case, the arrested citizen may feel lucky that he escaped arrest and therefore be unmotivated to report the offense to anyone else, while in the second case, the arrested citizen will feel angry and inclined to complain to anyone who will hear him.

These differences have implications for the relative importance of the two different sorts of corruption, as well as for the ease with which they can be controlled. In principle, it ought to be both (slightly) more important, and (a great deal) easier to deal with extortion than with bribery simply because there is a specific person who has been injured by the police and knows he has been injured. Bribery is much tougher to deal with because it lacks a complaining victim. For extortion, the police can be aided in their efforts to control corruption by the anger of the victim. All they have to do is open some channel for them to complain. For bribery, they will have to use more proactive methods to find the level of and successfully root out corruption (Ivkovich 2002).

It is not easy to measure either abuses of discretion in field operations or levels of extortion and bribery committed by officers, yet it is possible to construct methods for doing both. For example, if citizens were sufficiently insistent, and police managers sufficiently determined, one could establish a systematic way of "challenging" the department's operations. The method would be to set up situations that invited abuses of discretion, extortion, or bribery, and then record how the police behaved. This might sound bizarre, but it is worth noting that private companies use such techniques to test their points of contact with citizens. For example, many companies listen to conversations between their agents and customers, both to measure the overall quality of customer service, and to provide coaching to individual customer representatives. Similarly, some banks have tested for discrimination in mortgage markets by having two citizens identical in all respects but race apply for mortgages, and describing their different experiences.

In the context of policing, one could have black and white, rich and poor people drive around a district in the same car on similar routes and count the number of times each was stopped to determine whether the police are acting on race and class characteristics in deciding who to stop. Or, one could set up "sting" operations in which undercover police acting as drug dealers would flash a great deal of money in public locations, or would offer bribes to officers once they were arrested.

If one presented these "challenges" frequently enough, randomly enough, and did them over time, one could observe whether the levels of abuse and corruption were going up or down for the department as a whole. Unfortunately, such systems are very expensive to operate. Police also consider them unfair, and police unions oppose them, even when the operations are not to be used to develop evidence to press charges against the police.

Without measures such as these, one is limited to a small number of other options for investigating the procedural rectitude of the police in deploying their authority to stop, to question, to arrest, and so on. First, one can rely on examinations of policies and procedures, and check the knowledge of both supervisors and officers of those policies and procedures. Second, one can examine the character of the police department's administrative systems for controlling discretion and corruption—the way they train, the way they supervise, the way they discover instances of misconduct, the way they investigate the incidents they hear about, and the way they discipline officers in cases where charges are substantiated.

It is obvious, I think, that these measures are pretty inadequate as measures of the aggregate fairness in the way that the police use their authority. Unfortunately, this is what is now available. New measures are now being developed to gauge the extent to which the culture of a police department is supportive of or hostile to abuses of discretion and corruption (Klockars et al. 1997). And these may, over time, become appropriate for routine use. In the meantime, however, we are limited to these very inadequate measures to monitor a very important aspect of police performance. On grounds that something that is worth doing at all is worth doing badly, it would be better to measure this aspect of police performance badly rather than not at all. That would at least keep the pressure on for improving our capacity to measure this aspect of performance.

Measuring the Amount of Authority and Force the Police Use. Third, while it is important to examine the aggregate fairness with which the police use their authority, it is also important to analyze the overall *amount* of authority the police use. We often confuse the fairness with which the police use authority with the amount they use. The reason is that we have in our minds an idea about the "proper use" of force and authority in each particular situation. If our idea about the proper use of force and authority is reliably executed in particular situations, then that idea will determine both the aggregate overall *level* and the aggregate overall *distribution* of the use of police force and authority (i.e., who gets stopped and arrested, as well as how many people get stopped). Each case that deserves attention will get it. And the amount of attention it gets will be exactly what it deserves. There will no cases that the police investigate that they shouldn't. (In that sense there will be a proper distribution of the use of authority.) And there will be no cases in which the police use more force and authority than they are entitled to use. (In that sense, the amount of force and authority used in each particular case will have been appropriate, and so will the overall level of force and authority.)

As a practical matter, however, it seems useful to distinguish the aggregate *fairness* with which the police distribute obligations and duties across the society from the aggregate *amount* of force and authority they use in accomplishing their mission. After all, it is possible to imagine a police force in a totalitarian state that was scrupulously fair in the way it treated individuals in the society, but was oppressive in the overall level of control and surveillance it exercised. Equally, it is possible to imagine a lazy force that was avowedly racist in the way it operated, but didn't do much policing except against a minority population. So, we are interested in the *aggregate level* of authority and force that the police use as well as the *aggregate distribution* of its use. (This, in addition to being interested in the way that force and authority are being used in individual cases.)

The important measures indicating the overall level of force and authority used by the police must begin with individual instances of *abuses* of police force and authority. Abuse in an individual case means both that too much force and authority was used, and that it was unjustly used against that individual.²⁶ If it

²⁶ See Alpert and Dunham (1997) for an interesting discussion of how police use of force can be measured by the difference between the level of force used by police and the level of suspect resistance.

turns out that excessive force occurs more often to people in a certain group, that group (as well as the individuals) might have reason to be concerned. Thus, a community would want to keep track of citizen complaints against the police.

Note that we could be interested in two different aspects of citizen complaints. On one hand, consistent with our interests in ensuring the overall *fairness* of policing, we could determine whether the frequency of citizen complaints against the police varied much across different segments of the population. Did rich people complain more about mistreatment by the police, or poor people? Young people or old people? Men or women? White or black? On the other hand, consistent with our interest in the overall *level* of the use of force and authority, we could examine whether the number of complaints was going up or down.

Of course, complaints against the police have many problems as measures of the extent to which the police misuse their force and authority. For one thing, complaints about police misconduct have the same problems as a measure of police misconduct that crimes reported to the police have as measures of criminal victimization. In both cases, the number of reports is influenced by the ease with which complaints can be made, and the enthusiasm with which they are followed up, as well as the true underlying rate of incidents (Sviridoff and McElroy 1988, 1989). If citizens are discouraged from filing reports, or if they have little confidence that their complaints will produce any action, complaints filed against the police will be artificially lowered.

The problem can be rectified to some degree in the same way that the problem of reported crime is rectified—we can conduct a survey of those who had an "involuntary" contact with the police, and find out how they were treated.²⁷ By an "involuntary contact," I mean someone that the police stopped, or cited for a traffic offense, or arrested for a misdemeanor or a felony. We should not expect such individuals to feel very happy about their encounter. But it would be important to learn from them what kind of force or authority was used in the course of the encounter, and how they felt about it. (How they *felt* about it belongs more properly to our discussion below on perceived legitimacy). Because this method rests on testimony from citizens, it suffers from many of the same difficulties that crime victimization surveys do—namely, that those interviewed may have many motives other than reporting the truth of what occurred. But, again, if we do not take any individual report too seriously, but

²⁷ I am indebted to the Vera Institute of Justice for this idea.

do take the aggregate pattern of reports observed over time as a rough measure of how the police are generally behaving in a community, the data will probably serve decently well.

Another important question in using citizen complaints as a performance measure, however, is whether one should look at *all* complaints, or only those that are substantiated. Or, even more narrowly, only those that result in successful civil suits by citizens against the police.

A strong case can be made for limiting our attention to substantiated complaints and/or successful civil suits. It is only in these cases that we can be reasonably sure that the police did what they were accused of doing. Because complaints against the police could be motivated by many purposes other than imposing a just claim against an individual officer and the department, we should not take the mere fact of a citizen complaint as evidence of misconduct. That would be unjust and unfair to the department as a whole as well as to the individual officer(s) cited in the complaint. A good department could be made to look bad if enough unfounded complaints were filed against it.

Importantly, however, the distinction between successful civil suits and substantiated complaints on one hand, and all complaints on the other, may mirror the distinction made above between procedural rectitude on one hand, and perceived legitimacy on the other. What the courts are doing when they find for or against the police in a civil case, and what the internal affairs division is doing when it substantiates or fails to substantiate a complaint against the police, is partly testing the strength of the evidence against the police in a given case. But they are also relying on an established standard of procedural rectitude that defines what the police may do. That, of course, may be the right standard to enforce against the police when they are accused of misconduct. But that standard might be different than the standard of perceived legitimacy. It is quite possible that many of those who feel they have complaints against the police either do not know, or do not agree with the standards that govern police conduct. In these respects, we might want to keep track of the nature and number of unsubstantiated complaints as a rough indicator of the extent to which the police enjoy legitimacy with the population that they police.

Note that the data on successful civil suits are interesting for two somewhat different reasons. On one hand, they provide relatively convincing evidence that the police did misuse their force in a particular situation. Consequently, citizens should probably take an increase in the number of civil suits as an important indicator of the level of force that the police are using. On the other hand, the civil suits establish a direct link between the misuse of authority, and expenditures by the community. The size of the settlements tell us how much misuses of authority cost in financial terms, and thus allow us to impute a financial cost to the city of all the instances of misconduct that occurred.

The weakness of the data on civil suits is that there are usually only a small number of such events. As a result, movements in this number will not allow us to discover small improvements in the way the force is conducting itself. For this reason, it would be desirable to rely on substantiated complaints as well. Again, it is important to distinguish between the truth or falsity of any given claim against the police on one hand, and what an aggregate pattern of complaints might be telling us about the overall performance of the force (Sparrow et al. 1990).

While concerns about the levels of force and authority have to start with concerns about excessive or unjustified use of force and authority, our interests do not end there. After all, measures of unjustified and/or excessive use of force and authority depend on whether or not a certain level of force or a certain use of authority was or was not consistent with a particular standard that sets the outer limit for the use of force and authority. It is important to know how *many* times the police cross that line, of course. But it might be equally important to know by *how much* the line was crossed. We might do well to think of the use of force and authority as a continuum, in which legal standards set outer limits, but where our interests include knowing not only whether a given limit was exceeded, but also by how much. It might also be important for us to take an active interest in how often the police departments that we entrust with our lives, our physical well-being, and our liberty use less force and authority than they were entitled to use in accomplishing their mandated law enforcement purposes. This would be equivalent to noticing when a given corporate entity used less money than it had budgeted to achieve a particular result—certainly something that would be important for the company's owners and managers to notice and reward.

The proposal, then, is to think of the use of force and authority as a kind of continuous variable. While we are interested in ensuring that force and authority are never used improperly, we might also be interested in minimizing the force and authority used to accomplish law enforcement objectives. The assumption is that, all other things being equal, we would like to achieve the same level of enforcement effectiveness with less use of force and authority. For example, if we could achieve the same crime control impact with fewer arrests rather than more arrests, we should prefer that result. If we could achieve the same degree of success in solving crimes with less use of electronic surveillance, or less use of informants persuaded to testify against their colleagues through threats of exceptional prosecutorial efforts if they do not cooperate, then we should prefer that result.

Note that I am not saying that we should not use force and authority to achieve law enforcement objectives. That would be absurd. The whole reason we have a police force is precisely to *use* force and authority to control crime, enhance security, and ensure justice. The argument is simply that a good police department will achieve these important results with less use of authority and force than others, even if none of the departments ever use *excessive* force and authority. It is quite easy for a police department to get lax with the use of authority, just as it is easy to become lax in the use of public funds. They will spend authority up to the limit to accomplish their objectives, even when they could have achieved the same result with less use of force and authority. To keep the police focused on the use of force and authority as assets, it is important to pay attention to how much they use force and authority, even when it is authorized.

Important measures of the police use of force and authority could include the following: 1) the frequency with which the police initiated a contact with a citizen that involved a stop, a question, or a search; 2) the number of citations they issued; 3) the number of times they used physical force to subdue arrestees; 4) the number of times they fired their weapons; 5) the number of search warrants they received; 6) the number of wiretaps they fielded; etc. In effect, it would be important to get a measure of how proactive and intrusive the police were as they did their work. Again, this is important not because the police shouldn't be proactive and intrusive to achieve their objectives. It is important simply because if they could achieve their objectives and use their authority less intensively and intrusively, that would be an indication of a superior capacity to police.

Note that one extremely interesting and important indicator of the extent to which the police misuse their authority would be the frequency with which judges support motions to throw out evidence in criminal cases that had been improperly gathered. The police often see such instances as infuriating, because they often seem to sacrifice substantive justice (convicting those who deserve to be convicted of crimes) to procedural justice (accepting the results of a rule-governed process). Or, to put the matter more colloquially, the courts let the offender "walk on a technicality." Citizens can and do sympathize with the police frustration in these circumstances. But it is worth noting that when the police fail to play by the rules enforced by the courts, the police impose significant costs on society. They have wasted the efforts that went into making a case against the suspect, undermined the rights of the particular suspect, and undermined the fixed structure that protects the rights of all citizens to be free from unauthorized intrusions by the state. In addition, it is ethically wrong (as well as economically wasteful) for the police to break the law in their efforts to enforce the law.

In assessing how well the police force uses its authority, then, it would be important to know how often a court agreed with a defendant's claim that he or she had been the victim of an unlawful search and seizure, been "entrapped" into committing an offense, or been wronged by false police testimony. If that number is going up, then it should be a cause for concern. If it is going down, it should be a cause for celebration, and a reason to congratulate the force for its improvement in economizing on the use of force and authority, even as they use these assets to accomplish important public objectives.

Measuring Perceived Legitimacy. So far, we have been discussing the use of force and authority largely (but not exclusively) in terms of procedural rectitude as judged by the standards of the law. Thus, for example, we have focused on *abuses* of force and discretion—instances in which the police use their force and authority in ways that are not allowed by law. We have also focused on those investigative procedures that result in the court dismissing evidence gathered by the police, or voiding cases brought by the police.

In contrast, we have given less systematic attention to the *perceived* legitimacy of the police use of force and authority. We have noted that there might be a difference between the procedural rectitude of police actions on one hand, and the perceived legitimacy of their actions on the other. Further, we have noted that the difference in these concepts might explain some of the wide difference between the number of citizen complaints filed with the police, and the number that are substantiated and proceed to disciplinary action. We have also noted that it would be important to examine differences in the perceived legitimacy of the police among different parts of the population: rich and poor; middle-aged, young, and elderly; white, African American, and Hispanic; native-born citizens and immigrants; men and women.

Still, we have not given sufficient emphasis to the importance of measuring the perceived legitimacy of the police in the way that they use their force and authority. Nor have we said how such a thing could be measured.

There are several important reasons for citizens who wish to evaluate the performance of their police department to be concerned about the perceived legitimacy of the police. One reason is simply that trusting one's police depart-

ment is a valued end in itself. It is one of the important ways in which security is produced. After all, it is not just criminals that can make life dangerous and unsettled for citizens. If the police themselves are out of control, or even if they are perceived to be so, then citizens' security has been degraded by the police rather than enhanced. If, on the other hand, the citizens believe that they can trust the police not only to protect them from criminal offenders, but also to be disciplined and restrained enough to resist attacking citizens themselves, then citizens will enjoy the kind of security they hoped for themselves when they surrendered their hard-earned money and cherished liberty to the police.

A second reason to be concerned about perceived legitimacy is that it may be important as a means to other police ends, such as effective crime prevention and control. A crucially important thing to understand about policing is that police departments remain fundamentally dependent on citizen cooperation for their success in controlling crime. This is true despite the fact that we created public police departments at least partly as a way of shifting the burden of deterring and apprehending offenders from private citizens to a public agency. A police department's elaborate systems of patrol and rapid response cannot work effectively to control crime unless citizens direct police officers to crimes as they are happening. The elaborate systems of criminal investigation typically do not work well unless citizens help police with their inquiries by pointing to suspects, or providing other kinds of evidence about motivations and relationships among people. Unless citizens "support their local police," and join with the police in enforcing the law, the police cannot hope to succeed.

Note that this is particularly true in a liberal society that loves privacy and freedom as much as ours does, and that is deeply suspicious of state intervention. Our system of policing is based on Anglican-American traditions that have eschewed the widespread use of covert surveillance by informants or police agents of various kinds (Moore and Kelling 1983). These traditions limit the police largely to the somewhat superficial surveillance of public rather than private spaces. The only time when the police are allowed to take a more intrusive and intensive look into private spaces is when they are called in by private citizens to help them deal with a crime—that is, when they have probable cause to enter, to search, to make an arrest. This means that the police are often held to a *reactive* role, and that citizens must often make the first effort to mobilize them. This means, in turn, that police efforts will be both initiated and guided for the most part by private citizens. If private citizens fail to take on this responsibility, or do it badly, the police will fail.

Because legitimacy is an end in itself as well as a means for producing other important results, it is important to measure the extent to which the police enjoy legitimacy with heterogeneous citizens. As in the case of fear, the only way to find out how much legitimacy the police actually have with citizens is to ask them. Thus, an additional use of the survey of the population to determine levels of criminal victimization would be to discover the nature of the police department's reputation with citizens. It would be important to ask citizens whether they thought the police treated people like them fairly, and whether they thought the police generally behaved in a fair and appropriate way. It would also be important to understand whether the views that they hold come from concrete experience with the police, from discussions with friends and neighbors about their experiences, or from more remote sources such as newspapers, television, and radio.

Summary. In sum, it is important for police to measure the fairness and economy with which they use their force and authority to accomplish their law enforcement objectives. Again, the reason to do this is not because the police shouldn't use force and authority to accomplish their objectives. We give them a badge, a nightstick, and a gun precisely because we want them to have and to use force and authority to control crime and produce justice. They cannot do their job without using these assets, any more than Sears can deliver products and services without spending money. The point is, however, that just as Sears would like to spend as little money as possible in its efforts to make money for its shareholders by selling products and services to customers, so the police ought to be interested in spending as little of our privacy and freedom as possible in achieving the goal of producing security and justice for citizens by delivering both services and obligations to those they encounter on the streets. To create the functional equivalent of cost consciousness in a police department, it is important to develop performance measures that indicate how fairly and how economically they are using the force and authority we entrust to them.

Key concepts to try to measure include 1) the extent to which the police spread their protection across the population according to need and desert rather than ability to pay or political power; 2) the extent to which police impose the burdens of crime control fairly across the population; 3) the extent to which the police avoid abuses of discretion and excessive force, and more generally economize on the use of force and authority; and 4) the extent to which the police enjoy legitimacy and support among the citizenry as a whole, and among specific groups. The first concept can be measured through an examination of the resource allocating processes that assign officers to districts, and that establish priorities for dispatching patrol cars to calls for service, and an evaluation of the extent to which these resource allocation decisions are guided by reasonable concepts of "need."

The second concept can be measured (quite imperfectly) by an examination of 1) the organization's operational policies and procedures designed to ensure that they do not intentionally, unintentionally, or as a consequence of practice rather than formal policy impose special burdens on some segment of the population; and 2) the methods that the police department relies on to receive complaints from citizens and control corruption. It would also be possible to design a measurement system that challenges the police on a systematic basis, and uses the results of those challenges to determine the extent of abuses of authority and corruption in the department, and whether bad conduct is spreading or diminishing over time.

The third concept can be measured by recording information about 1) successful civil suits against the police, 2) substantiated citizen complaints, 3) all citizen complaints, and 4) instances where the courts threw out evidence and cases due to improper police investigative methods. It can also be measured by the extent to which the police rely on proactive methods of patrol and investigation, and the frequency with which they make arrests, use physical force, and/or fire their weapons. In addition, information from administrative records can be supplemented by survey data from those citizens who have had "involuntary contact" with the police regarding what their experience had been, and how they felt about that contact.

The fourth concept can be measured through a general population survey that asks citizens about their perceptions of the police; particularly, whether they think the police act fairly in dealing with the situations they confront. All of these are important measures of the fairness and restraint the police exhibit in using their substantial powers. None of them is entirely unfeasible to do, but all would take a certain amount of technical invention, and no small amount of political courage.

Measuring Economy and Fairness in the Use of Public Funds

The police use public money as well as public authority to produce their valuable results. They spend money on salaries and pensions to recruit and sustain the motivation of an able work force. They buy automobiles and gasoline to keep the cars running. They pay for radios and computers to guide the cars toward crimes and emergencies. They pay to maintain an elaborate set of records that allows them to account for their expenditures and activities on one hand, and that keeps track of offenders and evidence in ways that allow them to be effective in solving crimes and prosecuting offenders. Of course, we don't begrudge the police the money. We are glad to spend the money if they are effective in producing the results we want—namely, reduced crime, enhanced security, and sturdier justice. But still, if it were possible to save some money on the effort, we would like to do so. We hope, therefore, that the police will be careful with our money as well as with our liberty, and that they will economize on their use of both.

Being careful with our money means several things. First, we want to be sure that our money doesn't get lost, stolen, or diverted to objectives and activities we didn't intend. We could describe this as "financial integrity." Second, we expect the police to stay within agreed-upon spending limits, and to give us an accounting to show us that the money was spent the way that was planned, or if not, that there were good reasons for the different pattern of spending. We could describe this as "financial accountability." Third, we expect the police to keep searching for improved ways of doing their work—that is, to find ways to produce the same result at a lower cost, or to produce an improved result with the same cost. We could describe this as a commitment to "productivity" or "continuous improvement" or "learning."

The police have long been under pressure from the usual fiscal watchdogs to produce these different kinds of financial or cost-effectiveness results. They rely on the usual public sector accounting, control, and audit systems to make sure that the money is not stolen or diverted to inappropriate uses. They rely on the usual cost accounting methods and financial reporting systems to ensure that they stay within preset spending limits. And they have long been under pressure to produce cost savings through such things as making more effective use of officers on disability status, controlling overtime expenditures, altering schedules to fit demands for police services more reliably, or "civilianizing" the police force (i.e., substituting lower cost civilian workers to do jobs now performed by highly paid and highly trained police officers). All these things are important, but do not need much discussion here because they are familiar parts of the administrative responsibilities of running a police department.

For our purposes, only two things are worth emphasizing when talking about the economy and fairness with which the police use public funds. The first is to reiterate that *fairness* is an important value to pursue when one is using public money, as well as *efficiency* and *effectiveness*. The reason is that public money is raised through the use of public authority, and therefore must be used for the common good rather than for the benefit of particular individuals. The most important aspect of fairness in the use of public money has already been discussed—namely, the idea that the police should allocate their efforts in response to "need" (as both the collective defines it, and individual clients experience it) rather than ability to pay or political influence.

But there are three other aspects of fairness that are worth noting. One is that jobs in the police department should be open to all, and awarded on the basis of merit. The second is that procurements made by the police should rely on competitive bidding, with contracts awarded according to merit. These basic principles support the goals of both fairness and economic efficiency, because open competition for jobs and contracts helps the government buy high-quality resources at the lowest possible price.

The third important idea is that we really are interested in securing productivity gains in the way that the police operate; that is, we are interested in reducing the costs of existing levels of performance and service, and/or in increasing the quantity and quality of police service without increasing costs. This follows from the fact that what really interests us about policing is not just the gross value that the police produce, but the *gross* value they produce *minus the costs of producing it*. The fact that we want to drive down costs per unit of output, or drive up valued outputs vs. units of cost, has two very important implications for the police.

First, it suggests that the police should be engaged in a continuing search for better, lower cost ways to achieve their results. Like other modern, producing organizations, they have to learn how to put a premium on innovation. They have to examine how they do their work in all phases of their operations—how they staff and schedule dispatch operators, how they recruit and train officers, how they respond to a proliferating number of burglar alarms, how they handle domestic violence complaints, and what can best be done to close down street-level drug markets, to describe just a few of the literally thousands of "business processes" that exist in a modern police department. They have to find out how their current procedures are working, and imagine and test alternative ways of producing the same results. When they find a superior method for performing a particular task, they have to deploy that new method quickly and widely to take full advantage of the opportunity they have created for themselves.

This sets a standard for innovation that is well beyond what most police departments are currently able to do. Much of the innovation that now occurs in police departments is financed by grants from the federal government or foundations. The total amount of innovative experiments that such grants can sustain is usually not enough either to find all the possible ways of improving, or to create a culture of innovation in a police department. Moreover, because there is so much pressure on the police to use tried and true methods, and to use them consistently, there is often a resistance to any changes in operational procedures and methods.

The idea that the police need to be curious about their effectiveness, and creative in exploring new ways to deal with both old and new problems, is consistent with the current police drive toward improved "problem solving" (Goldstein 1990). The aim of problem-solving police departments is to produce results, and to do so through a self-conscious effort to invent and evaluate plausible solutions to a given problem. Further, it is to do this over and over again as new problems arise (Moore, Sparrow, and Spelman 1997). The idea that the police can and should be analytic, inventive, and resourceful in trying to deal with problems is new. So is the idea that they should decide whether something is worthwhile or not by seeing what results it produces, rather than simply by monitoring the effort.

If one were an investor evaluating a police department as an investment opportunity, one would look not only at its current performance in well-established missions with well-established procedures, but also at its capacity to invent new methods to deal with new situations as they arise, or to deal better with old situations than current methods can do.While organizations that have large research and development (R and D) budgets often look more expensive than organizations that eschew such investments in the short run, the organizations with the big R and D budgets often become incredibly profitable in the future. The reason is that they have continued to learn how to do their work better through investment, invention, and innovation. This suggests that, in evaluating the performance of a police department, we should look closely not only at current costs, but also at the investments they make in innovative efforts that make them flexible and adaptable.

The second implication of a focus on police productivity is that the police should take seriously the various efforts that have been made to develop productivity measures for policing, and use them to set "benchmarks" that could be used for comparisons of one department with another. We have, of course, made many efforts to construct useful productivity measures for police, and even to try to obtain comparative information about these measures by looking across departments (ICMA and Urban Institute 1997). For example, we have looked at measures of police spending, such as expenditures per capita for police services, or the total number of police fielded per capita, or the total number of police fielded per square mile of territory to cover (Pate and Hamilton 1991). We have also looked at numbers that claim to say something important about how efficient the police are. We have, for example, looked at the number of arrests per officer, or at the ratio of the force that is on patrol at any given moment to the total number of officers in the department. We have sometimes tried to attach cost numbers to such things, and calculated such things as the cost of sustaining one patrol car in the field 24 hours a day, seven days a week, 365 days a year, or the average cost of an arrest.

Despite these efforts, however, it is not at all clear that police departments and police managers have fully accepted the responsibility for controlling costs and searching for productivity gains. Part of the reason, no doubt, is that they are accustomed to dealing with important matters of life, death, and justice. When such things are at stake, it seems wrong to worry about how much money is being spent. It is more important to focus on producing the valued result than trying to maximize the difference between the value of the result and the costs incurred to produce it.

Another part of the problem may be that police departments are more strongly committed to staying with standard, tried-and-true measures than most other organizations. This is not simply because the police are more traditional and conservative, or less imaginative or risk-taking than other organizations. Indeed, when one observes the police planning complex operations under pressure, one discovers that they are incredibly resourceful, imaginative, and bold. The greater problem is that the police are expected to be highly consistent in what they do both over time and across different situations. They are also supposed to already know how to do their jobs. That is what it means to be professionally competent. They aren't supposed to be trying to learn how to do their jobs, or to run risky experiments where individuals' lives and properties are at stake. Taken together, this suggests that the police are rewarded for staying with tradition and punished for adaptations and experiments (Moore 1994).

Perhaps the most important reason that these productivity measures have never done much to stimulate productivity gains in policing is that they have always seemed so obviously inadequate as measures of police performance that it was hard for the police, or indeed, most citizens or elected representatives to take them seriously. To some, they seemed too small and unimportant. Who cared much if a new scheduling system for dispatchers reduced the cost of maintaining a 24-hour dispatching capacity by 10 percent? Or, they tried to address an important issue, but did so in an unconvincing way. It is clear that, all other things being equal, we would like the costs per arrest to be lower. But all other things are never equal. If we concentrate on increasing the number of arrests, can we be sure that that would reduce crime and enhance security? What would happen to other important police activities, such as preventing crime through problem solving rather than making arrests, or providing emergency medical and social services? And what would happen to the legitimacy the police enjoy with citizens?

These obvious limitations of proposed productivity measures make such measures seem useless from the outset. And so they are, if they constitute the only or even the primary means we use to assess police performance. If, however, they are used as part of a searching investigation of how the police actually do their work, and what impact different pieces of their work have on the broadest objectives of the police, then productivity measures may finally have their day. By focusing attention on how inputs are translated into outputs, the police may find and exploit new ways to do their work that cost less both in terms of money and authority, and that do more.²⁸ As a spur to innovate, and as a guide to innovations that could genuinely add value to policing by reducing costs or increasing the quantity and quality of outputs, productivity measures focusing on particular police processes may have some important strengths. The strengths would be magnified if the costs could be benchmarked reliably across departments, because then most departments would discover that there was at least one department that was outperforming them in some specific function, and they could go and find out how that department was achieving the desired result.

Measuring the Quality of Police Service to Clients and Customers

We come last in policing to what might have been first in the assessment of private sector operations—the measurement of the quality of services the police provide to the "customers" with whom they interact. The police and those who oversee them should be interested in "customer satisfaction" for at least two different reasons. First, producing customer satisfaction in those who interact with the police is valuable in and of itself. It is one of the goals toward which the police ought to be working. Second, to the extent that the police are responsive to the concerns of their clients and customers, and give

²⁸ This is the point of much total quality management. See Senge 1990.

them what they want, the police might well be rewarded with the loyalty and affection of the public. That loyalty and affection may help the police acquire additional resources. It might also ward off a tendency to rely increasingly on private rather than public security. Even more important, the public support and trust earned through quality services may help the police succeed in controlling crime. For all these reasons, in measuring police performance, it would be important to discover something about the experience of those who interact with the police.

The difficulty in constructing these measures lies in knowing exactly who the customers of policing are, and what they should be asked about their experiences. On one hand, it is a pretty straightforward idea that the police might want to find out how their work is evaluated by the individual citizens who call on them for assistance, e.g., those who call the 911 system, those who show up in police stations to seek help in dealing with a problem or to get one kind of permit or another, or those who stop a police officer on the street to ask for some kind of help. To the extent that the police are in the business of serving citizens who are afraid, have been victimized, are in serious medical or emotional distress, or who simply need some particular permissions from the police, it seems clear that the police ought to be evaluated by those who use their services in the same way that forward-thinking private sector service companies are evaluating the quality of their services. They should ask their customers about the experience they have had with their organization, and their evaluation of that service encounter.

One way to obtain this information would be through the addition of some questions to the general population survey that has been proposed previously as a way to get accurate information about criminal victimization, levels of fear, self-defense, and private security efforts undertaken by citizens. We could ask citizens whether they have called on the police for service over the last year or so, and if so, what their experience has been. Answers to such questions could provide lots of useful information. For example, we could learn what fraction of the population actually calls on the police in any given year. We could also learn whether there are important differences in the attitudes that people have toward the police between those who have had actual concrete experience with the police, and those whose ideas about the police have been based on secondary sources, such as the reported experience of friends and neighbors, or accounts given in newspapers. This would all be in addition to getting accurate information about how a representative sample of the population perceives the quality of police services they received. The difficulty with relying on a general population survey to capture information about the quality of customer service, however, is that only a small number of people included in the general population survey will have had this direct experience with the police. A far more direct method for obtaining information about customer satisfaction would be to take a representative sample of those who actually call the police or ask for assistance. This approach is much closer to the practice of business firms. Instead of taking a random sample of the general population and asking them how they liked their stay at a Marriott Hotel (knowing that many would report that they had not stayed at a Marriott), they ask a sample of their guests about their experiences. Alternatively, they leave a card in each room inviting those who stay at the hotel to give them their feedback.

Such efforts have two beneficial effects. First, they do capture information about the level of service provided, and the satisfaction it generates. Second, they are an indication that the organization is concerned about customer satisfaction. A similar approach could be used by police departments to discover the extent to which those who call the police, stop in at the station houses, or apply for licenses of various kinds feel they have been well-served by their police department.

Surveys of those who call the police for assistance focus on *individuals* who want particular things from the police. A somewhat different kind of customer are the "interest groups" that surround police departments, and press their collective interests on the department. Some of these groups are organized around the interests of particular geographic neighborhoods. They band together to demand more police services, or to insist that the police do something about particular problems in the community such as drug houses, fast driving in the streets, or noise late at night. Still other times, they have ideas about the means of policing as well as the ends; for example, they want a different response to minor offenses committed by juveniles. In either case, they make demands on how the police allocate their effort and do their work. Other groups are less focused on neighborhood interests and more interested in shaping the police response to certain kinds of crimes on a citywide basis. The merchants associations may want crackdowns on street vending, streetwalkers, and shoplifters. A women's group may want the police to take a tougher stance against rape or domestic violence. A child advocacy group may want the police to make a different response than they are making to runaway children on the street, or to adolescents caught up in drug trafficking.

These demands differ from individual requests for service in that they come from a *collective* group of citizens, not just an individual. The police view these

collective demands in two quite different ways. To a degree, these views are rooted in a department's overall philosophy of policing. In the professional model of policing, demands from interest groups are viewed with great suspicion. They are regarded as efforts to exercise political influence over the police, and to demand that the police deal with "special interests" rather than to stay focused on achieving the "common good." Under this model, it is important for police departments to *resist* group demands, and to stay focused on achieving the department's professional mission—to reduce serious crime and enforce the law. That mission remains inviolable, and unresponsive to the efforts of particular groups of citizens to change either the focus or the methods of policing.

In the community policing model, however, the demands from citizen groups are viewed quite differently. On one hand, far from being viewed as special interest claims that need to be resisted, the demands of citizen groups are taken as important guides about the goals that are important to citizens, and that a police department should, as a matter of principle, try to help them achieve. In effect, the police allow the citizen groups to guide them as to the value they should produce, rather than assume that all the important information about the value to be produced lies in the organization's established mission statement. In addition, being responsive to the expectations and demands of community groups is understood to be an important means for establishing an effective working partnership with community groups who are in a good position to help the police. They can help the police by supporting their demands for increased money and authority to help them do their work. And they can concretely help the police achieve their law enforcement objectives not only by cooperating with the police in investigations, but also by exercising their own forms of informal social control. That is, they can decide to use the streets for their own social and recreational purposes, rather than allow them to be used by drug dealers, gangs, and streetwalkers who attract strangers into the neighborhood.

So, the question of whether a police department should view interest groups and those who represent them as important customers of policing turns out to be an important ethical and practical question. If a city embraces the professional model of policing, it will tend to view the status of these groups with suspicion, and be uninterested in measuring their level of satisfaction with the police. If a city embraces the community policing model, it will view such groups both as important customers to satisfy, and as important co-producers of justice and security. As a result, a community policing department would be quite interested in keeping track of the strength of the partnerships between these groups and the police department. In making the decision about which strategy to embrace, and in searching for the means to measure police performance in responding to the demands of groups, a business model might be helpful. Businesses have figured out that their future success depends on maintaining strong relationships with key stakeholders (Kaplan and Norton 1996). The stakeholders include more people than the customers to whom they sell products and services. They also include key elements of the investment community that supply them with the capital they need to continually improve and adapt their operations. And they include key suppliers of the materials they need to produce their products and services.

To monitor their standing with important customers, investors, and suppliers, many companies have developed "account management systems" (Cespedes 1989). These systems recognize particular individuals, groups, or firms as entities with whom the organization needs to establish and maintain an ongoing relationship. Each such group enters the consciousness of the organization as an "account" that needs to be managed. For each account, in turn, there is a reason why the relationship is important, and a judgment made about how important the relationship is. There might also be some explicit objectives the firm has with respect to that particular relationship. Finally, there is a record of activity and exchanges between the firm and the account. All this is monitored closely by an account management information system that keeps track of the character of the organization's relationship with specific, key stakeholders.

In principle, an organization committed to community policing could set up a similar system. It could identify the key individuals and groups with whom it wanted to maintain an ongoing relationship.²⁹ It could set out the ambitions it had for the relationship, and maintain a record of interactions with those who represented that particular "account." It could record the contacts, interactions, and exchanges executed within that account.

These are the *operational* uses of the account management system. But the system could also be used for *evaluative* purposes. For example, the department could review the overall set of accounts to discover the extent to which the police were closely tied to some parts of the community, and largely isolated from others. If they were linked closely to business groups and not at all to community groups, for example, they might decide to make a concerted effort to develop additional accounts with community groups. And, more to the point of our discussion here, the account management system could be used

²⁹ The Vera Institute developed something like this and called it the "Beat Book."

as a basis for regular surveys of the satisfaction of various collective customers of the police, as well as individual customers. Through that device, we could discover whether the police were getting better or worse at maintaining relationships with and being responsive to groups that represented interests and purposes that were larger than individual needs, but smaller than overarching citywide goals.

There is one last "customer" of the police whom it might be important to query about the quality of their encounters with the police. The group I have in mind are not those individuals or groups that come to the police with requests for help in accomplishing their goals, but instead those individuals whom the police seek out on an involuntary basis. This includes those people whom the police stop, question and search; those whom they cite for traffic violations; and those whom they arrest for misdemeanor quality-of-life offenses and for felonies. As noted above, these individuals resemble customers in the sense that they interact with the police as individuals at the operational end of policing. But they differ from customers in that their satisfaction is not necessarily the goal of the enterprise. They interact with the police through what I have called obligation encounters rather than service encounters. An important question, then, is how obligation encounters should be evaluated, and particularly, to what extent the police should be concerned about the "satisfaction" of those who were questioned, cited, or arrested by the police.

Recall that one of the important features of an obligation encounter in which state authority is being deployed against particular individuals is that such encounters should, in principle, be evaluated both from the point of view of the "obligatee," and from the point of view of citizens who have an interest in how state authority is being deployed. Their interests are joined to a great degree in ensuring that the rights of "obligatees" are protected in the obligation encounter. Indeed, this is the way in which attending to civilian complaints can be understood not only as a service we supply to individuals who are subjected to police authority, but also to the society as a whole in its efforts to ensure that justice is done in situations where state authority is used. Indeed, we could think of the establishment and maintenance of a complaint system as a way of monitoring the satisfaction of those who are subjected to state authority.

In addition to being interested in protecting citizens' rights in obligation encounters as a valuable end in itself, we might well be interested in the satisfaction of obligatees in such encounters as a valuable means to important ends. Presumably, the instrumental goal of an obligation encounter is to secure compliance from the obligatee. We want the person whom the police stopped to have the rights we have guaranteed to all citizens. But we would also (for somewhat different ethical reasons) like that person to cooperate with the police investigation. We would like the person arrested by the police to "come along quietly" rather than resist, and force the police to use more force and authority than is desirable. We know from important research conducted by Tom Tyler that people are more likely to comply with authoritative claims against them when they believe that the claims made are legitimate ones (Tyler 1990). Compliance is also aided when the person in authority shows respect and courtesy to the person against whom authority is being used. So, society as a whole has both a *principled* reason to ensure that the rights of obligatees have been respected in police encounters, and a *practical* interest in ensuring compliance by establishing the legitimacy of the demand that is being made, and treating obligatees with respect and courtesy.

Note that our interests in evaluating the quality of obligation encounters as a dimension of "service quality" in policing aligns very closely with the interests we have in gauging the extent to which the police are using their force and authority fairly and economically. When we ask a sample of those who had different kinds of involuntary contact with the police what their experience has been, we are also evaluating how force and authority were used in individual encounters. We are not waiting for people to complain, and have their cases substantiated or not. We are actively investigating the day-to-day interactions that the police have with citizens who are being obliged by the police rather than served by them. These measures can, therefore, be used to supplement the measures described previously, which assess whether the police are using force and authority economically and fairly. It might even turn out that such measures could be used to tell us something important about how well the complaint system is working, or reveal problems with brutality and corruption in particular parts of the police department where we did not expect it. (This happened, for example, when a pattern of complaints about sexual harassment of women in traffic stops turned up in a police department that was doing a survey of those who had been stopped. The pattern allowed the department to discover a particular officer who was using his authority to sexually molest women he stopped—an unexpected operational benefit of a more general performance measurement system.)

For all these reasons, then, it might be important for those who oversee police departments to undertake surveys not only of those who ask the police for help and assistance, but also those whom the police obligate in various ways. It would not be hard to develop a sampling frame for undertaking such surveys. Nor is it difficult to imagine what questions one would want to ask. What is hard is 1) deciding that a polity really wants to know how the police are behaving in situations where they are using the force and authority we entrust to them, 2) deciding that the information one got back from citizens who had been exposed to enforcement action would be sufficiently accurate about what occurred to support judgments about how the police really were behaving on the street, and 3) coming to believe that the perceptions of those who had been obligated by the police are of some importance in deciding whether the police are or are not performing well.

Initially, it might seem crazy to survey those whom the police stop or arrest about what happened and whether the encounter was "good for them." One might imagine that all such people would use the opportunity to complain bitterly about the police. Yet, even if they were all bitter, there might be different degrees of bitterness that could be detected in the trends of the reports. Presumably, less bitter is better than more bitter, and that might be an effect of policing that would be worth evaluating. Indeed, I was once heartened by the response of a very experienced, tough police manager to the idea that police departments ought to survey those arrested about their experience and satisfaction with that process. He said, "You know, when I was a district commander, there were some guys who, no matter who they arrested or in what circumstances, the guys they brought in were bloody and mad. There were other guys, no matter who they arrested, whose arrestees came in clean and calm. I think that difference matters in the quality of the policing we supply." I couldn't agree more. It is important to find out how many people are coming in "bloody and mad," relative to how many are coming in "clean and calm." The best way to find out is to ask them.

INVESTING IN THE FUTURE OF POLICE PERFORMANCE MEASUREMENT: A SCHEDULE FOR INVESTMENT

In the previous pages, I have made many suggestions about how the different important dimensions of policing could, as a technical matter, be measured. This is designed to persuade people that it is possible to improve the way in which we measure police performance. We can do so not only by elaborating our ideas about what constitutes value in policing, but also by investing in the improvement of existing or in the development of new measurement and systems. No doubt, the suggestions were covered too briefly even to understand them fully, let alone form clear ideas about whether they were both desirable and practically feasible. It is difficult to form a clear idea of which among the various suggestions were the most important and easiest to do (therefore, high priorities for managerial attention), and which were less important and/or much more expensive and difficult to implement (therefore less urgent).

In addition, I think it should have become apparent that the different conceptual ideas we are relying on to evaluate police-reduce crime, call offenders to account, reduce fear/enhance security (particularly in public spaces), use force and authority economically and fairly, use tax dollars economically and fairly, and produce customer satisfaction—overlap and interact with one another in complicated ways. For example, for many people, three of the most important purposes of the police—reduce crime, call offenders to account, and enhance security—seem like the same idea, not three different ideas. Similarly, we can be interested in the overall economy and fairness with which the police use their authority from the viewpoint of somewhat disinterested citizens who are witnesses to how the police are operating and compare it with some abstract standard, or from the viewpoint of a particular obligatee against whom the state's force and authority is being used, who uses his or her own subjective ideas about fairness to evaluate his or her treatment. Or, we can be interested in both the fairness with which public money is being spent, as well as the efficiency and effectiveness of the expenditures. These facts create some uncertainty about how many major dimensions of police performance should be embraced, and which particular ideas belong under which of the more general concepts.

It should also have become apparent that no neat relationship exists between a particular methodology of data collection on one hand, and particular dimensions of performance on the other. We could examine police effectiveness in controlling crime by relying on existing administrative records. Or, we could supplement existing administrative records by conducting a general population survey designed to reveal criminal victimization not reported to the police, or by evaluating the impact of specific crime control programs initiated by the police. Similarly, we could examine the economy and fairness with which force and authority are being used by examining administrative records on civil suits and substantiated complaints filed by citizens. Or, we could supplement the existing administrative records by a general population survey that asks individuals who have involuntary contacts with the police about the nature of those contacts, or a more specific, focused survey of those who we know have had such contacts with the police. Because the concepts tend to cross boundaries and blur into one another, and because different kinds of measurement systems could be used to measure police performance on different dimensions of value, it is difficult to get a clear sense of the priorities a community should have in sustaining, improving, or developing particular measurement systems. That is unfortunate, because the key question I am trying to answer in this paper is not only what should, ideally, be measured, but also, what should be the highest priorities for moving toward an improved measurement system.

To answer that "bottom line" question, I take four last steps. First, in Table 2 (see page 79), I set out not only the seven major dimensions along which police performance should be measured, but also the more specific dimensions of performance that are included in these larger ideas. The reader should note that the idea of "police legitimacy" (as a perceived judgment by citizens) appears in different ways, in two different parts of this table. It appears as part of "the economical and fair use of authority and force," and also as a component of "customer satisfaction." When this concept appears in the first category, I am using it to mean the perceptions that members of the general citizenry have of the police in general. When it appears in the second category, I am using it to mean the more specific views that individual citizens who are stopped, cited, or arrested by the police hold about their particular treatment. In principle, there ought to be some relationship between these measures; overall legitimacy ought to be connected to the experience that individuals have with the police. But we do not know this to be the case until we begin measuring these things.

Second, in Table 3 (see page 80), I describe the different means that now exist or could be constructed to allow the measurement of the different dimensions of performance. I indicate which of these are fine the way they now are, which would require nothing more than new forms of analysis and reporting, and which would require new data collection efforts.

Third, in Table 4 (see page 83), I set out my judgments about what should be the highest priority investments that should be made in sustaining, improving, or developing performance measurement systems for policing.

I should note that these tables reflect my particular judgments. These judgments, in turn, are based on knowledge of both what is technically possible, and the relative costs of the different kinds of systems. But they are also based on more subjective judgments about what is (normatively) important in policing, and what is culturally, politically, and administratively feasible to do.

I have to emphasize, however, that these are just my judgments. Groups of citizens in different cities have the right and the responsibility to decide what kind of policing they want. They also have the right and responsibility to decide how police performance should be measured. Therefore, they are perfectly entitled to disagree with my judgments. They can and will make different decisions about what is important in policing, how what is important should be measured, and what priorities they would establish for expenditures to sustain, improve, and create systems for measuring police performance. In short, I set out my ideas in some detail as a starting point for discussion within America's communities, not as a scientifically based imperative that all rightthinking people have to accept. There are too many important values at stake to imagine that science or the academy is in a position to answer the question of what constitutes value in policing. My most fervent hope is that this work will occasion the political, administrative and technical discussions that will lead not only to an improved understanding of what constitutes the important public value produced by a public police department, but also serious efforts to recognize that value when it is produced through reliable performance measurement systems.

Table 2. Important Dimensions of Police Performance

Reduce Crime and Victimization

Crimes Reported to Police Crimes Not Reported to Police Violent Crimes (Reported or Not)



Call Offenders to Account

Solve Crimes Arrest Offenders



Reduce Fear/Enhance Personal Security

Subjective Experience of Fear Level and Kind of Self-Defense



Ensure Civility in Public Spaces (Ordered Liberty)

Protect Safety and Utilization of Public Infrastructure

Traffic Safety Parking Enforcement Park Safety School Safety Public Transit Safety Maintain Space for Political Activity

Fair Response to Applications for Parades and Demonstrations

Effective Response to Civil Disturbances

Use Force and Authority Fairly, Efficiently and Effectively

Fair Distribution of Police Services and Protection Fair, Unbiased Operational Policies Controlling Corruption Reducing the Use of Force and Authority Minimizing Excess Force and Authority Reducing Routine Use of Force and Authority Perceived Legitimacy* (See Obligation Encounters Below)



Use Financial Resources Fairly, Efficiently and Effectively

Financial Integrity Financial Accountability Productivity Gains/Innovation Equal Employment Opportunity Fair Contracting



Quality Services/Customer Satisfaction

Individuals Who Call the Police Organized Petitioners Obligation Encounters* (See Perceived Legitimacy Above)

Table 3. How to Measure the Dimensions of Policing

Okay As Is
 Changes in Reporting and Analysis Only
 New Data Collection

	Dimensions of Value	Measurement Systems	Current State
	Reduce Crime and Victimization		
	Crimes Reported to Police	Uniform Crime Reports/NIBRS	\checkmark
	Crimes Not Reported to Police	Victimization Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	$(\mathbf{\hat{s}})$
	Violent Crimes (Reported or Not)	Public Health Surveillance Coroners/Violent Deaths Emergency Room Trauma Stabbings Gunshot Wounds	(0) (0)
	Call Offenders to Account		
=	Solve Crimes Arrest Offenders	Crimes Cleared by Arrest <i>Current System</i> <i>Audited</i> <i>Focused</i> Quality Cases Produced (Principal Charge or All Charges) <i>Success Prosecuted</i> <i>Quality Investigation</i> Warrant Enforcement <i>Outstanding Warrants</i> <i>Arrests on Warrants</i>	 ✓ () <
•	Reduce Fear/Enhance Personal Security		

Subjective Experience of Fear	Fear Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	?
Level and Kind of Self-Defense	Self-Defense Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	?

Ä

Ensure Civility in Public Spaces (Ordered Liberty)

Protect Safety and Utilization of Public Infrastructure		
Traffic Safety	Auto Accidents Traffic Citations	(0) (0)
Parking Enforcement	Parking Citations Traffic Reports	© ?
Park Safety	Reported Crime in Parks Perceived Safety in Parks Utilization of Parks	(C) (P) (P)
School Safety	Reported Crime in Schools Perceived Safety in Schools	(C) ?
Public Transit Safety	Reported Crime in Public Transit Perceived Safety in Public Transit Utilization of Public Transit	(\bigcirc)
Maintain Space for Political Activity		
Fair Response to Applications for Parades and Demonstrations	Survey of Applicants	?
Effective Response to Civil Disturbances	After-Action Reports/Evaluation	?

Use Force and Authority Fairly, Efficiently and Effectively

Fair Distribution of Police Services and Protection	Allocation of Resources by Need	(C) (C)
	Service Levels by Neighborhood	$\langle \mathbf{O} \rangle$
Fair, Unbiased Operational Policies	Examination of Operational Policies	
	to Determine Neutrality on Face and in Effect, and Effective Compliance	?
	· · · · ·	\sum
Controlling Corruption	Examination of Systems to Control	?
	Bribery and Extortion	S:
	Survey of Police to Discover Values	
	Regarding Police Corruption	?)
Reducing the Use of Force and Authority		
Minimizing Excess Force and Authority	Citizen Complaints	
	Successful Suits	\bigcirc
	Corroborated Complaints	00
	All Citizen Complaints	(\mathbf{O})

Use Force and Authority Fairly, Efficiently and Effectively (cont.)		
	Surveys of Obligatees Those Stopped and Queried Those Investigated Those Cited for Traffic Violations Those Arrested for Misdemeanors Those Arrested for Felonies	?
Reducing Routine Use of Force and Authority	Cases Where Evidence Excluded	\bigcirc
	On-view Street Stops	Ø
	On-view Citations Issued	
	Use of Physical Force to Subdue Arrestees	?
	Use of Weapons	\bigcirc
	Search Warrants Issued	Ó
	Wiretaps Authorized	Ó
Perceived Legitimacy* (See Obligation Encounters Below)	Legitimacy Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	?



Use Financial Resources Fairly, Efficiently and Effectively

Financial Integrity		√
Financial Accountability		v
Productivity Gains/Innovation	Productivity Measures/Benchmarks Problem Solving Initiatives <i>Number</i> <i>Assessment/Evaluation</i>	(C) (C)
	Program Evaluations Operational Experiments	? ?
Equal Employment Opportunity	Minority Representation on Force	Ô
Fair Contracting	Survey of Bidders	?

Quality Services/Customer Satisfaction

Individuals Who Call the Police	Customer Satisfaction Surveys	?
Organized Petitioners	Account Management System	?
Obligation Encounters*	Survey of Obligatees	?
(See Perceived Legitimacy Above)	What Happened	
	Perceived Fairness/Quality	

Table 4. Priorities for Investment in the
Development of a Comprehensive
Police Performance Measurement System

 \bigcirc = High Value/Priority

• = MediumValue/Priority

• Relatively Low Value/Priority

	Dimensions of Value	Measurement Systems	Development Priority
	Reduce Crime and Victimization		
	Crimes Reported to Police	Uniform Crime Reports/NIBRS	\odot
	Crimes Not Reported to Police	Victimization Surveys (General Population One-Shot: Citywide Repeated: Citywide Repeated: District Level	on) O O
	Violent Crimes (Reported or Not)	Public Health Surveillance	
		Coroners/Violent Deaths	\odot
		Emergency Room	\odot
		Trauma Stabbings	© © ©
		Gunshot Wounds	õ
1/	Call Offenders to Account		
1	Solve Crimes	Crimes Cleared by Arrest	\odot
		Current System	\odot
		Audited	\odot
		Focused	\odot
		Quality Cases Produced (Principal Charge or All Charges)	
		Success Prosecuted	\odot
		Quality Investigation	Θ
	Arrest Offenders	Warrant Enforcement	
		Outstanding Warrants	\odot
		Arrests on Warrants	\odot

•
-i

Reduce Fear/Enhance Personal Security

Subjective Experience of Fear	Fear Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	
Level and Kind of Self-Defense	Self-Defense Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level	

Ensure Civility in Public Spaces (Ordered Liberty)

Protect Safety and Utilization of		
Public Infrastructure		
Traffic Safety	Auto Accidents	\odot
	Traffic Citations	\odot
Parking Enforcement	Parking Citations	\odot
	Traffic Reports	\odot
Park Safety	Reported Crime in Parks	O
	Perceived Safety in Parks	Θ
	Utilization of Parks	\odot
School Safety	Reported Crime in Schools	0
	Perceived Safety in Schools	0
Public Transit Safety	Reported Crime in Public Transit	\odot
	Perceived Safety in Public Transit	\odot
	Utilization of Public Transit	0
Maintain Space for Political Activity		
Fair Response to Applications for	Survey of Applicants	\odot
Parades and Demonstrations		
Effective Response to Civil Disturbances	After-Action Reports/Evaluation	\odot

Use Force and Authority Fairly, Efficiently and Effectively

Fair Distribution of Police Services and Protection	Allocation of Resources by Need Service Levels by Neighborhood	0 0
Fair, Unbiased Operational Policies	Examination of Operational Policies to Determine Neutrality on Face and in Effect, and Effective Compliance	0
Controlling Corruption	Examination of Systems to Control Bribery and Extortion	\odot
	Survey of Police to DiscoverValues Regarding Police Corruption	0
Reducing the Use of Force and Authority		
Minimizing Excess Force and Authority	Citizen Complaints Successful Suits Corroborated Complaints All Citizen Complaints	0 0 0

τ

O
O
O
O
O
O

Jse Force and Authority Fairly, Efficiently and Effectively (cont.)	
	Surveys of Obligatees Those Stopped and Queried Those Investigated Those Cited for Traffic Violations Those Arrested for Misdemeanors Those Arrested for Felonies
Reducing Routine Use of Force and Authority	Cases Where Evidence Excluded
	On-view Street Stops
	On-view Citations Issued
	Use of Physical Force to Subdue Arrestees
	Use of Weapons
	Search Warrants Issued
	Wiretaps Authorized
Perceived Legitimacy* See Obligation Encounters Below)	Legitimacy Surveys (General Population) One-Shot: Citywide Repeated: Citywide Repeated: District Level



Use Financial Resources Fairly, Efficiently and Effectively

	\odot
	0
Productivity Measures/Benchmarks	\odot
Problem Solving Initiatives Number Assessment/Evaluation	O
Program Evaluations	0
Operational Experiments	0
Minority Representation on Force	0
Survey of Bidders	0
	Problem Solving Initiatives <i>Number</i> <i>Assessment/Evaluation</i> Program Evaluations Operational Experiments Minority Representation on Force



Quality Services/Customer Satisfaction

Individuals Who Call the Police	Customer Satisfaction Surveys	Θ
Organized Petitioners	Account Management System	\odot
Obligation Encounters*	Survey of Obligatees	0
(See Perceived Legitimacy Above)	What Happened	
	Perceived Fairness/Quality	

REFERENCES

- Alpert, Geoffrey and Mark H. Moore. 1993. Measuring Police Performance in the New Paradigm of Policing. In *Performance Measures for the Criminal Justice System*. Washington, D.C.: Bureau of Justice Statistics.
- Alpert, Geoffrey and Roger Dunham. 1997. *The Force Factor: Measuring Police Use of Force Relative to Suspect Resistance.* Washington, D.C.: Police Executive Research Forum.
- Andrews, Kenneth. 1980. The Concept of Corporate Strategy. Homewood, Ill.: R.D. Irwin.
- Applbaum, Arthur Isak. 1996. Racial Generalization, Police Discretion, and Bayesian Contractualism. In John Kleinig (ed.) *Handled with Discretion: Ethical Issues in Police Decision Making*. Lanham, Md.: Rowman and Littlefield Publishers.
- Bayley, David. 1994. Police for the Future. New York: Oxford University Press.
- Biderman, Albert and Albert Reiss. 1967. On Exploring the 'Dark Figure' of Crime. Annals of the American Academy of Political and Social Sciences 374: 1–15.
- Biderman, Albert and James Lynch. 1991. Understanding Crime Incidence Statistics. New York: Springer Verlag.
- Blumstein, Alfred, Jacqueline Cohen, and Daniel Nagin (eds.) 1978. Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences.
- Cespedes, Frank V. 1989. *Managing Major Accounts.* Cambridge, Mass.: Harvard Business School Publishing.
- Clarke, RonaldV. (ed.) 1996. *Preventing Mass Transit Crime*. New York: Criminal Justice Press.
- Cohen, Mark A. 1987. *The Cost of Crime to Victims*. Working Paper #87–12. Nashville: Owen Graduate School of Management, Vanderbilt University.

- Committee to Review Research on Police Policies and Practices. Forthcoming. In Wes Skogan and Kathleen Frydl (eds.) *Fairness and Effectiveness in U.S. Law Enforcement: The Evidence.* Washington, D.C.: National Academy of Sciences.
- Delattre, Edwin. 1996. *Character and Cops: Ethics in Policing*. Third Edition. Washington, D.C.: American Enterprise Institute Press.
- Dickert, Jillian. 1992. *Pentagon and the War on Drugs* (Part A and Part B). Case numbers 1149.0 and 1150.0. Cambridge, Mass.: John F. Kennedy School of Government.
- Eck, John. 1983. *Solving Crimes: The Investigation of Burglary and Robbery.* Washington, D.C.: Police Executive Research Forum.
- Eck, John. 1992. Criminal Investigation. In Gary Cordner and Donna Hale (eds.) *What Works in Policing?* Cincinnati: Anderson.
- Faggiani, Donald, Daniel Bibel and Diana Brensilber. 2001. Regional Problem Solving Using the National Incident Based Reporting System. In Melissa Reuland, Corina Sole Brito and Lisa Carroll (eds.). Solving Crime and Disorder Problems. Washington, D.C.: Police Executive Research Forum,
- Farmer, Michael T. (ed.) 1981. *Differential Police Response Strategies*. Washington, D.C.: Police Executive Research Forum.
- Federal Bureau of Investigation. 2000. *Crime in the United States 2000: Uniform Crime Reports.* Washington, D.C.: Author.
- Ferraro, Kenneth. 1995. *Fear of Crime: Interpreting Victimization Risk.* Albany, N.Y.: State University of New York Press.
- Fingerhut, Lois and Joel Kleinman. 1990. International and Interstate Comparisons of Homicide Among Young Males. *Journal of the American Medical Association* 263(24):3292–3295.
- Fridell, Lorie, Robert Lunney, Drew Diamond and Bruce Kubu with Michael Scott and Colleen Laing. 2001. *Racially Biased Policing: A Principled Response*. Washington, D.C.: Police Executive Research Forum.
- Geller, William and Hans Toch (eds.). 1995. And Justice for All: Understanding and Controlling Police Abuse of Force. Washington, D.C.: Police Executive Research Forum.
- Goldstein, Herman. 1977. Policing a Free Society. Cambridge, Mass.: Ballinger.
- Goldstein, Herman. 1990. Problem-Oriented Policing. New York: McGraw-Hill.
- Hammond, John S., Ralph L. Keeney, and Howard Raiffa. 1998. Even Swaps: A Rational Method for Making Tradeoffs. *Harvard Business Review* 76(2): 137ff.

- Hermann, Peter and Nancy A. Youssef. 2000. Fugitives Warrant Regional Effort: Metro-Area Police Force Targets Outstanding Cases. *The Baltimore Sun.* 11 July. 1B.
- Howe, Kenneth and Erin Hallissy. 1999. When Justice Goes Unserved. *The San Francisco Chronicle*. 22 June. A1.
- International City/County Management Association (ICMA) and Urban Institute. 1997. Comparative Performance Measurement: FY 1995 Data Report. Washington, D.C.: International City/County Management Association. Pp. 3–1–3–65.
- Ivkovich, Sanja Kutnjak. 2002. The Fallen Blue Knights: Controlling Police Corruption. Unpublished S.J.D. dissertation. Harvard Law School.
- Kamisar, Yale. 1980. Police Interrogation and Confessions: Essays in Law and Policy. Ann Arbor: University of Michigan Press.
- Kaplan, Robert S. and David P. Norton. 1996. *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.
- Kelling, George L. and Mark H. Moore. 1988. The Evolving Strategy of Policing. *Perspectives on Policing* No. 4. Washington, D.C.: National Institute of Justice.
- Kenney, Dennis and T. Stewart Watson. 1998. *Crime in the Schools: Reducing Fear and Disorder with Problem Solving*. Washington, D.C.: Police Executive Research Forum.
- Kenney, Dennis, Dina Rose, Cristine Maglieri, Tara O'Connor Shelley, Melissa Reuland, and Deborah Lamm Weisel. 1999. *A Conflict of Rights: Public Safety and Abortion Clinic Conflict and Violence*. Washington, D.C.: Police Executive Research Forum.
- Klockars, Carl B., Sanja K. Ivkovich, William E. Harver, and Maria R. Haberfeld. 1997. *Measurement of Police Integrity: Final Report.* Washington, D.C.: National Institute of Justice.
- Lindblom, Charles E. 1965. *The Intelligence of Democracy: Decision Making Through Mutual Adjustment*. New York: Free Press.
- Martin, Susan and Lawrence Sherman. 1986. Selective Apprehension: A Police Strategy for Repeat Offenders. *Criminology* 24:155–173.
- Marx, Gary T. 1988. Undercover: Police Surveillance in America. Los Angeles: University of California Press.
- Mashaw, Jerry L. 1985. *Due Process in the Administrative State.* New Haven, Conn.:Yale University Press.
- McElroy, Jerome E., Colleen Cosgrove, and Michael Farrell. 1981. *Felony Case Preparation: Quality Counts.* New York: Vera Institute of Justice.

- Monkkonen, Eric. 1992. History of Urban Police. In Michael Tonry and Norval Morris (eds.) *Modern Policing*. Chicago: University of Chicago Press.
- Moore, Mark H. 1994. Policing: DeRegulating or ReDefining Accountability. In John J. DiIulio, Jr. (ed.) *Deregulating the Public Service: Can Government Be Improved.* Washington, D.C.: Brookings Institution.
- Moore, Mark H. 1995. *Creating Public Value: Strategic Management in Government*. Cambridge, Mass.: Harvard University Press.
- Moore, Mark H. 1997. *Legitimation of Criminal Justice Policies and Practices*. Speech at the National Institute of Justice. Washington, D.C.
- Moore, Mark H. 2002. *Recognizing Value in Policing: The Challenge of Measuring Police Performance.* Washington, D.C.: Police Executive Research Forum.
- Moore, Mark H. and George L. Kelling. 1983. To Serve and Protect: Learning from Police History. *Public Interest* 70.
- Moore, Mark H. and Margaret Poethig. 1999. The Police as an Agency of Municipal Government: Implications for Measuring Police Effectiveness. In Robert Langworthy (ed.) *Measuring What Matters*. Washington, D.C.: National Institute of Justice.
- Moore, Mark H. and Robert C. Trojanowicz. 1988. Policing and the Fear of Crime. *Perspectives on Policing* No. 3. Washington, D.C.: National Institute of Justice.
- Moore, Mark H., Malcolm Sparrow, and William Spelman. 1997. Innovations in Policing: From Production Lines to Job Shops. In Alan Altshuler and Robert Behn (eds.) *Innovation in American Government*. Washington, D.C.: Brookings Institution Press.
- Moore, Mark H., Susan Estrich, Daniel McGillis, and William Spelman. 1984. *Dangerous Offenders: The Elusive Target of Justice*. Cambridge, Mass.: Harvard University Press.
- Nadelmann, Ethan. 1993. Cops Across Borders: The Internationalization of U.S. Criminal Law Enforcement. University Park, Penn.: Pennsylvania State University Press.
- National Research Council. 1993. Understanding Child Abuse and Neglect. Washington, D.C.: National Academy Press.
- O'Keeffe, Michael. 1998. Police Lure Suspects with '\$100 Prizes.' *The Denver Rocky Mountain News.* 29 March. 36A.
- Pate, Antony and Edwin Hamilton. 1991. *The Big Six: Policing America's Largest Cities*. Washington, D.C.: Police Foundation.
- Philadelphia Police Study Task Force. 1987. *Philadelphia and Its Police: Toward a New Partnership—A Report by the Philadelphia Police Study Task Force*. Philadelphia: Author.

- Peters, Tom and Robert H. Waterman, Jr. 1982. In Search of Excellence: Lessons from America's Best-Run Companies. New York, NY: Harper & Row.
- Police Executive Research Forum. 1981. Survey of Police Operational and Administrative Practices. Washington, D.C.: Author.
- Police Foundation. 1981. Newark Foot Patrol Experiment. Washington, D.C.: Author.
- Ramirez, Deborah, Jack McDevitt, and Amy Farrell. 2000. A Resource Guide on Racial Profiling Data Collection Systems: Promising Practices and Lessons Learned. Washington, D.C.: U.S. Department of Justice.
- Senge, Peter M. 1990. The Fifth Discipline: The Art and Practice of the Learning Organization. New York: Doubleday.
- Senna, Joseph and Lawrence Siegel. 1993. *Introduction to Criminal Justice*. New York: West.
- Sherman, Lawrence. 1992. Policing Domestic Violence. New York: Free Press.
- Sherman, Lawrence. 1995. The Police. In James Q. Wilson and Joan Petersilia (eds.) *Crime.* San Francisco: Institute for Contemporary Studies Press.
- Sherman, Lawrence. 2002. Fair and Effective Policing. In James Q. Wilson and Joan Petersilia (eds.) *Crime*. Second edition. San Francisco: Institute for Contemporary Studies Press.
- Sherman, Lawrence, Patrick Gartin, and Michael Buerger. 1989. Hot Spots and Predatory Crime: Routine Activities and the Criminology of Place. *Criminology* 27(1):27–56.
- Skogan, Wesley. 1990. Disorder and Decline. New York: Free Press.
- Skogan, Wesley and Susan Hartnett. 1997. Community Policing, Chicago Style. New York: Oxford University Press.
- Skogan, Wesley, Susan Hartnett, Jill Dubois, Jennifer Corney, Marianne Kaiser, and Justine Lovig. 1999. On the Beat: Police and Community Problem Solving. Boulder, Colo.: Westview Press.
- Sparrow, Malcolm, Mark H. Moore, and David M. Kennedy. 1990. *Beyond 911: A New Era for Policing.* New York: Basic Books.
- Sviridoff, Michele and Jerome E. McElroy. 1988. Processing Complaints Against Police in New York City: The Civilian Complaint Review Board. New York: Vera Institute of Justice.
- Sviridoff, Michele and Jerome E. McElroy. 1989. Processing Complaints Against Police in New York City: The Complainants Perspective. New York: Vera Institute of Justice.
- Tyler, Tom. 1990. *Why People Obey the Law.* New Haven, Conn.:Yale University Press.

- U.S. Census Bureau. 1999a. 1997 Census of Governments, Vol. 4(4), Government Finances: Finances of Municipal and Township Governments. Washington, D.C.: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- U.S. Census Bureau. 1999b. 1997 Census of Governments, Vol. 4(5), Government Finances: Compendium of Government Finances. Washington, D.C.: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- Walker, Samuel. 1992a. Historical Roots of the Legal Control of Police Behavior. In David Weisburd and Craig Uchida (eds.) *Police Innovation and Control of the Police*. New York: Springer Verlag.
- Walker, Samuel. 1992b. *The Police in America*. Second Edition. New York: Mc-Graw-Hill.
- Weber, Max. 1994. Politics as a Vocation. In Peter Lassman and Ronald Spiers (eds.) *Weber: Political Writings*. New York: Cambridge University Press.
- Weisel, Deborah Lamm. 1990. *Tackling Drug Problems in Public Housing: A Guide for Police*. Washington, D.C.: Police Executive Research Forum.

ABOUT PERF

THE POLICE EXECUTIVE RESEARCH FORUM (PERF) is a national professional association of chief executives of large city, county and state law enforcement agencies. PERF's objective is to improve the delivery of police services and the effectiveness of crime control through several means:

- the exercise of strong national leadership,
- the public debate of police and criminal issues,
- the development of research and policy, and
- the provision of vital management and leadership services to police agencies.

PERF members are selected on the basis of their commitment to PERF's objectives and principles. PERF operates under the following tenets:

- Research, experimentation and exchange of ideas through public discussion and debate are paths for the development of a comprehensive body of knowledge about policing.
- Substantial and purposeful academic study is a prerequisite for acquiring, understanding and adding to that body of knowledge.
- Maintenance of the highest standards of ethics and integrity is imperative in the improvement of policing.
- The police must, within the limits of the law, be responsible and accountable to citizens as the ultimate source of police authority.
- The principles embodied in the Constitution are the foundation of policing.

RELATED TITLES

Recognizing Value in Policing

(Mark Moore with David Thacher, Andrea Dodge and Tobias Moore), 192 pp. ISBN#: 1-878734-76-8

Price: \$22.00

As police resources are being stretched to their limits, there is renewed pressure to evaluate what our police agencies are doing well, and whether we are using the right measures to determine their effectiveness. Mark Moore and his colleagues, with support from the Sloan Foundation, provide researchers, policymakers, police professionals and citizens the insight and tools to better assess what they should value in law enforcement services, and how to better measure police performance. *Recognizing Value in Policing* explores seven valuable goals of policing and demonstrates how traditional measures have been inadequate to assess police effectiveness on so many dimensions. The publication provides very concrete advice to those thinking about strategic reforms for his or her police agency-reforms that will improve how the department's professionals do their jobs and better serve individuals and society. Working with numerous criminal justice practitioners and conducting research in several cities, Moore has created a framework that represents the latest thinking about measuring police performance. Citizen Involvement: How Community Factors Affect Progressive Policing (Mark Correia 2000), 124 pp. ISBN#: 1-87873469-5

Price: \$17.00

Based on an analysis of six sites and other survey data, interviews and reports, author Mark Correia provides us with information about how community factors can influence community policing efforts. Among his many findings is that members of a community must be organized into a social network—in which neighbors know and rely on one another and government officials—to advance community policing effectively. Without a cohesive social network, community policing efforts may be ineffective. It may be that police need to pay as much attention to how communities mobilize and develop bonds of trust, as they do to innovative policing principles.

Beyond Command and Control:

The Strategic Management of Police Departments (Mark H. Moore and Darrel W. Stephens, 1991), 145 pp. ISBN#: 1-878734-25-3

Price: \$16.50

Police are expected to not only control crime, but also reduce fear, maintain order and manage social crises. *Beyond Command and Control* is a first step toward establishing a new police management orthodoxy—one that moves away from the traditional military command bureaucracy and toward a structure that fosters change and innovation. This management philosophy borrows corporate strategies from the private sector to help define the goals of policing.

Police Program Evaluation (Larry Hoover, ed. 1997), 260 pp. ISBN#: 1-878734-54-7

Price: \$18.00

It's a challenge police professionals face daily—how to determine if programs and tactics are effective. Meaningful program evaluation often requires going beyond piecemeal observations or simple "before and after" comparisons. *Police Program Evaluation,* an edited volume from PERF and the Sam Houston State University, provides substantive articles covering various aspects of police program evaluation such as evaluating tactical patrol and criminal investigations. The authors present valuable information on types of evaluations and different ways of collecting and analyzing data, all in language accessible to both experienced researchers and those engaging in program evaluation for the first time. This is a highly practical volume for police managers implementing new practices or revising traditional ones, as well as other readers who need to measure the effectiveness of police programs and tactics. It is often used for teaching, training and promotional exams.

Quantifying Quality in Policing (Larry Hoover, ed. 1995), 280 pp. ISBN#: 1-878734-40-7

Price: \$19.00

In *Quantifying Quality in Policing*, police professionals and social scientists identify those elements of total quality management (TQM) that may be used to assess effectiveness in police performance. In the past, police performance has primarily been evaluated in terms of numbers, such as crime statistics and arrest rates. The authors of *Quantifying Quality in Policing*, however, suggest that other indicators such as citizen satisfaction and crime prevention, although hard to quantify, are also important in fairly assessing police services. Routinely used as required reading for classes and promotional exams, this book features such noted experts as George Kelling, Gary Cordner, John Eck, Darrel Stephens, and David Bayley.

Citizen Review Resource Manual (Samuel Walker 1995), 424 pp. ISBN#: 1-878734-37-7

Price: \$27.50

As more and more jurisdictions, large and small, establish review committees of community members in an effort to hold the police accountable for their actions, it is crucial that police leaders and policymakers be familiar with the policies and procedures in place across the country. In the *Citizen Review Resource Manual*, author Samuel Walker provides an overview of the state of citizen review, including a section of ordinances and statutes, executive and department orders, and other documents collected from over 30 police departments nationwide.

Why Police Organizations Change: A Study of Community-Oriented Policing (Jihong Zhao 1996), 140 pp. ISBN#: 1-878734-45-8

Price: \$18.50

Why do police organizations change? What prompts them to make the shift to community-oriented policing? In *Why Police Organizations Change*, Jihong Zhao addresses the various factors in both the internal and external environment that prompt a police organization to adopt innovative approaches to policing. Such factors range from managerial tenure and personnel diversity to local political culture and community characteristics.

Removing Managerial Barriers to Effective Police Leadership (Norman H. Stamper, 1992), 175 pp. ISBN#: 1-878734-29-6

Price: \$12.00

Police executives whose attempts to provide quality leadership are frustrated by the obstacles they encounter in their organizations may find the solutions they seek in *Removing Managerial Barriers to Effective Leadership*. This report includes an examination of more than 50 big-city police chiefs and their assistants to determine what America's urban police chiefs profess to value in relation to their community and organizational responsibilities, and whether they are perceived by their assistants as acting in accord with those values in their daily work.

Police Management: Issues and Perspectives (Larry T. Hoover, ed., 1992) Product #265, 380 pp. ISBN#: 1-878734-28-8

Price: \$17.00

This volume provides a comprehensive review of important issues facing police administrators. More than a dozen noted researchers and police administrators contributed to this unique anthology, including George Kelling, Elizabeth Watson, Larry Hoover, Victor Strecher, Dennis Kenney and Darrel Stephens. *Police Management: Issues and Perspectives*, used as a management text and required reading for promotional exams, systematically addresses the underlying, intractable problems that police agencies face. Managing Innovation in Policing: The Untapped Potential of the Middle Manager (William A. Geller and Guy Swanger, 1995), 204 pp. ISBN#: 1-878734-41-5

Price: \$27.50

The conventional wisdom holds that middle managers are sometimes obstacles to strategic innovation, including community policing. In *Managing Innovation in Policing*, however, authors Geller and Swanger argue that, when properly motivated and supported, police middle managers have been and can be key players in policing reform. This book includes case studies of successful middle managers and suggestions for how police senior leaders, city officials and others can help position middle managers to voluntarily, proactively and effectively help implement community policing. *Managing Innovation in Policing* has become a popular text for community policing training courses.

Tired Cops: The Importance of Managing Police Fatigue (Bryan Vila, 2000) 190 pp. ISBN# 1-878734-67-9

Price: \$20.00

Police fatigue is a common and potentially lethal problem that largely has been ignored—until now. In *Tired Cops*, BryanVila, Ph.D., a prominent police researcher with 17 years of law enforcement experience, reports important findings from his NIJ-sponsored research with the Police Executive Research Forum (PERF) on police fatigue.Vila explores potential links between fatigue and officer accidents, injuries, illnesses and misconduct. The PERF publication, supported by the National Sleep Foundation, also provides police executives with the background they need to start managing fatigue, and gives officers and their families insight into this long overlooked occupational hazard.

Mapping Across Boundaries: Regional Crime Analysis (Nancy LaVigne, Julie Wartell, 2001) ISBN: 1-878734-74-1 Price: \$20.00

Mapping Across Boundaries: Regional Crime Analysis addresses the obstacles and answers in developing regional crime mapping. The 130-page report is a primer for police agency personnel and students of mapping who want to enhance crime control and prevention efforts. The book discusses how cross-boundary mapping can better reveal hot spots of crime that occur along jurisdictional boundaries or identify serial crimes by offenders operating in neighboring jurisdictions. This book provides guidance through case studies on a range of regional mapping models—from central archiving systems to ambitious multiagency consortia with common database structures and GIS platforms. This practical guide outlines for each case model how the mapping effort began; how it was implemented; decisions regarding software, hardware, data sharing and privacy agreements; and how the cross-agency mapping has been used in practice. It highlights issues to consider in cross-agency collaborations and provides sources for additional resources, information, sample Memoranda of Understanding and other guidance on emerging regional crime analysis efforts.

Using Research: A Primer for Law Enforcement Managers (John E. Eck and Nancy LaVigne, 1994), 180 pp. ISBN#: 1-878734-33-4

Price: \$19.00

Using Research, now in its second edition, remains the only research text specifically tailored to police audiences. Authors John Eck and Nancy La Vigne provide a comprehensive introduction to the research process, from defining the problem to designing the research, from analyzing the data to reporting the findings. They also provide criteria for judging others' research and a listing of information sources. The second edition is updated to reflect changes in technology and in the nature of policing itself. Anyone interested in evaluating police practices will want to add this book to his or her collection.

Problem-Oriented Policing: Crime-Specific Problems, Critical Issues and Making POP Work (Volume 3) (Corina Solé Brito and Eugenia E. Gratto, eds., 2000) ISBN#1-878734-72-5

Price: \$30.00

The third in the problem-solving series, this book focuses on emerging issues in addressing community problems. It focuses on such issues as hate crimes, stalking, crime in public housing, public disorder and other issues of concern to police problem solvers. Deadly Force: What We Know—A Practitioner's Desk Reference on Police-Involved Shootings (William Geller and Michael Scott 1992), 656 pp. ISBN#: 1-878734-30-X

Price: \$25.50

Published in 1992, *Deadly Force* remains one of the most comprehensive volumes of information about police-involved shootings, compiling data from hundreds of research studies conducted over the past 30 years. Its 187 detailed graphs and tables highlight the most important findings from prior landmark research and present such previously unpublished information as national FBI data on justifiable homicides by police and data from a dozen major American cities on all shots fired from 1970 through 1991. The book also provides data and practical advice on such critical issues as shootings of cops by "friendly fire," justifying actions to local officials, averting a civil disorder after a controversial shooting, creating sound policies and reducing civil liability.

Solving Crime and Disorder Problems:

Current Issues, Police Strategies and Organizational Tactics (Melissa Reuland, Corina Solé Brito and Lisa Carroll, eds. 2002), 210 pp. ISBN: 1-878734-75-x

Price: \$29.00

Solving Crime and Disorder Problems: Current Issues, Police Strategies and Organizational Tactics is PERF's latest publication dedicated to innovations in police problem solving. The 11 chapters each use a case study to identify effective problem-solving strategies to deal with issues such as racially biased policing, sexual assaults, drug and disorder problems, field training, crime mapping, response to people with mental illness, and more. Using strategies from the United States, Canada and Europe, this book is written for police professionals, criminal justice academicians and students looking for innovative ways in which the problem-solving model has been applied. The book is broken down into three sections that deal with applying problem-oriented policing to current issues, police strategies and organizational tactics. Each case study offers a successful approach for how law enforcement departments can address seemingly intractable problems within their communities. Reviewed and edited by problem-solving experts, Solving Crime and Disorder Problems is appropriate for police professionals interested in community problem solving and for classroom, promotion exam and training uses.

Command Performance: Career Guide for Police Executives

(William Kirchoff, Charlotte Lansinger and James Burack, 1999). 225 pp. ISBN #: 1-878734-68-7

Price: \$19.00

Command Performance: Career Guide for Police Executives is the culmination of a three-year project to bring you the most comprehensive and practical information on successfully competing for police executive positions and understanding the selection process. If you are interested in establishing or maintaining your position as a progressive leader in policing, you will not want to miss this opportunity. Written by a city manager, employment specialist and police researcher, the book provides useful resources, helpful advice and substantive briefings on issues related to career development as a police executive.

PERF also has many publications on community problem solving, evaluating police agencies and practices and other materials used for promotion exams, training and university classes. For a free catalog or more information, call toll-free to 1-888-202-4563. PERF's online bookstore can be found at www.policeforum.org on the PERF Store section of the Website.

NOTES

NOTES