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Systematic Observation of Public Police: Applying Field Research Methods to Policy Issues

U.S. Department of Justice
Office of Justice Programs
810 Seventh Street N.W.
Washington, DC 20531

Janet Reno
Attorney General

Raymond C. Fisher
Associate Attorney General

Laurie Robinson
Assistant Attorney General

Noël Brennan
Deputy Assistant Attorney General

Jeremy Travis
Director, National Institute of Justice

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*Stephen D. Mastrofski, Roger B. Parks, Albert J. Reiss, Jr.,
Robert E. Worden, Christina DeJong, Jeffrey B. Snipes,
and William Terrill*

NIJ

Jeremy Travis
Director

Steven Edwards
Program Monitor

Stephen D. Mastrofski is with Michigan State University; Roger B. Parks is with Indiana University; Albert J. Reiss, Jr., is with Yale University; Robert E. Worden is with State University of New York at Albany; Christina DeJong is with Michigan State University; Jeffrey B. Snipes is with Florida State University; and William Terrill is with Rutgers University.

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Preface

This report outlines a social science method called systematic social observation (SSO). Elements of SSO, as a practice of a group of researchers, can be traced to England in the 1930s and the United States in the 1950s. But Albert J. Reiss, Jr. (1968) was the one who identified it as a valid method for sociologists, detailed its advantages and limitations, and alerted researchers to the requisites of its successful employment. This preface provides some background on Reiss' development of this methodology and its application to the study of social phenomena and to the police.

Reiss began with the premise that "[o]bservation is an integral part of any science" and argued the value of precision in recognizing and recording that which is observed. Only by requiring precise rules for recognizing and recording could we begin to measure the error introduced by observation—whether the observation is done by the individual investigator, by a team of trained observers, or by research subjects who report their observations to interviewers as in the common social survey.

A key insight offered by Reiss was the linking of observational and survey research. A recording instrument much like that of a survey could be used to systematize recording of events by observers, affording them memory prompts in the same manner that survey items prompt a respondent. This insight is important because it forces attention to what observers can reasonably recognize, recall, and record accurately. Construction of observation "items" must be done as carefully as any survey "item," and with much the same reasoning.

Reiss' insight led him to the important elements of systematic observation—elements paralleling those in systematic social surveys. It is as important to sample units of observation as it is to sample respondents. Our ability to generalize from observation or survey—to estimate parameters for a larger population and assess the error distribution for these parameters—depends on the sample design. Just as one worries about reactivity of particular survey items and of interviewer-respondent interactions, so too are these important concerns for systematic observation. Training of observers is key to their reliable and valid recording of events,

just as it is for interviewers. Close supervision is needed for observers and for interviewers. Careful analysis of "observer effects" is made possible by employing multiple observers, just as "interviewer effects" can be detected across multiple interviewers.

These issues and others that we have pursued further in our research using SSO are discussed at greater length in the report that follows. We cite them here to acknowledge Reiss' groundbreaking work and our own debt to him. When Roger B. Parks was a not-so-young graduate student struggling to develop credible methods to study police officer behavior for the Police Services Study, he had one of those treasured "Aha!" moments when reading Reiss' "Stuff and Nonsense about Social Surveys and Observation" and "Systematic Observation of Natural Social Phenomena." Parks still had a lot of work to do, but after reading these articles, he knew how to do it well.

When drafting the section of this volume entitled "How Systematic Social Observation Is Done," we could easily have acquitted that obligation by writing, "See Reiss." For the reader's convenience, we have summarized his published work on SSO and drawn from additional insights he offered in subsequent projects, including this one. This piece showcases SSO and its applicability to questions of interest to policymakers and practitioners, as well as researchers. We have thought it advantageous to summarize Reiss' insights in what follows, but readers are here placed on notice that it cannot be said better than it was the first time.

Stephen D. Mastrofski
Roger B. Parks
Robert E. Worden

Contents

Executive Summary

Introduction

This report describes systematic social observation (SSO), a field research method used to study police. This method has shown promise in answering many of the questions regarding how police work is conducted today. It was developed originally to guide field research on policing in the 1960s and 1970s. Most recently, SSO was employed by the Project on Policing Neighborhoods (POPN) to study police behavior in Indianapolis, Indiana, and St. Petersburg, Florida, and other research projects use it as well. The report describes the method and explores SSO's potential as a field research tool in a variety of venues.

What is systematic social observation?

SSO systematizes field methods for teams of researchers who observe the object of study (in this case, the police) in its natural setting. Researchers record events as they see and hear them and do not rely upon others to describe or interpret events. The researchers follow well-specified procedures that can be duplicated. For example, researchers who wish to record whether officers are respectful to complainants must define "respectful" and "complainant" in such a manner that other researchers record these terms in the same way when observing the same and similar situations. This makes it possible for many researchers to conduct observations, rather than relying on the observations of just one. Furthermore, the observation is conducted independent of the object of observation—the researcher does not rely on the officer's report as to whether he or she treated a complainant with respect; the researcher makes that observation and judgment.

How systematic social observation is done

Albert J. Reiss, Jr., developed the methods of SSO applied to the study of police. According to Reiss, the important considerations in conducting SSO include: (1) selection of problems for investigation, (2) preliminary investigation by direct observation, (3) definition of the universe to be observed, (4) sampling for observation, (5) development of instruments to collect and record observations systematically, (6) provision for measuring

error, (7) pretesting instruments, (8) organization for direct field observations, (9) processing observations, and (10) quantitative analysis.

The basics of SSO. In SSO of patrol work, trained observers accompany police officers in their cars, on foot, or on bicycle to observe everything they do during a typical tour of duty. To help them later reconstruct what they have seen and heard, observers take brief handwritten notes on small notepads. Officers are allowed, and even encouraged, to read the notes made by their observers. The only stipulation is that the notes cannot be shown or discussed with any other officer or supervisor or anyone outside the research team. On some occasions, observers will interview officers on their perspectives and decisionmaking rationale regarding particular events.

SSO observers are trained carefully in what to look for, how to note it in the field, and how to record it for data analysis. Following each observation session, field researchers complete extensive, semistructured narratives of the ride and events that occurred (narratives often run 15 to 20 single-spaced pages) and respond to a highly structured, computerized questionnaire about what they observed. Field supervisors compare the narratives and coded data from the questionnaire and work with observers to correct discrepancies and clarify information in their reports.

Selecting who, where, when, and what to observe. Because the purpose, opportunities, and constraints differ from one research project to the next, the shape and design—the questions of who, where, when, and what that are asked—differ from one SSO project to the next. In the recent NIJ/COPS-funded POPN:

- The "where" was a set of geographically defined study areas: police beats.

- The "when" were specific shifts or tours of duty.

- The "what" were police and citizen behaviors in activities and encounters.

- The "who" were the officers serving the selected beats and times, and the citizens with whom they interacted.

In this project, where (police beats) and when (specific shifts) decisions determined the who (officers and residents) and what (activities and encounters) of the project.

Reliability. Before they are assigned to the field, potential observers are shown a prerecorded video of incidents and then are asked to complete relevant portions of a narrative and electronic questionnaire of what they have just seen and heard. The research team compares the observations of several observers to estimate the reliability of each potential observer. The researchers also scrutinize each observation for the observer's internal coding logic. Those observers who demonstrate reliable coding are selected for field work.

Further reliability checks are made in the field. Where police data systems allow, supervisors compare observers' records of sequence and timing of events with police department records of the event. When multiple observers record the same event, field supervisors compare the information recorded by each observer. In some projects, citizen participants in events are interviewed and their perceptions of the actions are compared with the observers' recorded information. Observers are interviewed about their attitudes and perceptions at the beginning and end of their employment to uncover possible bias that could affect their work.

Experience has shown that the more discrete and limited the decisions an observer must make, the easier it is to achieve reliable results. Nevertheless, observers often must weigh multiple and sometimes conflicting social cues (for instance, did one party show disrespect to another?) that may vary widely among individuals and cultures. Coding criteria must be as explicit as possible, and observers practice using them repeatedly during training.

Personnel, logistics, project management, and quality control. Because SSO is resource intensive, it takes time to recruit and train observers and demands advance planning and intensive supervision, monitoring, and coordination while data are collected. Experience has shown there are a number of considerations.

Recruiting and selecting observers. Desirable skills and traits include curiosity about the project, attentiveness to detail, good social skills, good reporting skills, self awareness, word-processing ability, and familiarity

with the community being studied. University undergraduate, graduate, and law students are commonly used as SSO field researchers. They are relatively inexpensive to hire and can often be trained in controlled classroom settings before deployment with officers.

Staffing. The number of observers required depends upon the scope of the work. Sampling standards can also affect staffing requirements. The more elaborate the data-entry protocols, the greater the need to monitor coding while in the field. The cost of SSO can vary tremendously depending on staff size, the number of observations to be made, and other incidental expenses (travel, housing, equipment, supplies, and so forth).

Data-entry computer software. Data entry software, called Codit, has been developed specifically for police SSO. The researcher creates coding protocols using a standard word-processing program. The protocols include the questions asked of the observers about their observations and all of the code response options. Codit allows the researcher to enter coded data at several levels of analysis and to move easily among those levels with a menu. Narrative accounts of field observations are entered separately using standard word-processing programs and can be analyzed using commercial qualitative data-analysis programs.

Training. Observers must have sufficient training to become comfortable with police officers and to learn the data-entry protocols. The latter usually takes longer than the former. Most observers take between three and five training rides to be able to produce usable data. In addition to training rides, observers receive classroom instruction on the SSO methodology and substantive issues of the research.

Onsite supervision. Data managers scan the disks submitted by observers to catch logical inconsistencies in the coding and suspicious or unusual coding patterns. Field supervisors review the data managers' and field researchers' reports, clarify coding rules, and debrief observers.

Liaison with the police department. SSO requires close coordination with the police department. Top managers must know what the project will require and how the agency will be asked to depart from its routines. Close working relationships with district commanders and shift and first-line supervisors are essential during data collection.

Confidentiality of observations. All parties to the research endeavor must have a clear and common understanding of the rules of confidentiality that will apply. The U.S. Department of Justice has established confidentiality guidelines for the research it funds, as have most universities and research institutes. Persons not on the research team are denied access to the data derived from tours of duty with observed officers.

Reactivity. While officer reaction to an observer is a concern, experience has shown it is easier to estimate and manage in SSO than when relying on data found in survey and archival research. Officers usually acclimate quickly to trained observers, and observers can note signs of reactivity in the officer's behavior in their notes. Observers' adherence to strict confidentiality guarantees in most cases will put the officer at ease.

Some policy applications of systematic social observation

Researchers have used SSO to improve our understanding of police work and to account for variations in the way it is conducted. SSO can also provide more precise knowledge of how policies are actually carried out and can reveal the biases and limitations of other forms of data. Although the practical applications of SSO have been limited to date, this report shows how it may be used to determine how officers spend their time, how they mobilize to deal with the public, how they use their authority with the public, the nature and extent of on-scene supervision, and how policing styles vary in different beats.

SSO can provide police departments with information to determine how best to deploy personnel and resources, to develop a more complete picture of how officer interactions with the public are instigated (for instance, dispatcher, supervisor, another officer, citizen on the scene, telephone reports, and the observed officer), to discover how officers report—or fail to report—their use of authority (for instance, detaining, questioning, and searching citizens) and enforce laws short of arrest, to determine how police supervisors interact with officers in the field, and to discover whether the socioeconomic characteristics of an area or the local precinct's policies play a more influential role in police intervention levels.

Conclusion

SSO offers many advantages for gathering and analyzing information on police at work. It can be designed to suit very specific information needs and does not rely upon the recordkeeping accuracy, candor, or recall of those who are being observed. It offers a scope and depth of data seldom available through official records and survey questionnaires.

SSO is not without its limitations. It is costly, time-consuming, and dependent upon the cooperation of the police. Special effort must be made to address the reactivity of research subjects to observers and the reliability of observers in recording events. Training, supervision, and quality control in the field are the best ways to manage these problems, but they take planning, time, and money. Given these constraints, SSO seems less feasible as a mechanism for routinely monitoring police practice and better suited to special studies.

Introduction

American police[1] are entering a period of experimentation and self-examination that may surpass any other during this century. Police are showing great openness to researchers—both to obtain rigorous evaluations of their work and to demonstrate accountability to constituents. The news is filled with anecdotal accounts of police successes and failures, but policymakers and the public need systematic evidence about what police do and accomplish. They want to know the advantages and disadvantages of traditional methods and how new approaches affect the quality of service delivery. Most importantly, people want to know what is really going on between the police and the public. This report describes systematic social observation, a field research method well-suited to answer many of the questions posed about policing today. The following text describes the method and illustrates its potential as a policy analysis tool.

What Is Systematic Social Observation?

> Observation is fundamental to all forms of data collection.
> The forms differ primarily in how techniques of investigation
> are organized, how observations are made and recorded, and in
> their own validity and reliability.[2]

Systematic observation of natural social phenomena (systematic social observation or SSO) has the following features.[3] First, researchers observe the object of study in its "natural" setting. For example, the researcher observes directly how an officer responds to a citizen's request for service by being present as the officer interacts with the citizen. SSO requires that the researcher see and hear the event directly without relying upon others to describe it. Second, researchers make and record their observations according to procedures that can be duplicated. These procedures are made explicit before observation and can be followed by other researchers to produce the same results, should they observe the same thing. For example, if the researcher wants to know whether the officer was respectful to a complainant, the researcher must define "respectful" and "complainant" in such a way that if other researchers were to follow these rules observing the same situation, they would use the same criteria. This makes it possible for many researchers to conduct observations, rather than relying only upon the observations of a single researcher. Third, these rules are constructed so that researchers can use them to make scientific inferences.

For example, suppose one wishes to measure the amount of public disturbance observed by police serving a given patrol beat. The unit of observation—what is being observed (e.g., a public disturbance)—must be defined in such a way that it can be distinguished from other kinds of events (i.e., citizens engaged in activities that are not public disturbances). Once the unit of observation is defined and distinguished from the stream of other citizen behaviors that might be observed, the researcher may begin to make decisions about how to obtain a representative sample. Finally, the method of observation does not rely upon that which is being observed but rather is independent of it, thereby making it possible to assess the effects of the method of observation. For example, the researcher does not rely upon the officer's report as to whether he or she treated the complainant with respect; the researcher makes that observation and judgment.

SSO has a number of benefits for the study of public policing. Because researchers observe policing in natural settings, they need not rely upon the accounts of others to learn what happened. In addition to their observations of the police, SSO researchers may draw from observations made by the police of events and even of the researcher accompanying them. Obtained at the scene, these "fresh" observations by police are difficult to document in any other way. Official reports often fail to give researchers the kind of information they need, and sometimes the official records are suspect because those who record the data make intentional or unintentional misrepresentations of what happened. Citizens whom researchers question with surveys may also misrepresent what actually happened. A disinterested researcher whose sole job is objective observation and accurate recording of those observations is likely to produce the needed information. When a participant or interested party is the sole source, biases are more likely to color observations.

SSO draws from a tradition in police research that relies upon direct observation "in the field." It is like the work of anthropologists who observe people from a distinctive tribe or culture by being with them. This form of field research is sometimes called an "ethnography" and has been used in some of the classic studies of policing in the 1960s and 1970s. Ethnographers strive to describe not only what their research subjects do, but how they do things and how they feel about their experiences. Ethnographies are used frequently to understand the motivations and rationales of the people studied. Ethnographers do not systematize their field research methods before they go into the field. They assume that their experiences

in the field dictate whom and what they study and how they conduct research. They derive data structure from their field experiences and systematize to some extent after their field work. This approach is especially useful when researchers are doing exploratory research on a topic to generate hypotheses, but it is harder to use ethnographic data for hypothesis testing and establishing the internal and external validity of findings.

The methods of SSO were developed and applied to the study of police by Reiss, but it has applications across a much broader array of social phenomena.[4] Others have used SSO to study the pace of life in large U.S. cities,[5] the presence of social incivilities on residential blocks,[6] the style of management in various organizations,[7] and many other phenomena. This report addresses SSO of police.

How Systematic Social Observation Is Done

The main procedures for SSO

> . . . include selection of problems for investigation, preliminary investigation by direct observation (optional), definition of the universe to be observed, sampling for observation, development of instruments to collect and record observations systematically, provision for measuring error, pretesting instruments, organization for direct field observations, processing observations, and quantitative analysis.[8]

This section describes these procedures, concentrating on methods that we have used in our research. However, there are many ways to do SSO, so we will sometimes describe alternatives as well.

The basics of SSO

SSO of police patrol work is accomplished by trained observers who accompany police officers at work in their cars, on foot, or even on bicycles. The expectation is that an observer accompanies the assigned officer everywhere that officer goes. Officers are told that they may direct their observer not to accompany them if they believe that safety is at issue. In our experience, such instances occur rarely and officers quickly acclimate to the observer's presence throughout the shift.

While accompanying their assigned officer, observers may make field notes to help them reconstruct what they observe. These are written on a small notepad that is easily carried in a pocket or purse.[9] Observers quickly develop their own shorthand for recording information that will assist their recall of the who-when-where-how of what happened. Officers are allowed, even encouraged, to read the notes made by their observer, but these notes may not be shown to or discussed with those outside the research team. Because the observed officer may ask to read the observer's notes at any time, observers are careful not to record anything the officer may find objectionable. While some might think that observer notetaking is too obtrusive, perhaps making observed officers nervous or self conscious, others find that when done judiciously it can enhance rapport. Observers simply explain it as a part of their job, likening it to the reports that officers are required to complete. Most officers readily understand and accept this.

In recent studies we have added postevent interviewing to the field researchers' responsibilities. After some events, researchers debrief the observed officer to get the officer's perspective on what just happened and to get the officer to reconstruct the rationale behind his or her decisions.[10] Our debriefings are informal. There is no questionnaire because the range of events we wish to capture is too great for one set of questions to apply. Also, we want to make the field worker's questions seem as natural as possible, coming from him or her as an individual, rather than some remote scientist. Other research purposes might make a structured debriefing more desirable (with predetermined questions and even listed response options). Some SSO studies have the observer debrief one or more of the citizen participants at the scene after the police-citizen interaction is completed.[11]

Following each observation session, field researchers begin entering observations in formats amenable to data analysis. First, observers complete extensive, semistructured narrative descriptions of the ride and of events that occurred—often 15–20 single-spaced pages. Second, they enter data in a highly structured format, using computer software that administers a questionnaire to them about what they observed. Observers must complete data entry for a given ride or shift before conducting another observation session. Finally, the narratives and coded data are checked carefully by field supervisors, who are assisted by data-checking software. Corrections and clarifications are made quickly before memory fades and events become confused.

Selecting who, where, when, and what to observe

Regardless of the method used, researchers are highly selective about what to include in their records. Such selections should facilitate a clear understanding of the meaning and limitations of the results. A systematic approach to observation entails a consideration of all the basic elements of research design: defining the study's purpose, establishing one or more units of analysis, identifying the important variables, defining the population and sampling frame, designing data-collection instruments, and assessing the reliability and validity of the data.[12] There is no single best way to design SSO, because the purposes of research can vary greatly, not to mention practical opportunities and constraints that differ from project to project. How one answers one set of questions (who or what to observe) often determines how other questions will be answered (where and when to observe). So the priority given to these questions will shape the design of the SSO project. The only straightforward "rules" are that the priority of the questions should reflect the purposes and constraints of the project.

Who and where: police beats. In our research we have answered the who- and where-to-observe questions by selecting a set of geographically defined study areas, typically police beats. Our study designs have required variation in conditions thought to affect the way the police and public behave toward each other. We have used several socioeconomic indicators of the residents of the police beat (e.g., race, wealth, unemployment, and family characteristics).[13] Alternatively, one might use crime or calls-for-service levels, land use, or histories of police-citizen relations. We observe the patrol officers who are assigned to those areas, so whom we observe is determined in our design by where we observe. However, other designs might replace territorial organization with a different sampling criterion. A study of police use of force might oversample officers with a history of complaints. If researchers were evaluating a domestic violence training program for patrol officers, the sampling problem for SSO would be identifying otherwise comparable samples of officers who had and had not received the training. Researchers seeking to understand the difference between average and extraordinary officers might begin by asking officers to nominate the peers they consider to be excellent, then oversampling from those so identified.[14]

When: shifts. We answer the "when to observe" question with a sampling plan that selects specific shifts or tours of duty.[15] We selected shifts to

obtain variation in anticipated calls-for-service demand because we be-
lieve the level of demand to be an important influence on behavior. We
ordinarily observe for a full shift at a time for efficiency and to allow
enough time for officers and observers to become acclimated to each
other. Observation usually begins with roll call. Beginning and ending
a shift together creates more of a "partner" relationship between the
observer and the observed.

Researchers with different questions would answer the where and
when questions differently. If the question were how citizens are treated
postarrest, the locus of observation might be the county jail and observa-
tions could be scheduled for specific high-arrest periods. In-custody inter-
rogations could be videotaped. If researchers wished to assess the impact
of police presence at a particular set of "hotspots," observers or videotape
recorders could be located there to record police presence and activities.

We have found that defining the where and when of observation in the
systematic fashion we employ in our police patrol research is important
to maintaining integrity of an SSO project in the field. Some officers are
more willing than others to accommodate "ridealongs," especially with
researchers who are studying their department. Given the chance to do so,
some officers would refuse to take an observer. In the absence of strict
rules about where and when our observer must work, shift supervisors
might accommodate officer preferences or put an observer with the officer
least likely to discredit the unit. A few officers may suspect that the ob-
servers are spying for the chief or the sponsoring agency. So it is impor-
tant at the outset to describe and justify the sampling plan to the entire
department. Field researchers can then explain to potentially recalcitrant
officers that the design targets place and time, not individual officers, and
that researchers must observe police work as it would normally be done at
preselected places and times.

All of our SSO of police has required their explicit cooperation because
our field research is a form of participant observation. However, SSO can
be done in other ways. Observation of police can be unobtrusive, as when
researchers watch an address or street corner to see how it is policed. Par-
ticipant observation of police can also place the researcher in the role of
suspect or client (or someone accompanying likely suspects or clients) to
observe how police treat them. Some researchers have attempted to esti-
mate the likelihood that police would stop ethnic minorities driving in

predominantly white neighborhoods. The passenger in the car is a researcher who observes the interaction between the officer and his or her colleague, the driver.

What: encounters and activities. "What to observe" is defined first by the research questions, and then by the amenability of direct observation to those questions. When ethnographers go into the field, what they observe, at least initially, takes the form of largely undifferentiated strings of activities, situations, decisions, and events. SSO requires that this stream of events be broken up systematically. One way to do this is to divide observations into units of time and then note what occurs during a given time unit. We opted for a different approach—to treat time as a variable and to define events so that observers could determine when these events begin and end. Because of our special interest in police-citizen relationships, we distinguish police-citizen encounters from all other situations.[16] Such encounters begin when the observed officer has some significant face-to-face communication with a citizen. We operationalize this as requiring some significant verbal communication that takes at least 1 minute or involves three verbal exchanges between the officer and the citizen, or that there be some physical contact (e.g., striking someone or shaking someone's hand). Any time that is not spent in such encounters is considered to be a different kind of event or "activity." We have a set of rules to distinguish one type of activity from another (e.g., general patrol, traffic surveillance, en route to a location, paperwork, and personal breaks).

There are some common data elements for both encounters and activities (e.g., amount of time spent, location, the presence of other police, communication with supervisors, and nature of the problem), but otherwise what we ask observers to track differs greatly between encounters and activities. We have modified the definition of events to suit particular research purposes. For example, when observing first-line supervisors, we have expanded the definition of an "encounter" to include the observed supervisors' face-to-face interactions with other officers as well as with the public. Doing so enables us to capture more detail on this important aspect of their work as intermediaries between the rank and file and the rest of the organization's hierarchy. We note that researchers might easily develop entirely different ways of structuring their observations. Observation of police officers who do case work (detectives, internal affairs agents) might best be organized around the case or suspect. Observation of officers whose work is primarily problem-oriented policing might be

structured best on the problem or address where the problem occurs. Systematic observation of police managers might be structured around goals, issues, decisions, or projects rather than the encounters and activities defined for street-level officers.

The presence or absence of civility in police-citizen encounters has been a recurring theme in our work so we have focused on circumstances and actions that might be related to civility. Among these are the nature of an incident as initially presented to the observed officer; the number, characteristics, and roles of citizens present during an encounter; citizens' demeanor toward the police and other citizens; citizen and police requests of one another; how those requests are acted upon; and indicators of how an observed incident is resolved. A second theme has been the specification of how officers spend their time and understanding the extent and use of time not directed by dispatch or superiors. Our observers record extensive time-place-occurrence data on each shift.

Reliability

Reliability in SSO is enhanced by its systematic nature. Observers are trained extensively in what to look for, how to note it in the field, and how to record it for data analysis. Our instruments are designed to lead the observer through the sequence of events on a shift and during particular events recalling sequences.[17] Observers begin data recording by completing a worksheet drawn from their field notes. A worksheet structures a sequential accounting of events from the start to the end of the observation period (i.e., a shift or a ride), time and location of events, and a listing of participants in those events. Observers next write a narrative account of the ride and of each event in its order of occurrence. Observers are instructed to describe each event as if they were writing a scene for the director of a dramatic production, describing the setting, the participants, their behavior and demeanor, and anything that the officer said that might help others understand what occurred. Observers detail the sequence of actions within a given event. Finally, they respond to an extensive computer questionnaire to record quantitative data about the ride, events during the ride, and citizens with whom the observed officer interacted.[18]

After an observer completes a narrative account of an observation period and records observation data using our quantitative instrument, field supervisors run computerized quality control programs to check the coded data. Supervisors also compare the observer's narrative account with the

quantitative data, identify any inconsistencies or unclear events and sequences, and then work with the observer to resolve them.

We test reliability in several ways. We show prerecorded videos of incidents to all observers, who then complete relevant portions of the recording instrument. We compare these coded observations across observers to develop reliability estimates. We look for internal coding logic. For example, someone who is interrogated by police should be coded as a suspect at some point during the encounter. We also sample the more difficult items, comparing what the observer described in the narrative to what the observer coded. Where police data systems allow, we compare the sequence and timing of events recorded by our observers to the sequence and timing reported in the police department's records. In one project we compared the actions recorded by our observers to actions reported by citizen participants who were interviewed independently a few days after the encounter.[19] Where multiple researchers observe the same event, we compare the information recorded by each. During and after field work we perform data checks for observer effect, testing, for example, whether particular observers recorded data seemingly at odds with that produced by others working in similar circumstances. We also collect data on the attitudes and perceptions of our field researchers at the beginning and end of their employment. We look for possible coding patterns that would reflect biases introduced by the kinds of views revealed in these surveys.[20] As a result of these various checks, we are able to estimate the reliability of the data.

We have found that certain items create greater reliability challenges than others. The more discrete and limited the decisions an observer must make, the easier it is to achieve sufficient reliability. Fewer judgments must be made in answering the question, "Did the police handcuff the citizen?" than, "Were the police justified in handcuffing the citizen?" Our instruments emphasize questions of the first type. Despite this, we have some items that present challenges to achieving reliability, such as establishing whether one party showed disrespect to another (criteria can vary among individuals as well as cultures), the age of the citizen, the wealth of the citizen, and the display of emotions. Each of these requires observers to consider and weigh multiple and sometimes conflicting cues (e.g., determining the wealth of a person from a low-income area who wears a lot of expensive clothes and jewelry but drives a dilapidated automobile). With items such as these, we provide coding criteria that are as explicit as possible and practice using them during training.

Personnel, logistics, project management, and quality control

SSO is resource intensive. It takes time to recruit and train observers. It demands advance planning and intensive supervision, monitoring, and coordination while data are collected. Researchers who want to use it on a large scale should first gain experience with it on a small scale. Here are some guidelines we can offer based on our experiences.

Recruiting and selecting observers. Getting the right people to do SSO is perhaps the most important task for ensuring quality data. We have relied mostly on university undergraduates and graduate and law students, but we have also used police or people with prior police experience.[21] We have found students to be a relatively inexpensive source of capable and willing employees for short-term projects. One of the advantages of using students is that they naturally avoid the problem of appearing to be an authority on policing. Students can credibly decline to offer opinions about what they observe by indicating that they lack the training and experience to make such judgments. They are in the field to watch, listen, and learn from the officer. Their role as "student" legitimizes their queries about events just observed. This may reduce officers' sensitivity about being judged by a knowledgeable person. It may reduce officer defensiveness or anticipation of critical judgment, but it may also increase other forms of reactivity, such as looking harder for opportunities to show the naive observer certain aspects of the job or anticipating that the observer may not be able to "understand" certain events and thus avoid them.[22] Whatever the role "frame" that observers use (e.g., student versus seasoned professional), they and those who analyze the data should be sensitive to cues about what the officer makes of that role.

Regardless of the occupational background of observer candidates, we have found certain skills and traits especially valuable. Among these are curiosity about the topic of study, attentiveness to detail, good social skills, good reporting skills, self-awareness,[23] word-processing ability, and familiarity with the community being studied. It is possible to get a good estimate of some of these traits from a written application, grade transcript, writing sample, and interview. However, we have found it optimal to screen student observers during a lengthy training period, as long as a semester. Such training gives students an opportunity to examine notions about police that are often based on highly publicized accounts of police work. During training, students demonstrate their capacity to grow in the

job and show how well they can deal with the complexities and frustrations of the work. Knowledge of policing is desirable but not essential. Unlike ethnographic research, which relies heavily upon the field researcher to make choices about what to observe and how to interpret it, the observer using SSO is guided by the instruments designed by presumably experienced and knowledgeable police researchers.

Staffing. The number of observers required depends on the scope of the work. Our most recent study, the Project on Policing Neighborhoods (POPN), requires observers to conduct full 8-hour observation sessions, followed by a full day or more of data entry. (See "The Project on Policing Neighborhoods.") Given the demands of data entry, we have found that observers working full time can handle 2 to 2.5 observation sessions per week. We have found that a full-time observer can readily manage 20 rides over the course of 9 or 10 weeks, and some observers can handle more. Such loads for student observers suggest their use during summer break periods—introducing a concern for seasonal effects that should be checked by reference to longer term data sequences of service calls and crime reports from the police department. Using student observers who are taking a full course load during their academic year will mean a much reduced rate of output, perhaps one observation session with data recording completed every 2 weeks. If researchers conduct SSO with many fewer demands placed on what the observers must look for and record, data entry and quality control time can be reduced accordingly.

Sampling standards can also affect staffing requirements. If the project's data-collection timeframe is short, one would be wise to staff for a sample size that exceeds the target as a safety margin. Unexpected staff attrition can make it difficult to make up those sessions. Also, observers occasionally err in selecting the correct officer to accompany, or the department errs in assigning them—requiring that these observations be conducted again.

The more elaborate the data-entry protocols, the greater the need to monitor coding while in the field. Our most recent SSO study, the Project on Policing Neighborhoods (POPN), used three field supervisors and a data manager to check the work of the observers and assist them in making corrections. This quality control staffing level can readily handle 22 full-time observers in our experience, and perhaps a few more.

The Project on Policing Neighborhoods

The Project on Policing Neighborhoods (POPN) was conducted in Indianapolis, Indiana, and St. Petersburg, Florida, in 1996 and 1997, respectively. The research was sponsored under NIJ grant number 95–IJ–CX–0071, with funds from the Office of Community Oriented Policing Services. The study was designed to provide a "snapshot" of how police and the public relate and of the consequences for neighborhood quality of life during a time when community policing had been initiated in each department.

POPN had the following objectives:

● To compare past and present policing methods, particularly in light of the emerging popularity of community policing.

● To reveal more about the nature of police discretion and which features of police organizations influence how it is exercised.

● To study the effects of factors outside the police department on officer and citizen behavior relevant to policing.

● To determine the consequences of policing for the general public.

Observers accompanied patrol officers in 12 of each city's police beats (neighborhoods). Beats were selected to represent variation in social distress (determined by the amount of unemployment, poverty, and female-headed households with children), which affect service demands and conditions for police. Researchers also interviewed patrol officers and their immediate supervisors individually. The project also conducted a telephone survey of approximately 100 randomly selected residents in each neighborhood.

The cost of SSO can vary tremendously. We have conducted small studies on "shoestring" budgets, using students enrolled in courses and a graduate teaching assistant to conduct coding quality control. We have generated as many as 100 observation sessions in a semester with students enrolled in a course on SSO.[24] At the other extreme, on POPN we estimate that the 1996 salary cost per ride (based only on the salary of observers, supervisors, and data manager) is $280 (or $35 per hour).[25] This does not count the time of the other staff who design and coordinate the project, nor does it include time spent on data editing, cleaning, and file creation at the conclusion of field work. Other costs, such as travel, equipment, housing, and supplies, are not included either. The above cost of $35 per hour of observation time may be increased or decreased by the sampling requirements and the time demands of the instruments used. When more funding has been available, we have invested in paid—and presumably more focused and motivated—observers, more elaborate instruments, more training, and much more supervision and quality control.

Data-entry computer software. A number of our projects used handwritten coding forms, but since 1992 our observers have entered their data on personal computers using Codit, a software package developed specifically for SSO of police.[26] The researcher creates coding protocols using a standard word-processing program. The researcher configures Codit to accept the DOS ASCII text form of the word-processing output. The researcher can specify minimum and maximum values acceptable for each data item and can also program item skips when certain subsequent items are not applicable. The result is a program that allows the researcher to enter data at several levels of analysis (e.g., ride, activity, encounter, and citizen characteristics), moving easily between them with a menu. Data can be viewed and edited, and there are a few internal logic checks that observers can do themselves. An early version of Codit is currently available from the National Institute of Justice (NIJ), as are copies of the instruments used in the Richmond Study of Community Policing.[27] A new version of Codit will soon be available.

Narrative accounts of observation sessions are entered according to a special protocol with a standard word-processing program and saved in text form. These can be analyzed by any of a number of qualitative data analysis programs available at commercial outlets, but Qualitative Data Analyst software has been developed specifically for these SSO police data. It is currently undergoing testing.

Training. Ideally observers should have enough training to become comfortable with police officers and to learn the data-entry protocols. The latter usually takes more time than the former. Qualitative data are often usable by the third ride. The elaborate POPN protocols for quantitative data require four or five rides for most observers to master. POPN observers conduct five training rides during the semester before field work and then an orientation ride at the site before collecting data. In addition to training rides, the students receive classroom instruction on the SSO methodology and substantive issues of the research. Class time is also spent on instruction and reliability checks using videotapes of police at work. A portion of each class is devoted to debriefing field work experiences to clarify coding protocols.

Onsite supervision. We strongly recommend onsite supervision during data collection. Observers submit their field notes, observation worksheet (a handwritten document used to organize field notes into discrete events), and diskettes with the data they have entered. Using a special quality control computer program, the data manager scans the data on the diskette to catch logical inconsistencies in the coding and suspicious or unusual coding patterns. The data manager places the printed output from this computer scan in the package with the observer's materials and passes it to one of the field supervisors. The field supervisors use these materials to assist in their review. They use the observer's narrative account of events to double-check coded material. If necessary, they discuss questionable items with the observer before noting which items require correction. Field supervisors are also available to answer observers' questions about coding data and to make recommendations to the data manager about issuing clarifications or modifications to coding rules. The field supervisors also spend time debriefing observers and giving them an opportunity to express their personal views about memorable events. Observers are encouraged to discuss their experiences with each other and their supervisors. They are forbidden to communicate with anyone about their work outside the project, but the events they observe can have profound effects on them. Field supervisors are alert for signs that observers may substantially alter their outlook on police and police work.

Liaison with the police department. SSO requires close coordination with the police department. Top managers need to know what the project will require and how the agency will be asked to depart from its routines.[28] The department may request some basic information on field

researchers (e.g., name, date of birth, and social security number) to conduct a limited background investigation on them. The chief will often assign one middle manager responsibility for working with the project. A good working relationship with this person is essential, and that means keeping him or her posted well in advance on the details of the operation. However, researchers should not restrict their contact to the assigned liaison person. Shift commanders and first-line supervisors must also be apprised of the project's purpose and what they will be asked to do to accommodate it. Although working through the agency's chain of command to communicate with these people is important, we have found it advantageous to commit considerable effort—before data collection begins—to speak individually to each shift commander and supervisor whose cooperation will be required. The police department often issues a brief description of the upcoming project to the rank-and-file officers several weeks before data collection will begin. We also send a researcher to each shift's roll call to make a brief presentation about the upcoming project and answer questions. We recommend that senior research staff spend time conducting at least one practice observation session in each work unit so that officers can learn informally what these "ridealongs" entail. On our larger projects we assign these tasks to a full-time site director.

Maintaining close contact with district commanders and shift and first-line supervisors is essential during data collection. Observation schedules are submitted in advance, but many unforeseen events require their modification. Recalcitrant supervisors need additional attention and encouragement to follow the sampling protocol or allow observers to accompany officers in all but dangerous situations. Frequent visits to the police station by the site director or other senior researchers make it easy for department staff to discuss their concerns on a regular basis.

Confidentiality of observations. All parties to the research endeavor must have a clear and common understanding of the rules of confidentiality that will apply. The U.S. Department of Justice sets forth guidelines for research it funds, and universities and other research institutions also have their own rules for the protection of human subjects. The specifics may vary, depending upon who is sponsoring and conducting the research. For ethical reasons and to reduce conscious reactivity among officer research subjects, we have opted for the maximum degree of confidentiality allowable. Data are archived and reported in publications in such a way that an observed officer's anonymity is ensured. This means

that a supervisor or chief who wants to know what our researcher observed on a given ride will be politely refused this information.

Occasionally, observed officers list our researchers as witnesses in legal proceedings. When this occurs, we attempt to get legal decisionmakers not to call upon our observers. We have never had an observer subpoenaed to testify, but researchers should be prepared to deal with that contingency. Top police officials and prosecutors once pressured one of us to reveal observations of police misconduct. These officials were persuaded not to pursue their request with a subpoena by pointing out that it was not a researcher's function to ferret out misconduct to bring to legal proceedings. When conducting research funded by NIJ, researchers enjoy a form of limited protection from legal process[29] based on Federal statute 42 USCS 3789g. However, its applicability to State courts has not been tested, so all parties should be aware of its potential limits.

Regardless of the confidentiality agreement reached before the study begins, situations can arise when an observer is pressured by a department supervisor or administrator to reveal field observations. Observers should be instructed to summon the site director immediately when this occurs and decline to say anything. The site director then serves as the person with whom the department must deal regarding this matter, creating a buffer between those desiring information and the observer.

Reactivity. Officer reactivity to observers is commonly thought to be a significant threat to SSO of police patrol work. We agree that reactivity is a concern, but one that is in many respects easier to estimate and manage than that found in survey and archival research, in which accuracy of data provided by interested parties (either police or public) is quite difficult to determine.[30] Officers usually acclimate quickly to trained observers. Although officers vary in degree of reactivity, researchers can look for signs of reactivity in the officer's behavior and note them.[31] Our observers are prompted to record circumstances in which they suspect officer reactivity to have been a problem in their coded data[32] and to describe the circumstances in their narrative accounts of observations.

Officer reactivity is reduced, we believe, by our confidentiality safeguards. All observed officers are made aware of these safeguards before fieldwork begins, and each observed officer is reminded of it by his or her observer at the start of each ride. Even these guarantees will not prevent

some officers from altering their behavior, especially avoiding egregious misbehavior. However, the central purpose of our research is not to study misconduct. Further, in our previous studies officers made candid, potentially embarrassing comments and engaged in misconduct (both minor and serious) in the presence of observers with sufficient frequency to lead us to conclude that they usually felt at ease in the observer's presence. Forms of reactivity that fall within the bounds of appropriate conduct (e.g., legal stops and arrests) are likely to be more frequent, leading to an overestimation of actual frequency.[33] We expect that as officers become acclimated to observer presence this tendency will dissipate. Distortions due to officer reactivity seem within acceptable limits, given the biases of alternative data-collection methods.

Rigid adherence to confidentiality guarantees can incur some costs that tend to refresh the officer's sensitivity to the outsider status of the observer. We instruct our observers not to discuss observations made while accompanying one research subject with another research subject. Often, in the routine course of conversation during a ridealong, officers will ask about previous ridealongs the observer has conducted: "How did things go at that big pileup the other night? I saw you were with Officer Smith when I drove by." These are often casual queries, made to carry on social conversation. Sometimes the officer really wants the information, and occasionally the officer will test the observer to see if the confidentiality guarantee will be honored. To such queries we encourage a vague response without substantive comment, but if pushed, we instruct observers to remind the officer that as a matter of routine we simply do not discuss our observations of other officers so that we can fulfill our confidentiality commitment. Because officers have been forewarned of this, most accept it without further ado.

Fielding a small, focused SSO project. Police departments often need research on a specific, narrowly focused issue, and they have limited resources and pressing time constraints for getting answers to their questions. For example, a department wishes to learn the impact of a new "preferred arrest" procedure on handling domestic violence incidents. A department wants details on how community policing officers conduct meetings with neighborhood organizations. Or a department wants to know more about the aggressive order-maintenance interactions between officers and juveniles in a troubled area of town.

One of us has fielded a general-purpose SSO research project for a consortium of municipal governments on a budget of less than $5,000, using student observers who received academic credit for the training they received using SSO.[34] It took several months to prepare the data-collection instruments and a semester and summer to collect the data. However, that timeframe may be too long for police agencies under some circumstances. The greatest challenge in fielding a project on shorter notice is the availability of trained field observers. Many universities have survey research operations capable of fielding telephone or in-person surveys on very short notice, but none to our knowledge maintains a cadre of researchers experienced in SSO of police. Police agencies and local universities can work together to foster a group of experienced SSO researchers by engaging in a series of projects that benefit both institutions. University researchers obtain access to a police field environment for teaching and research, while police departments obtain access to SSO-based studies that address issues that most concern them. With modest expenditures, such an operation can reduce the startup time required to initiate SSO projects from "scratch."

When SSO researchers focus a project on a single issue or narrow range of issues, this reduces the amount of resources that must be expended to obtain information. Research instruments can be much shorter, and sampling can be more efficiently fitted to a more restricted purpose. However, this does create greater challenges for overcoming officer reactivity. General-purpose field observation has the advantage of not singling out any particular set of officers or issues for attention. Consequently, officers are not especially sensitized to the observer's interest in them or in a narrow range of incidents or activities. Under these circumstances, researchers will find it especially important to guarantee the confidentiality of individual research subjects and to convince them that the researchers warrant their confidence.

Some Policy Applications of Systematic Social Observation

Researchers have used SSO to improve a general understanding of policing and to account for variations in the way it is done.[35] Its utility extends into policy domains as well. It can provide more precise knowledge of how policies are actually carried out and can reveal the biases and

limitations of other forms of data. Practical applications of SSO have been limited thus far. Here we offer some examples of SSO's practical applications from data we have collected. The examples cover matters of frequent concern to police managers and the public: how officers spend their time, how they mobilize to deal with the public, how they use their authority with the public, the nature and extent of on-scene supervision, and how police style varies in different beats. We draw from data from a number of departments we have studied over the years. Except where indicated, readers should not assume that the data presented in one table refer to the same department as another table. Because we are not presenting a substantive report on these issues, we do not identify the departments. Data elements have been selected for illustrative purposes only and are not necessarily representative of the departments studied or of policing in general. We do not report statistical significance or other technical details that would normally accompany a substantive report. Readers are therefore cautioned not to draw substantive inferences from the exhibits that follow, but simply to consider them as illustrative of the kinds of analysis that can be performed on SSO data.

Time accounting

Officer salaries and benefits constitute the largest portion of police department budgets, yet most managers are unable to obtain detailed, reliable data on how their officers use their time. SSO can provide such data. Police work involves an assortment of activities, many of which go undocumented or which are grouped into uninformative, general categories. Officers frequently fail to provide an accurate accounting of this time, often because they regard the task as unimportant and occasionally because they wish to misrepresent events. SSO can provide great detail on police use of time and is generally more accurate than department records.

Exhibit 1 shows on average how officers with different job assignments spent their time in two agencies. Department A had two basic patrol assignments: beat officers and community policing specialists. Beat officers were responsible for handling calls for service and encouraged to do special community policing activities during their unassigned time, although this was not required.[36] Community policing officers were freed from responding to calls for service so they could devote more time to working with the community and problem solving. In Department B, there were also community policing specialists freed from calls for service, but most

of the rest of the patrol officers were generalists, responsible both for answering calls for service and expected to engage in community policing activities. Department B's managers placed greater pressure on its generalists to do community policing than did A's managers on its beat officers.

The two departments show similar patterns of time allocation. Officers with calls-for-service responsibility spent more time dealing with the public in encounters and on general patrol (the latter difference being especially large in Department A). In both departments community policing specialists spent more time on personal business than did officers with calls-for-service responsibility, but the difference is more pronounced in Department B. The most striking difference between the two departments is the time allocations for administrative activities (e.g., writing reports, processing evidence, meeting with court officials, or researching a problem). Department A community policing officers spent much more time on administrative activities than did beat officers, but Department B's community policing officers spent slightly less time on administrative activities.

Many police departments are moving to one or the other of the models of division of labor characterized by these two departments. SSO can help

Exhibit 1. How Officers Spend Their Time: A Comparison of Two Departments				
	Average % of Shift Spent on Each Activity			
	DEPARTMENT A		**DEPARTMENT B**	
Type of Activity	**Beat Officers**	**Community Police Officers**	**Generalist Officers**	**Community Police Officers**
Encounters with citizens	22	14	19	14
En route to location	15	13	15	14
Problem directed	9	11	11	12
Information gathering	9	11	6	9
Administrative	5	21	12	10
General patrol	21	9	24	19
Personal	18	21	14	23

police obtain a better understanding of the implications of different organizational arrangements for how officers spend their time. Such analyses need not be constrained by the general categories of police activity listed in exhibit 1. For example, time spent on encounters can be broken down by type of problem, and time spent on other activities can be broken down into much finer detail. We use 200 problem codes for encounters and nearly 70 activity codes for all other events.

SSO data can be particularly enlightening when linked to other kinds of data. Exhibit 2 shows how data on officer attitudes can be linked to systematic observations of officers' time use. This particular example shows more similarities than differences among officers who like, dislike, or are neutral/ambivalent about community policing. However, those who disliked community policing tended to spend less time in encounters with the public. The difference was even more pronounced for community policing training. Those who received community policing training (about a day or more) spent much more time on encounters with the public: 24 percent as opposed to about 16 percent for those with less than a day (no exhibit shown).

One should exercise care in interpreting a particular time allocation as desirable. Some community policing advocates suggest that spending

Exhibit 2. How Officers Spend Their Time By Officer View Of Community Policing			
	Average % of Shift Spent on Each Activity		
Type of Activity	Likes Community Policing	Neutral or Ambivalent	Dislikes Community Policing
Encounters with citizens	20	20	16
En route to location	14	15	15
Problem directed	12	10	11
Information gathering	6	5	8
Administrative	11	13	12
General patrol	22	22	24
Personal	16	16	15

Exhibit 3. Officer Self-Directed Time: Beat v. Community Policing		
	Percent of Shift Engaged in a Self-Directed Task	
Work Shift	**Regular Beat Officer**	**Community Policing Officer**
Day	77	86
Evening	74	77
Midnight	71	Not Applicable

more time with the public is something that patrol officers need to do to establish better relations. Spending more time may mean that officers are taking greater care or doing a more thorough job. It may also mean that officers are getting into more complicated situations that require more contact time with the public. Or it may mean that officers who take more time are simply less efficient than those who take less time with citizens. Sorting out these possibilities would require a detailed analysis of individual encounters, something that is possible from SSO data but not presented here.

Another way to characterize officers' time allocation is whether it is spent on tasks assigned by some higher authority (dispatcher or supervisor) or whether it is spent on self-directed tasks initiated without input from supervisors. Exhibit 3 shows how much self-directed time officers had on each of three shifts. Self-directed time is free from tasks given by the dispatchers or supervisors—time that is used at the officers' discretion.[37] Most of the time accounted for in this sample was self-directed. Community policing officers did have more self-directed time than regular beat officers, but not as much as one might expect, given that they were freed from the obligation to respond to calls for service.[38]

Self-directed time periods vary in length, from a few minutes to several hours. Police are particularly interested in the availability of blocks of self-directed time that are long enough to allow officers to engage in problem- or project-oriented work. SSO can provide detailed information on blocks of self-directed time of varying lengths. Exhibit 4 shows the distribution of self-directed time that occurred in blocks of 60 minutes or more. Overall, a substantial portion of self-directed time is available in blocks of at least 60 minutes (almost half), but it varies across work shifts. An

Exhibit 4. Self-Directed Time in Blocks of 60 Minutes or More	
Work Shift	**% of Shift Engaged in a Self-Directed Task**
Day	52
Evening	41
Midnight	35
All shifts	**44**

important point, however, is that for most hours of the day, the probability that a given officer in this sample experienced a 60-minute block of self-directed time is relatively low (below 1 in 4—figures not in exhibit). "Split-force" plans attempt to deal with this uncertainty by having some officers handle as many assigned calls as possible, freeing other officers to work on other activities uninterrupted.

Officer mobilizations

Patrol work is often characterized in terms of "mobilizations"—instances in which the police are ordered, are requested, or decide on their own to undertake some specific task. This might be responding to a call for service, helping a citizen who waves down an officer, investigating a suspicious situation uncovered by the officer, or working on a project. Police records document many of these mobilizations but can never capture all of them. Recording brief mobilizations that require no official documentation would be unwieldy and time consuming. However, SSO provides a comprehensive picture of patrol mobilizations.

Exhibit 5 shows the different sources that can mobilize the police to engage the public (dispatcher, other officer, citizen on the scene, direct telephone calls, and observed officer). Perhaps surprising to those who believe that police work is mostly reactive, the most frequent initiation source in this department was the observed officer, not the dispatcher. Almost half of these mobilizations resulted in encounters with the public that were less than a minute or were casual (no obvious police business); the remainder were "full" (noncasual encounters lasting a minute or more). About one-third of all encounters (regardless of mobilization source) were brief or casual (not "full"), showing that in this sample, police deal with large numbers of the public in situations in which their contact is fleeting or not focused on what is commonly considered "police

Exhibit 5. Police Mobilizations Resulting in Contact With the Public			
Mobilization Source	**No. per 8-hour Shift**	**% Full Encounter**	**% Documented**
Observed officer	5.2	51	10
Dispatcher	4.4	89	100
Other police	0.5	89	20
Citizen on-scene/ direct telephone	1.4	44	10
Total all sources	**11.4**	**66**	**46**

business." The exhibit also shows the proportion of each type of mobiliza-tion that is documented and, therefore, visible to and reviewed by others in the department after the fact. We assume for the purposes of this exhibit that all dispatcher-initiated mobilizations are documented.[39] All other mo-bilizations are considered recorded only if there was some indication to the observer that the police documented or planned to document them. Less than half of all mobilizations resulting in contact with the public were documented. Only about 1 in 10 mobilizations initiated by the ob-served police officer or the citizen on the scene was documented. Work that is not initiated by dispatch is not visible to anyone who was not present at the scene.

Exhibit 5 shows a department where officers were more proactive than reactive in initiating encounters. Exhibit 6 shows how risky it is to gener-alize about police departments regarding the reactivity and proactivity of patrol work. It shows the ratio of dispatcher-initiated encounters to observed officer-initiated encounters for several police departments (measurements taken at different times, spanning two decades). Two departments are very reactive, having more than three times the number of dispatch-initiated encounters as officer-initiated ones. The other four, however, have substantially lower reactivity ratios, three being very close to 1.0 (parity between dispatch- and officer-initiated encounters).[40] All of these departments employed more than 450 sworn officers.

An important concern about mobilizations is not only how they are begun, but how many officers are present. The more officers at the scene, the

Exhibit 6. Reactivity to Proactivity Ratio in Six Departments	
Department	**Ratio of Dispatch-Initiated to Officer-Initiated Encounters**
A	3.8:1
B	3.6:1
C	1.5:1
D	1.2:1
E	1.1:1
F	1.0:1

Exhibit 7. Number of Officers Present at Encounters With Citizens		
Maximum Number of Officers Present	**% of Encounters***	
	Department A	**Department B**
1	52	44
2	34	37
3	6	11
4	3	4
5	2	2
6 or more	3	2
*Brief and casual encounters are excluded from this exhibit.		

greater the commitment of police resources. This is something about which police records are notoriously incomplete, since officers frequently do not report their presence as backups. Exhibit 7 shows the distribution of officer mobilizations at the scene of police-citizen encounters according to the maximum number of officers present at any given time.[41] The distributions for two departments are shown. There were many multiple-officer mobilizations in both departments. Department A used more multiple-officer units, but Department B had a larger proportion of multiple-officer encounters.

Using police authority

Police have a wide range of authority, from making casual inquiries to using deadly force. Police departments try hardest to track the use of authority when it will have legal consequences, such as when their actions are reviewed in court. But many citizens are detained, questioned, and searched (sometimes in a manner that technically constitutes an "arrest"), without any formal record. A police department concerned about officers using their authority appropriately and effectively may desire a comprehensive accounting from time to time to get a complete picture of work on the street and to see what, if anything, the reporting system is missing.

One NIJ-sponsored study used arrest reports as the means by which the use of force and overt coercion were monitored.[42] One of the most comprehensive such studies to date, its reliance solely on arrest reports meant that it still missed many occasions when officers used force or threats of force. SSO allows researchers to capture situations in which force or threat of force is used but no arrest occurs. Exhibit 8 shows the ways officers used physical force in the presence of SSO researchers.[43] The most frequent was searching, which occurred at a rate 20 times that of the least frequent applications of force: pain compliance (the application of force that causes pain to ensure compliance), impact methods (striking the

Exhibit 8. Police Use of Physical Force		
Type of Force	**Number of Forceful Citizen Contacts per 8-hour Shift**	**% of Citizen Contacts Documented**
Searched person or property	2.1	45
Threatened physical force	0.2	71
Firm grip/nonpain restraint	0.3	59
Handcuffing	1.3	75
Pain compliance	0.1	93*
Impact	0.1	93*
Draw firearm	0.1	48*
Any force (any of the above)	2.4	46
*These percentages are based on 30 or fewer citizen contacts.		

citizen), and firearms. The likelihood that the rare pain compliance or impact methods would be reported was nearly certain, but fewer than half of the searches and the firearms uses resulted in officer reports (no citizen was fired upon). Even if every report offered a detailed account of the force used by the police, more than half of such instances would not have been documented, including one-quarter of the handcuffed citizens and more than half of the citizens on whom a firearm had been drawn.

Police records generally do a poor job of documenting when and how officers maintain order and enforce laws without invoking the criminal or civil process. Yet these informal efforts outnumber those occasions when police resort to arrest, citation, or protective custody. For most minor offenses, using the legal process is an option of last resort. In one jurisdiction, police averaged about one arrest per 8-hour period, but in another, the rate was only about 0.6 per 8 hours. Exhibit 9 shows the frequency with which officers in the high-arrest department used informal methods of control by explicitly suggesting, requesting, or demanding that the citizen behave in a certain way.[44]

A number of questions about the quality of police work arise from these mostly undocumented actions. How did police attempt to obtain citizen

Exhibit 9. Informal Police Control of Citizens: Methods and Consequences			
Police Request, Demand, or Suggestion	Number of Citizens per 8-hour shift	% Citizens Handled Authoritatively	% Citizens Complied
Leave other citizen alone/ leave scene	0.9	41	84
Stop disorderly behavior	0.7	29	78
Stop illegal behavior	0.6	38	82
Provide info. on wrongdoer	2.3	2	93
Use legal process	0.3	0	68
Use other service agency	0.3	4	66
Use other family, friends	0.3	0	72
Help other citizen	0.2	0	93
Control other citizen	0.1	17	97

compliance? Exhibit 9 shows that authoritative police actions (commands or threats) were rare except with those citizens who were themselves a problem to others. Were attempts at achieving citizen compliance successful immediately? The exhibit shows that citizen compliance rates on scene ranged between 66 and 97 percent.[45] Highest rates were achieved in getting citizens to control or help others; lowest rates were obtained when officers attempted to get citizens to help themselves. For minor offenses, compliance rates may prove a far more useful measure of police effectiveness than arrest and citation rates.

Police authority is used not only to control citizens, but also to assist them. Yet police agencies rarely account in any systematic detail for the wide range of services rendered to the public, except perhaps to tally the number of calls for service answered. This is remarkably uninformative, because such a tally tells us nothing about what the police actually did when they responded. Exhibit 10 shows the rate at which citizens asked officers at the scene explicitly for a variety of actions and the rate at which the police complied. The most commonly requested police services were information related—either providing it directly to the citizen or documenting the event by filing an official report. Physical assistance requests and requests to control other citizens by various means were also

Exhibit 10. Police Fulfillment of Citizen Requests for Service		
What Citizen Requested	**Number of Citizens per 8-hour shift**	**% Requests Fulfilled**
Arrest other citizen	0.4	32
Advise/persuade other citizen	0.6	71
Warn/threaten other citizen	0.3	52
Make other citizen leave	0.4	75
File report	0.8	76
Help citizen w/other organization	0.1	82
Physical assistance	0.4	86
Info. on handling problem	0.9	97
Leniency for other citizen	0.2	36

frequent. Police were most likely to fulfill requests that did not require that they control other citizens for the requester.[46]

From the perspective of those who must do the work on the street and from those who experience the consequences, a valuable measure of the state of police-community relations would be the level of mutual cooperation between the police and the public. Based on the data from the two previous exhibits, we found that overall the police complied with all citizens' requests in 71 percent of the contacts. Citizens complied with all police requests in 84 percent of the contacts.

Street-level supervision

First-line supervisors are responsible for the direct guidance and oversight of patrol officers. They are also an important source by which the organization obtains assessments of officer work performance. In one department, a supervisor was present at 7 percent of encounters between observed officers and the public.[47] However, for certain kinds of situations, it was much higher: when a citizen assaults an officer (75 percent), when the officer requests supervisor input (71 percent), and when officers arrest two or more citizens (34 percent). Based on the overall rate of supervisor field contacts observed, on average an officer in an 8-person squad in this department could expect to have a supervisor present at about 11 public encounters per 20 work days. However, in this department any of a number of on-duty supervisors could show up at the scene, since several sergeants and a lieutenant were usually on duty at a given time. Thus, any one supervisor would probably observe a specific officer at a substantially lower rate. Most of these occasions (87 percent) were at the supervisor's initiative, not the subordinate's. The probability of supervisor presence was inversely related to how busy the shift was. The shift with the lightest calls demand had supervisors on scene at twice the rate of the shift with the heaviest demand (5 and 10 percent, respectively).

What did supervisors do when they showed up at the scene? For 40 percent of the encounters at which supervisors were present, they did not discuss the encounter with the officer at any time during the work shift. During these occasions they merely observed or discussed other matters unrelated to the situation at hand. When supervisors did discuss an event with the observed officer, they were seldom directive, and in the 28 percent of cases when they were, their input nearly always took the form of a suggestion, not an order.[48]

Exhibit 11. How Supervisors Spent Their Time			
	Average % of Shift Spent on Each Activity		
Type of Activity	**Day Shift**	**Afternoon Shift**	**Night Shift**
Encounters with police and public	24	31	31
En route to location	10	11	8
Problem directed	12	4	7
Administrative	8	8	6
Information gathering	3	2	1
General patrol	28	33	37
Personal	15	11	10

How do street supervisors spend their time? Exhibit 11 gives a breakdown for three shifts. What is most striking about these figures is how much time street supervisors spent on general patrol. The large portion of time devoted to this activity may have been the product of supervisors' desire to be readily available to go rapidly to the scene of situations where their presence was expected by management. Or perhaps it was their reluctance to intrude on subordinates' work unless there was a specific, compelling reason. Or perhaps, as some managers in this department felt, many supervisors lacked the initiative and creativity to find better ways of spending their time than "just driving around." If these observation data were linked to data from interviews with each supervisor (conducted separately), the validity of each of these possibilities could be tested.

Patterns of policing at the beat level

Community problems vary among geographic areas. Styles of policing may cluster accordingly, especially if a department embraces a decentralized approach to problem solving. Exhibit 12 shows several indicators of policing style in three pairs of patrol beats in two precincts (X and Y).[49] The beats are matched across precincts according to the level of socioeconomic distress (low, medium, and high) of residents in the beat, indicated in column 1.[50] Officers in this sample included both those who were assigned exclusively to the indicated beat and those whose geographic assignments covered larger areas that included the indicated beat.

Exhibit 12. Patterns of Policing at the Beat Level								
1 Socio- economic Distress	2 % Time in Beat	3 % Time Watching and Waiting	4 % Time Public Disorder	5 % Time Casual Contacts	6 No. Suspect Stops /Shift	7 No. Arrests /Shift	8 No. Police- Init Encs /Shift	9 No. Citizen- Init Encs /Shift
Low-X	54	35	11	3	5.6	1.5	6.9	6.5
Low-Y	49	33	7	4	3.4	0.6	5.3	3.8
Med.-X	45	34	12	2	6.5	1.0	8.0	7.9
Med.-Y	49	31	14	6	1.6	1.4	4.7	8.4
High-X	52	35	10	6	5.0	1.0	8.0	8.3
High-Y	48	35	8	1	2.9	0.7	4.4	4.4
X = Precinct 1 Y = Precinct 2								

Many researchers and practitioners expect that greater socioeconomic distress will generate higher levels of crime and disorder, and thus higher levels of police intervention. The exhibit offers a comparison of officer activities within and between precincts, each precinct headed by a commander with discretion to tailor service delivery to the needs of residents in his or her precinct. Given this kind of latitude at the precinct level, it is interesting to see whether police practices are patterned more by the beat's socioeconomic characteristics or the precinct's identity.[51] The pattern of these police practices may help us determine which is more influential, the beat's character or the precinct commander's policies.

Column 2 shows what portion of observed officers' time was spent on or within the boundaries of each beat studied. Most conceptualizations of community policing seek to maximize the amount of time officers spend in an assigned geographic area. Approximately half of the officers' time was spent in each of the indicated beats. Whether it would be wise or feasible for the department to seek a higher rate of in-assigned-beat time depends on many considerations. Such deliberations would benefit from an analysis of how officers spent their time both in and outside the beats studied. Both types of data are available, but for illustrative purposes the remainder of the exhibit focuses on police activity conducted on or within beat boundaries.

Columns 3–5 show what proportion of observed time in the beat was spent on three types of activities: watching and waiting (e.g., general automotive patrol, foot patrol, and traffic patrol—without a particular target or focus); policing of disorder in public places; and casual contacts with the public (encounters in which there was no specific problem, but merely an opportunity for a social chat).[52] These indicators highlight the actual priorities of street-level policing by showing the allocation of police time to different tasks and problems. The department's community policing program had placed a strong emphasis on policing public disorders and a lower priority on developing positive community relations through "public relations" activities such as casual conversations.

The data do not show striking differences across the six beats in how officers allocate their time to these three activities. Despite substantial differences in degree of socioeconomic distress, these beats showed a remarkable consistency in the proportion of work time officers spent watching and waiting (31–35 percent). This may be due to the department's effort to equalize workload across patrol units. There was more variation across beats in the proportion of time officers committed to policing disorder in public places (7–14 percent), but in all cases it was relatively low. The policing of disorders shows no clear pattern across levels of socioeconomic distress or precincts. There was some variation among beats in the amount of time spent on casual contacts (1–6 percent), although there is no consistent relationship shown to degree of socioeconomic distress or precinct. The SSO data show much consistency in the pattern of general street-level police activities, regardless of socioeconomic distress and precinct command policies. Police officers spent much more time in the beats watching and waiting to mobilize than they did actually intervening to deal with public disorders or have casual interactions with the public. Far more resources were devoted to the potential to intervene than actual interventions of the sort indicated.

Columns 3–5 show the amount of time committed to general tasks or problems, but these variables do not indicate how officers dealt with them specifically. Columns 6–9 show the rate at which some specific activities were undertaken: stopping suspects, making arrests, engaging in encounters initiated by citizens (via the dispatcher, in the field, or by telephone directly to the officer), and engaging in encounters initiated by the police (without a specific request for police mobilization). These indicators

reveal greater variation in policing style and show some interesting differences across the beats.

Two indicators show levels of aggressive order maintenance and formal law enforcement: the rates of suspect stops and arrest, respectively. Suspect stops are officer-initiated encounters with citizens who were treated by police as suspects. Some ended in arrest, but most did not. Figures in the arrest column represent citizens who were taken into custody and charged with a misdemeanor or felony. These encounters were both citizen and officer initiated. Precinct X beats show much higher suspect stop rates across all levels of socioeconomic distress than Precinct Y beats. This mirrors the more aggressive order-maintenance policies of the Precinct X commander. The differences of suspect stop rates are much greater between precincts than between socioeconomic distress levels of the beats. Thus, even though the decision to initiate any given suspect stop is really at the individual officer's discretion in nearly all cases, these data suggest that management can make a big difference.

Arrest rates varied much less across beats, and the pattern was quite different from that of suspect stops. Precinct X had higher arrest rates for the low and high levels of economic distress, but Precinct Y had a higher arrest rate for medium socioeconomic distress. Neither precinct nor level of socioeconomic distress was a good predictor of arrest rate. Although arrests are easier for management to monitor, and would thus seem more susceptible to command influence, the officer's discretion is constrained more by situation-specific factors that are probably not strongly related to command policy or the socioeconomic character of the beat: the nature of the observed offense, the evidence available, and the preference of the complainant.

The rate of police contact with the public is another way to characterize policing style in a beat. Columns 8 and 9 show two rates of police-public encounters: police-initiated encounters and citizen-initiated encounters (via the dispatcher, citizens on-scene, and telephone calls direct to the officer). Police-initiated encounters reflect the degree of proactive policing; citizen-initiated encounters show the degree of reactive policing. Exhibit 12 shows that in four of the six beats, the level of police encounter proactivity is greater than or equal to the level of reactively initiated encounters, contrary to the widely held assumption that patrol encounters with the public in urban neighborhoods are overwhelmingly citizen

initiated. One important reason for this difference is that SSO enables researchers to record many encounters (often only a minute or two) that are seldom documented officially. The greatest differences between beats tend to be between precincts, not levels of socioeconomic distress. Police proactivity is consistently much higher in Precinct X than Precinct Y, the same pattern observed in suspect stops. That is also the case for citizen-initiated encounters in low- and high-distress beats, medium-distress beats being the exception. In Precinct X, the level of police proactivity did not vary much according to the level of socioeconomic distress. It varied more in Precinct Y, and in the opposite direction, decreasing as the level of distress increased. Finally, most police believe that the level of police proactivity is determined largely by the amount of citizen-initiated work in a given geographic area: the more citizen-initiated work, the less time to do proactive policing. These data show, however, a positive, not negative, relationship between the level of reactive and proactive encounters. Where citizen-initiated encounters are high, police-initiated encounters are too.

One of the ways to use data from exhibit 12 is to characterize different styles of policing. For example, suspect stop rates and arrest rates represent different forms of police intrusion, each having different implications for those who frequent the neighborhood. When police stop a suspect, they interfere with whatever that person was doing, but unless they arrest, the encounter is usually transitory. These stops represent the occasions when police interventions are the least welcomed by the citizens involved[53] and most likely to generate citizen complaints. Especially when police fail to make an arrest, these stops are more readily interpreted as harassment by those stopped and bystanders. But from a "broken-windows" perspective, an arrest is an entirely secondary concern, since any suspect stop is valuable as a means of controlling suspicious or disorderly behavior, whether or not it produces an arrest.[54] Such stops presumably prevent disorders and legal violations, signaling to troublemakers and bystanders that they are in a space that is heavily and aggressively policed. Broken-windows advocates recommend this approach in part because it is more efficient than selecting only those suspects for whom an arrest is legally justifiable. Indeed, arrests are quite time-consuming, often taking patrol officers off the beat for a considerable length of time while booking a suspect. Arrests represent the mobilization of a potentially far more punitive police intervention resulting in possible bail and attorney costs, a criminal record, fines, or incarceration. Yet many arrests are made at the

request of another citizen and have behind them the legitimizing features of formal legal action (with the possibility that the arrestee can hold the police accountable in court for their actions). Suspect stops are less intrusive, but often less legitimate to those stopped; arrests are more intrusive, but legitimized by the officer's invocation of the law, which is enhanced when there is someone present who requested police involvement.[55]

The indicators of police practice shown in exhibit 12 by no means exhaust the possible measures available from SSO data. One might develop measures of the attentiveness of police to crime victims, time spent on problem analysis, use of informal enforcement measures, and so on. The exhibit shows how SSO data might be used to present a more comprehensive picture of police practice and service delivery across different geographic units. Given enough observations, it would also be possible to break these down further according to work shift (e.g., day, evening, and midnight).

Conclusion

SSO offers many advantages for gathering and analyzing information on police at work. It can be designed to suit very specific information needs and does not rely upon the recordkeeping accuracy, candor, or recall of those who are observed. It offers a scope and depth of data seldom available through official records and survey questionnaires. It can generate rich data sets for both quantitative and qualitative analysis. The largesse from the Violent Crime Control and Law Enforcement Act of 1994 has supported thousands of police departments' programs to change practices at the street level. This legislation has also supported many evaluations of these efforts. Police departments and those who evaluate their efforts now, more than ever, need rigorous social science tools to measure what matters. SSO can be a valuable tool for those who can commit to its demands.

Of course, SSO is not without its limitations. It is costly, time consuming, and, the way we do it, dependent upon the cooperation of the police. It is not free of various threats to data quality. Special efforts must be taken to deal with two threats in particular: the reactivity of research subjects to the observers and the reliability of those observers in recording what occurred. Training, supervision, and quality control in the field are the best ways to manage these problems, but they take planning, time, and money. Given these constraints, SSO seems less feasible as a mechanism for routinely monitoring police practice and better suited to special studies. In

addition to the wide range of scholarly questions that can be pursued using SSO, it can also provide information with a high degree of validity on organizational needs assessment, process evaluation, and assessment of immediate outcomes. SSO is an especially powerful addition to a project when linked with other forms of data collection (e.g., officer interviews, neighborhood resident surveys, followup surveys of participants, and official records). When used as part of a multimethod project, systematic field observation can be focused with greater cost efficiency to supplement what is available through other methods.

To conclude, we encourage police researchers to use SSO and police practitioners to support its use. We are gratified that NIJ and other government agencies have supported SSO's development over the past three decades and are encouraged by several such projects that are currently ongoing in addition to our own.[56] There are many uses for this research method and many ways that it can be implemented. We have discussed a few, but our hope is that others will pursue its possibilities with creativity and rigor.

Notes

1. This report focuses on policing done by people who work in public, not private, police organizations. Unless otherwise stated, references to police refer to public police only.

2. Reiss, Albert J., Jr., "Systematic Observation of Natural Social Phenomena," in *Sociological Methodology*, ed. Herbert L. Costner, San Francisco: Jossey-Bass, 1971: 3–33.

3. Ibid.

4. Reiss, Albert J., Jr., "Stuff and Nonsense about Social Surveys and Observation," in *Institutions and the Person: Papers Presented to C. Everett Hughes*, eds. Howard S. Becker, Blanche Greer, David Riesman, and Robert S. Weiss, Chicago: Aldine Publishing Company, 1968: 351–367.

5. Levine, Robert, *A Geography of Time*, New York: Basic Books, 1997.

6. Taylor, Ralph B., "Social Order and Disorder of Street Blocks and Neighborhoods: Ecology, Microecology, and the Systemic Model of Social Disorganization," *Journal of Research in Crime and Delinquency*, 34 (February 1997): 113–155.

7. Luthans, Fred, and Diane Lockwood, "Toward an Observation System for Measuring Leader Behavior in Natural Settings," in *Leaders and Managers: International Perspective of Managerial Behavior and Leadership*, eds. J. Hunt, D. Hosking, C. Schriesheim, and R. Steward, New York: Pergamon Press, 1984: 117–141; Mintzberg, H., *The Nature of Managerial Work*, New York: Harper Collins, 1972.

8. Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

9. Sykes, Richard E., and Edward E. Brent, *Policing: A Social Behaviorist Perspective,* New Brunswick, New Jersey: Rutgers University Press, 1983. Sykes and Brent note that one SSO project used a handheld data-entry machine that enabled researchers to record their observations in the field at the time events occurred. This may be useful for studies that take an interactionist perspective and wish to break down observations to the level of each statement or action by parties to an event. It is difficult for observers to remember accurately each such "utterance" by the police and the public. Our studies have not sought that level of detail. Moreover, we find that notetaking by pen and paper is less obtrusive and enables the observer in the field to concentrate more on observing and less on recording events. And it is also difficult to enter data on a large number of items if the field researcher's data entry must keep pace with events as they transpire.

10. Mastrofski, Stephen D., and Roger B. Parks, "Improving Observational Studies of Police," *Criminology*, 28 (August 1990): 475–496.

11. Hersch, Rebekah, and Royer F. Cook, "Citizen Responses to Community Policing," National Institute of Justice, draft Report, NIJ Criminal Justice Research and Evaluation Conference, 1997.

12. Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

13. We create a summative index (percent unemployed, percent very poor, and percent of families with children headed by a single female). This is thought to be related inversely to the capacity for informal social control. See Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls, "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science*, 277 (1997): 918–924.

14. Bayley, David H., and James Garofalo, "The Management of Violence by Police Patrol Officers, *Criminology*, 27 (February 1989): 1–27.

15. A broader "when" question concerns time of the year. We have concentrated our observations principally during summer months because of our reliance on

college students as observers (see discussion under "Personnel, logistics, project management, and quality control"). Such a design prevents us from testing the effects of seasonality, because summer months may differ substantially from other seasons in the nature of the police workload. See Frank, James, "Street Level Policing in Cincinnati: The Content of Community and Traditional Policing and the Perceptions of Policing Audiences," National Institute of Justice, Research Proposal, grant number 96–IJ–CX–0075, 1996, for an SSO study that covers all four seasons.

16. Our construction of the police-citizen encounter relies heavily on Goffman, Erving, *Encounters*, Indianapolis: Dobbs–Merrill, 1961.

17. Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

18. The following is an excerpt of questions posed to the observer about each citizen involved in an encounter with the observed officer:

> (17.) Did this citizen show any signs of physical injury or illness requiring immediate medical attention?
>
> 1 no
> 2 yes, minor injury or illness
> 3 yes, serious injury or illness
>
> (18.) Did this citizen have a weapon in his/her possession or within "jump and reach"?
> SELECT HIGHEST NUMBER APPLICABLE.
>
> 1 no weapon evident [GO TO Q-20]
> 2 incapacitating device (mace, pepper spray)
> 3 blunt/martial arts instrument
> 4 knife/stabbing/cutting instrument
> 5 other weapon
> 6 firearm
>
> (19.) Was this weapon concealed from the police at any time during the encounter?
>
> 1 no
> 2 yes, on citizen's person
> 3 yes, not on citizen's person
>
> (20.) Did the citizen threaten to assault the police?
>
> 1 no

2 yes, before the police attempted to arrest or physically control citizen

3 yes, during or after police attempted to arrest or physically control citizen

4 yes, both 2 and 3 above

(21.) Did the citizen physically assault the police?

1 no

2 yes, before the police attempted to arrest or physically control citizen

3 yes, during or after police attempted to arrest or physically control citizen

4 yes, both 2 and 3 above

19. Parks, Roger B., "Comparing Citizen and Observer Perceptions of Police-Citizen Encounters," in *Understanding Police Agency Performance*, ed. Gordon P. Whitaker, Washington, DC: U.S. Government Printing Office, 1984: 121–135.

20. Mastrofski, Stephen D., Jeffrey B. Snipes, and Ann Supina, "Compliance on Demand: The Public's Response to Specific Police Requests, *Journal of Research in Crime and Delinquency*, 33 (August 1996): 269–305; Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

21. Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

22. Mastrofski and Parks, "Improving Observational Studies of Police," 475–496.

23. By self-awareness we mean the capacity to monitor one's own perceptions and feelings and how these may influence one's observations and judgments.

24. However, only about 60 of these rides are usable, because students do not learn the entire protocol until they conduct the third ride.

25. The compensation rate is attractive to many students, who seek only summer employment, but for most, the opportunity to observe police and to use the data in their own research are at least equally strong motivators. Using nontemporary employees would require substantially higher salaries and benefits to attract persons of comparable skill and motivation.

26. These forms and the data will be available at the Inter-University Consortium for Political and Social Research at the University of Michigan, the data archivist for NIJ.

27. Snipes, Jeffrey B., and R. Richard Ritti, *Codit User's Manual: A Guide for Qualitative Data Entry*, University Park, PA: The Pennsylvania State University, 1993.

28. For example, our protocols require observers to be present during roll call, but some departments do not allow civilian ridealongs to attend, so we seek an exception. Some departments do not conduct roll call. Their officers check onto duty when they drive their "take-home" car onto the assigned beat. These officers need to pick up the observer before checking onto duty. We ask the department to alter its check-on procedures to accommodate the project's needs. A department might issue earphones for its officers' portable radios. Radio messages provide important information to observers, so we ask the department to issue observers radios and earphones too.

29. Boruch, Robert A., Albert J. Reiss, Jr., Joel Garner, K. Larntz, and S. Freels, "Data Sharing and Privacy in Criminal and Civil Justice Research: The Spouse Assault Replication Program," in *Sharing Social Science Data: Advantages and Challenges*, ed. J.E. Sieber, Beverly Hills, CA: Sage, 1991.

30. Reiss, "Stuff and Nonsense about Social Surveys and Observation," 351–367; Reiss, "Systematic Observation of Natural Social Phenomena," 3–33.

31. In Richmond, only 6 of the 451 encounters with suspects yielded an observer's assessment that the officer seemed influenced by the observer's presence.

32. The coding sequence for reactivity in an encounter between the observed officer and one or more citizens is:

> (52.) Did the police change their behavior because of your or other observer presence?
>
> 1 no significant change [GO TO Q–55]
> 2 yes, a little change
> 3 yes, a substantial change
>
> (53.) In what way did the police change their behavior during this encounter because of observer presence?
> SELECT HIGHEST APPLICABLE NUMBER
>
> 1 police more inclined to get involved
> 2 police less inclined to get involved
> 3 police more inclined to arrest or cite

4 police less inclined to arrest or cite
5 police more inclined to use force
6 police less inclined to use force
7 other

(54.) What is the basis of your judgment that police changed their behavior because of observer presence?

1 police stated that their behavior changed
2 observer inferred it from behavior or manner of police
3 other

33. Mastrofski and Parks, "Improving Observational Studies of Police," 475–496.

34. Mastrofski, Stephen D., *Policing the Centre Region: An Assessment of Current Arrangements and Alternatives, A Report of the Cooperative Police Services Study to the Centre Region Council of Governments*, University Park, PA: The Pennsylvania State University, 1984.

35. Riksheim, Eric C., and Steven M. Chermak, "Causes of Police Behavior Revisited," *Journal of Criminal Justice*, 21 (4) (1993): 353–382.

36. For this illustration only officers working in the same precinct and serving the same geographic areas on the same work shift were compared.

37. Self-directed time is not necessarily time uncommitted to a focused task. During self-directed time, an officer may *choose* to initiate contact with the public or to respond when someone waves him down. Or the officer may *choose* to engage in other problem-focused activities, such as traffic surveillance, business security checks, or doing paperwork. Thus, an officer with a great deal of self-directed time may nonetheless be a busy officer, albeit at his or her own choosing.

38. Community policing officers frequently volunteered to take calls in or near their assigned areas because they wanted to show their colleagues that they were carrying their share of the workload, or because they found this a useful way to get to know a wide variety of people in the area.

39. Some dispatched assignments may not be recorded for a variety of reasons, but ridealong observers would be unable to determine when this occurs.

40. Excluded from consideration are the brief and casual encounters that were included in exhibit 5 to make measures comparable over different projects. These brief and casual encounters were not recorded in some of the jurisdictions studied.

41. Nearly all of the observations were conducted with one-officer units, so the presence of multiple officers means other units or supervisors were present.

42. Garner, Joel, John Buchanan, Tom Schade, and John Hepburn, *Understanding the Use of Force by and Against the Police*, Research in Brief, Washington, DC: U.S. Department of Justice, National Institute of Justice, November 1996, NCJ 158614.

43. Police can coerce in many other ways besides using or threatening physical force: gathering in number around a citizen, being especially close to a citizen, or using commanding language or threats of nonphysical punishment (e.g., reporting a juvenile's misbehavior to a parent). These too were recorded by observers but are not included in this exhibit.

44. The second column of exhibit 9 indicates the total number of citizens, regardless of how the police expressed their request. The third column indicates what percentage of those citizens were the object of authoritative police expressions (commands or threats). The fourth column indicates what percentage of all citizens complied, regardless of the mode of police expression.

45. Citizens were considered to have complied if they did what the police wanted in the officer's presence or if they explicitly promised to comply in the future.

46. Police were considered to have complied if they fulfilled the request in the citizen's presence or promised to do so at a later time.

47. This may vary considerably among departments. In another department, supervisors were present in only about 3 percent of the encounters.

48. Of course, a suggestion from one's superior may be interpreted as tantamount to a directive, even if it was not expressed in that fashion.

49. We use the term "precinct" generically to refer to a police administrative unit that is comprised of several patrol areas or "beats." Some departments refer to these areas as districts.

50. This is an index composed of the sum of three percentages: percentage of

labor force unemployed, percentage of residents living in extreme poverty, and percentage of households headed by single females. Scores in the low-distress beats were in the mid-20s; they were in the low- to mid-40s for medium-distress beats; they were in the mid-50s for high-distress beats.

51. Klinger, David A., "Negotiating Order in Patrol Work: An Ecological Theory of Police Response to Deviance," *Criminology*, 35 (May 1997): 277–306.

52. Casual conversations engaged in while the officer was on personal business (e.g., meals and snacks) are not included in these figures. The accounting of officer time in this exhibit is not comprehensive, so the sums of columns 3–5 will not be 100 for any beat.

53. Reiss, Albert, J., Jr., *The Police and the Public*, New Haven, CT: Yale University Press, 1971: 111.

54. Wilson, James Q., and George L. Kelling, "The Police and Neighborhood Safety: Broken Windows," *Atlantic Monthly*, 127 (March 1982): 29–38.

55. Reiss, *The Police and the Public*, 1971: 57–62.

56. Frank, "Street-Level Policing in Cincinnati: The Content of Community and Traditional Policing and the Perceptions of Policing Audiences," 1996; Hersch and Cook, "Citizen Responses to Community Policing," 1997.

About the National Institute of Justice

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research agency of the U.S. Department of Justice. Created by the Omnibus Crime Control and Safe Streets Act of 1968, as amended, NIJ is authorized to support research, evaluation, and demonstration programs, development of technology, and both national and international information dissemination. Specific mandates of the Act direct NIJ to:

- Sponsor special projects, and research and development programs, that will improve and strengthen the criminal justice system and reduce or prevent crime.

- Conduct national demonstration projects that employ innovative or promising approaches for improving criminal justice.

- Develop new technologies to fight crime and improve criminal justice.

- Evaluate the effectiveness of criminal justice programs and identify programs that promise to be successful if continued or repeated.

- Recommend actions that can be taken by Federal, State, and local governments as well as by private organizations to improve criminal justice.

- Carry out research on criminal behavior.

- Develop new methods of crime prevention and reduction of crime and delinquency.

In recent years, NIJ has greatly expanded its initiatives, the result of the Violent Crime Control and Law Enforcement Act of 1994 (the Crime Act), partnerships with other Federal agencies and private foundations, advances in technology, and a new international focus. Some examples of these new initiatives:

- New research and evaluation are exploring key issues in community policing, violence against women, sentencing reforms, and specialized courts such as drug courts.

- Dual-use technologies are being developed to support national defense and local law enforcement needs.

- The causes, treatment, and prevention of violence against women and violence within the family are being investigated in cooperation with several agencies of the U.S. Department of Health and Human Services.

- NIJ's links with the international community are being strengthened through membership in the United Nations network of criminological institutes; participation in developing the U.N. Criminal Justice Information Network; initiation of UNOJUST (U.N. Online Justice Clearinghouse), which electronically links the institutes to the U.N. network; and establishment of an NIJ International Center.

- The NIJ-administered criminal justice information clearinghouse, the world's largest, has improved its online capability.

- The Institute's Drug Use Forecasting (DUF) program has been expanded and enhanced. Renamed ADAM (Arrestee Drug Abuse Monitoring), the program will increase the number of drug-testing sites, and its role as a "platform" for studying drug-related crime will grow.

- NIJ's new Crime Mapping Research Center will provide training in computer mapping technology, collect and archive geocoded crime data, and develop analytic software.

- The Institute's program of intramural research has been expanded and enhanced.

The Institute Director, who is appointed by the President and confirmed by the Senate, establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the Department of Justice, and the needs of the criminal justice field. The Institute actively solicits the views of criminal justice professionals and researchers in the continuing search for answers that inform public policymaking in crime and justice.