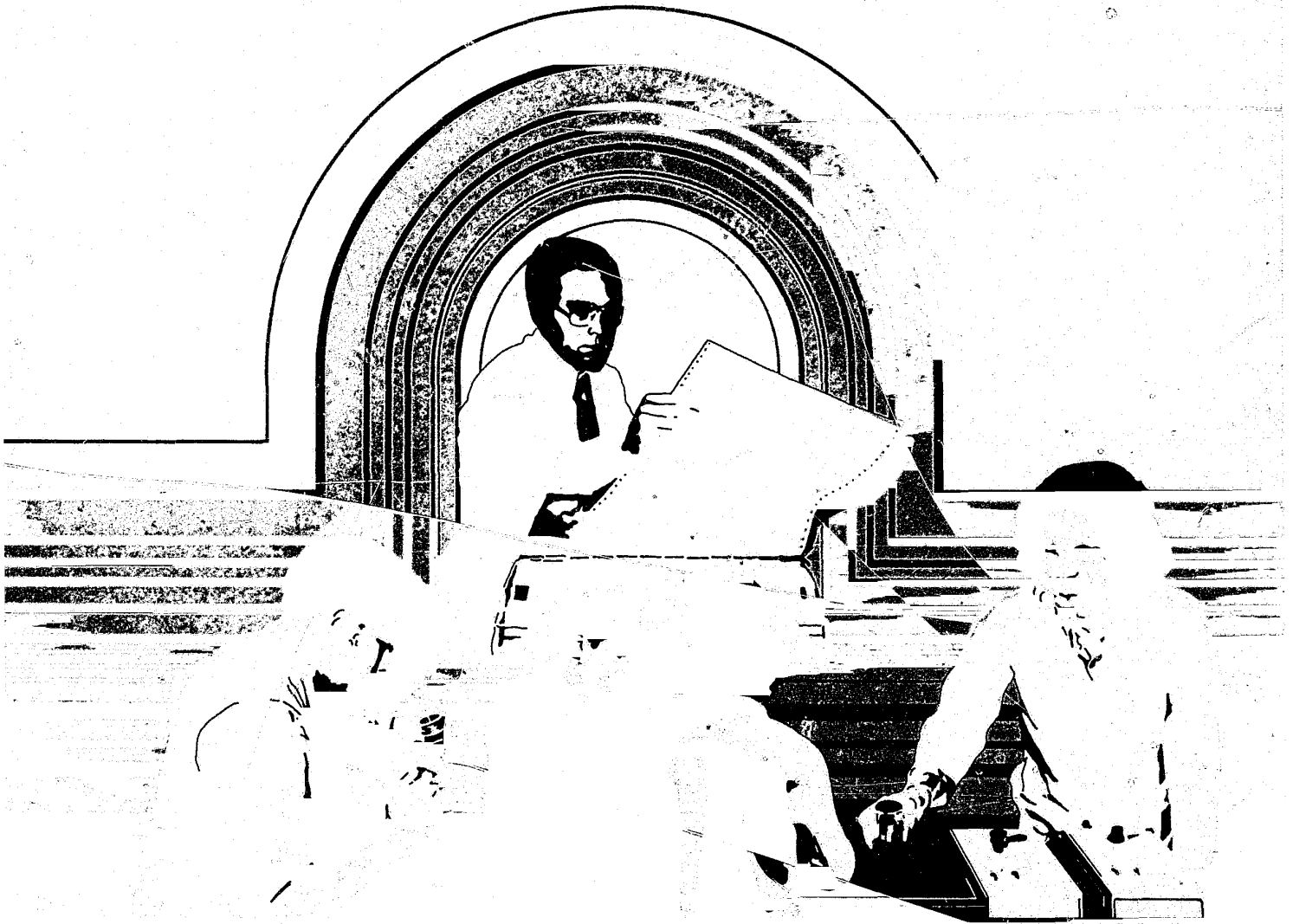


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The Criminal Investigation Process: A Dialogue on Research Findings



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National Institute of Law Enforcement and Criminal Justice
Law Enforcement Assistance Administration
United States Department of Justice

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ACQUISITIONS

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April 1977



**National Institute of Law Enforcement and Criminal Justice
Law Enforcement Assistance Administration
United States Department of Justice**

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FOREWORD

While innovative methods have gained a foothold in many areas of police operations, reforms have largely bypassed the investigative process in most departments. One impediment to change is the traditional view of detective work as something of an art, in which success depends more on talented individuals than sound management policies. Another obstacle is the lack of solid information: Because few critical analyses of the investigative function have been done, the police administrator looking for more effective ways to manage criminal investigations has had little to go on.

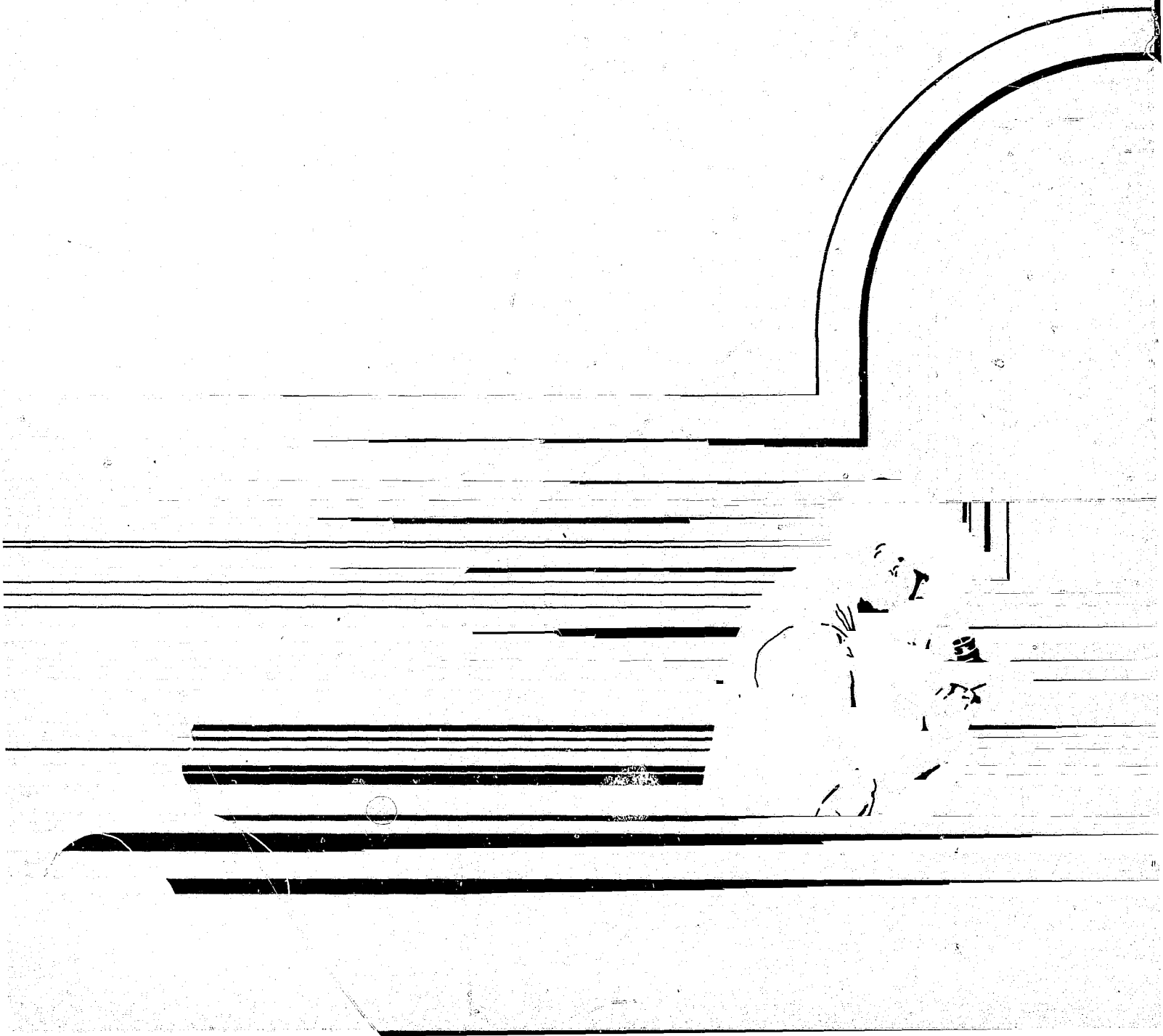
To help remedy the situation, the National Institute in 1973 awarded funds to the Rand Corporation for a two-year study of the criminal investigation process. From this research has come a more realistic view of the detective's role in solving crime and recommendations for increasing the efficiency and effectiveness of investigative procedures.

When the study was made public, it sparked a debate in the law enforcement community. A critical analysis of the Rand research and the researchers' response appeared in The Police Chief. Because of the importance of the issues involved, the National Institute has compiled this report, which includes the original summary of the criminal investigation study, the critical analysis and the researchers' response, and a revised summary prepared by the researchers. We hope it will be useful in continuing the dialogue between researcher and practitioner.

Research by its nature is tentative in what it offers. Final answers are not in its province. The Rand study is no exception. It suggests new ways of attacking difficult questions, and that is useful. But the real significance of the study is that it opens up another important part of police operations to analysis and experimentation, a very healthy development.

Gerald M. Caplan
Director
National Institute of Law Enforcement
and Criminal Justice

Part I
The Criminal Investigation Process
Summary and Policy Implications



THE CRIMINAL INVESTIGATION PROCESS VOLUME I: SUMMARY AND POLICY IMPLICATIONS

**PREPARED UNDER A GRANT FROM THE NATIONAL INSTITUTE OF LAW
ENFORCEMENT AND CRIMINAL JUSTICE, LEA.A., DEPARTMENT OF JUSTICE**

**PETER W. GREENWOOD
JOAN PETERSILIA**

**R-1776-DOJ
OCTOBER 1975**

PREFACE

This report is the first in a series of volumes resulting from a two-year study of police criminal investigation practices and their impacts. The study, supported by a grant from the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration, U.S. Department of Justice, had four objectives:

- To describe, on a national scale, current investigative organization and practices.
- To assess the contribution that police investigation makes to the achievement of criminal justice goals.
- To ascertain the effectiveness of new technology and systems being adopted to enhance investigative performance.
- To reveal how investigative effectiveness is related to differences in organizational form, staffing, procedures, etc.

The present volume, *The Criminal Investigation Process: Summary and Policy Implications*, summarizes and synthesizes the overall findings of the study and draws policy-relevant conclusions and recommendations. This report should be of interest to police officials and to other criminal justice practitioners, such as prosecutors and judges, whose work brings them in contact with criminal investigators.

Volume II of the series (R-1777-DOJ), *The Criminal Investigation Process: Survey of Municipal and County Police Departments*, reports on the responses of police departments with more than 150 employees to a national survey. Differences among departments with regard to policies, resources used, and operational characteristics are identified and then related to standard gross performance statistics such as crime, clearance, and arrest rates. This report should be of interest to both police officials and the criminal justice research community.

Volume III of the series (R-1778-DOJ), *The Criminal Investigation Process: Observations and Analysis*, presents a comprehensive description of the criminal investigation process (based on all data gathered in the course of the study) and an analysis of those issues that can be illuminated by quantitative evidence. This report is directed primarily to researchers but may also be of interest to police officials who wish to examine the details of the analysis supporting the findings reported in this volume.

SUMMARY

SCOPE AND OBJECTIVES

This report, the first of a series of three volumes, is the product of a two-year Rand study of police investigation funded by the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration, U.S. Department of Justice. The objectives of the research were:

- To describe, on a national scale, current investigative organization and practices.
- To assess the contribution that police investigation makes to the achievement of criminal justice goals.
- To ascertain the effectiveness of new technology and systems being adopted to enhance investigative performance.
- To reveal how investigative effectiveness is related to differences in organizational form, staffing, procedures, etc.

The scope of the Rand study was limited to police investigation of serious reported crime: homicide, rape, assault, robbery, burglary, and theft. Our work did not address misdemeanor offenses or victimless and organized crimes whose investigation is substantially different from the felony offenses that were our primary concern.

The present volume summarizes and synthesizes the overall findings of the study and draws policy-relevant conclusions. Throughout the report the collective "we" is used to describe the work of the entire project staff.

SOURCES OF INFORMATION

The information used in this study was obtained in several ways. First, we examined the literature on the investigative performance of police departments in American cities and used some of their findings as hypotheses to be explored in our work.

We developed a comprehensive survey questionnaire which was distributed to all municipal or county law enforcement departments that had 150 or more full-time employees or that served a jurisdiction whose 1970 population exceeded 100,000. This survey produced extensive information from 153 jurisdictions (of the 300 solicited) on such topics as department characteristics, investigator deployment, investigator training and status, use of evidence technicians, nature of specialization, evaluation criteria, prosecutorial interaction, case assignment, use of computer files, and crime, clearance, and arrest rates.

On the basis of the survey responses, together with the consensus of our project advisory panel,¹ more than 25 police agencies were selected for more detailed study.

¹ A panel of distinguished police personnel were selected to serve in an advisory capacity to the project. The group consisted of Cornelius (Neil) J. Behan (New York City Police Department); James Fisk (Mem-

Our project staff visited each of these departments, observing and participating in the operations of the investigative units and discussing their procedures with personnel at various departmental levels. In some cities we monitored individual investigators and their supervisors continuously over a period of several days to obtain realistic profiles of their activities.

From some departments we obtained studies that they had made to evaluate novel investigative programs. Several departments cooperated closely with the Rand staff and provided us access to samples of completed or suspended cases, whose folders enabled us to trace case progress and disposition as related to the specific investigative inputs.

One very useful data source made available to us was the Kansas City Detective Case Assignment File, which has been maintained in that department since 1971. On the basis of daily information submitted by individual detectives, this computer file permitted us to determine, for each investigator and each investigative unit, a description of the time spent on various activities, the number of cases handled, and the number of arrests and clearances produced. This information source greatly facilitated our analyses of how detectives spend their time and to what purposes and effects.

From the FBI we obtained a computer-readable file of 1972 Uniform Crime Report (UCR) data, by reporting departments; these data and information from the survey were used to develop inferences about the relationship between investigative activities and reported crime rates, arrest rates, and clearance rates.

Finally, to provide a data source for a special study of information feedback to crime victims, a limited telephone survey was made of robbery and burglary victims in a single jurisdiction.

MAJOR FINDINGS

- *On investigative effectiveness: Differences in investigative training, staffing, workload, and procedures appear to have no appreciable effect on crime, arrest, or clearance rates.*

As part of our analysis of the survey questionnaire, we attempted to correlate (by means of standard statistical tests) crime, arrest, and clearance rates with the wide differences in organization, staffing, and procedures by which those departments reported that they performed the investigation function. This analysis shows that variations in crime, arrest, and clearance rates among these communities were weakly, if at all, related to the disparities in investigation inputs.

- *The method by which police investigators are organized (i.e., team policing, specialists vs. generalists, patrolmen-investigators) cannot be related to variations in crime, arrest, and clearance rates.*

Detailed analysis of case samples, combined with FBI-UCR and Rand survey data, shows that crimes are solved similarly across departments, regardless of how the investigators are organized.

ber of the Los Angeles Police Commission); Thomas Hastings (Rochester, New York Police Department); Jerry Wilson (Former Chief, Washington, D.C. Police Department); and Eugene Zoglio (Professor, Prince George's Community College).

- *On the use of investigators' time: Substantially more than half of all serious reported crimes receive no more than superficial attention from investigators.*

From an analysis of a computer-readable case assignment file maintained by the Kansas City (Missouri) Police Department, and observations during site visits, we determined that although a large proportion of reported crimes are assigned to an investigator, many of these receive no more attention than the reading of the initial crime incident report; that is, many cases are suspended at once. The data show that homicide, rape, and suicide invariably resulted in investigative activity. Overall, however, less than half of the reported felonies could be said to be worked on by an investigator, and the great majority of cases that are actively investigated receive less than one day's attention.

- *Our data consistently reveal that an investigator's time is largely consumed in reviewing reports, documenting files, and attempting to locate and interview victims on cases that experience shows will not be solved. For cases that are solved (i.e., a suspect is identified), an investigator spends more time in post-clearance processing than he does in identifying the perpetrator.*

From our analyses of a variety of crime types, it was determined that, in more than half of the cleared cases, the identity of the perpetrator is known or readily determinable at the time the crime report is made. The investigator needs to devote little time to the solution of these cases, but post-arrest processing frequently requires him to perform a number of administrative tasks. Difficult cases that are finally solved after a substantial application of investigative effort are relatively uncommon. Most of the work done by investigators on cases that are solved is a consequence of the fact that an arrest has already been made. Furthermore, much of the investigator's time is consumed by administrative duties, services to the public, and other activities not immediately directed to assigned cases.

- *On how cases are solved: The single most important determinant of whether or not a case will be solved is the information the victim supplies to the immediately responding patrol officer. If information that uniquely identifies the perpetrator is not presented at the time the crime is reported, the perpetrator, by and large, will not be subsequently identified.*

In an analysis of a large sample of combined crime types, it was determined that the perpetrator's identity became immediately known in more than one-half of the cases that were eventually cleared, chiefly because (1) the offender was arrested at the scene; (2) the victim or other witness identified him by name and address even though he was not arrested at the scene; or (3) he was identifiable by some unique evidence apparent at the crime scene, for example, a witness observed the license plate on the perpetrator's car or his employee badge number.

- *On how cases are solved: Of those cases that are ultimately cleared but in which the perpetrator is not identifiable at the time of the initial police incident report, almost all are cleared as a result of routine police procedures.*

A finding from our examination of the cleared cases in a sample drawn from six cities was that in nearly all cases where the perpetrator's identity was not apparent at the time of the offense, the clearances were produced by routine police procedures; that is, they required no imaginative exercise of investigative experience and skills. Typically, fingerprint search, random informant tips, mug shot showups, or stolen property recovery were instrumental in producing clearances. Investigative "special action" made a perceptible difference in only three types of crimes: commercial burglary, robbery, and homicide. In these crimes, we found that roughly 10 percent of the cases were solved as the result of nonroutine initiatives taken by investigators.

- *On collecting physical evidence: Most police departments collect more physical evidence than can be productively processed. Our analysis shows that allocating more resources to increasing the processing capabilities of the department can lead to more identifications than some other investigative actions.*

From our comparative analysis of the physical evidence collection and processing activities of six police departments which employ different procedures, we found that a department can assure a relatively high recovery rate of latent prints from crime scenes by a sufficient investment in evidence technicians and by routinely dispatching technicians to the scene of felonies. The latent print recovery rate is also increased by processing the crime scene immediately following the report of the incident. But, unless the department's print processing capability is commensurately improved, the rate of suspect identifications does not increase significantly.

- *On the use of physical evidence: Latent fingerprints rarely provide the only basis for identifying a suspect.*

Comparisons among fingerprint identification sections in four contrasting departments showed that although 4 to 9 percent of all latent prints are eventually matched with a suspect's inked prints, they rarely provide the basis for initial identification. Although the use of "cold search" (no other evidence) and its success rate varied substantially among departments, fingerprint identification did not have a significant effect on overall arrest rates in any department.

- *On investigative thoroughness: In relatively few departments do investigators consistently and thoroughly document the key evidentiary facts that reasonably assure that the prosecutor can obtain a conviction on the most serious applicable charges.*

This finding derives from a combination of observations of police departments made throughout the country and some of the results obtained in the study of post-arrest investigation practices. In the latter study our analysis of robbery cases showed that the department confronted by a stringent prosecutorial filing policy was significantly more thorough in performing and reporting post-arrest investigative work than the department in which cases were more permissively filed. Yet, even the former department fell short of supplying the prosecutor with all of the information he desired; the data show that each of 39 evidentiary questions considered by a prosecutor to be necessary for effective case presentation was on the average covered in only 45 percent of the cases, while 26 percent were addressed by the latter department.

- *On investigative thoroughness: Police failure to document a case investigation thoroughly may have contributed to a higher case dismissal rate and a weakening of the prosecutor's plea bargaining position.*

In relating case disposition to investigative thoroughness, our analysis showed significant differences between the two study jurisdictions that displayed differences in investigative thoroughness and prosecutorial screening practices. For example, none of the sampled cases were dismissed in the jurisdiction with more stringent case screening and greater investigative thoroughness; furthermore, 60 percent of the defendants pled guilty to the charges as filed. By comparison, in the second jurisdiction, about one-quarter of the sampled cases were dismissed after filing, and only one-third of the defendants pled guilty to the charges as filed.

- *On relations between victims and police: Crime victims in general strongly desire to be notified officially as to whether or not the police have "solved" their case, and what progress has been made toward convicting the suspect after his arrest.*

The Rand telephone survey indicated a strong desire on the part of victims to receive official notification when a suspect had been arrested, and of the disposition of the case. Few victims, no matter how distressed by the information conveyed to them by the police (e.g., that investigation into their case had been suspended), would act to redress their grievances by making a formal complaint.

- *On investigative organization and procedure: Investigative strike forces have a significant potential to increase arrest rates for a few difficult target offenses, provided they remain concentrated on activities for which they are uniquely qualified; in practice, however, they are frequently diverted elsewhere.*

Rand analyzed the performance of such units in general, and the Long Beach Suppression of Burglary (SOB) Unit and the Miami STOP Robbery Unit in particular. In these instances, the formation of an investigative strike force did tend to produce higher arrest rates for the targeted offense; yet, a significant proportion of the arrests in which these investigators participated did not result from the special efforts and skills exercised by them.

PROPOSED REFORMS

The above findings imply that traditional approaches to criminal investigation by police departments do not significantly affect the rate at which cases are solved. It appears, rather, that most cases are solved by the application of routine administrative procedures. If these implications are valid, then several policy changes are suggested. We set forth a number of such "reforms" whose rationale is consistent with our findings. We do not expect a police department to adopt them uncritically. Rather, it should first assure itself of the relevance of our work to its situation and then introduce the changes on an experimental basis, together with a careful evaluation program that enables their effects to be identified and assessed. If these experimental implementations have favorable outcomes in several departments, then the change(s) involved could be promoted for national adoption.

We believe that the recommended reforms should lead to a somewhat greater number of arrests, more successful prosecutions, and savings in resources. But they will not necessarily lead to a *substantial* improvement in apprehension rates, which our work indicates are more dependent on other factors, for example, victim and witness cooperation.

On their face, our study findings suggest that the effectiveness of criminal investigation would not be unduly lessened if approximately half of the investigative effort were eliminated or shifted to more productive uses. The remaining investigative force should suffice to handle routine cases, which give rise to most of the clearances that now occur, and to perform the post-arrest processing involved in a patrol arrest. These findings also indicate that significant increases in criminal apprehension rates are much more likely to be produced by more alert patrol units and improved citizen cooperation than by refinements in investigative work.

1. *Reduce follow-up investigation on all cases except those involving the most serious offenses.*

Rationale: Our data consistently reveal that a regular investigator's time is preponderantly used in reviewing reports, documenting files, and attempting to locate and interview victims and witnesses on cases that experience shows will not be solved. Our data show, moreover, that most cases that are solved are solved by means of information spontaneously provided by a source other than those developed by the investigator. It follows that a significant reduction in follow-up investigative efforts would be appropriate for all but the most serious offenses for which public confidence demands some type of response. If a thorough preliminary investigation fails to establish a suspect's identity, then the victim should be notified that active investigation is being suspended until new leads appear, for example, as a result of an arrest in another matter.

2. *Assign generalist-investigators (who would handle the obvious leads in routine cases) to the local operations commander.*

Rationale: Under the investigation policy suggested above, the main duty of the generalist-investigator is to respond to information developed by the patrol units at the crime scene or volunteered by the public, rather than to develop new leads on his own initiative. This role emphasizes the public service function of the investigator, and the men performing it should be responsible to the local commander who is concerned with all aspects of police-community relations.

Our research suggests that this type of investigative duty does not entail a requirement for specialized skills or centralized coordination. The officers performing it could readily shift between patrol and investigative duties. In departments with team policing, such investigation of routine cases could be a duty rotated among team members.

3. *Establish a Major Offenders Unit to investigate serious crimes.*

Rationale: Because of their importance to society, serious crimes (homicide, rape, assault with great bodily injury, robbery, or first-degree burglary) may warrant some special investigative efforts. These efforts can best be provided by a Major Offenders Unit, manned by investigators who are well trained and experienced in examining crime scenes, interpreting physical evidence, and interrogating hostile

suspects and fearful witnesses, and who are aided by modern information systems. One reason to establish such a unit is to clearly identify the investigative positions that require special skills and training and that demand knowledge of citywide crime patterns and developments. Our analysis of traditional investigation workloads suggests, by way of contrast, that with current staffing patterns, most investigators rarely see these highly serious cases. Therefore, when they arise, the investigators are frequently ill equipped to cope with them and unduly distracted by the burden of paperwork on their routine cases.

The Major Offenders Unit would concentrate efforts on a few *unsolved* serious felonies. The team would consist of a relatively small number of experienced investigators who would be closely supervised by a team commander.

4. *Assign serious-offense investigations to closely supervised teams, rather than to individual investigators.*

Rationale: The most serious impediment to high-quality investigative work appears to us to be the traditional method of case assignment and supervision. In nearly every department, cases are normally assigned to an individual investigator and become his sole responsibility whether he is a generalist, specialist, or engaged in team policing. Supervisors do not normally review the decisions he makes on how to pursue the case investigation—decisions that are largely unrecorded in the case file. Consequently, the relative priority an investigator gives to the tasks on one case assigned to him results largely from the number and nature of his other case assignments and from his personal predilections and biases. It may frequently turn out that caseload conflicts and personal predilections lead an investigator to unduly postpone or improperly perform important elements of a particular case assignment.

Assigning cases to investigative teams rather than to individuals could eliminate this impediment. For effective operations, this team should number approximately six men and be led by a senior investigator who is knowledgeable in the local crime situation, in criminal law, and in police management. The leader's primary responsibility would be to keep informed of progress on the cases assigned to his team and make the broad tactical decisions on the team's expenditure of effort. Each day the subordinate investigators would perform individually assigned tasks. A clerk delegated to the team would prepare progress reports to document the daily accomplishment on open cases and to assist the leader in making the allocation for the following day. These reports would also help the leader identify which of his men was most effective at which tasks. This approach should assure that significant steps in an investigation are objectively decided by a senior experienced investigator. This proposed reform is especially applicable to those cases handled by the Major Offenders Unit, described in Reform 3, and by those investigators assigned to the prosecutor, described in Reform 8.

5. *Strengthen evidence-processing capabilities.*

Rationale: Many police departments collect far more evidence (primarily fingerprints) than they can productively process. Our work shows that cold searches of latent fingerprints are far more effective in increasing the apprehension rate than are routine follow-up investigations.

The fingerprint-processing capabilities should be strengthened as follows: First,

the reference print files should be organized by geographic area, with a fingerprint specialist assigned to each area, of no more than 4000 to 5000 sets of inked prints. Second, to assure a large number of "request searches," which imply a cooperative effort between investigator and fingerprint specialist, some communication links should be devised to help motivate and facilitate the reciprocal exchange of information between these two parties. And third, the persons performing this function should be highly trained, highly motivated, and not overloaded with other tasks which detract from their primary function.

6. *Increase the use of information processing systems in lieu of investigators.*

Rationale: Much of the scanning and monitoring of the huge volume of information concerning crime incidents and arrests could instead be done by means of an information processing system that would involve clerks and routine procedures in small departments, and electronic computers in large ones. Rand's nationwide survey indicates that computerized information systems are not nearly as prevalent as would be justified by their potential to save manpower in this area.

7. *Employ strike forces selectively and judiciously.*

Rationale: The few investigative strike force operations we examined support the view that strike forces can be relatively productive, particularly against burglary and fencing offenses. But to achieve an advantage, these units must be manned by motivated and innovative personnel. The gain in employing them becomes illusory when mere quantity of arrests is emphasized, for then the efforts of this force tend to be diverted into making arrests that are not the result of its own unique capabilities. The operation of strike forces necessitates careful procedural and legal planning to protect the involved officers and to ensure that the defendants they identify can be successfully prosecuted. They also require close monitoring by senior officials to ensure that they do not become overly aggressive and infringe on individual privacy.

In all likelihood, the relative advantage of strike force operations in a particular department will not persist; so the department must accustom itself to creating and then terminating strike forces, as circumstances may dictate.

8. *Place post-arrest (i.e., suspect in custody) investigations under the authority of the prosecutor.*

Rationale: Our analyses of workload data reveal that most investigative effort on cleared cases is made after the arrest, and that most arrests are made by a responding patrol unit without prior investigator involvement. But many of these cases necessitate post-arrest investigation to strengthen the evidence to meet the "beyond a reasonable doubt" standard for conviction. Also, the investigator may be impelled to post-arrest efforts in an attempt to achieve clearances in other cases by the present arrest, or to satisfy the documentation requirements of the department.

Most prosecutors do not have investigators on their staff. If they do, these investigators are usually occupied with relatively complex "white-collar" offenses. Generally, then, the prosecutor relies on police investigators to provide the evidence needed to prosecute and convict the suspect. But this situation contains an inherent conflict between prosecutor and police. A police arrest is justified by *probable cause*—i.e., an articulable reasonable belief that a crime was committed and that the arrest-

ee was the offender. But generally, because of the pressure of new cases and the expectation that the case will be bargained rather than tried, the police are reluctant to expend further investigative efforts to strengthen the evidence in the case. The prosecutor, on the other hand, may be reluctant to file the charges that the police prefer, or to file at all, if he believes the evidence would not suffice for a conviction, i.e., *proof beyond a reasonable doubt*. It is clear that many cases are affected by the conflicting incentives of police and prosecutor, as reflected in failures to file, lenient filing, early dismissals, or imbalanced bargaining.

A promising remedy for this problem would be to place *post-arrest* investigations under the authority of the prosecutor's office, under assignment or as an integral part of his staff, depending on the local situation. They would be used to implement the policy that post-arrest investigation should seek to demonstrate the culpability of the suspect beyond a reasonable doubt. We feel this arrangement would be a more effective way of assuring that the evidentiary needs for a successful prosecution are met.

9. *Initiate programs designed to impress on the citizen the crucial role he plays in crime solution.*

Rationale: All our data show that the most important factor in crime solution is the information provided by the victim to the responding police officer. If information that uniquely identifies the perpetrator is not presented at the time the crime is reported, the perpetrator, by and large, will not be subsequently identified.

Police departments must initiate programs designed to increase the victim's desire to cooperate fully with the police. Resources allocated to such programs may serve to increase apprehension rates. Specifically, police departments should widely disseminate the findings uncovered by this study. The realistic picture of how crimes are solved will help eliminate the public's distorted stereotype images of detectives and will impress on them the importance of their cooperation with police in order to solve crimes.

CONCLUDING REMARKS

Rand began this study prepared to find great variability in the criminal investigation procedures employed by police departments across the country and in their effectiveness. We hoped to identify and describe those key program factors which led to improved effectiveness and to suggest how other police departments might modify their investigative practices to achieve the identified benefits. These hopes were not realized.

Despite our finding apparently diverse investigation practices, organization, and official procedures, we conclude that most detectives work similarly everywhere. Special projects established to test new operating concepts in some communities usually seemed to us to be poorly designed to test the underlying concept on which they were based, or to provide reliable proof of their eventual impact.² We found few departments seriously undertaking the use of electronic data processing equipment

² Exceptions were the Long Beach SOB Unit, the New York City Anti-Fencing Unit, and Rochester's Team Policing experiment.

to help solve their cases; and in those departments where computing systems were used, few objective data were available to assess their contribution.

In general, we ascertained that investigator activities have only a marginal impact on the overall level of identifications and arrests achieved by a major police department. Although investigators may sometimes concentrate sustained investigative efforts on particular cases, nearly all case solutions result from simple routine processing of information available at the time of the initial police report.

It would not be prudent for a department to materially reduce its level of investigative effort on the strength of our findings alone. For many inescapable reasons, a police chief would be sharply criticized by crime victims and others if he failed to respond with some degree of investigative effort on most cases. Rather, we recommend that a series of closely monitored experiments or demonstrations be conducted in different types of jurisdictions. These undertakings should provide for a carefully controlled reduction in follow-up investigative efforts and for an increase in efforts to accomplish identifications and arrests by other means. These demonstrations should be aimed at testing the substantive findings of our study and at demonstrating practical alternatives for enhancing police capability to apprehend criminals.

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from different police departments to discuss our preliminary findings and determine how the findings conformed to their views based on experience. We are grateful to the following investigators for participation in these discussions and sharing their unique insights: Sergeant Gary Arnold, Sergeant Ted Bach, and Sergeant Frank Gravante (Los Angeles Police Department); Inspector Frank Sabatini and Officer Patrick Phelps (Berkeley Police Department); and Sergeant Jack Greenleaf (Long Beach Police Department).

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Chapter 1

INTRODUCTION

Over the years it has become increasingly evident that the crime problem is exceeding the capabilities of the criminal justice system to control or even contain it. If official statistics are to be believed, the increase in crime assumed epidemic proportions in the first few years of the 1960s. Since 1961, the rate for all serious crimes has more than doubled. From 1973 to 1974 this rate jumped 17 percent, the largest annual increase in the 44 years that national statistics have been collected. The rise in criminal statistics has prompted a public awareness of the seriousness of the problem. The observation was made in 1970 that "Suddenly, sometime in the 1960s, crime and race and lawlessness and civil rights became the most important domestic issues in America."¹ The mounting crime issue led to the formation of the President's Commission on Law Enforcement and The Administration of Justice in 1967, which formally identified crime as a prime, nonpartisan, domestic problem.

Congress subsequently created the Law Enforcement Assistance Administration to authorize grants to state and local governments "in order to improve and strengthen law enforcement and encourage research directed toward the improvement and development of new methods for the prevention and reduction of crime and detection and apprehension of criminals."² Each state planning agency was charged with developing a comprehensive plan for reducing crime throughout its state and allocating resources under these guidelines. The allocation of such funds, which rose to almost \$900 million during FY 1975, was often shaped by the individual philosophies of local administrators. Some, who had "liberal" views, emphasized projects whose aims were to remedy the effects of poverty, racism, or other social inequities on the potential offender. Others, regarded as "conservatives," while acknowledging the contribution of poverty and social injustice to criminal behavior, placed more reliance on public measures that would increase the capabilities of agencies more directly concerned with combatting crime—the police, prosecution, courts, and corrections.

During the past decade, both ideological postures have helped to justify the formation of a myriad of corrections, courts, and police action programs. Billions of dollars have been allocated to state and local governmental agencies for the purpose of reducing crime. Unfortunately, if one is to judge from the available evidence, such expectations have not been realized.

The persistence of the national crime problem has compelled proponents of competing remedies to combine their approaches. For example, all sides seem to agree that even if the goal of rehabilitating criminals cannot be achieved, the public, at least, has a right to demand that dangerous criminals be somehow restrained.

Leading criminologists now take the position that some individuals will not be readily deterred from criminal activity by any reasonable preventive measures. For

¹ Richard Scammon and Ben Wattenberg, *The Real Majority*, Coward, McCann, and Geoghegan, New York, 1970, p. 39.

² Omnibus Crime Control and Safe Streets Act, Public Law 90-351, June 19, 1968.

them the criminal justice system is not a credible deterrent; they do not find that the penalties of criminal conduct outweigh its benefits; and they are prepared to act accordingly. If this is the case, as research leads us to believe, then police programs designed to increase the likelihood that criminals will be identified and apprehended are probably the only effective means of directly attacking the criminal behavior of this select offender population. However, responsible public administrators recognize that unselective increases of resources to policing are likely to be inefficiently used. Millions of dollars have recently been expended on research to explore specific programs or activities by which the police may best contribute to crime reduction. This research has uncovered a number of important findings in the area of policing, but mostly of a negative nature, i.e., it has shown what does *not* work.

For example, the Kansas City Patrol Experiment demonstrated that, for all practical purposes, changes in the level of preventive patrol made no difference at all in a number of crime indexes. After one year of this experiment, no differences were observed in criminal activity, amount of recorded crime, rate of victimization as revealed in a follow-up survey, level of citizen fear, or degree of citizen satisfaction with the police among city areas where preventive patrol was varied.³ Such findings have led police administrators to question the traditional allocation of police personnel. If it is not productive to assign substantial numbers of uniformed officers to routine car patrols on the streets, then this police manpower, often as much as one-third of all patrol man-hours, might be better used in other tasks, such as investigation, surveillance, or community services. Unfortunately, the effectiveness of these alternative uses of police has never been clearly demonstrated.

The National Institute of Law Enforcement and Criminal Justice, the research arm of LEAA, has been confronted by indecisive or negative research results on the effectiveness of traditional police patrol activities; a public that is becoming more vocal in its demands that violent criminals be apprehended and swiftly prosecuted; and police personnel who are disillusioned and frustrated by their inability, because of manpower shortages and strict legal statutes, to convict strongly suspicious suspects in court. One effect of these pressures has been a fresh focusing of attention on the investigation function in policing. If police investigation were demonstrated to be a relatively effective means of identifying and apprehending criminal offenders in general, and a reliable means to assure swift and certain prosecution of dangerous offenders in particular, then public safety would be enhanced by allocating more resources to this police function. To this end, the National Institute sponsored The Rand Corporation in a two-year study of criminal investigation as practiced throughout the country. Study objectives included the following:

- To describe, on a national scale, current investigative organization and practices.
- To assess the contribution that police investigation makes to the achievement of criminal justice goals.
- To ascertain the effectiveness of new technology and systems being adopted to enhance investigative performance.

³ For complete results of the Kansas City Patrol Experiment, see *The Kansas City Preventive Patrol Experiment*, by George Kelling, Tony Pate, Duane Dieckman, and Charles E. Brown, published by the Police Foundation, Washington, D.C., 1975.

- To reveal how investigative effectiveness is related to differences in organizational form, staffing, procedures, etc.

In the conduct of this study, Rand has limited its attention to police investigation of the serious reported crimes—homicides, rape, robberies, burglaries, larceny, and auto theft—used by the FBI to establish its crime index. Investigation aimed at such offenses as the sale and use of narcotics, vice, gambling, or organized crimes has been excluded as they pose an entirely different set of issues from those presented by the investigation of street crimes.

SOURCES OF INFORMATION

The information used in this study was obtained in several ways. First, we examined literature on the investigative performance of police departments in American cities and used their findings as hypotheses to be explored in our work.

We developed a comprehensive survey questionnaire which was distributed to all municipal or county law enforcement departments that had 150 or more full-time employees or that served a jurisdiction whose 1970 population exceeded 100,000.⁴ This survey produced extensive information from 153 jurisdictions (of the 300 solicited) on such topics as department characteristics, investigator deployment, investigator training and status, use of evidence technicians, nature of specialization, evaluation criteria, prosecutorial interaction, case assignment, use of computer files, and crime, clearance, and arrest rates.

On the basis of the survey responses, together with the consensus of an advisory panel of experienced law enforcement personnel, more than 25 police agencies were selected for more detailed study. Our project staff visited each of these departments, observing and participating in the operations of the investigative units and discussing their procedures with personnel at various departmental levels. In some cities we monitored individual investigators and their supervisors continuously over a period of several days to obtain realistic profiles of their activities.

From some departments we obtained studies that they had made to evaluate novel investigative programs. In addition, several departments cooperated closely with the Rand staff and provided access to data that were subsequently used in one of the component studies.

COMPONENT STUDIES

The components of Rand's criminal investigation study are summarized in this volume, with the exception of our national survey of police departments which is discussed in Volume II. We do not need to repeat such summaries here; however, to facilitate our presentation of representative findings from the component studies in this volume, we enumerate and briefly identify these studies:

- *The Literature Review*—a comprehensive search for, and the analysis of, reports of previous studies concerning the police investigative function,

⁴ The complete results of the Rand survey are reported in R-1777-DOJ, Volume II of this study, *The Criminal Investigation Process: Survey of Municipal and County Police Departments*, October 1975.

concentrating on work done in the past decade.

- *Description of the Investigative Function*—a full characterization of what the criminal investigation seeks to accomplish, how it is organized and managed, how it operates, how personnel are assigned and trained, what forms of support are given, etc. This description mainly derives from information obtained from Rand's national survey to which 153 police departments responded and from our extensive field work within more than 25 departments.
- *How Detectives Spend Their Time*—a reconstruction of the daily routine of investigators, concomitantly relating the uses of their time to various measures of accomplishment. This analytical portrayal is based on a program of personal observations by Rand researchers, on inferences from the numerous criminal case files collected and reviewed for many purposes in this study, and on a computer-readable data file maintained by the Kansas City Police Department.
- *How Crimes Are Solved*—an analysis of cleared case samples from the police departments of six contrasting cities, to ascertain what factors were responsible for the identification of the suspect and what contribution the investigators made to the case solution.
- *The Role of Physical Evidence Collection and Processing*—a comparison of the physical evidence collection and processing efforts in six police departments, seeking to show how the type and amount of such efforts, and the procedures for applying them, affect the clearance of robbery and burglary cases. The role of the evidence technician is extensively explored, including differences in his productivity among the six departments studied.
- *Investigative Thoroughness*—a comparison of robbery case samples from two prosecutors' offices to illuminate several issues about the thoroughness of performing and reporting follow-on investigations; namely, What effect does the stringency of the prosecutor's charging policy have on such thoroughness? and How does investigative thoroughness affect case disposition?
- *Information Feedback to Victims*—an assessment of how the feedback of information from police to robbery and burglary victims affects their attitudes, as revealed by a small telephone survey in a single jurisdiction.
- *The Investigative Strike Force*—an examination of proactive investigation methods purporting to enhance overall arrest effectiveness. The nature, use, and performance of strike forces are considered both in general and for the instances of the Miami STOP Unit and the Long Beach SOB Unit in particular.

Chapter 2

A REALISTIC VIEW OF INVESTIGATIVE ACTIVITIES

A primary objective of this study has been to develop a realistic description of the activities in which police investigators are routinely engaged. At its beginning we had considerable doubts about whether we could ever resolve the many conflicting views concerning what detectives really accomplish.

STEREOTYPES OF THE INVESTIGATOR'S ROLE

Three common stereotypes influence the public's perception of investigative effectiveness. First is the media image, which many detectives would claim for themselves—the resourceful, streetwise cop, who always gets his man. Next is the historical stereotype, the image that old-timers on the force have of the detective's contribution to law and order. Finally, the critical stereotype—which recent objective studies have tended to develop. Some combination of these alternative stereotypes provides the basis for current investigative policies in most police departments today.

The media image of the working detective, particularly pervasive in widely viewed television series, is that of a clever, imaginative, perseverant, streetwise cop who consorts with glamorous women and duels with crafty criminals. He and his partners roam the entire city for days or weeks trying to break a single case, which is ultimately solved by means of the investigator's deductive powers. This image is the one that many investigators prefer—perhaps with a degree of sanitizing. They would concede that criminals are rarely as crafty or diabolical as depicted in the media, but may not quarrel with the media characterization of their own capabilities.

Some current investigative practices appear mainly as a means to preserve a media-like image or to give a victim the kind of services he expects largely because of that image. That is, fingerprint dusting, mug shot showing, or questioning witnesses are often done without any hope of developing leads, but simply for public relations.

The stereotyped images held by older police administrators are influenced by the special status that detectives once held in earlier times.¹ Not too many years ago various forms of illicit activity such as vice, gambling, prostitution, and speakeasies were much more openly tolerated by city governments than they are today. The existence of these illegal, but accepted, enterprises created problems for the city police. How could they keep such institutions under control without driving them completely out of business? The police dealings with these institutions were frequently carried on by detectives. The detectives ensured that the businesses were

¹ This brief historical account was compiled from information presented in: Bruce Smith, *Police Systems in the United States*, Harper & Row, New York, 1960; Raymond Fosdick, *American Police Systems*, The Century Company, New York, 1921; and Charles Franklin, *The Third Degree*, Robert Hale, London, 1970.

run in a somewhat orderly fashion and that "undesirables" who attempted to take part were driven out. By this delicate handling of a troublesome situation the detectives often won the favor of the business leaders and politicians connected with these activities. Such political connections made the detective a man of respect and influence.

Allowing these illegal enterprises to continue had special investigation benefits for the police. When serious crimes did occur or when public pressure was brought to bear on the police to deal with a particular problem, these illegal activities provided a valuable source of information to which the detectives could turn. Not surprisingly, thieves and con men would often be customers of the vice and gambling operations, or have close contacts with people engaged in such business. If the police really wanted information on a particular criminal activity, the detectives could turn to their contacts within the illicit activities and either solicit information as a favor or extort it by threatening the safety of the illegal operation. Thus the "effectiveness" of detective operations frequently depended on maintaining close contacts with a select group of potential informers.

Another role detectives played in addition to that of policing illicit activities was that of dispensing street-corner justice. A good cop was expected to maintain order without resorting to the courts. He did this by persuasion; and by threats, and by actual physical force, if necessary. Only in those instances where it was clear that his presence alone would not deter crime did he bring in a suspect for criminal proceedings.

Detectives played a prominent role in the exercise of this discretionary justice because they were less visible than a uniformed patrolman when it came to breaking down doors or pummeling offenders on the street. Because of their experience they were expected to be more diplomatic in handling these incidents—part of the detective's basic working knowledge included which individuals could be treated roughly without getting the department into trouble. The detectives who could handle or clear up delicate situations without causing a commotion were highly valued by police and city administrators.

Another method formerly available to help a detective close cases was the third-degree or the extended interrogation. *Miranda*,² increased enforcement of civil liberties, and the rise of community review boards put a limitation on this type of activity. It is no longer acceptable for detectives to arrest a suspect and keep him in custody simply for investigative purposes. The use of physical or psychological force in an attempt to extort a confession or to get information about other suspects in a case is no longer permissible under current due process requirements.

We have no empirical evidence concerning the results produced by these various techniques; therefore any comparisons between the effectiveness of historical and current approaches is purely speculative. However, it is obvious that investigators once possessed a number of investigative tactics that are no longer permissible.

A more critical stereotype of investigative effectiveness can be gleaned from a number of studies which attempt to analyze how detectives go about their work.

The earliest critic was probably Raymond Fosdick in his *American Police Systems* (The Century Company, New York, 1921). After visiting police departments in all of the major cities of the United States, he criticized detectives for:

² The rights enumerated in *Miranda v. Arizona*, 384, U.S. 436 (1966).

- Lack of civil service standards in selection.
- Lack of training.
- Poor coordination with patrol operation.
- Lack of effective supervision.
- Lack of ordinary "business systems" for handling their administrative work.

In many departments, these criticisms are equally appropriate today. More recent analysts have argued that:³

- Police agencies do not routinely collect and summarize data that can be used to determine the effectiveness of investigation activities. Clearance and arrest statistics in particular are unsuitable because they fail to distinguish outputs of investigative efforts from those of other units in the department. Clearance data alone are also extremely unreliable indicators of police performance because of their subjective nature.
- The solution rate of crimes assigned to detectives appears insensitive to the number assigned, implying that detectives can accurately predict which cases can be solved and work on only those, or that the cases solve themselves.
- A high proportion of cases are closed when a patrol unit makes an arrest at the scene of the crime.
- Investigators make scant use of indirect evidence such as fingerprints, toolmarks, etc.

Uncomplimentary views are also being espoused by a number of progressive police chiefs who have seen reforms and new initiatives take hold in every other area of policing, but find their detectives the last bastion of the status quo. In their departments, an appointment to the detective bureau is no longer viewed as the best path to promotion. In some departments (Los Angeles Police Department, for instance) an independent detective bureau no longer exists. Investigators are now assigned directly to a local operations commander.

Many of these chiefs are quite candidly critical of the old freewheeling detective style of operation. They see their detectives as simply trying to preserve the freedom and prerequisites of their jobs without making any efforts to adapt to the rapidly shifting community and legal climate in which they must work.

CURRENT INVESTIGATIVE ACTIVITIES

Since the purpose of this volume is to propose major changes in how future criminal investigations are conducted, the reader should be well acquainted with the current investigative process. We now turn our attention to providing a realistic perspective of current investigative activities. An expanded version is given in Volume III (R-1778-DOJ), together with data showing how investigative efforts are allocated among various investigative activities.

A realistic view of investigative activities can most easily be portrayed by de-

³ For a more complete discussion of these findings, see Chapter 2, Volume III, of this study—*The Criminal Investigation Process: Observations and Analysis*, R-1778-DOJ, October 1975.

scribing how a typical case is handled. We also present some variations that frequently occur in this typical pattern, as well as some departmental policies that govern how cases are handled. Finally, we discuss the supporting activities that police perform to increase the likelihood of identification and apprehension.

Incident Report and Preliminary Investigation

Most cases involving major felonies are initiated by a citizen calling the police to report the crime or a police patrol unit responding to evidence that a crime is in progress. In either case, the first police representative on the scene will usually be a uniformed patrolman. His duties are to provide aid to the victim, to secure the crime scene for later investigation, and to begin documenting the facts of the crime. In a very few departments, investigators may be dispatched simultaneously with the patrol unit to begin an immediate investigation of the crime scene, but in most departments investigation by detectives does not take place until after a patrol unit has filed its report. The patrolman's initial incident report usually contains the basic facts of the crime, the identity of the victim, a description of the suspect, and the identity and location of any potential witnesses, as well as a description of the crime scene and any pertinent statements by witnesses of the victim.

In most departments, patrol units are under considerable pressure to cut short their investigation and get back on patrol. These departments regard the investigator as responsible for developing potential leads and continuing the case. In a few departments, patrolmen are encouraged to use their own initiative to conduct such additional investigative activities as house-to-house canvasses or other attempts to track down suspects.

The product of the responding patrolman's activities will be a report which passes to the detective unit. Depending on departmental policies and the thoroughness of the patrolman, it will be something between a cryptic incident report providing only the essential facts of the case and a complete preliminary report of all pertinent information available at the time the patrolman responded, with most departments tending toward the former. This document, then, provides the basis for any further investigative activity by the detective.

Evidence Collection and Processing

Studies have shown that most crime scenes contain physical evidence that could conceivably be used to link a suspect to the crime scene and that in approximately 50 percent of the crime scenes there are usable latent fingerprints. To collect this potential evidence—primarily the fingerprints—many departments now use specially trained evidence technicians, whose sole task is to process crime scenes. They may be available for dispatch at the time of the crime report or may be sent out following the initial report if in the responding patrolman's judgment there is a potential for finding any usable evidence. The evidence technicians examine the crime scene, lift any usable latent prints, and submit a report of their results to the responsible investigation unit.

In most departments latent prints will not be used unless an investigator asks the print examiner to compare them against the inked prints of a specific suspect. In a very few departments the print examiner may attempt "cold" searches, using the lifted prints to compare against files of known or suspected offenders.

Screening and Case Assignment

Every morning (about 7 o'clock) the previous day's incident reports are assembled and distributed to the responsible investigation unit. Assignments are determined by the organizational pattern of the department, which may be by crime type specialties (robbery, burglary, sex offenses, etc.) or by geographic areas of the city. The specialization may be so detailed that the assignment personnel can direct the incident report to the specific investigator who is supposed to handle that case. Otherwise, the incident report will go to a unit supervisor who will then assign the case to an individual detective, based on previous patterns of offenses or individual workloads. Each detective usually receives one or two new cases a day. Workload assignments are lower for crimes against the person and higher for minor property crimes.

In some departments formal "solvability factors" or the judgment of the unit supervisor may be used to determine whether or not a specific case should be followed up by the investigators assigned, or simply suspended until any new facts develop. In most departments every case is assigned to a responsible investigator with some minimal attempt at follow-up expected. This minimal effort is usually an attempt to re-contact the victim and see whether he can remember any other facts in addition to those recorded on the incident report. Although most investigators will have twenty or thirty open cases on their desks at any one time, only two or three are really considered active. Our workload data showed that most cases are closed within the first day of activity. Very few remain active after two or three days.

Follow-up Investigation

The new cases assigned to an investigator can generally be sorted into one of three categories. Receiving first priority are those in which the investigative steps are obvious from the facts related in the incident report. These are the cases in which the victim names the suspect, gives a license number, where the suspect can be found, or additional witnesses are indicated who were never interviewed by the responding patrolman. Investigators are always expected to track down these obvious leads.

Second in priority are those cases which require attention, not because any obvious leads are indicated, but because of the seriousness of the offense or the notoriety it receives in the press or in the community. Because the investigators want to avoid charges by the community that they are not doing their job or simply because an investigator is outraged by the offense and wants to help the victim, additional efforts on the case are expected. This may involve re-contacting victims and witnesses and going over their prior statements.

In the lowest category of priority are the routine cases that offer no indication of additional leads. In all departments these cases receive nothing more than perfunctory attention. The Kansas City Case Load Assignment File indicates that approximately 70 percent of all residential burglaries may fall into this third category.

The first task of the investigator when he comes to work is to plan his activities for the day. Most of the morning is usually devoted to reviewing his new cases, accomplishing the paperwork required for the cases to which he has been assigned, processing prisoners who are in custody from the previous night, and making re-

quired court appearances. Late morning and afternoon are usually free for conducting interviews or street patrol. Although he must make his required court appearances and he must process arrestees, usually within narrowly prescribed time schedules, how he uses the rest of his time is determined by his own judgment.

He conducts interviews and checks around the community according to his own sense of priority about each case, the difficulty or attractiveness of conducting the various interviews, transportation difficulties, and fellow investigators' activities.

It is rare to see an investigator take detailed written notes as a result of any of his interviews. He only records telephone numbers, addresses, nicknames, as necessary, on scraps of paper. Information put into the official case folder is only what is required. Transcripts of witness statements are made in only the most important cases.

Clearance and Arrest

A major demand on the investigator's time is made when a suspect is finally taken into custody—usually as a result of patrol activity. In most departments a concerted effort is made to clear additional crimes in addition to the one for which the suspect has been arrested. This effort is purely the investigator's. If the suspect is willing, the investigator may talk to him concerning a number of similar offenses, or if the suspect is not willing to talk, the investigator may rely on his own judgment about the similarity of the cases. If the suspect has been involved in crimes where he was seen by the victim, such as sex crimes or robbery, earlier victims may be brought in to view the suspect in a lineup. The results of these efforts must then be conveyed to the prosecutor in written reports.

In many jurisdictions the prosecutor will require the investigator to consult with him about the facts of the case at the time of filing. If he helped solve the case, the investigator will have to be a witness in court.

Supporting Activities

In addition to their regular investigative activities, most departments expend additional resources in attempts to develop leads for investigators by other means or to provide alternative means for identifying the suspect. All departments maintain a variety of information files which are sources of investigative leads. These may include: a file of crimes of a similar type or in similar locations in a specific time period; a file of the addresses, description, and modus operandi of known offenders; mug shot files, usually organized by crime type and basic descriptors; fingerprint files for all past arrestees; intelligence files on specific individuals suspected of particular criminal activity; field interrogation files to indicate the location and reason for stopping a specific individual or vehicle, along with the description of a person and his vehicle; and files of stolen or pawned property.

In some departments, special details or strike forces may be operated in an attempt to provide investigative leads that would never come in through normal incident reports. The most commonly encountered example of such activity is a pawnshop detail which routinely inspects items taken in by pawnshops and compares them with stolen property lists. Another type of strike force uses investigators to buy stolen property in an attempt to identify fences or frequent burglars.

Selection, Training, and Supervision

In most departments the investigators occupy a unique position and job title, often with civil service status. Our survey indicated that in the average department, 14.5 percent of the sworn personnel have positions designated as investigators.

The men selected for investigators usually have spent three to five years on patrol assignments. Where selection is not based strictly on civil service criteria, the more aggressive patrolmen are usually selected for investigative assignments, presumably because a patrolman who makes a large number of arrests has the appropriate type of initiative and insight to make a good investigator.

Whatever training new investigators get is usually on the job. When new recruits join the department, they are given some investigative training to help them in their patrol work, but there are usually no special classes for men recently assigned to investigation units. Only a few departments offer continuing education for people in investigative assignments.

Most investigators operate out of special units that are separate from patrol, except in those team policing jurisdictions where the investigators have been integrated into the patrol/team concept. The units themselves have only administrative significance. Each investigator or investigator-pair operates fairly independently. The supervisor worries about vacation schedules, timeliness of reports, and tidiness of paperwork, but he does not usually enter into substantive decisions about the case. In departments where men are encouraged to spend a good deal of their time on the street, the supervisor may be only vaguely aware of what his men are doing on a day-to-day basis.

This brief description represents our attempt to portray how investigation activities are carried out on a daily basis and to furnish the reader with some appreciation of the activities we evaluate in Chapter 3, as well as some understanding of the difficulties an administrator would face if he tried to introduce greater accountability into investigation activities or to eliminate unproductive efforts. A more detailed description of daily activities is provided in Volume III (P-1778-DOJ), along with data that show how investigative time is distributed over such activities as interviewing victims, making court appearances, and attempting to locate witnesses.

Chapter 3

THE RESULTS OF INVESTIGATIVE ACTIVITIES

We have described how the activities that make up the investigative function are most frequently carried out; in some sense, these activities represent inputs to a production process—the investigation of reported crimes. This chapter is concerned with the outputs of those activities, that is, what society gains in return for the resources expended.¹

The departments we interviewed did not keep records that permitted us to determine this input-output relationship directly, and traditional methods proved unsuitable as a means of measuring the results obtained from investigative, as opposed to noninvestigative, activities. For example, clearance rates are calculated by combining *all* cleared cases, regardless of which police function is actually responsible for their clearance; and no department kept records that enabled the clearance rate to be broken down by police function. Therefore, our study approach was to first define the outputs of the investigative function, and subsequently to develop criteria of effectiveness and productivity for each output.

Top-ranking police personnel and detectives concurred that the outputs sought from police investigations are:

1. The identification and apprehension of suspects.
2. The conviction of defendants.
3. The satisfaction of the victim's demand for police attention.

Once these three output goals were identified, we designed individual pieces of research to estimate how various investigative activities contributed to them. In each piece of our research, with the exception of the victim survey, we collected data from several police departments so that we could compare departments and determine whether various investigative activities and organizational arrangements made a difference in output measures. Where possible we attempted to control for other factors that may also make a difference.² In addition, we were interested in determining how much of the overall level of police effectiveness is associated with investigative, as opposed to noninvestigative, efforts.

The remainder of this chapter summarizes the results of the individual pieces of research:³

¹ The researchers primarily responsible for the material summarized in this chapter are: "How Cases Are Solved," Jan M. Chaiken and Linda Prusoff; "Analysis of the Collection and Processing of Physical Evidence," Joan Petersilia; "The Daily Routine," Jan M. Chaiken and Konrad Kellen; "The Relationship Between Thoroughness of Investigation and Case Disposition," Joan Petersilia; "Investigative Strike Forces," Peter Greenwood; and "Information Feedback to Crime Victims," Robert Castro and Marvin Lavin.

² Analysis of our survey data showed that organizational differences among investigative units cannot be directly related to differences in clearance rate, arrest rate, or crime rate. The intention of the more detailed pieces of analysis was to attempt to isolate departmental characteristics that could be said to account for differences in investigative effectiveness.

³ The complete analysis of our research appears in Volume III, *The Criminal Investigation Process: Observations and Analysis* (R-1778-DOJ).

- The contribution of investigation to case clearance (identification and, where possible, arrest) was explored in several studies. We analyzed a large sample of cleared crimes from a variety of crime types to determine what factors contributed to case solution. The contribution of physical evidence collection and processing efforts was determined by examining case records and departmental statistics from a number of departments employing different collection and processing strategies. These records were used to determine what role, if any, physical evidence played in the solution of each case and to infer if departmental differences could be directly related to the rate at which suspects are identified through latent prints.
- Employing a data file from the Kansas City Police Department, we developed workload indexes of possible use to all departments, drew a portrait of how an investigator's time is spent, and analyzed the relationship between time spent and case solution.
- The impact of investigative efforts on court dispositions was determined by examining a sample of cases from two jurisdictions which demonstrated markedly different approaches to the post-arrest investigative function. The quantity of information provided by one department to the prosecutor greatly exceeded that provided by the other.
- To determine the impact of special investigative strike force operations, we examined the case histories of two such units and evaluated data which purported to demonstrate their productivity.
- And finally, to explore the attitudes of victims toward various investigative policies, we conducted a survey of recent burglary and robbery victims to find out how they would respond to a variety of possible investigative policies.

HOW CASES ARE SOLVED

A police investigation is initiated when the patrolman responds to the crime scene and records preliminary information. That crime report is subsequently forwarded to the investigative division, where the case is assigned to a detective so that the investigation may be completed. This method of operation suggests that in determining the involvement of a detective in a case solution, we should distinguish between those cases in which the solution was essentially established before the detective received the case and those where the solution occurred afterward. Also, to determine the type of investigative skills and effort required to solve a case, for those cases where no initial identification was available, it was desirable to distinguish those cases solved through simple routine investigative activities from those that required special investigative initiative or skills.

To control for the variability one encounters across distinct crime types, we examined cases from a number of typical specialized investigative units, including: forgery and fraud, automobile theft, theft, commercial burglary, robbery, felony morals (sex crimes), aggravated assault, and homicide.

For each of these crime types we examined a sample of cleared cases, first classifying them as to whether there was or was not an initial identification at the time the investigator received the report, and then, for those cases in which there

was no initial identification, determining how the case was eventually solved. The results of this analysis were as follows:⁴

- In more than half of the cleared cases, the identification of the offender was available at the time of the initial report because (1) the offender was arrested at the scene; (2) the victim or witness identified the suspect by name and address; or (3) some evidence available at the crime scene, such as a license plate or employee badge number, uniquely determined the identity of the suspect.
- Most of the remaining cases that were eventually cleared were done so through simple routine administrative actions: fingerprint search, informant tips, reviewing of mug shots, or arrests in connection with the recovery of stolen property. In only three crime categories were any special action cases observed. These were commercial burglary, robbery, and homicide; in each of these categories special action cases accounted for about 10 percent of the solved cases.

Given these findings, it is easy to see that clearance rates cannot be expected to vary substantially according to the organization of investigative units, the training and selection of investigators, whether they specialize by crime type or not, their workload, and other variables that were explored in our survey. Basically, with the possible exception of homicide, if investigators performed only the obvious and routine tasks needed to clear the "easy" cases, they would solve the vast majority (97 percent) of crimes that now get cleared. All their efforts in relation to other cases have a very marginal effect on the number of crimes cleared.

Thus, it is not appropriate to view the role of investigators as that of solving crimes. They do not spend much time on activities that lead to clearances, and much of their work in this connection could be performed by clerical personnel.

Our findings also highlight the importance of patrol officers in producing clearances. A substantial fraction of clearances are produced by patrol arrests at the scene of crimes. In other cases, it is the patrol officer who records the information that we labeled as "initial identification." The efforts that many departments are making to structure their crime reports so that this information is properly recorded appear to be highly desirable. Such information can make a routine case out of an otherwise difficult one.

Technology has also converted many previously difficult investigative tasks into routine ones. The ability of patrol officers to check rapidly whether a car is stolen, or the driver is wanted, made possible many spontaneous clearances that we classified as routine. Well-organized and maintained mug shot or modus operandi files also helped produce routine clearances that either would never have occurred or would have been nonroutine in the absence of such files.

Finally, our review of individual case folders persuaded us that actions by members of the public can strongly influence the outcome of cases. Sometimes private citizens, by ruse or restraint, held the perpetrator at the scene of the crime. Some-

⁴ Initially, we analyzed 63 robbery cases, divided among four police departments (Berkeley, Los Angeles, Miami, and Washington, D.C.). We then expanded the analysis to include 109 cleared cases for crimes other than robbery from Long Beach, California. The sample was again expanded to include an additional 92 cases from the Kansas City, Missouri Police Department, selected according to a different sampling design.

times they recognized the suspect or stolen property at a later time and called the investigator. In other cases, the victim or his relatives conducted a full-scale investigation on their own and eventually presented the investigator with a solution. Collectively, these types of citizen involvement constitute a sizable fraction of cleared cases. Possibly many more cases could be solved if the public were made aware that they cannot depend on the police to solve cases magically but rather must provide the police with as much information as possible.

ANALYSIS OF THE COLLECTION AND PROCESSING OF PHYSICAL EVIDENCE

The ability of a police agency to properly collect and process the physical evidence retrieved from crime scenes is thought to be important to the process of successful police investigation. Police departments across the country are emphasizing more efficient collection and processing efforts by allocating more personnel to them, establishing crime scene search units, purchasing sophisticated equipment, and processing a larger percentage of crime scenes for physical evidence. These policy decisions are based on the assumption that there is a positive correlation between the amount of physical evidence retrieved and the number of suspects identified from such evidence. The research reported here was undertaken to see whether or not such a relationship exists. Our primary purpose was to conduct a comparative analysis of the physical evidence collection and processing efforts in six police departments (Long Beach, Berkeley, Los Angeles, and Richmond, California; Washington, D.C.; and Miami, Florida), selected on the basis of their contrasting evidence collection and processing efforts. In each of the six police departments we visited, data were collected from the evidence-gathering unit so that the role of physical evidence could be assessed under different methods of operation.⁵

To get an overall indication of the frequency with which a technician responds to residential burglaries, how frequently he lifts prints, and how frequently the prints result in an identification, we took a sample of cleared and uncleared cases. This sample, consisting of 200 residential burglary cases per department in three cities, indicated that in only about 1 percent of the cases in each department were latent prints matched with the inked prints of the suspect. Our results show that in Richmond, California, where evidence technicians are dispatched to nearly 90 percent of the reported burglaries, and recover prints from 70 percent of the scenes they process, their *hit rate* (or percentage of all cases where an identification resulted) is the same as in Long Beach and Berkeley which dispatch evidence technicians to the scene less frequently and lift prints less often.

From these data, we infer that a heavier investment in evidence technicians and a policy of routinely dispatching technicians to all felony crime scenes produces a higher print recovery rate; yet, they appear not to affect the rate at which finger-

⁵ The Berkeley technicians are dispatched at the patrolman's discretion; in Long Beach the technician is required to process only specified types of felony crime scenes; Los Angeles technicians process only violent crime scenes, whereas the patrolmen lift prints at others; Miami technicians are requested at the patrolman's discretion at felony crime scenes; Richmond technicians are required to process a felony crime immediately following the report of the incident; in Washington, D.C., the technicians are cruising the streets in mobile evidence vans and when a felony is reported, they are automatically dispatched to the scene.

print identifications serve to clear burglary cases. The data also suggest a higher print recovery rate in Richmond, where the crime site is processed immediately following the report of the incident.

There are several plausible explanations as to why lifting more prints does not actually result in a higher rate of burglary suspect identifications. The most reasonable explanation appears to involve the fingerprint searching capabilities of the individual department. That is, a high proportion of recovered latents are never used to search fingerprint files and to attempt to make identifications from comparisons.

We compared the effectiveness of fingerprint identification sections in four police departments (Washington, Los Angeles, Miami, and Richmond) which differ significantly in terms of size, fingerprint files maintained, and types of fingerprint services performed. We used the identification success rates of the fingerprint sections as a measure of their effectiveness.

We compared the productivity of fingerprint identification operations in the four cities we examined in several ways. By looking at the approximate number of crime scenes processed per year (all crimes combined), the percentage of crime sites where prints were lifted, and the number of identifications which resulted, we were able to draw the following conclusions regarding the productivity of physical evidence processing:

- Miami, Richmond, and Los Angeles make approximately the same percentage of identifications from retrieved latent prints—approximately 9 percent of the prints retrieved are subsequently used to help identify a suspect. In Washington, D.C., only about 4 percent of the retrieved prints (all crime types combined) will be matched with those of a suspect.
- In Washington, D.C., a majority of identifications result from *request searches*.⁶ Miami specialists produce nearly half of their identifications from *own initiative* searches;⁷ Richmond is able to make nearly 20 percent of their identifications from *cold searches*.⁸
- When the manpower devoted to identification efforts is considered, it is clear that the productivity levels of different fingerprint units differ significantly. A fingerprint specialist in Washington, D.C., averages 42 suspect identifications per year (assuming 70 percent of his time is spent searching prints); whereas Richmond averages 397. In terms of cost, an identification in Washington, D.C., entails 140 hours of manpower at a cost of \$875 per identification. In the other three cities the cost for each identification is less than \$100.

Plausible explanations that account for *some* of the very wide differences observed in the productivity levels of these four fingerprint identification sections include the following:

⁶ A request search is initiated when an investigator submits the name of a possible suspect and requests that the suspect's inked prints be compared with the latents from a specified crime site.

⁷ An "own initiative" search occurs when the fingerprint specialist acts "as his own detective." As such, he attempts to match MOs by reading arrest reports, independently searching arrestees' prints with recently lifted latents, etc., in an attempt to match latent prints.

⁸ A cold search usually consists of taking latents and trying to match them with the inked prints in a specialized, career-offender file.

- The Washington, D.C. specialist is responsible for several fingerprint-related activities, more so than in the other three cities. These additional activities may prevent the D.C. specialist from becoming as thoroughly familiar with latent fingerprints and the various files maintained as someone who is involved solely in this activity.
- In all four departments, the majority of the suspect identifications result from a request made by an investigator to have the fingerprint specialist compare a certain latent print with those of a named suspect. This implies that the productivity of the fingerprint specialist depends primarily on the quantity and quality of the leads or requests made by the investigator.

Does identification productivity depend on the number of requests made by investigators? A Washington investigator averaged two requests for searches per year; in Richmond, we estimate that on the average an investigator requests fifteen searches per year. So, such dependence may be significant.

- The absolute number of prints maintained in the different fingerprint files certainly affects the productivity of the specialist. In Richmond and Miami, the specialized criminal file (usually repeat offenders) contains the prints of 4000 persons; in the District of Columbia, a similar file contains the prints of over 30,000 career offenders. In practical terms, D.C.'s career file cannot be cold-searched. This limitation makes the D.C. technician dependent on his own initiative or on request searches.
- Miami fingerprint specialists, maintaining close contact with the rest of the police department, are able to associate several crime scenes based on similar MO, and then proceed on their own initiative to search latents. So in Miami, their own "detective" work has proved most profitable in leading to suspect identifications.

The current organization of the Washington Fingerprint Examination Section makes a situation similar to Miami's impossible. The D.C. Section receives latents from eight police districts, and with the large volume of criminal activity in each of these districts, it is doubtful that any specialists could follow the criminal activities in all of these districts. Therefore, "own initiative" searches in D.C. are limited primarily to situations where a suspect has been arrested and the specialist chooses to search the latents retrieved from the area in which he was arrested.

The collection of physical evidence is emphasized in many police departments because it is believed that the greater the amount of physical evidence retrieved, the greater will be the number of suspect identifications from such evidence. Our study fails to confirm so simple a relationship. For example, our sample of burglary and robbery cases reveals that within the range of variation exhibited in the departments we studied, collecting fingerprints at a higher percentage of crime scenes does not necessarily lead to more suspect identifications. We are led rather to the inference that an improved fingerprint identification capability is more productive of identifications than a more intensive print collection effort.

But simply increasing resources devoted to fingerprint identification activities does not necessarily assure that more identifications will be produced. We have observed that fingerprint files may become inoperable because of excessive size. Therefore, the print identification process in larger police departments could be

facilitated by keeping the print files by geographical area, with a fingerprint specialist assigned to each area. To make cold searches more practical, we estimate area subfiles should contain the prints of no more than several thousand persons. Some experimentation in this area is required.

Request searches, which imply cooperative effort between investigator and fingerprint specialist, clearly appear to be the most productive type. An information system should be devised to link investigators and fingerprint specialists in an efficient manner. This should help motivate and facilitate the reciprocal exchange of information.

The overall conclusion to be drawn from this analysis is that the relatively small contribution that physical evidence currently makes to police investigation is not likely to increase significantly under current procedures, although there are some areas of physical evidence collection and processing where improvements can be made which are likely to result in additional suspect identifications. Regardless of a department's size, organization, training, or processing technology, our analysis again shows that crimes are most frequently solved as a result of information the victim is able to supply the responding patrol officer, and not as a result of physical evidence directly traceable to a suspect. Most frequently, when latents are matched to a suspect's prints, the suspect has confessed and the lifted prints are subsequently identified as the perpetrator's. This process allows additional evidence to be presented to the prosecutor, but cannot be seen as contributing to the initial identification of a perpetrator.

We cannot determine whether efforts to identify perpetrators through physical evidence are thwarted by the countermeasures adopted by the more careful criminal offenders; or whether technological advances in processing equipment are not keeping pace with the growth of the criminal population; or whether the mobility of the criminal population is such that purely localized systems are unable to keep track of an offender, and that only a national centralized system would enhance identification through fingerprints significantly. Each of these hypotheses merits further consideration.

THE DAILY ROUTINE

Since investigators have considerable autonomy in determining how they will spend their working day and are not subject to the hour-by-hour supervision imposed on other police personnel, we felt it would be useful if our research could explore their daily routine. Such information might assist in developing rational methods for allocation of investigative personnel and perhaps also provide information for inferences concerning the relationship between time spent and case solution.

All of the quantitative information for the study of investigators' activities was gathered by means of a computer-readable case assignment file maintained by the Kansas City (Missouri) Police Department. The file describes, for each investigator and for each unit, the number of hours spent on various activities, the number of cases handled and the number of arrests and clearances produced.

Our analysis of this case file shows that for all units together, 55.7 percent of the detective's time is devoted to case work; 13.8 percent to administrative details

which are clearly unrelated to case work; 1.9 percent to surveillance, crime prevention, warrants, youths, etc.; and 28.6 percent of their time is unaccounted for. From both the data and observations we conclude that detectives are not involved in a single-minded pursuit of solutions to crimes; rather, they spend some 40 percent of their time in an interruptible fashion on other activities.

Because of the nature of the computerized file, we were able to determine not only the average workload of cases per investigator, but also whether or not the workload was directly related to case solution. The data in this file show that a large percentage of the reported crimes are assigned to an investigator but that many receive no more attention from the investigator than a cursory reading of the crime report. Certain cases are selected for inattention from the start, while other cases are worked on.

The data show that only homicide and rape (and suicide, because it is potentially homicide) are invariably worked on. A few other types of crimes that are universally regarded as serious are worked on in over 60 percent of cases, but many types of crimes are more likely than not to receive less than a half-hour's attention from an investigator (thereby counting as "not worked on"). Since the bulk of crimes fall into these latter categories, *well under half of all reported crimes receive any serious attention by an investigator.*

The net result is that the average detective does not actually work on a large number of cases each month, even though he may have a backlog of hundreds of cases that were assigned to him at some time in the past and are still theoretically his responsibility. *The number of worked-on cases per detective in the Kansas City Police Department is generally under one per day.*

In many departments, arrestees for serious crimes are processed by investigators, which means that investigators necessarily have some work to do on all cleared crimes. Other crimes are reported to the investigator with such strong leads that the investigator is nearly compelled to pursue them. Such crimes are very likely to be cleared, and then the investigator has additional work to do. As a result, worked-on cases by investigators have two important characteristics. First, the majority of crimes that an investigator works on are cleared, and, second, most of the time spent on cleared crimes occurs after the arrest is made.

Moreover, for every type of case except bank robbery (which is often handled by the FBI), the amount of effort devoted to cleared cases prior to the arrest is less than the amount of effort devoted to those uncleared crimes that are worked on. We conclude, then, that detective work is not characterized by hard work leading to case solutions. If this were so, the more effort that was devoted to a case, the more likely it would be to be cleared. On the contrary, the data suggest that the cases that get cleared are primarily the easy ones to solve, and that most of the investigator's work is a consequence of the fact that an arrest has been made.

In addition, the vast majority of cases that a detective works on are handled in the course of a single day, after which they are either completed or suspended. Only a few types of crimes fail to follow this pattern: homicide, rape, safe burglary, commercial robbery, and forgery/counterfeiting.

The number of investigative man-hours devoted to crimes other than those just listed is quite small in Kansas City, averaging under five man-hours for those that are actually worked on; those hours are not spread out over a long period of time, but are concentrated in the first day or two after the crime is reported. Over 86 percent of cases are suspended by the end of the first week.

In summary, our analysis has shown that the investigator's daily routine cannot be characterized as devoted primarily to piecing together clues for the purpose of solving crimes. For the most part he operates in a reactive mode, responding to externally generated events that require an action on his part. Administrative activities, service to the public, and other work not related to cases consume nearly half of his time.

A large number of incidents come to his attention, but many of them receive little or no work and simply sit on his desk constituting part of his caseload. If an arrest has already been made, or it is apparent from the crime report that a limited amount of work will result in an arrest, then the case is pursued and most of the work involves post-arrest processing, writing reports, documenting evidence, and the like. A small number of cases are pursued simply because of their seriousness or importance, but it does not appear that the chances of clearance are enhanced in proportion to the amount of work.

THE RELATIONSHIP BETWEEN THOROUGHNESS OF INVESTIGATION AND CASE DISPOSITION

A police investigator is responsible for gathering evidence, identifying it in court, and testifying about the circumstances of its collection. Subsequent court disposition of the case often depends on how well the investigator has performed these tasks. Prosecutors frequently complain that the police have provided them with insufficient evidence upon which to proceed, compelling them to reject cases, to suffer dismissals, or to make undue concessions to defendants to obtain a plea of guilty, rather than go to trial at a serious disadvantage.

The research described here was undertaken to illuminate two facets of the controversy between police and prosecutor:

- What was the investigative completeness (i.e., the "thoroughness") in robbery cases presented by the police to the prosecutor for filing in two local jurisdictions during the first four months of 1974?
- What seemed to be the effect of the degree of completeness of the police-provided information on the disposition of the defendant?

To reflect different prosecutorial practices in felony case screening, we selected two California prosecutors' offices for this study. We took from each office a sample of approximately 20 robbery cases presented to them by the police during the first four months of 1974. The information from these sampled cases enabled us to draw inferences about the *thoroughness*⁹ of the police investigation behind them. They also served as a basis for our assessment of how the disposition of defendants appears to depend on the quality of investigation.

One of the offices (denoted A) tends to be extremely strict in screening cases for filing. The standard it follows is that of filing only those charges it believes can be proved to a jury. The other office (denoted B) appears to operate with significantly

⁹ The term *thoroughness* is used here to designate investigative completeness, i.e., how much of the information that the prosecutor deems desirable is provided in written documentation given him by the police.

greater accommodation to routine police procedures, accepting their practice of presenting minimal information to substantiate the filing of a case.

To assess the completeness of investigation in each sampled case, we examined all of the documents presented to the prosecutor by the police. For this purpose, we developed a data collection form which was divided into subject areas pertaining respectively to the offense, the suspect, the victim or witnesses, and the arrest (Fig. 8-1, Volume III).¹⁰ Within each area, questions were listed that an experienced prosecutor believed should be addressed by a police investigation to facilitate prosecution of the case. A total of 39 questions were listed on the form.

A comparison of the reports provided by the police to the prosecutor in our two samples of robbery cases demonstrated, as anticipated, that the thoroughness of police investigation in Jurisdiction A was perceptibly better than in Jurisdiction B. In A, the reports to the prosecutor were typewritten, painstaking in detail, and documented each investigative activity in chronological order. The police reports provided to the B prosecutor were generally handwritten, were difficult to read and understand, and generally contained only the major facts of the case.

The information provided to the A prosecutor at the time of screening would always include a crime report, an arrest report, and at least one follow-up investigation report. In A, the crime report would usually include a verbatim account of the incident from the victim and from each witness, a detailed description of the property taken in the robbery (and if it was money, the denominations of the bills); a description of the physical injury, if any, sustained by the victim; and a description of the physical evidence retrieved from the crime scene, including latent fingerprints.

In our sample of robbery cases from B we found that a crime report and an arrest report were given to the prosecutor, but no separate report of a follow-up investigation (even though the transcript of the preliminary hearing might indicate that some investigative activity of this nature had been conducted). The B crime report typically contained the identity of the victim and the witnesses, together with the victim's account of the crime, but seldom more than this single account of the event, which the responding patrolman would record as volunteered. Consequently, B crime reports tended to be short, as well as fragmentary in details.

On their face, the statistical results on the comparison of robbery investigation seem to support the prosecutor's view that his needs for information are not fully and consistently met by law enforcement agencies. The data show that each of the 39 questions was on the average covered in 45 percent of the cases in our A sample; and only 26 percent of the cases in our B sample. Each of the "offense items" of information was covered on the average in 57 percent of the cases in our A sample, but only 36 percent of the cases in our B sample. Investigative reporting in A more frequently revealed the extent of force used, the victim's injuries, and the nature of the property taken. Both A and B reports often contained information on the type of weapon used, but seldom answered more detailed questions. Information about the suspect averaged 39.3 percent coverage for the cases in the A sample, but only 14.0 percent in B.

¹⁰ One useful by-product of our study is the instrument that we employed to analyze the information content of police reports. This data form contains a list of 39 questions that a prosecutor desires the police to address in conducting a robbery investigation. This form is comprehensive and as such could be useful for investigator training; as a checklist in conducting an investigation; as a performance measure for the needs of investigator supervisors; and as an aid to the prosecutor's office in making decisions on complaint filing. The form should be readily modifiable to crimes other than robbery.

The second phase of this study, seeking to relate case disposition to the thoroughness of police investigation and reporting, required us to trace the judicial processing of each sampled case. This was accomplished by examining the court files. Our comparisons between A and B concerning the rate of dismissals, the heaviness of plea bargaining, and the type of sentences imposed are based on an examination of these materials.

No cases in our A sample were dismissed, but nearly 23 percent were dismissed in our B sample. It is not clear that any of these dismissals could have been avoided by better police investigation and reporting in B. Yet, if the investigation had been more thorough in B, the charges might not have been filed, and valuable court resources not wasted.

A comparison between A and B as to the degree of plea bargaining showed that about 60 percent of the defendants in A pled guilty to original charges, whereas only 32 percent in B did. Further analysis revealed that defendants in Jurisdiction B were often allowed to plead guilty to a lesser included offense or a lesser degree of robbery than originally charged. While on their face these results appear to show that plea bargaining was lighter in A than in B, this may simply reflect that the gravity of criminal conduct in the A cases was less than in the B cases, i.e., to begin with, special allegations were considerably more frequent in B. One cannot conclude that only the quality of police investigation accounted for the difference. No clear pattern of differences was observed in the severity of sentences imposed.

In summary, our analysis suggested that more thorough documentation of essential facts is associated with fewer dismissals and more frequent pleas to original charges. Since court congestion currently represents a major obstacle to the administration of swift and considered justice, and a majority of those arrested for serious crimes are never convicted, more thorough investigation could conceivably result in the reduction of currently wasted efforts. A possible next step in the further evaluation of the importance of investigative thoroughness might be an analysis of how court dispositions are affected by varying levels of investigative thoroughness within a particular jurisdiction where prosecution policies are relatively consistent.

INVESTIGATIVE STRIKE FORCES

Investigative strike forces are units that attempt to circumvent the routine (and often unproductive) follow-up case loads which usually consume most of an investigator's time. Strike force investigators receive no routine case assignments. Instead, they are left on their own to focus on targets of opportunity such as second-hand stores, a suspect who is alleged to be buying stolen property, or a suspect who is attempting to sell suspicious merchandise. Strike force detectives also develop informants or pursue major cases for which regular investigators do not have enough time.

The purpose of our research was to explore the potential advantages and disadvantages of this type of unit and to evaluate the performance to date of two such units—the Long Beach SOB Unit and the Miami Police Department's STOP Robbery Unit. Data for this discussion are based on documents and records compiled by the units, review of their cases, and interviews with strike force investigators.

Miami—STOP Robbery

The Miami Police Department put an investigative strike force into operation under its Robbery Control Project which commenced on October 1, 1971. This project was intended to provide a comprehensive improvement in the department's capability to deal with robbery offenders and to result in a significant drop in robbery offenses.

The primary objective of the unit was to focus on known offenders, and a list was compiled of wanted fugitives. Since few attempts had been made to apprehend these fugitives after the first attempt to serve an arrest warrant had failed, the execution of active warrants became a principal focus of the unit.

Other tactics used to increase the output of the unit in making arrests included stake-outs, informants, surveillance, and new equipment. They carried no case load and were responsible for responding to all possible robbery calls while on duty, as well as for other activities designed to identify and apprehend wanted robbery offenders.

The principal criterion for determining the overall impact of the total robbery control project was to have been the robbery offense rate. During the four years immediately preceding the instigation of the project, robbery offenses had increased at an average annual rate exceeding 25 percent. During the first 27 months of the project a substantial decrease in the reported robbery offense rate did occur. In 1971, robbery offenses (2,829) declined 1.3 percent compared to the previous years. In 1972 and 1973 the rates of decline were 9.6 percent and 6.4 percent, respectively.¹¹ The project was acclaimed a success.

However, by 1974 the robbery offense rate was no longer on the decline. By October the department was reporting a 35 percent increase over the same time period in 1973.¹² Total departmental clearances and arrests showed a consistent pattern of increase over the life of the project. The clearance rate increased from 17.6 percent in 1971¹³ to 26.2 percent in 1973. Robbery arrests increased from 408 in 1971 to 526 in 1973—a 29 percent increase.

For a sample¹⁴ of 30 robbery arrest cases examined by our staff, the STOP Robbery officers were involved in 11 of the arrests. However, in nine of these cases, the arrest resulted from executing an arrest warrant resulting from the regular detective's investigative activity. In another case, STOP Robbery men were accompanying the assigned investigator when he made an arrest. Apparently in only one case in 11 were STOP Robbery officers operating on their own initiative (in response to a description of the suspect, of a bar he frequented, and of his associates) when they apprehended a suspect.

The overall impact of the robbery control project on crime rates is difficult to

¹¹ According to the FBI's Annual Reports, substantial decreases in robbery offense rates were being reported in about one-third of the nation's major counties and cities during this same time period. The national rate of change for robbery offenses in the years 1971, 1972, and 1973 were +11 percent, -3 percent, and +2 percent, respectively.

¹² The Uniform Crime Reports 1974 Preliminary Annual Release shows that the national robbery offense rate increased by 14 percent in 1974.

¹³ During the previous eight years, the robbery clearance rate had shown considerable random fluctuation between a high of 30.0 percent and a low of 14.1 percent. It was 24.5 percent in 1969.

¹⁴ The sample consists of a random selection of cases assigned to either of two robbery detectives during 1973 and 1974. Cases were limited to these two detectives so that they could be interviewed to fill in missing data.

interpret. One could argue that the project initially did have a large impact on robbery offense rates, which diminished over time as either external factors caused an increase in the underlying base rate or offenders became more used to the project and its deterrent effect lessened.

Another explanation could be that the robbery offense rate is determined by factors beyond the reach of the police and that the initial decrease was simply a fortuitous coincidence. Some support for this theory can be found in the fact that the trend in robbery offenses began to decline even before the project was fully operational (1971).

Long Beach—SOB

The Long Beach, California Police Department formed an investigative strike force called the Suppression of Burglary (SOB) Unit in April 1972 to deal with their burglary problem. Its primary focus was the identification, arrest, and filing of charges against burglars and receivers of stolen property, and the recovery of stolen property for the victims. The standard operating procedure of the SOB Unit allows each man to work on his own cases against suspected major offenders. The unit is never assigned routine cases for follow-up. Each SOB investigator may engage in a number of activities, including operating a secondhand storefront to buy stolen property, checking property identification, as well as maintaining surveillance stake-outs and developing informants.

The overall impact of the SOB Unit during its first three years' existence was that total arrests increased from 167 in 1972 to 291 in 1974. This increasing trend is more apparent than real, for the unit operated only nine months in 1972, for most of that period with less than eight men, and in 1974 the size of the unit was increased to ten.

Overall arrest productivity is better assessed by looking at the averaged individual officer's performance. In 1972 each officer averaged 3.2 felony arrests per month. In 1973 and 1974 this figure declined to 2.4. Apparent reductions in the average arrest productivity per officer over time might be due to any of the following explanations: (1) The high arrest rate during the first year was simply due to chance. (2) If the best officers had been initially selected to man the unit, manpower changes over time might dilute the average capability of the unit's officers. (3) Criminals may have adjusted to the unit's novel techniques.

High arrest productivity was maintained without sacrificing the quality of arrests. During 1972 and 1973 the percentage of cases filed by the prosecutor was exactly the same for SOB as the department average. The unit's average monthly property recovery rate fluctuated between \$10,000 and \$23,000 over the last three years.

Examination of similar units in the past has shown that their arrest rates were often inflated because they were allowed to make many simple arrests which some other police unit could just as easily have made.

Our research shows that about half of their assigned cases or 27 percent of their total arrests really represent payoffs from the unique type of investigative practices that this kind of unit is supposed to employ. Their other arrests come about because they represent a pool of skilled officers, available on short notice to arrest identified suspects, or because departmental policy gives them the opportunity to pursue some specific types of leads (pertaining to receivers) developed by other units.

These findings should not be interpreted in any way as disparaging the efforts of SOB officers. As our analysis of how cases get solved shows, regular investigators are seldom able to make arrests in which the identity of the suspect is not readily apparent from the facts available at the time of completing the incident report. Experimental projects intended to allow the investigators more time to investigate cases have not shown any increase in arrests. Therefore, the SOB-initiated arrests represent a real gain in the effectiveness of the department, both in suspects apprehended and property recovered. Whether or not this gain is enough to justify the expense of the unit is a judgment each department must make for itself.

INFORMATION FEEDBACK TO CRIME VICTIMS

Many investigators, as well as top-ranking police officials, have defended the investigative function, not only because it contributes significantly to the identification of perpetrators, but also because it is one of the principal contacts the police maintain with the victims of serious crimes.

If the public's confidence in their local police department is to be strengthened, it seems reasonable that when the perpetrator has been identified, the victim should be notified. However, a policy of routinely providing case information feedback to crime victims poses some risk of being self-defeating. For example, if a victim is informed that the perpetrator of his crime has been apprehended but is being prosecuted on another offense, not his, the victim may be resentful of the police or the criminal justice system. We conducted a limited telephone survey (36 interviews) of recent robbery and burglary victims concerning information feedback. The questions of how much information to convey to victims, and when to convey it, were addressed.

Data from our survey suggested that victims desired very strongly to learn officially whether or not the police had "solved" their case, when a suspect on their case had been arrested, and what progress had been made toward conviction of the defendant. Victims were divided as to their wish to be informed when the person believed responsible for their victimization was released from custody. Our survey also suggested that the greater the involvement of a victim in the prosecution of the suspect in his case, the greater his desire to be informed about events in the later stages of the proceedings. The majority of victims surveyed also preferred to be informed when the police decided to suspend investigation in their case. Even though a sizable minority of victims said they would react unfavorably to this news, few victims would act to express their grievances in official complaints.

To the extent that our survey results may reach beyond the confines of our small and special sample, they broadly underscored a belief that there exists a strong market for information feedback to victims from the police. But they also tend to confirm the view that giving unfavorable information to victims creates undesirable reactions in attitudes toward the police in some of these victims. (We have no evidence of how widely the feelings of resentful victims might be propagated among the general public.) Few victims, no matter how much distressed by information coming to them from the police, would act inimicably to police interests.

Chapter 4

POLICY IMPLICATIONS

HOW RELIABLE ARE OUR FINDINGS?

The data collected and analyzed in our study imply that traditional approaches to criminal investigation by police departments do not significantly affect the rate at which cases are solved. It appears, rather, that the solutions result from the application of routine administrative procedures. If these implications are valid, then some changes in current investigative policy can be considered. But first we should reflect on the reliability of our data and its related implications.

To begin with, our data embody a relatively small quantity of cases and police departments from the total national population. Only the Kansas City data constitute a significant proportion of a complete departmental workload. Should similar analyses be performed in other cities whose departments deal with a different mixture of crime types? We feel that such research would indeed strengthen the inferences about criminal investigation that could be drawn; furthermore, we believe that these additional studies should be done by the police themselves, primarily to forestall the difficulties that outsiders encounter in extracting the type of case data required. Such inquiries should involve only a nominal expenditure of effort, the bulk of which would be to code case samples (as we did in our analysis of how cases are solved).

It may be contended that the data we collected by means of the Rand survey and the case samples do not reflect sufficiently controlled experiments, wherein one pure program is contrasted with an alternative. Rather, they purport only to characterize, for purposes of comparison, departments that were pursuing loosely defined programs containing some experimental concepts along with many traditional methods of operation. This limitation on our data base should be recognized, but we feel that its effect is moderated by the fact that the departments we examined represented a wide diversity of approaches to the performance of criminal investigation. In a practical sense, the data used in our study embody differences that are about as large as one could find among police departments that modify their operations in an effort to improve the investigative function.

The credibility of our findings is enhanced by the consistency with which they are supported across a variety of crime types and police departments. Moreover, they are consistent with our personal observations as well as with the collected data; and consistent with the findings of earlier researchers. We have sought and failed to find contradictory evidence. Senior police officials familiar with the departments we studied have supported our inferences about the practice of criminal investigation and about its output.

In sum, we feel that our work is sufficiently reliable, despite limitations in the scope and amount of data collected, to support the fundamental findings that many current investigation practices should be sharply challenged because of their ineffectiveness. This finding justifies our central recommendation that police departments concerned about making the most productive use of their manpower should proceed

to ascertain whether or not our detailed findings apply to their circumstances and whether or not our policy recommendations are appropriate.

WHAT ARE THE POLICY IMPLICATIONS OF OUR FINDINGS?

On their face, our study findings suggest that the effectiveness of criminal investigation would not be unduly lessened if roughly half¹ of the investigation effort were eliminated or shifted to more productive uses. The remaining investigative force should suffice to handle the routine cases, which give rise to most of the clearances that now occur, and to perform the post-arrest processing involved in patrol arrests. These findings also indicate that significant increases in criminal apprehension rates are much more likely to be produced by improved patrol tactics and expanded citizen response and cooperation than by refinements in investigative work.

If these findings are valid, then they should prompt numerous policy changes affecting the criminal investigation function of the police. In the remainder of this section, we set forth a number of such reforms² whose rationale is consistent with our findings. As discussed above, we feel that a police department should not adopt them uncritically. Rather, it should first assure itself of the relevance of our work to its situation and then introduce the changes on an experimental basis, together with a careful evaluation program that enables their effects to be identified and assessed. If these experimental implementations have favorable outcomes in several departments, then the change(s) involved could be promoted for national adoption.³

The recommended reforms should lead to a greater number of arrests, more successful prosecutions, and savings in resources. But they will not necessarily lead to a *substantial* improvement in apprehension rates, which our work leads us to believe are more dependent on other factors such as victim behavior.

PROPOSED REFORMS

1. *Reduce follow-up investigation on all cases except those involving the most serious offenses.*

Rationale: Our data consistently reveal that a regular investigator's time is preponderantly consumed in reviewing reports, documenting files, and attempting to locate and interview victims and witnesses on cases that experience shows will not be solved. Our data show, moreover, that most cases that are solved are solved by means of information spontaneously provided by a source other than those developed by the investigator. It follows that a significant reduction in follow-up investigative efforts would be appropriate for all but the most serious offenses in which public confidence demands some type of response. If a thorough preliminary investigation failed to establish a suspect's identity, then the victim could be notified that active investigation was being suspended until new leads appeared, for example, as

¹ Based on our analysis of how cases are solved and of investigators' daily routines.

² The proposed reforms could be adopted individually or as a complete package.

³ To allow for adequate planning and refinements during the implementation process, an experimental adoption of a suggested reform should be in operation at least two years before a conclusive judgment about its merits is made.

a result of an arrest in another matter. Our understanding, from departments that employ a victim-notice procedure, is that the public will generally accept such a policy once it is established. Future contacts with the victim would be oriented more toward securing their cooperation in community protection programs to deter and prevent further crimes.

2. *Assign the generalist-investigators (who would handle the obvious leads in routine cases) to the local operations commander.*

Rationale: Under the investigation policy suggested above, the main duty of the generalist-investigator is to respond to information developed by the patrol units at the crime scene or volunteered by the public, rather than to develop new leads on his own initiative. This role emphasizes the public service function of the investigator, and the men performing it should be responsible to the local commander who is concerned with all aspects of police-community relations.

Our research suggests that this type of investigative duty does not entail a requirement for specialized skills or centralized coordination. The officers performing it could readily shift between patrol and investigative duties. In departments with team policing, such investigation of routine cases could be a duty rotated among team members.

3. *Establish a Major Offenders Unit to investigate serious crimes.*

Rationale: Although there will be much fewer follow-up investigations on cases with no clear leads as to the identity of a suspect, most departments will continue to conduct extensive follow-up investigations on a small number of serious or inter-related cases. These special efforts can be most effectively provided by a single Major Offenders Unit, manned by investigators who are well trained and experienced in examining crime scenes, interpreting physical evidence, and interrogating hostile suspects and fearful witnesses. One reason for establishing such a unit is to clearly identify the investigative positions that require special skills and training and that demand knowledge of citywide crime patterns and developments. Our analysis of traditional investigation workloads suggests, by way of contrast, that most investigators are rarely confronted with these serious and demanding cases; and when they are, most investigators are ill equipped to cope with them and unduly distracted by the burden of paperwork on their routine cases.

4. *Assign serious-offense investigations to closely supervised teams, rather than to individual investigators.*

Rationale: The Rand analyses described under "How Cases Are Solved" and "The Daily Routine" (see Chapter 3) revealed that, in the great majority of cases, the factors governing whether or not a case is solved are largely independent of the amount of investigative effort expended; that is, clearances typically result from factors external to the investigator's activities. Concomitantly, our consideration of "Investigative Thoroughness" (see Chapter 3) suggests that when a suspect has been arrested, particularly in a complex case, the disposition of his case may be importantly affected by the quality of the investigative documentation, as well as of the work it describes. At least in this class of cases (where an arrest is made), the amount and quality of investigative effort may be relevant.

The most serious impediment to high-quality investigative work appears to be the traditional method of case assignment and supervision. In nearly every department, cases are normally assigned to an individual investigator and become his sole responsibility, whether he is a generalist, specialist, or engaged in team policing. Supervisors may review his activities to make sure that paperwork requirements are on schedule, but they do not normally review the decisions he makes on how to pursue the case investigation—decisions that are largely unrecorded in the case file. Consequently, the relative priority an investigator gives to the tasks on any one case assigned to him results largely from the number and nature of his other case assignments and from his personal predilections and biases. (The latter factors are surely not considered in the making of assignments, which is done on the basis of a geographic or offense specialization.) It may frequently turn out that caseload conflicts and personal considerations lead an investigator to unduly postpone or improperly perform important elements of a particular case assignment.

Case assignment to investigative teams could eliminate this impediment. For effective operations, this team of about five to seven men should be led by a senior investigator knowledgeable in the local crime situation, in criminal law, and in police management. The leader's primary responsibility would be to keep informed of progress on cases assigned to his team and to make broad tactical decisions on the team's expenditure of effort. Each day the subordinate investigators would perform individually assigned tasks. A clerk delegated to the team would prepare progress reports to document the daily accomplishments on open cases and to assist the leader in making the allocation for the following day. This proposed reform is especially applicable to those cases handled by the Major Offenders Unit, described in Reform 3, and those investigators assigned to the prosecutor, described in Reform 8. This approach should assure that significant steps in an investigation are objectively decided by an experienced senior investigator.

5. Strengthen evidence-processing capabilities.

Rationale: Many police departments collect far more evidence, primarily fingerprints, than they can productively process—so runs a finding from our study of the "Collection and Processing of Physical Evidence" (see Chapter 3). And our work shows that the processing of evidence can be more valuable than other investigative actions; for example, where adequate processing capabilities exist, cold searches of latent fingerprints are far more effective in increasing the apprehension rate than are routine follow-up investigations.

Several important aspects must be considered in strengthening fingerprint processing capabilities. First, the print identification process in larger police departments should be facilitated by keeping the print files by geographic area, with a fingerprint specialist assigned to each area. Career offender files are particularly amenable to this sort of decentralization, and in order to make cold searches practical, this file should contain no more than 4000 or 5000 sets of inked prints. Second, since request searches, which imply a cooperative effort between investigator and fingerprint specialist, are clearly the most productive type of search, some communication links should be devised to help motivate and facilitate the exchange of information between these two parties. And third, the persons performing this function should be highly trained, highly motivated, and not overloaded with other related tasks which detract from their primary function.

6. *Increase the use of information processing systems in lieu of investigators.*

Rationale: The Kansas City Detective Case Assignment File, which was intensively examined in our study, suggests that a substantial part of an investigator's working day is taken up by the scanning and monitoring of huge volumes of information on crime incidents and arrests that pass through the department. In doing this, he seeks to make connections between cases, or between suspects and cases, or between recovered weapons or property and past cases, etc. Success is infrequent. Much of the scanning and monitoring could instead be done by means of an information processing system which would involve clerks and routine procedures in small departments and electronic computers in large ones. Rand's nationwide survey indicates that computerized information systems are not nearly as prevalent as would be justified by their potential to save manpower in this area.

7. *Employ strike forces selectively and judiciously.*

Rationale: The few investigative strike force operations we examined support the view that strike forces can be relatively productive, particularly against burglary and fencing offenses. But to achieve an advantage, these units must be manned by motivated and innovative personnel. The gain in employing them becomes illusory when mere quantity of arrests is emphasized, for then the efforts of this force tend to be diverted into making arrests that are not the result of its own unique capabilities. The operation of strike forces necessitates careful procedural and legal planning to protect the involved officers and to ensure that the defendants they identify can be successfully prosecuted. They also require close monitoring by senior officials to ensure that they do not become overly aggressive and infringe on individual privacy.

In all likelihood, the relative advantage of strike force operations in a particular department will not persist; so the department must accustom itself to creating and then terminating strike forces, as circumstances may dictate.

8. *Place post-arrest (i.e., suspect in custody) investigations under the authority of the prosecutor.*

Rationale: Our analyses of workload data reveal that most investigative effort on cleared cases is made after the arrest. Most arrests are made by a responding patrol unit without prior investigator involvement or by investigators who have had to invest only a minor amount of work. But many of these cases necessitate post-arrest investigation to strengthen the evidence to meet the "beyond a reasonable doubt" standard for conviction. Also, the investigator may be impelled to post-arrest efforts in an attempt to achieve clearances in other cases by the present arrest, or to satisfy the documentation requirements of the department.

Most prosecutors do not have investigators on their staff. If they do, these investigators are usually occupied with relatively complex "white-collar" offenses—such as consumer fraud—and not with street crime. Generally, then, the prosecutor relies on police investigators to provide the evidence needed to prosecute and convict the suspect. But this situation contains an inherent conflict between prosecutor and police.

A police arrest is justified by *probable cause*—i.e., an articulable reasonable belief that a crime was committed and that the arrestee was the offender. Once they have made an arrest, the police desire that the case be filed by the prosecutor on the

basis of the most serious criminal charge(s) applicable, both to vindicate their actions and to improve their clearance record. But generally, because of the pressure of new cases and the expectation that the case will be bargained rather than tried, the police are reluctant to expend further investigative efforts to strengthen the evidence in the case.

The prosecutor, on the other hand, may be reluctant to file the charges that the police prefer, or even to file at all, if he believes the evidence would not suffice for a conviction, i.e., proof beyond a reasonable doubt; or even if the evidence simply places him at a serious disadvantage in plea bargaining. He needs more and better police investigation both at the time of the arrest and afterward. While the police have various means of creating pressure on the prosecutor to file a case, still the latter has the final discretion in the matter. It is clear that many cases are affected by the conflicting incentives of police and prosecutor, as reflected in failures to file, lenient filing, early dismissals, or imbalanced bargaining.

A promising remedy for this problem would be to place post-arrest investigations under the authority of the prosecutor's office,⁴ under assignment or as an integral part of his staff, depending on the local situation. They would be used to implement the policy that post-arrest investigation should seek to demonstrate the culpability of the suspect by the standard of conviction, i.e., beyond a reasonable doubt. Because of his responsibilities in the criminal proceedings, the prosecutor is clearly the appropriate official to direct such investigative efforts.

Is this too drastic a measure? Would it not suffice for the prosecutor to prepare an investigation manual and help train police investigators? We believe that the latter would be a less satisfactory solution, given the dynamic character of criminal case law and the inherent conflicts between two relatively independent agencies. Giving the prosecutor responsibility and authority over post-arrest investigation would be a more effective way of assuring that the evidentiary needs for a successful prosecution are met. This is not to assert that the police should be foreclosed from post-arrest investigations for their own intelligence purposes or to effect clearances on other cases, but only that they would relinquish the responsibility of follow-on investigation of the instant case for prosecutorial purposes.

9. *Initiate programs designed to impress on the citizen the crucial role he contributes to crime solution.*

Rationale: All our data show that the most important factor in crime solution is the information provided by the victim to the responding police officer. If information that uniquely identifies the perpetrator is not presented at the time the crime is reported, the perpetrator, by and large, will not be subsequently identified.

Police departments must initiate programs designed to increase the victim's desire to cooperate fully with the police. Resources allocated to such programs may serve to increase apprehension rates. Specifically, police departments should widely disseminate the findings uncovered by this study. The realistic picture of how crimes are solved will help eliminate people's distorted stereotype images of detectives and will impress on them the importance of their cooperation with police in order to solve crimes.

⁴ Our analysis of investigators' workloads suggests that this detailing of post-arrest investigators could be made from those investigators remaining after the 50 percent cut and reduction in follow-up efforts suggested under the proposed reforms. Post-arrest efforts would clearly account for at least half of the remaining total investigation workload.

Part II
An Evaluation of the Rand Corporation's Analysis
of the Criminal Investigation Process
The Police Chief/July 1976



AN EVALUATION OF THE RAND CORPORATION'S ANALYSIS OF THE CRIMINAL INVESTIGATION PROCESS

by DARYL F. GATES and LYLE KNOWLES



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IN 1973, the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration, United States Department of Justice, awarded the Rand Corporation of Santa Monica, California, a contract to study police criminal investigation practices. In October, 1975, the Rand Corporation published findings and proposed reforms in three volumes. When a potentially influential piece of research such as this has been completed, published, and publicized, it is important for those persons and organizations that could be affected to review the work with care and consideration. If there are questions regarding the validity of the study and the utility of its findings and recommendations, then it would seem appropriate to share these views. It is within this general framework that this analysis is oriented.

There is no question that Rand's research project has developed some useful data. Unfortunately there appears to have been an irrepressible need to produce a document with meaningful findings and provocative recommendations. Had the findings and proposed solutions been supported by and consistent with the data gathered, the current evaluation would not have been necessary; and, more importantly, the Rand Report on the Criminal Investigation Process would have made a valuable contribution to law enforcement. Herman Kahn of the Hudson Institute paraphrases an overused computer metaphor that does not precisely fit here, but comes embarrassingly close: "garbage in, gospel out."

It is hard to determine at this point what impact this research effort will have on the police investigative function. To date, there appears to be no measurable harm done. However, as time passes and as police budgets are reviewed, this report unchallenged could have serious and perhaps devastating impact on the whole investigative process.

The present evaluation was not undertaken to support the investigative status quo. There is indeed a definite need for improvement in the investigative process, but there is also substantial cause for concern that police administrators may take at face value Rand's claimed research findings and implement changes which will prove harmful both to the police and the communities they serve. It is therefore imperative that we alert police administrators to exercise great caution in considering the Rand study's purported findings and suggested reforms.

An examination of the study's three volumes by the authors of this evaluation has resulted in questions regarding the methods, data bases, and conclusions of the Rand researchers, particularly from the perspective of the police administrator. This article discusses these questions in relation to Rand's major findings and proposed reforms, and particularly in relation to the Rand conclusion that:

"... our study findings suggest that the effectiveness of criminal investigation would not be unduly lessened if approximately half of the investigative effort were eliminated or shifted to more productive uses."

GENERAL METHODOLOGICAL PROBLEMS

Upon considering the research procedures of the Rand study, it should be noted that it is traditional and ethically sound to present statistical evidence along with research findings. A violation of this research procedure occurred in a number of places in the Rand report. The reader must accept the word of the authors that such data do exist, but for some reason were not included. Phrases such as "detailed analysis of case samples" and "in an analysis of a large sample of crime types"² are used to indicate the source of various major findings. These are of little help in assisting the reader to connect a specific finding with the data. No conscientious police administrator would find such explanations acceptable as proof for conclusions with such widespread impact as the Rand study proposes.

Prior to conducting any piece of research, every effort is usually made to ensure that the basic data are valid and reliable. In the Rand report, various references are made to problems inherent in the data, in the measurement of certain variables, and in the operational definitions of variables. As one example, in the section titled "How Reliable Are Our Findings," the Rand researchers admit that "It may be contended that the data we collected ... do not reflect sufficiently controlled experiments."³ Because of problems of lack of control, accuracy, and consistency, most researchers would not have used these data. The Rand researchers have recognized these problems (as indicated by their references) but have not hesitated to use the data associated with them. Comparing data collected from different agencies must be regarded as a serious shortcoming. The number of uncontrolled and even unknown variables operating in such situations serves to seriously compromise the validity of

any findings.

It is important to recognize that much of the information used in the Rand study was quantitative (with the exception of a few subjective data sources). The entire dimension of quality was all but overlooked. The quality of investigative training, the quality of investigative personnel, the quality of their experience, the quality of procedures, and the quality of the entire organization all play a role in the overall quality of the police function. Almost all law enforcement administrators have come to learn that quality can be as important as quantity. Evidently, the Rand researchers have not come to realize this.

INSUFFICIENT DATA BASES

Rand queried 300 major police departments in the nation through a mail survey. One hundred and fifty-three responded. These replies provided general information about each department from which Rand selected "more than 25 police agencies" for individual on-site research.⁴ Volume III of the Rand report specifically names seven departments from which special statistics and data samples were collected.⁵ The specific identity of the remaining "more than" 18 agencies and the nature of the "more detailed" study that was performed is not clear in any of the report's three volumes.

As limited as this source of information is, the majority of Rand's conclusions were based on even less information. The major conclusion at issue here, the reduction of investigative effort, is shown by a Rand footnote as being "based on our analysis of how cases are solved and of investigator's daily routines."⁶ Given this generalized explanation, it is an alert reader who can infer that the phrase "how cases are solved" refers to Chapter 6 of Volume III entitled "Analysis of How Crimes Are Solved," and that the phrase "investigator's daily routines" refers to Chapter 5 of Volume III entitled "The Daily Routine." However, an examination reveals that Rand's entire analysis, in Chapter 6, of how crimes are solved was obtained from six police agencies and that by far the majority of the information was obtained from one agency, the Kansas City Police Department. The daily routine chapter does away with the other five departments and names only Kansas City as its source. Rand is attempting to support a finding of purportedly nationwide significance with limited and potentially inadequate data drawn primarily from a single agency. Granted that the Kansas City Police Department is a modern police

department with a penchant for computerization that draws swarms of researchers eager for easy data access; however, this does not mean that Kansas City can stand for the nation. To draw a majority of information from this one city distorts the entire data base and leads to conclusions that are, at best, valid only for Kansas City.

ERRORS IN DRAWING CONCLUSIONS

Although Rand has used procedures with questionable reliability and data not representative of the nation, it has gone on to draw conclusions that are not consistent with the data. For example, one of the "findings" that is used to support the Rand conclusion that investigative efforts could be lessened states that "Our data consistently reveal that a regular investigator's time is preponderantly consumed ... on cases that experience shows will not be solved." However, the data behind the "finding" claims that 60 percent of an investigator's time is spent investigating cases⁷ and approximately 40 percent of that time is spent on cases that are not solved.⁸ This means that a total of 24 percent of an investigator's time is spent on cases that are not solved. Does this support the conclusion that an investigator's time is *preponderantly* spent on unsolved cases?

Even if we were to assume that 24 percent is a large amount of time to spend on cases that are eventually unsolved, Rand has not considered in its conclusion the additional reasons for investigation that a police agency must consider. For example, both the deterrent effect on criminals and the obligation of the police to investigate all cases are important benefits of investigation that can not be measured by the percent of cases solved.

AN OPINION OF THE TOTAL WORTH OF THE RAND STUDY

The Rand Corporation received \$500,000 to prepare a report that (1) contains procedural errors that erase almost all hope of accuracy, (2) has a fatally limited data base, and (3) presents conclusions that do not follow from the data presented and which ignore a host of important related influences.

While every good police administrator welcomes advice that will increase the efficiency of his department, it would seem the Rand Corporation's conclusion that half of the investigative effort could be eliminated without lessening the effectiveness of criminal investigation can not be

seriously considered as anything other than the unsubstantiated opinions of researchers who lack the insight and understanding of the police investigation function necessary to draw such a conclusion.

MAJOR FINDING 1

ON INVESTIGATIVE EFFECTIVENESS: DIFFERENCES IN INVESTIGATIVE TRAINING, STAFFING, WORKLOAD, AND PROCEDURES APPEAR TO HAVE NO APPRECIABLE EFFECT ON CRIME, ARREST, OR CLEARANCE RATES¹⁰

Source of the Finding Cannot Be Determined

This finding is plagued by a variety of difficulties, including contradictory statements by the report's authors concerning which data actually produced it. In the finding's supporting paragraph in Volume I, it is unequivocally stated that it resulted from an analysis of the study's survey questionnaire.¹¹ In contrast, Volume III indicates that the part of the finding relating to clearance rates resulted from entirely different data — from a study of six departments.¹²

The report provides equally contradictory statements as to whether or not the data actually produced Major Finding 1. Thus, the report's authors state in Volume II that, although they failed to find any differences in the effectiveness of various investigative practices, this does *not* mean such differences do not exist, but rather that clearance and arrest rate statistics for departments as a whole may be inadequate to reveal whatever differences do exist.¹³ In this connection, the authors note that arrest and clearance are widely understood to be inadequate measures of investigative effectiveness.¹⁴ The authors are, in effect, saying that arrest and clearance rates are inadequate tools with which to produce *any valid finding*.

Incredibly, there is little or no empirically substantiated attempt shown anywhere in the report to determine the relationship between crime rates and differences in investigative training, staffing, workload, and procedures—even though this is the essence of Major Finding 1!

Conclusion

The authors have little or no factual basis for Major Finding 1; it reflects only their failure to find a correlation between the involved variables. By stating a finding where none exists, the authors call to mind geographers who, having admitted that their instruments are inadequate to determine if the earth

is flat, go ahead and call it flat anyway because that is the way it appears and, one suspects, is the way they want it to be.

MAJOR FINDING 2

THE METHOD BY WHICH POLICE INVESTIGATORS ARE ORGANIZED (i.e., TEAM POLICING, SPECIALISTS V. GENERALIST, PATROLMEN-INVESTIGATORS) CANNOT BE RELATED TO VARIATIONS IN CRIME, ARREST, AND CLEARANCE RATES¹⁵

Source of the Finding Limited and Arbitrary

The authors claim that this finding resulted from a detailed analysis of case samples combined with FBI-UCR and Rand survey data.¹⁶ However, the Rand survey data used to support this finding is virtually identical to that supporting Major Finding 1 and is just as inadequate for support of this finding as it is for Major Finding 1.¹⁷ The manner in which FBI-UCR data supports Major Finding 2 is not shown. As for the detailed analysis of case samples mentioned, this concerns clearance rates only and involved an extremely limited data base comprised of two samples.¹⁸ The first of these samples was composed of 172 cleared cases ("with rough estimates" made from another 92 cases) drawn from five cities, including 109 cases (63 percent of the sample) from Long Beach, California.¹⁹ The authors assert that their analysis of this minuscule sample shows that, in more than half of cleared cases, suspect identification is available at the time of reporting, and thus helps prove that the organization of investigative units can have little effect on clearance rates.²⁰ This assertion is essentially meaningless to the law enforcement administrator, especially in light of the tiny, localized sample used to produce it.

The second sample used in this connection consisted of 92 cleared cases drawn from the Kansas City, Missouri, Police Department.²¹ The authors classified the method of solution of these cases as being either "routine" or "special action" ("requiring more than procedural investigative skill")²² by means of a totally arbitrary and specious classification system. By means of this scheme, in which all investigative actions were classified as "routine" unless they happened to strike the nonpolice researchers as unusual or flamboyant, the conclusion was reached that 97 percent of all crimes that now get cleared could be solved using only "obvious and routine tasks."²³ This, say the authors, proves that investigative organization cannot

be expected to influence clearance rates.²⁴ This assertion, by merely calling competent investigative police work "routine" on the basis of an arbitrary single-agency study, reflects considerable naïveté and is of little or no value to law enforcement agencies.

Conclusion

As was the case with Major Finding 1, no attempt to establish a relationship between crime rates and investigative practices can be found anywhere in the report's three volumes. In sum then, the Rand report provides little or no factual basis for Major Finding 2.

MAJOR FINDING 3

ON THE USE OF INVESTIGATOR'S TIME: SUBSTANTIALLY MORE THAN HALF OF ALL SERIOUS REPORTED CRIMES RECEIVE NO MORE THAN SUPERFICIAL ATTENTION FROM INVESTIGATORS²⁵

Single Agency Data

According to the report's authors, this finding is based on "... an analysis of a computer-readable case assignment file maintained by the Kansas City, Missouri, Police Department and observations during site visits..."²⁶ Despite this claim, only the Kansas City data is discussed in the report; the data obtained from the unspecified observations and the nature of its relationship to the finding is not given.

Non-Crimes and Minor Crimes Included in the Data

The authors, in discussing the Kansas City data, state that only homicide, rape, and suicide are invariably worked on, and that "A few other types of crimes universally regarded as serious are worked on in over 60 percent of the cases, but many types more likely than not receive less than a half-hour's attention (thereby counting as not 'worked on')." The authors conclude that "Since the bulk of crimes fall into these latter categories, well under half of all reported crimes receive any serious attention by the investigator."²⁷ This assertion, which paraphrases Major Finding 3, may be true for all *reported crimes* (including trespassing, vandalism, and other minor crimes), but the report's data certainly does not support it in relation to the "serious reported crimes" specified in the major finding.

This data, presented in Table 5-3, includes two non-crimes, "dead body" and "lost property," and two Part II offenses — "common assault" and

"vandalism."²⁹ Even with suicide (another non-crime) removed from the list, the data shows that 10 (77 percent) of the 13 "serious reported crimes" listed are investigated 59 percent of the time with only three (23 percent) being worked on less than 50 percent of the time. The data also reveals that the "worked on" average for all of the *serious crimes* listed is 49.9 percent, a far different figure than the authors' 32.4 percent average, and hardly the "well under half" claimed by Major Finding 3.

Conclusion

The authors have used limited data from a single agency in their attempt to support this finding. And while it is obvious that Kansas City is not the nation, even the data given does not support the finding. The finding is not supported by fact and therefore has little validity.

MAJOR FINDING 4

OUR DATA CONSISTENTLY REVEAL THAT AN INVESTIGATOR'S TIME IS LARGELY CONSUMED IN REVIEWING REPORTS, DOCUMENTING FILES, AND ATTEMPTING TO LOCATE AND INTERVIEW VICTIMS ON CASES THAT EXPERIENCE SHOWS WILL NOT BE SOLVED. FOR CASES THAT ARE SOLVED (i.e., SUSPECT IS IDENTIFIED), AN INVESTIGATOR SPENDS MORE TIME IN POST-CLEARANCE PROCESSING THAN HE DOES IN IDENTIFYING THE PERPETRATOR³⁰

Single Agency Data

The same major finding, stated in Volume III, substitutes the word "preponderantly" for "largely."³¹ The finding's supporting paragraph states that it resulted from "... an analysis of a variety of crime types..."³² but Volume III of the report informs us that all quantitative data on the use of investigators' time resulted from the Kansas City Case Assignment File.³³ The Kansas City, Missouri, Police Department's computer-readable case assignment file must therefore constitute the unspecified "experience" to which the finding refers, unless it can be assumed that the report's authors can discern without investigative effort which cases are unsolvable.

Limited Reliability of the Data

Concerning the case assignment file, the authors offer the caution: "We do not know whether the officers are conscientious about reporting accurately how they spend their time..."³⁴ This warning appears well founded; during

the period from which the data was drawn (May-November 1973), Rand lists 28.6 percent of all detective working time as "unaccounted for."³⁵

"Largely" = 24 Percent?

Undaunted by these deficiencies, the authors used the data to compute expenditures of "detective casework time," which the researchers estimated to constitute 60 percent of all detective working time.³⁶ Their computations produced the finding that uncleared cases account for 40.2 percent of all detective casework time.³⁷ Based on Rand's total casework estimate of 60 percent, Kansas City detectives spend 24 percent of their time on "unsolved" cases — a percentage that in no way "largely consumes" the detectives' time.

Non-Crimes and Minor Crimes

Before considering the second assertion contained in Major Finding 4, that for solved cases an investigator spends more time in post-clearance processing than he does in identifying the perpetrator, we must first turn to Volume I which states: "The scope of the Rand study was limited to police investigation of serious reported crime: homicide, rape, assault, robbery, burglary, and theft. Our work did not address misdemeanor offenses or victimless or organized crimes whose investigation is substantially different from the felony offenses that were our primary concern."³⁸

This statement notwithstanding, the data base for the report's casework time percentages contains such offenses as "trespassing," "protective custody," and "disorderly conduct," among others.³⁹ The average preclearance time expenditure for these offenses is substantially less than for actual serious crimes,⁴⁰ but as the authors failed to provide complete casework data, the extent to which the inclusion of these minor offenses lowered the preclearance time expenditure percentage could not be determined.

Conclusion

These procedural shortcomings, to which the authors appear peculiarly susceptible, pale in importance beside the fact that they are attempting to support a finding of purportedly nationwide significance with incomplete and potentially inaccurate data drawn from a single agency. Major Finding 4 does not have adequate factual support to have more than possible validity for the Kansas City, Missouri, Police Department.

MAJOR FINDING 5

ON HOW CASES ARE SOLVED: THE SINGLE MOST IMPORTANT DETERMINANT OF WHETHER OR NOT A CASE WILL BE SOLVED IS THE INFORMATION THE VICTIM SUPPLIES TO THE IMMEDIATELY RESPONDING PATROL OFFICER. IF INFORMATION THAT UNIQUELY IDENTIFIES THE PERPETRATOR IS NOT PRESENTED AT THE TIME THE CRIME IS REPORTED, THE PERPETRATOR, BY AND LARGE, WILL NOT BE IDENTIFIED⁴¹

Source of Finding Not Given

In the paragraph supporting this finding, the authors claim that it is based on "... an analysis of a large sample of combined crime types..."⁴² Since no additional clues as to the nature of the finding's supporting data are offered, the "large sample" must be tracked down, a process necessary in relation to several of the major findings. Perusal of Volume I reveals the following footnoted finding (not a "major" finding): "In more than half of the cleared cases, the identification of the offender was available at the time of the initial report..."⁴³ This is not precisely the same as the first sentence of Major Finding 4, but is close enough to show the relationship. The footnote appended to this finding provides the following information: "Initially, we analyzed 63 robbery cases, divided among four police departments (Berkeley, Los Angeles, Miami, and Washington, D.C.). We then expanded the analysis to include 109 cleared cases for crimes other than robbery from Long Beach, California. The sample was again expanded to include an additional 92 cases from the Kansas City, Missouri, Police Department, selected according to a different sampling design."⁴⁴ In discussing the 92 Kansas City cases, all of which were drawn from that city's case assignment file, the authors note that "The sample design in Kansas City also permits us to obtain rough estimates of the fraction of cleared cases that were solved by initial identification in Kansas City."⁴⁵

Inadequate Data

Are 172 cases, 109 of which are from one city, and "rough estimates" based on 92 cases from another city really a "large sample" for a nationwide study? Such a miniscule sample would at most have limited relevance for the sampled jurisdictions.

An Obscure Relationship

The source of the second half of Major Finding 4 — that if a perpetrator

is not initially identified, he usually will not be identified — cannot be determined from the information provided in the report, although the authors imply that it is based on the same six-cities data that supports the first half of the finding.⁴⁶ The six-cities data cited by the authors in this connection includes only *previously cleared* cases and does not in any way address case solution probabilities.⁴⁷ However, there is no other data in the report that is even remotely related to case-solution probabilities. This fact, coupled with the authors' implication, makes it reasonably safe to assume that the second half of Major Finding 4 is based on the same insignificant six-cities data as is the first half of the finding. Given the nature of the data, the finding could only have been arrived at through some process of indirect inference, which no doubt accounts for the use of the vague term "by and large" in the finding.

Conclusion

The authors derived this finding from very limited data drawn from six cities and, possibly, from inferences made from these data. Major Finding 5 does not have adequate factual support to have more than possible localized validity.

MAJOR FINDING 6

ON HOW CASES ARE SOLVED: OF THOSE CASES THAT ARE ULTIMATELY CLEARED BUT IN WHICH THE PERPETRATOR IS NOT IDENTIFIABLE AT THE TIME OF THE INITIAL POLICE INCIDENT REPORT, ALMOST ALL ARE CLEARED AS A RESULT OF ROUTINE POLICE PROCEDURES"

An Arbitrary Classification

This finding resulted from the authors' arbitrary classification of 92 cleared cases (from the Kansas City, Missouri, Police Department) as having been solved by either "routine" methods or "special action."⁴⁹ It should be added here that in classifying some types of cases, the authors followed the guideline that "... investigator action is characterized as 'routine,' even though the actions may be routine only to an investigator."⁵⁰ In response to this guideline, one may well ask: Can the investigative methods of an expert investigator, developed as a result of years of experience and training, be classified as "routine" merely because the investigator's expertise makes them appear so to an uninitiated observer? Uninformed classification of competent investigative police work as "routine" action and the use of this classification

to generate a statement on how cases are solved results in a finding that is meaningless.

Conclusion

The finding is the result of arbitrary, subjective classification and has no validity.

MAJOR FINDING 9

ON INVESTIGATIVE THOROUGHNESS: IN RELATIVELY FEW DEPARTMENTS DO INVESTIGATORS CONSISTENTLY AND THOROUGHLY DOCUMENT THE KEY EVIDENTIARY FACTS THAT REASONABLY ASSURE THAT THE PROSECUTOR CAN OBTAIN A CONVICTION ON THE MOST SERIOUS APPLICABLE CHARGES"

Two-Jurisdiction Study

Rand claims that "This finding derives from a combination of observations of police departments made throughout the country and some of the results obtained in the study of post-arrest investigation practices."⁵² As the location, nature, and substantive content of these observations is not supplied in the report, the contribution of the observations to the finding cannot be determined. However, statements elsewhere in the report suggest that the finding is in all probability based entirely on Rand's study of post-arrest investigation practices involving but two jurisdictions.⁵³

This study involved two anonymous California prosecutors' offices (both branch offices of the same district) and their companion police departments. The authors allege, without supporting data, that prosecutor's office "A" tends to be extremely strict in screening cases for filing; it files only those charges it believes can be proven to a jury. Prosecutor's office "B" is alleged to give "routine police procedures" greater accommodation, "... accepting their practice of presenting minimal information to substantiate the filing of a case."⁵⁴

To assess the "completeness of investigation" of cases submitted by the police departments to their respective prosecutors' offices, the authors developed a list of 39 questions "... that an experienced prosecutor believed should be addressed by a police investigation to facilitate prosecution of the case."⁵⁵ Twenty-one robbery cases from Jurisdiction "A" and 22 robbery cases from Jurisdiction "B" comprised the study sample. The authors then examined the case documents presented to the prosecutor by the police. The report states that each of the 39

questions had an average coverage of 45 percent in the sample of cases from Jurisdiction "A", while 26 percent of the questions were covered in the cases from Jurisdiction "B".⁵⁶

From Molehills to Mountains

Concerning these results, the report states: "On their face, the statistical results on the comparison of robbery investigation seem to support the prosecutor's view that his needs for information are not fully and consistently met."⁵⁷

The authors have leaped from the molehill of their limited two-agency data to the mountains of national significance. But what did the authors prove, if anything, concerning even the two jurisdictions studied?

Conclusion

Upon examining this portion of the Rand study, it seems that the authors operated under the premise that the prosecutor's filing policy was the only variable influencing investigative thoroughness in the two different police departments. This is explicitly indicated by the authors' conclusion that "strict filing standards apparently resulted in more thorough investigation."⁵⁸ Totally unaccounted for are the effects of the differences between the departments in recruitment, training, caseload, management, and myriad other variables, as any police administrator knows. Additionally, as noted in Volume III, the authors have no idea of the true relevance of its questionnaire to the actual requirements of successful prosecutions. The questionnaire was based on the opinion of *one* "experienced" prosecutor. Finally, 43 robbery cases can hardly be considered an adequate sample, even for two jurisdictions.

While there may be a continuing need to upgrade investigative thoroughness, Rand has not adequately documented this need. Major Finding 9 does not have adequate factual support to have more than *possible* validity for robbery investigations of the two involved jurisdictions.

MAJOR FINDING 10

ON INVESTIGATIVE THOROUGHNESS: POLICE FAILURE TO DOCUMENT A CASE INVESTIGATION THOROUGHLY MAY HAVE CONTRIBUTED TO A HIGHER CASE DISMISSAL RATE AND A WEAKENING OF THE PROSECUTOR'S PLEA BARGAINING POSITION"

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EVALUATION OF THE RAND CORPORATION'S ANALYSIS

Continued From Page 24

A Puzzling Finding

This finding resulted from a Rand analysis of the judicial processing and disposition of the same 43 robbery cases used in attempting to support the previous major finding.⁶⁰ It is perhaps the most puzzling of the Rand major findings in that statements in the report repeatedly contradict it.

Obstacles Confronting the Study

In discussing the analysis that produced the finding, the authors seem genuinely aware of the obstacles confronting attempts to convert case dispositions into measures of investigative quality. They note that numerous variables, including the social characteristics and criminal record of defendants and differences in the competency of prosecutors, defense counsel, and judges, all figure importantly in case dispositions.⁶¹ A warning is even provided: "... it must be remembered that extraneous variables, which cannot be estimated, have possibly intervened and confounded the results."⁶²

Results Inconclusive

This being the case, the "results" of such a study could at best be considered inconclusive. And, in Volume III, the authors appear to accept this limitation. In noting that several cases in the "B" sample were dismissed, while none in the "A" sample were dismissed, the authors concede: "It is not clear that any of these dismissals could have been avoided by better police investigation and reporting in 'B'."⁶³ In discussing the totally inconclusive case disposition results, the authors conclude: "Because of the inconsistent results, no definitive inferences can be drawn, regardless of the fact that in the category where the largest percentage of cases appear, the data show less plea bargaining and more severe sentencing in Jurisdiction 'A'."⁶⁴ A further conclusion is added concerning sentencing: "It thus appears that the outcomes in Table 8-7 reflect to a greater extent the 'non-comparability' of our samples than the effects of differences in the quality of police investigation."⁶⁵

The Authors Reverse Themselves

Given these acknowledged obstacles, this does not really seem to be the stuff that a "major finding" is made of. But then a generous reader might suppose that the authors were saying that they

really had not found anything by using the hedge word "may" in the finding statement. This generosity would be misplaced, as demonstrated by the paragraph used to support the major finding in Volume I: "In relating case disposition to investigative thoroughness, our analysis showed *significant* differences between the two-study jurisdictions that displayed differences in investigative thoroughness and prosecutorial screening practices. For example, none of the sampled cases were dismissed in the jurisdiction with more stringent case screening and investigative thoroughness; furthermore, 60 percent of the defendants pled guilty to the charges as filed. By comparison, in the second jurisdiction, about one quarter of the sampled cases were dismissed after filing, and only one third of the defendants pled guilty to the charges as filed."⁶⁶ (Emphasis added.)

Conclusion

It appears that Rand could not resist straying from the path of scholarly rectitude to create a "finding" where none exists. As averred in Volume III, "We do not know of any previous study that has succeeded in converting information about case disposition into a valid measure of the quality of investigative work."⁶⁷ There still is none. The finding is not supported by fact.

CONCLUDING REMARKS ON THE MAJOR FINDINGS

It will be noted that Major Finding 7, 8, 11, and 12 have not been considered in the current evaluation. These omissions were made in the interest of brevity and do not imply that the omitted major findings are entirely free from the methodological problems that beset the other major findings. All suffer from excessively small data bases. For example, Major Finding 11, which states in part that "Crime victims in general strongly desire to be notified officially as to whether or not the police have 'solved' their case ...,"⁶⁸ is derived from a telephone survey of 36 crime victims residing in one California city.⁶⁹

SOME PROPOSED REFORMS AND A CONCLUSION

The Rand report offers nine "proposed reforms" whose

"... rationale is consistent with our findings," and while the authors say that they do not expect a police department to adopt the reforms uncritically — the department should act in relation to its individual situation and then only on an experimental basis⁷⁰ — the dubious validity of the "findings" evaluated in this critique should give pause to the most eager of innovators. Special wariness is warranted in view of the fact that some of the proposed reforms appear to be directly inimical to the interests of police agencies and the communities they serve. It thus becomes incumbent that we examine those reforms which possess a negative potential in order to determine their factual basis and to then consider their merits from that perspective.

PROPOSED REFORM 1

REDUCE FOLLOW-UP INVESTIGATION ON ALL CASES EXCEPT THOSE INVOLVING THE MOST SERIOUS OFFENSES"

Is Time Spent on Cases Which Will Not be Solved?

This proposed reform is supported by the following "rationale":

"Our data consistently reveal that a regular investigator's time is preponderantly consumed in reviewing reports, documenting files, and attempting to locate and interview victims and witnesses on cases that experience shows will not be solved. Our data show, moreover, that most cases that are solved are solved by means of information spontaneously provided by a source other than those developed by the investigator. It follows that a significant reduction in follow-up investigative efforts would be appropriate for all but the most serious offenses in which public confidence demands some type of response."⁷²

What the authors are saying, then, is that because investigators spend most of their time working on unsolvable cases and because most cases are solved by information from other than investigative sources, it follows that the follow-up investigation of most crimes should be substantially reduced. The data which the authors view as revealing that investigators waste most of their time working on unsolvable cases is the same data from the Kansas City Police Department used by the authors in attempting to support Major Finding 4. It will be recalled that our examination of that finding revealed that Kansas City detectives spend 24.1 percent of their time on unsolved cases, a percentage that contradicts the authors' assertion that an investigator's time is preponderantly expended on cases experience shows will not be solved. The data does not even support the assertion

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for Kansas City, let alone the nation.

Although we have dealt with the authors' claimed basis, in terms of the use of investigators' time, for suggesting a significant reduction in follow-up investigations, it may be contended that we have responded too narrowly to the data embracing investigative time expenditures. For this reason additional elements of these data will be examined.

Incorrect Finding That Crimes Are Not Worked On

Referring to the Kansas City data (all of the investigators' time-use data is from Kansas City), the authors present the following information:

"The figures show that only homicide and rape (and suicide, because it is potentially homicide), are invariably worked on. A few other types of crimes that are universally regarded as serious are worked on in over 60 percent of cases, but many types more likely than not receive less than a half-hour's attention from an investigator (thereby counting as not 'worked on'). Since the bulk of crimes fall into these latter categories, *well under half of all reported crimes receive any serious attention by an investigator.*"⁷³ (Emphasis added.)

The incorrectness of this assertion in relation to the Kansas City data is proved in the evaluation of Major Finding 3 (their error is in the computing of the percentages). The point is that the authors believe it, in spite of the data they collected. If we turn to Rand's Table 5-3 (under Major Finding 3), we see that the serious crimes that get investigated 60 percent or more of the time are very serious crimes on which, the authors tell us in Volume I, follow-up investigation ought *not* to be reduced.⁷⁴

We should in all fairness look at the total investigative time expenditure data, from the authors' own perspective, to determine if there really is some possibility, somewhere, of reducing follow-up investigation and eliminating investigators.

What Follow-Up Investigations Can be Reduced?

In Volume III, the authors set forth their guideline for measuring investigative productivity:

"Finally, we have been careful not to judge any activities as unproductive when in fact they are primarily directed at objectives we were unable to measure. For example, time spent by investigators on crimes that are never solved is by definition not productive when clearances are used as a measure of performance, but there may well be some (unmeasured) deterrent value that justifies such investigations."⁷⁵

Police administrators would heartily support this guideline which, of course, would have been uppermost in the

authors' minds as they cast about for likely functions where investigation could be reduced.

It thus becomes important to look at the total investigative time-expenditure data from the perspective of the authors' guideline. This data is summarized as follows:

	Per-Cent	Per-cent
Case work		60.0
Work on cleared crimes before clearance	7.4	
Work on cleared crimes after clearance	28.4	
Work on uncleared crimes	24.1	
Administrative duties		13.8
Surveillance, crime prevention, and warrants		1.9
Unaccounted for		25.3

The question now becomes, which of these work categories could be eliminated? Work on cleared crimes before clearance? This is largely work on those very serious crimes which the authors think should nearly always be investigated.⁷⁶ Work on cleared crimes after clearance? According to the authors, detectives do not do nearly enough post-arrest investigation as it is now.⁷⁷ Work on unsolved cases? The authors say that in Kansas City "... well under half of all reported crimes receive any serious attention by an investigator,"⁷⁸ so this does not seem a likely area for cuts. Besides, the authors have said they would be careful not to judge these efforts as unproductive. Surveillance, crime prevention, and warrants? A tiny but highly important category that would not contribute much to the authors' really big cut. Unaccounted for activities? How can you cut something when you do not know what it is? The authors say they have an idea that this category is comprised of duties like homicide and robbery unit stand-by time, travelling to interview victims and witnesses, responding to citizen requests for information, etc., all of which seem like important activities which should not be done away with.⁷⁹ But, the authors do not know what is in this category, so they cannot logically make any cuts here.

This being the case, where *did* this conclusion come from?

What About Deterrence?

Throughout their discussions of reducing follow-up investigations, the authors avoid any reference to the deterrent value of follow-up investigation. In Volume III, we do find the authors questioning whether the mere process of investigation has some deterrent value;⁸⁰ the authors readily admit that they omitted from their study any measurement of the deterrence value of investigative activities.⁸¹ This

leaves unsettled (and unconsidered by the Rand authors) the effect on the crime rate if a sizable percentage of a city's serious crimes was no longer investigated and the population was told of this unhappy situation through the authors' suggested victim notification program.

How Much Manpower Is Devoted to Solving Cases?

It will be recalled that the second half of the authors' basis for Proposed Reform 1 was how cases are solved — specifically: "... most cases that are solved are solved by means of information spontaneously provided by a source other than those developed by the investigator."⁸² Given the preceding evaluation, just what this has to do with substantially reducing follow-up investigation is difficult to comprehend. Even granting for the moment that the authors' claim for the importance of non-investigatory case solutions is correct, their data purports to show that well under half of all serious crimes in Kansas City are presently investigated and that less than one-fourth of investigative time is expended on unsolved cases. So, how does this support "significant" reductions in follow-up investigation?

Conclusion

The Proposed Reform 1 is based on exceedingly limited data, not supporting the premise, but rather contradicting it. This conclusion could only exert a pernicious effect on police agencies and their client communities.

PROPOSED REFORM 2

ASSIGN THE GENERALIST INVESTIGATORS (WHO WOULD HANDLE THE OBVIOUS LEADS IN ROUTINE CASES) TO THE LOCAL OPERATIONS COMMANDER"

No Initiative Required

In their "rationale" for this reform, the authors explain: "Under the investigation policy suggested above, the main duty of the generalist investigator is to respond to information developed by the patrol units at the crime scene or volunteered by the public, rather than to develop new leads on his own initiative."⁸⁴ Incredibly, this means that investigators would not be allowed to develop new leads!

No Expertise Required

This reform is symptomatic of the authors' conceptualization of the investigative process, which holds: "... if investigators performed only the obvious and routine tasks needed to clear

the "easy" cases, they would solve the vast majority (97 percent) of crimes that now get cleared."⁸⁵ Thus, the authors continue their rationale with the statement: "Our research suggests that this type of investigative duty does not entail a requirement for specialized skills or centralized coordination. The officers performing it could readily shift between patrol and investigative duties."⁸⁶ Of course, here the authors are talking about the "vast majority" of crimes — the investigation of which usually begins with "leads" or information developed by patrol units or received from citizens.

Although the authors do not say just which research area it is that suggests this concept, it appears that it is the same Kansas City research used to produce the "finding" that 97 percent of all cases can be solved by obvious, routine tasks, i.e., in Kansas City "... at most 2.7 percent of cleared crimes are solved by special action."⁸⁷ This percentage and the specious case solution classification scheme used to arrive at it have been previously discussed, but further commentary is warranted in connection with this proposed reform.

The authors' conclusion that the investigation of the vast majority of crimes requires only simple tasks for solution is obviously the basis for their assertion that the solution of these crimes requires no investigative expertise. And yet this reasoning rests upon a totally arbitrary classification scheme that categorizes all case solutions as being "simple" unless the nonpolice authors say they are not. Only those cases that happened to strike the authors as being unusual were classified as "special action."⁸⁸ Apparently no thought was given to the fact that many seemingly "routine" investigative tasks, such as skillful crime scene investigation and evidence interpretation, competent suspect interrogation, and proper search warrant preparation, actually demand an extremely high level of investigative expertise. Thus the authors' conclusion that the "vast majority" of crimes require no investigative expertise for solution resulted more from their unfamiliarity with the investigative process than from any research findings.

Conclusion

The authors, their single-agency data notwithstanding, have offered no tangible evidence to support their claim that "routine" cases require no investigative expertise. All varieties of follow-up investigation require investigative exper-

tise, the development of which depends on substantial training and experience. The researcher's proposal to assign this class of investigators general duties only and rotate them with patrol officers would not permit the development and maintenance of this vital investigative expertise.

PROPOSED REFORM 4

ASSIGN SERIOUS OFFENSE INVESTIGATION TO CLOSELY SUPERVISED TEAMS, RATHER THAN TO INDIVIDUAL INVESTIGATORS"

The Prescription Exceeds the Symptoms

The rationale explaining this reform stresses the improper supervision of personnel and blames this for the improper performance of investigations.⁹⁰ Could it be that rather than reorganizing investigators, a solution to the problem of improper supervision would be the improvement of supervision? Reorganization would not necessarily affect the level of proper supervision. The imposition of supervisory teams in other than major, complex cases may be such an inefficient use of manpower that the investigative process would be affected quite adversely.

Conclusion

Even if it is assumed that Rand is correct in its assumption that supervision is a problem in some investigations, the proposed reform does not address itself to the problem.

PROPOSED REFORM 6

INCREASE THE USE OF INFORMATION PROCESSING SYSTEMS IN LIEU OF INVESTIGATORS"

Clerks Instead of Investigators

The authors state that their examination of the Kansas City Detective Case Assignment File suggests that a substantial part of an investigator's working day is taken up by the scanning and monitoring of huge volumes of crime and arrest information in order to make connections between cases, suspects, and property. They indicate that the Kansas City detectives experience only limited success in these endeavors and offer the opinion that much of the scanning and monitoring could instead be done by information processing systems which would involve clerks and routine procedures in small departments and electronic computers in large ones.⁹²

Meaning of the Reform Is Unclear

The language of the proposed reform can be interpreted as meaning either

that the use of information processing systems should be increased to assist investigators or that this increased use should be undertaken to replace them. Be that as it may, information processing systems are tools which can provide valuable assistance to investigators. Information processing systems have been of major benefit to law enforcement agencies. However, these systems are not a substitute for investigators. To assume otherwise would run counter to the experience of most major police departments.

Conclusion

Irrespective of the meaning of this proposed reform, it is without an adequate research basis. The authors have possibly demonstrated that Kansas City detectives spend an unknown but substantial amount of time processing information while realizing but limited success in their endeavors. It is possible, depending upon the nature and current level of systematization of information processing in the Kansas City Police Department, that the detectives of that department could be materially assisted in achieving their goals by additional information processing systems. Given the data that the authors have provided, nothing more can be concluded from this proposed reform.

PROPOSED REFORM 8

PLACE POST-ARREST (i.e., SUSPECT IN CUSTODY) INVESTIGATIONS UNDER THE AUTHORITY OF THE PROSECUTOR"

A Bald Supposition

Before beginning the evaluation of this reform, it is first necessary to consider the authors' rationale:

"Generally, then, the prosecutor relies on police investigators to provide the evidence needed to prosecute and convict the suspect. But this situation contains an inherent conflict between the prosecutor and police. A police arrest is justified by *probable cause* — i.e., an articulable reasonable belief that a crime was committed and that the arrestee was the offender. But generally, because of the pressure of new cases and the expectation that the case will be bargained rather than tried, the police are reluctant to expend further investigative efforts to strengthen the evidence in the case. The prosecutor, on the other hand, may be reluctant to file charges that the police prefer, or to file at all, if he believes the evidence would not suffice for a conviction, i.e., *proof beyond a reasonable doubt*. It is clear that many cases are affected by the conflicting incentives of police and prosecutor, as reflected in failures to file, lenient filings, early dismissals, or imbalanced bargaining."⁹⁴

The implication here is that all these

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ills are brought on by having the police investigate crimes. The reader hastens through the Rand report volumes to find the source of these startling findings, but he looks in vain. The whole rationale is a bald supposition on the part of the authors, made without an offering of any data which might provide support.

A Promising Remedy?

Having "proven" the existence of the problem, a solution is provided: "A promising remedy for the problem would be to place post-arrest investigations under the authority of the prosecutor's office, under assignment or as an integral part of his staff, depending on the local situation."⁹⁵ And, where would all of the investigators required for the newly expanded district attorney's offices come from? Depending on the local situation, from the local police department.⁹⁶ The authors ask the rhetorical question, "Is this too drastic a measure? Would it not suffice for the prosecutor to prepare an investigation manual and help train police investigators? We believe that the latter would be a less satisfactory solution, given the dynamic character of criminal case law and the inherent conflicts between two relatively independent agencies."⁹⁷ What basis do the authors have for this belief? Do they believe that the police are incapable of learning case law and case preparation? And what basis do they have for their belief that district attorney investigators will do a better job of post-arrest investigation

than the police?

An Exercise in Redundancy

The district attorney investigators have a role to play in many jurisdictions in relation to certain categories of investigations, and there are instances where it is expedient for the district attorney's office to deal directly with victims and witnesses. However, almost all routine investigations can be more effectively and efficiently handled by the police investigators. The mere political considerations of a proposal to place post-arrest investigations under the authority of the prosecutor would be absurd in most jurisdictions.

If political obstacles could be overcome, it would still be a massive exercise in investigative redundancy, with the police investigators spending half of their time trying to show the district attorney's investigators what they had already done on the cases. The district attorney's investigators, being totally unfamiliar with crime scenes, victims, witnesses, informants, reports, tapes, and evidence, would spend most of the rest of their time going over the same ground the police investigators had already covered. In addition, there remains the questionable assumption that the district attorney investigators would have sufficient time to manage this unpredictable situation.

Conclusion

Probably the only additional comment this "reform" deserves is in relation to what the authors believe should

be done with it. In their words it should "... be in operation for at least two years before a conclusive judgment about its merits is made."⁹⁸ In considering the problems of applying this recommendation, one wonders whether it should be seriously entertained at all.

CONCLUDING REMARKS ON THE PROPOSED REFORMS

Much of what went awry with the Rand study and its subsequent reporting can probably be traced to unrealistic expectations on the part of the Rand researchers. These expectations, largely produced no doubt by popular stereotypes, led the Rand people to believe that they would discover the previously undescribed essences of the investigative process:

"We hoped to identify and describe those key program factors which led to improved effectiveness and to suggest how other police departments might modify their investigative practices to achieve the identified benefits. These hopes were not realized."⁹⁹

Having failed in its endeavor, it appears that Rand proceeded to erect a series of straw men which it then knocked down to provide a basis for provocative, and seemingly significant, findings and proposals. This is unfortunate. Several of its proposed reforms might be beneficial to police agencies. But, the defective methodology and ill-conceived conclusions associated with most of the study's findings and proposals do not encourage experimentation by the criminal justice system.★

¹Peter W. Greenwood and Joan Petersilia, *The Criminal Investigation Process Volume I: Summary and Policy Implications* (Santa Monica, California, The Rand Corporation, 1975), p. x.

²*Ibid.*, pp. vi-vii.

³*Ibid.*, p. 26.

⁴*Ibid.*, p. v.

⁵Peter W. Greenwood, Jan M. Chaiken, Joan Petersilia, and Linda Prusoff, *The Criminal Investigation Process Volume III: Observations and Analysis* (Santa Monica, California, The Rand Corporation, 1975) p. 4.

⁶Greenwood and Petersilia, p. 27.

⁷*Ibid.*

⁸Greenwood, Chaiken, et al., p. 52.

⁹*Ibid.*, p. 59.

¹⁰Greenwood and Petersilia, p. vi.

¹¹*Ibid.*

¹²Greenwood, Chaiken, et al., p. 65.

¹³Jan M. Chaiken, *The Investigative Process, Volume II: Survey of Municipal and County Police Departments* (Santa Monica, California, The Rand Corporation, 1975) p. 34.

¹⁴*Ibid.*, pp. 1-2.

¹⁵Greenwood and Petersilia, p. vi.

¹⁶*Ibid.*

¹⁷Chaiken, pp. 1-2, 34.

¹⁸Greenwood, Chaiken, et al., pp. 76-78.

¹⁹*Ibid.*, pp. 66-68.

²⁰*Ibid.*, pp. 82-83.

²¹*Ibid.*, pp. 72-73.

²²*Ibid.*, p. 72.

²³Greenwood and Petersilia, p. 14.

²⁴Greenwood, Chaiken, et al., pp. 82-83.

²⁵Greenwood and Petersilia, p. vii.

²⁶*Ibid.*

²⁷Greenwood, Chaiken, et al., p. 56.

²⁸Greenwood, Chaiken, et al., p. 56.

²⁹Federal Bureau of Investigation, *Uniform Crime Reporting Handbook* (Washington, D.C., January, 1974) pp. 19, 86.

³⁰Greenwood and Petersilia, p. vii.

³¹Greenwood, Chaiken, et al., p. vii.

³²Greenwood and Petersilia, p. vii.

³³Greenwood, Chaiken, et al., p. 46.

³⁴*Ibid.*, p. 51.

³⁵*Ibid.*, p. 52.

³⁶*Ibid.*

³⁷*Ibid.*, p. 59.

³⁸Greenwood and Petersilia, p. v.

³⁹Greenwood, Chaiken, et al., p. 59.

⁴⁰*Ibid.*

⁴¹Greenwood and Petersilia, p. vii.

⁴²*Ibid.*

⁴³*Ibid.*, p. 14.

⁴⁴*Ibid.*

⁴⁵Greenwood, Chaiken, et al., p. 76.

⁴⁶Greenwood and Petersilia, p. vii.

⁴⁷Greenwood, Chaiken, et al., pp. 65-78.

⁴⁸Greenwood and Petersilia, p. vii.

⁴⁹Greenwood, Chaiken, et al., pp. 69-83.

⁵⁰*Ibid.*, p. 69.

⁵¹Greenwood and Petersilia, p. viii.

⁵²*Ibid.*

⁵³Greenwood, Chaiken, et al., pp. 122-123; Greenwood and Petersilia, p. 21.

⁵⁴Greenwood and Petersilia, pp. 20-21.

⁵⁵*Ibid.*, p. 21.

⁵⁶Greenwood, Chaiken, et al., p. 105.

⁵⁷Greenwood and Petersilia, p. 21.

⁵⁸Greenwood, Chaiken, et al., p. 123.

⁵⁹Greenwood and Petersilia, p. ix.

⁶⁰Greenwood, Chaiken, et al., pp. 116-123.

⁶¹*Ibid.*, pp. 38, 108.

⁶²*Ibid.*, p. 108.

⁶³*Ibid.*, p. 119.

⁶⁴*Ibid.*

⁶⁵*Ibid.*, p. 121.

⁶⁶Greenwood and Petersilia, p. ix.

⁶⁷Greenwood, Chaiken, et al., p. 38.

⁶⁸Greenwood and Petersilia, p. ix.

⁶⁹Greenwood, Chaiken, et al., pp. 126-127.

⁷⁰Greenwood and Petersilia, p. ix.

⁷¹*Ibid.*, p. 27.

⁷²*Ibid.*

⁷³Greenwood, Chaiken, et al., p. 56.

⁷⁴Greenwood and Petersilia, p. x.

⁷⁵Greenwood, Chaiken, et al., p. 35.

⁷⁶Greenwood and Petersilia, p. x.

⁷⁷*Ibid.*, p. 30-31.

⁷⁸Greenwood, Chaiken, et al., p. 56.

⁷⁹*Ibid.*, pp. 52-53.

⁸⁰Greenwood, Chaiken, et al., p. 35.

⁸¹*Ibid.*, p. 36.

⁸²Greenwood and Petersilia, p. 27.

⁸³*Ibid.*, p. 28.

⁸⁴*Ibid.*

⁸⁵*Ibid.*, p. 14.

⁸⁶*Ibid.*, p. 28.

⁸⁷Greenwood, Chaiken, et al., p. 74.

⁸⁸*Ibid.*, pp. 69-74.

⁸⁹Greenwood and Petersilia, p. xi.

⁹⁰*Ibid.*

⁹¹*Ibid.*, p. 30.

⁹²*Ibid.*

⁹³*Ibid.*, p. xii.

⁹⁴*Ibid.*, pp. xii-xiii.

⁹⁵*Ibid.*, p. 31.

⁹⁶*Ibid.*

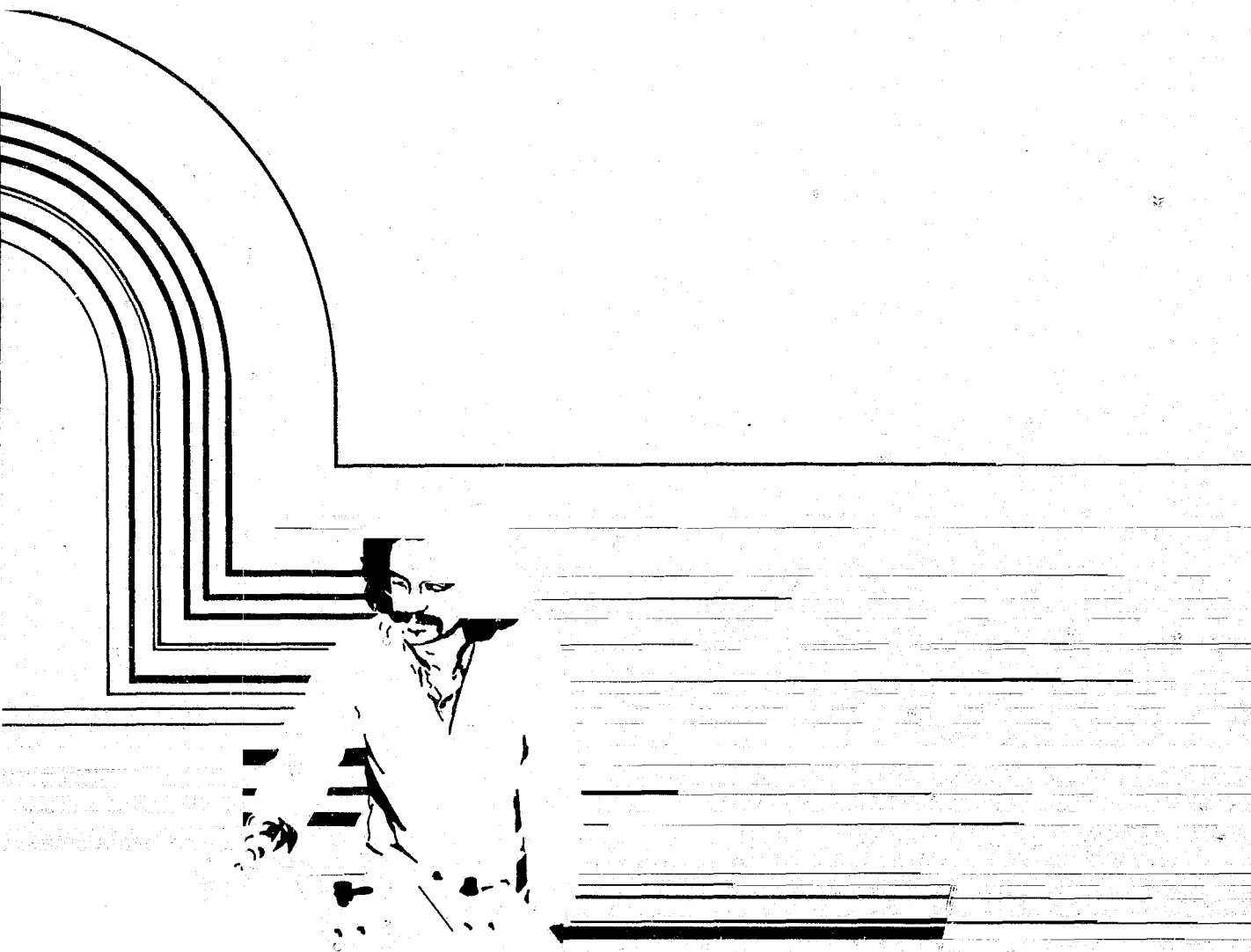
⁹⁷*Ibid.*

⁹⁸*Ibid.*, p. 27.

⁹⁹*Ibid.*, p. xiii.

Part III

Response to The Police Chief Article



RESPONSE TO —

By P.W. Greenwood,
J.M. Chaiken, and
J. Petersilia*

An Evaluation of the Rand Corporation's Analysis of the Criminal Investigation Process

The July issue of *The Police Chief* contains an article, "An Evaluation of the Rand Corporation's Analysis of the Criminal Investigation Process," by Daryl F. Gates and Lyle Knowles. The evaluation purports to demonstrate that the Rand Study:

"1. contains procedural errors that erase almost all hope of accuracy,

"2. has a fatally limited data base, and

"3. presents conclusions that do not follow from the data presented and which ignore a host of important related influences."

We believe that the evaluation is misleading to those not fully acquainted with our work, and therefore we prepared this article to correct misconceptions that might arise.

The principal substantive finding of our research² was that, although the solution or clearance of reported crimes is the primary focus of police investigators, most clearances are arrived at through the application of administrative procedures, with solutions for a very small percentage, concentrated in a few specific crime types, being generated through the use of what has been traditionally thought of as investigative efforts. Much of this traditional investigative effort is applied to crimes which empirical evidence shows will never be solved. As a result of this finding, along with others on fingerprint processing, the use of information systems, strike forces, victim satisfaction, and post-arrest investigation thoroughness, which are based on more limited data samples, we suggested a number of reforms which we believe might result in more effective investigation activity. We cautioned against adopting any of these reforms without careful evaluation of their possible impacts.

In the months that have passed since the publication of our reports, we have been made aware of instances of imprecise or misinterpretable wordings that we have modified in subsequent writings.³ But no one has brought forth contradictory evidence that suggests our basic conclusions are erroneous. Studies released during this period by the Police Foundation and by the Stanford Research Institute directly support some of our major findings.⁴ Manuscripts based on our reports have been accepted for publication in the research journal, *Policy Analysis*, and as a book by D.C. Heath. Both publishers subjected the work to knowledgeable outside reviewers.

Our conclusions and especially our policy recommendations should not be judged alone by whether they flow inevitably and exclusively from the data collected in our study. Instead they should be appraised in terms of whether they are within reason correct or incorrect as cast against a full backdrop of what is known about the criminal investigation process. The evaluators do not present other than their opinions that our conclusions are incorrect or inappropriate. Is it their view that every research study must be fully self-contained and should not express conclusions and recommendations based in part on known results by other researchers and on the interpretations of practitioners who worked with or advised the researchers? Both our research design and our findings were discussed in detail with police officials of various ranks and type of experience in investigative matters. They did not express reservations that our findings differ from what they believed was the situation in their own agencies. Indeed, some commented that our

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study was guilty of "overkill" in applying so much data to demonstrate what knowledgeable professionals already concurred in.

Gates and Knowles (hereafter referred to as the evaluators) repeatedly mention limitations of our data. These limitations were not discovered by them, but rather were clearly described in our reports. However, the evaluators go beyond reviewing the stated limitations and assert that "... because of problems of control, accuracy, and consistency, most researchers would not have used these data." This point is nonsense. It is the nature of social science research, especially concerning policy issues, that one must analyze and draw the best possible inferences from data with such shortcomings. Given imperfect data, it is the researcher's duty to point out its biases and other shortcomings, and this we have done. Our findings have not been represented as an ultimate appraisal of investigative effectiveness. We urged that further research be conducted to collect and analyze new data that would confirm, refine, or refute our results.

The evaluators mention two aspects of our case samples as data limitations. First, the samples are said to be "miniscule." A sample is not large or small simply as a matter of opinion, but its size must be judged in terms of the statistically determined levels of confidence with which one desires to draw inferences. For example, to predict which of two candidates would win a close local election, a properly selected sample of 100 voters would be inadequate for a reasonable level of confidence as to the outcome. Yet a properly drawn sample of this size would well suffice to show, with a high level of confidence, that neither candidate could be expected to receive over 80 percent of the votes. That is to say, the type of inference to be drawn governs sample size requirements. In our study we applied 95 percent confidence levels that were associated with our sample sizes and indicated when differences between statistical measures were significant by these criteria. In other words, our conclusions reflect differences that were found to be significant or they are worded in such a way as to indicate the degree of uncertainty that must be attached to numerical quantities.

The second fault of our samples is said to be that some findings are based on data from a small selection of police departments. Here the question is, in how many departments must researchers find similar patterns of data before these patterns may be considered to be representative of the national picture? Many of our findings had been previously reported by other researchers in studies of single departments. These studies could have been individually questioned on the grounds that the department studied might have been unique in some critical respect. But when, in our work, similar results emerge from several departments located in different parts of the country and having different organizations and procedures, they take on greater generality of interpretation.

Our reports did not assert that the study's findings applied to all departments. In fact, we presumed that exceptions exist, and we urged that each department "assure itself of the relevance of our work to its situation." Especially for types of information that are available in most departments, we showed how these data were tabulated, so that others could replicate the analysis. It is our hope that this will be done in many departments in the near future so that firmer conclusions about generality can be drawn.

The evaluators contend that our conclusions are inconsistent with our data and erroneously derived, contentions they sought to substantiate by citing items of data out of their full context and by reiterating the limitations that we described ourselves. Our broad rebuttal is that conclusions and recommendations necessarily reflect subjective inter-

pretations of the data examined and cannot be confined to a mere recital of the facial appearances of the data and their limitations. In order that the reader be made more conscious of where findings have been broadened by our subjective interpretations, conclusions of this nature were presented in a separate summary and policy implications volume (Vol. I) and not in the main text of the analysis volumes (Vol. II and Vol. III).

The evaluators dispute primarily statements of conclusions and recommendations of policy as appearing in Volume I rather than seriously disagreeing with the main text of the complementary volumes (apart from the objections to our case samples discussed above). They in fact cite the second and third volumes to support their criticism of the first volume, intimating that we did not subscribe to or respect our own statements concerning the nature of our findings and their limitations.

The evaluators' comments notwithstanding, our conclusions still appear to be sound. Gates and Knowles have not offered any evidence to the contrary.

The remainder of this article discusses in order and with greater specificity the items individually considered by the evaluators.

MAJOR FINDINGS

Major Finding 1

On investigation effectiveness: Differences in investigative training, staffing, workload, and procedures appear to have no appreciable effect on crime, arrest, or clearance rates.

The evaluation points out that no analysis of crime rates was performed. This is a correct observation, and the word "crime" should be removed from the statement of this finding. In regard to arrest and clearance rates, the finding is derived from cross-sectional analysis of our national survey data. The evaluation states that the source of the finding cannot be determined because we also mention in this connection the data collected from samples of case records in six departments. However, the case sample data are rarely described as helping to explain why the finding is true, not as establishing the finding in the first instance.

The evaluation claims that we have stated a finding where none exists. This comment appears to rest on the belief that when no relationship among variables is found, then nothing has been found. On the contrary, determining that no relationship is present among variables is a valid research finding that helps in developing new hypotheses that will clarify the phenomena under study. A "finding" is not a "call for action." It is simply a true statement that requires further explanation or analysis. In this case, our interpretation of the finding is exactly as the evaluation has quoted us: that departmentwide arrest and clearance rates are inadequate as measures of investigative performance because they primarily reflect the activities of noninvestigators, departmental policy, the nature of police-community relations, and a host of other factors. Thus, aspects of investigative staffing that are presumably related to "quality" cannot necessarily be detected in departmentwide arrest and clearance rates. However, since the observation is also subject to other interpretations, we have stated it separately as a finding.

Major Finding 2.

The method by which police investigators are organized (i.e., team policing, specialists vs. generalist, patrolmen-investigators) cannot be related to variations in crime, arrest, and clearance rates.

The source of this finding is the same as for Finding 1 and is subject to the same caveats and interpretations. In particular, the word "crime" should be removed. (The evaluators discussed our classification of case solutions in

their critique of this finding; but it is not directly relevant here and will be covered in connection with Finding 6, below.)

Major Finding 3

On the use of investigators' time: Substantially more than half of all serious reported crimes received no more than superficial attention from investigators.

Here the evaluators appear to be criticizing our report for presenting superfluous data. While it is true, as claimed, that we describe the fraction of cases of "dead body" and "vandalism" that detectives work on, the finding refers to investigation of reported felonies, for which data are also given.

The finding was initially reported to us by our field investigators who spent many weeks observing the activities of investigators and asking them questions about the cases they pursued and did not pursue. However, to develop adequate quantitative information about the extent to which cases receive only superficial attention through the technique of field observation would have required many man-years of effort. To validate, then, the impressions based on observations and interviews, we turned to the Kansas City case assignment file. These data show that reported homicides and rapes invariably received at least a half-hour's investigative time in Kansas City, and well over half of aggravated assaults and robberies received similar attention. But most felonies do not fall in these categories. For homicides, rape, other felony sex crimes, kidnapping, aggravated assault, robbery, burglary, auto theft, and larceny together, 35.2 percent received at least a half-hour's attention, or 64.8 percent did not. We call this latter percentage "substantially more than half" of serious crimes. (The figure of 49.9 percent reported by the evaluators is erroneous because they failed to take into account the relative numbers of crimes, e.g., that there are more burglaries than homicides, a fact that we pointed out in Volume III even though it does not appear necessary except for readers unfamiliar with police work.)

Major Finding 4

Our data consistently reveal that an investigator's time is largely consumed in reviewing reports, documenting files, and attempting to locate and interview victims on cases that experience shows will not be solved. For cases that are solved (i.e., a suspect is identified), an investigator spends more time in post-clearance processing than he does in identifying the perpetrator.

The first sentence is indeed badly worded and speaks to several different issues at once. Criticism of this statement that we received immediately after its publication led to clarification in our subsequent briefings and writings about this study. The facts are essentially as stated by the evaluators and are clearly described in the main text of Volume III. First, the primary case-related activities of investigators are reviewing reports, documenting files, and attempting to locate and interview witnesses. Second, for those cases that detectives work on, the average time devoted to a case that is never cleared is greater than the average time required to clear one that is cleared. In other words, it is not true in general that the greater the investigative effort devoted to a crime the more likely it is to be cleared. Third (but this is not mentioned in the finding), investigators spend somewhere around 40 percent of their time on noncasework activities. Part of this time was reported by us as "unaccounted for," meaning that it was not explained in the Kansas City file that we used. Since we have been made aware of some unanticipated interpretations of the term "unaccounted for," we wish to emphasize here that the categories of activities to be recorded in the file did not include all conceivable activities of investigators. We do not find it at all unreasonable that

some 20 to 40 percent of investigators' time (varying by unit) would be spent on activities that they were not expected to record in the file. Examples include reading teletypes, travel to various locations, checking out junkyards or pawnshops, answering questions from the public or the press, and the like.

The second sentence of this finding was firmly established for nearly every crime type in Kansas City, and the figures were judged reasonably applicable by investigators in other cities who cooperated with the study. Again the evaluators appear to fault us for presenting more data than are needed to reach this conclusion. But Table 5-6 in Volume III permits the reader to consider any particular crime or collection of crimes of interest to him and determine that the sentence is true for those crimes. The reader is free to ignore all other crimes, if he chooses, but the assertion is true for them also.

Major Finding 5

On how cases are solved: The single most important determinant of whether or not a case will be solved is the information the victim supplies to the immediately responding patrol officer. If information that uniquely identifies the perpetrator is not presented at the time the crime is reported, the perpetrator, by and large, will not be subsequently identified.

We do not believe anyone would seriously contest the observation that crimes in which no suspect is named are much less likely to be cleared than those in which a suspect is positively identified or apprehended at the scene. The thrust of this finding is that the majority of cleared crimes fall into the latter category, i.e., where a suspect is known at the time the crime report is taken. (The finding applies not only to the totality of crimes but also to each crime type examined, except auto theft.) It requires little special knowledge about clearance rates for Part I crimes (which are displayed in Volume II) to realize that if more than half of cleared crimes are accounted for by initial identification of the suspect, then crimes with no initial identification have a relatively low probability of being cleared.

The evaluators' claim that the source of this finding is not given is preposterous in light of the fact that Volume III has an entire chapter entitled "Analysis of How Crimes Are Solved." Chapter 6 not only describes the data collected and analyzed for this study but also indicates that the finding draws on results of three previous studies. Isaacs, in a 1967 study of 1905 crimes reported to the Los Angeles Police Department,⁶ found that of 336 crimes cleared by arrest, 203 (or 60 percent) had a named suspect in the initial crime report, and of 1,556 crimes without a named suspect, 133 (or 8.6 percent) were cleared by arrest. Conklin, in a study of 259 robberies reported to the Boston Police Department in 1968,⁷ found that in 74 percent of cleared robberies the suspect was known by arrest at the scene or by victim identification. Smith,⁸ in a study of 59 cleared robberies in Oakland in 1969, found that a victim or witness was responsible for case solution in 61 percent and that the suspect was known at the time of the crime report was filed in 80 percent of cleared robberies.

Other studies, by Greenberg, et al.,⁹ of 1974 Oakland crimes and by Bloch and Bell¹⁰ of 1973 Rochester crimes, while not specifically addressing the exact topic of this finding, provide adequate information for the reader to deduce that the same pattern prevails for the times and locations studied.

We view our analysis not as uncovering this finding but as adding fresh evidence for its confirmation. Moreover, the detailed tabulations we provide permit future analyses in other cities to have a base of comparison. To date, the fraction of cases solved by initial identification had displayed

remarkable similarity across departments. If a department with substantially different figures can be found, then an analysis of the underlying causes of the difference could be very illuminating.

Major Finding 6

On how cases are solved: Of those cases that are ultimately cleared but in which the perpetrator is not identifiable at the time of the initial police incident report, almost all are cleared as a result of routine police procedures.

The critique of this finding rests mostly on the claim that case solutions were categorized as "routine" in an arbitrary and specious fashion. Reference to this problem was also made by the evaluators in their discussion of Major Finding 2, but it applies primarily here. An important point is that the Rand staff undertook the analysis with the objective of identifying and describing the key factors that lead to improved effectiveness in investigating crimes that are reported without a named suspect. From the research point of view, then, it was a considerable disappointment to find so few cases in which any noticeable application of investigative skill bore an apparently causative relationship to the case outcome.

Only someone who collects together some investigative files and asks for each case "How was this solved?" can begin to realize that no subtle judgments are involved in distinguishing "routine" from "special action" cases. The reviewer of the files must simply be careful to distinguish between the cause of the case solution and the various, possibly ingenious, steps taken by the investigator without identifying the perpetrator. If the investigator puts out a "want" for the license number of the perpetrator's car (as recorded by a witness), and the suspect is subsequently arrested by a patrol officer, is this a "special action" case? If the perpetrator voluntarily and unexpectedly surrenders to the police, is this "special action"? If the investigator shows the victim a book of mug shots that was previously prepared for all crimes of the type in question, leading to an identification, is this "special action"? (This is an example of a solution that is routine for an investigator but would not be routine for someone else.) If the victim tells the police officer the exact location of the suspect's car, and the suspect is sitting in the car, is this "special action"?

In every instance where there was any indication that investigative skill played a role in case solution, we recorded the case as special action. For example, when an investigator had no suspect identification but did obtain a description of a suspect with distinctive hairdo and facial features, the clearance that was produced by a patrol officer who read the investigator's bulletin was classified as "special action." A case solved by matching latent prints to inked prints in a file organized by *modus operandi* is a good example of "special action."

We are confident that even if a department establishes a restricted definition of what constitutes "routine processing" it will find that investigative skill or "special action" contributes to under 10 percent of all its clearances (but more, of course, for certain crimes such as homicide or commercial theft). The point is not that the special action cases are uninteresting or unimportant in the overall police role, but rather that they are numerically uncommon when compared to the totality of cleared cases. It is for this reason that differences in the quality of investigative work among units or departments can be expected to have only a small effect on total clearance rates, except for the crime types we noted in our report.

This finding is also supported by the work of other researchers. For example, the 1974 Greenberg study of crimes in Oakland showed that 85 percent of 413 assaults with a deadly weapon were cleared, but only two clearances

were produced in cases with unnamed suspects more than 8 hours after the crime was reported (i.e., as a result of a follow-up investigation). In Conklin's study of robberies, 7.3 percent of clearances were attributed to "police investigation."

Major Finding 9

On investigative thoroughness: In relatively few departments do investigators consistently and thoroughly document the key evidentiary facts that reasonably assure that the prosecutor can obtain a conviction on the most serious applicable charges.

Our overwhelming impression from site visits in both police departments and prosecutors' offices around the country was that the quality of investigative documentation is a problem in most jurisdictions, the exceptions being those that have projects specifically directed at improving police-prosecutor interactions. However, we agree with the evaluators that the research design, which consisted of interviews in 28 jurisdictions and actual inspection of investigative reports in only eight of them, was inadequate to support the stated conclusion that "in relatively few departments" was the documentation of high quality. Rather, we should have asserted that "in many large departments investigators do not consistently and thoroughly document the key evidentiary facts . . ." This revision of the wording, however, in no way dilutes the fact that we believe the documentation of investigative findings is an important area for improvement.

As in the case of Finding 3, we attempted to verify our field observations by collecting quantitative information in two jurisdictions. The evaluators are distressed that our descriptions of the filing policies and practices that distinguished the prosecutors' offices in the two jurisdictions are "without supporting data."¹¹ Here we are culpable of brevity, but the source of the data is in fact mentioned. Footnote 2, p. 105, of Volume III indicated that the Rand researchers were familiar with both of the selected prosecutors' offices by reason of an earlier published, widely available Rand study.¹² These characterizations were not ours alone, but reflected the expressions by responsible officials of these offices.

We plainly stated that the limited two-jurisdiction study was illustrative and illuminative.¹³ It was intended to put what we and others saw as a professional tension between police investigators and prosecutors' offices in concrete terms — to demonstrate that the issue of how thorough an investigation need be to avoid blame for a decision not to file or a failure to convict was not an illusory question. We selected two jurisdictions that were known to differ markedly in characteristics relevant to this research exercise. And we sought, as stated, to show by means of statistical evidence based on modest samples of robbery cases, that two modern police departments could substantially differ in the completeness of evidentiary documentation provided to their respective prosecutorial offices.

The evaluators' judgment that 43 robbery cases were not an adequate sample would undeniably be sound if our purposes included, as the evaluators evidently felt they should, the measurement of the independent effects of all significant variables influencing investigative thoroughness, or the degree to which incomplete investigative documentation governed case disposition, relative to other variables. For the latter purposes, which we did not avow, much larger samples and much more sophisticated analytical techniques would be entailed.¹⁴ However, samples of 20-plus cases in each jurisdiction can suffice to illuminate two facets of a controversy between police and prosecutors, which was conspicuously stated to be our purpose.

The evaluators denigrated the questionnaire of 39 evidentiary items on the grounds that it reflected the opinions of

only one "experienced" (their quote-marks) prosecutor and that we did not know its true relevance to successful prosecutions. For their first ground the evaluators chose to ignore the statement on p. 105 that "This data form . . . was developed on the basis of discussions with prosecutors, detectives, and police supervisors." As to the second ground, we should first concede a semantical lapse on p.viii of Volume I where we described the items of the questionnaire as being considered by a prosecutor as *necessary* for effective case presentation, when we should have used the term *desirable* (that is, we intended the list to be as complete as we could make it at the time). Nevertheless, we stated on p. 105, Volume III, the following: "Of course, some individual cases may require less investigative information than is covered by this form; others may require more. Nevertheless, it is sufficiently comprehensive to be useful for investigator training; to be applied as a checklist in conducting an investigation; to serve as a performance measure for the needs of investigator supervisors; and to aid the prosecutor's office in making decisions on complaint filing." But, to reiterate, we hoped that the evidentiary items in the list more or less included the requirements for all types of robbery cases. As to our use of the list to assess the performance of the two prosecutors' offices studied, the evaluators are indeed correct to observe that the criterion of completeness in reporting the listed evidentiary items is not tantamount to a criterion of prosecutorial success. Some individual cases may require less information, others may require more. But for the purpose of our analytical exercise, the questionnaire did suffice to disclose that marked differences existed between the amount of relevant investigative information furnished the respective prosecutors' offices in a sample of robbery cases. And, as a consequence, we did not need to rely wholly on the subjective statements of involved individuals that these differences existed.

Major Finding 10

Police failure to document a case investigation thoroughly may have contributed to a higher case dismissal rate and a weakening of the prosecutor's plea bargaining position.

The evaluators, while acknowledging that we revealed a genuine awareness of obstacles in relating case dispositions and investigative quality and chiding our use of the hedge-word "may" in the finding statement, assert that we have reversed ourselves in moving from Volume III, which admits pervasive inconclusiveness in results, to Volume I, which asserts certitude about differences between the jurisdictions studied concerning case dispositions.

We have already commented about differences in tone between Volume I and Volume III, reflecting the breadth of their respective considerations, so we need not repeat this point to the extent that it applies here.

The evaluators buttress their criticism by quotations out of the context of our report. For example, they cite our concession: "It is not clear that any of these dismissals could have been avoided by better police investigation and reporting in 'B' " as evidence of inconclusiveness, which it is, but fail to include the following statement: "Yet, if the investigation had been more thorough in 'B', the charges might not have been filed . . ." which is the point of the preceding statement rather than the inconclusiveness of dismissals.¹⁵ And they employ our statements about the inconclusiveness of sentencing outcomes to contradict statements that the two jurisdictions displayed significant differences in case dismissals and pleas of guilty to charges as filed.

The salient point for us to make here, however, concerns the evaluators' intimation that we held out the two-jurisdiction study as one which succeeded in converting information about case disposition into a valid measure of the

quality of investigative work, where all before us had failed. Our claims were far more modest: "We believe that the differences in dismissal rates disclosed in this study are important. For this reason, among others, criminal justice officials should be mindful of the level of investigative thoroughness maintained in their jurisdiction. In addition, this research could be used to support a policy of presenting all available information to the prosecutor in written form, since no negative disposition effects were witnessed in a jurisdiction where such a policy was in effect."¹⁶ It seems regrettable that the evaluators have not accepted this self-appraisal of what the two-jurisdiction study accomplished.

Additionally, the evaluators contend that the finding is not supported by fact, and results from Rand's inability to "resist straying from the path of scholarly rectitude to create a 'finding' where none exists." For some reason, the evaluators have ignored pages 104 through 122 in Volume III, which are devoted exclusively to presenting facts which directly support that statement. The stated finding requires evidence to show, first, that a lower-level "documentation" does exist in one department, and secondly, that this department is characterized by higher dismissal rates and a greater amount of plea bargaining. The evidence to show that the degree of thoroughness differs in the two chosen jurisdictions is contained in pages 104 through 116, Volume III. The data show that each of the 39 questions was on the average covered in 45 percent of the cases in our A sample; 26 percent of the cases in our B sample. However, there is considerable variation in percentage coverage among the four subject areas comprising an investigation. On items detailing the offense, the data show that on the average the questions were addressed in 57 percent of the cases in our A sample, and by 36 percent in our B sample; with respect to the "suspect" questions, 39.3 percent for A versus 14.0 percent for B; for "victim-witness," 31.1 percent for A versus 3.4 percent in B; and for arrest, 52 percent for both sample jurisdictions (pages 113 and 114, Volume III). The first burden of proof has been provided.

Secondly, the data showing differences in the dismissal rates and the level of plea bargaining are contained in pages 116 through 122, Volume III. With reference to dismissal rates:

"No cases in our A sample were dismissed (the jurisdiction previously shown to possess more thorough police investigations). Nearly 23 percent of the cases in our B sample were dismissed. Furthermore, to determine whether or not the large differences in dismissal rates held constant in a larger sample, another 50 cases were randomly selected to look at dismissal rates only. In this larger sample, 24 percent of the cases in jurisdiction B were subsequently dismissed, whereas none was dismissed in A. Therefore, we can conclude that indeed there is a significant difference in the number of cases that are subsequently dismissed in the two jurisdictions" (page 119, Volume III).

With reference to level of plea bargaining, a comparison between A and B of the heaviness of plea bargaining showed the following:

"The charges on which the defendant was bound over to the superior court were more frequently identical to the arrest charges in jurisdiction A than in jurisdiction B." (Arrest charges were unchanged in 88.8 percent of the cases filed in A versus 63.5 percent in B; see Table 8-4, Volume III.)

"In jurisdiction A, 61.1 percent of the defendants pled guilty to the crime as charged in the information, with no apparent plea bargaining concessions; whereas in jurisdiction B, 31.8 percent of the defendants pled guilty as charged. The remainder of the cases were either dismissed or plea bargained in some manner" (page 122, Volume III).

"All of the cases in jurisdiction A were disposed of when the defendant entered a guilty plea to the charge; whereas in jurisdiction B, 15 percent (three) of the cases ended in either a court or jury trial" (page 122, Volume III).

The above finding, which our critics allege is not supported by fact, follows quite logically from the factual data presented in the report.

PROPOSED REFORMS

Reforms were proposed in Volume I of our report as potentially constructive changes that might produce manpower savings, increased arrests, or higher conviction rates. We unequivocally asserted that the proposals must be tested in practice to ascertain if such benefits can be realized. The rationale for each proposed reform was drawn from the data presented, from observations made while visiting various departments, and from discussions with a variety of professionals. The evaluators, at several points in their article, question the validity of these proposals because they are not fully substantiated by only the empirical data that we collected. Such criticisms ignore the spirit in which these proposals were openly offered and the stated qualification that they must be evaluated by suitable test.

Reform 6, for example, proposes the increased use of information systems in lieu of investigators for routine monitoring and scanning tasks — a proposal that the evaluators find to be “without an adequate research basis.” The actual nature of the research was as follows: First, through our survey and interviews we identified information systems that are believed to be extremely valuable by the departments that have them, but we were unable to state unequivocally that they are effective because we did not find any convincing evaluations of them. Second, our staff carefully reviewed three information systems and prepared a document describing them. This document is available to police departments but, in accordance with the confidentiality agreements under which we obtained the information, it has not been published. It was provided to Chief Gates’ department at the same time as the other volumes of our report. Third, we found that a common source of case clearances was “routine processing,” which included many instances of use of information systems. In particular, the capability of patrol officers to determine rapidly whether a vehicle is stolen, or, more important, whether an occupant of the vehicle is wanted for questioning produced numerous case solutions. Well-organized files providing rapid access to mug shots or pawn slips having specified characteristics also lead to clearances that, while “routine,” could not have occurred in the absence of such systems.

Reform 1, which proposes the reduction of follow-up investigative efforts on all but the most serious offenses when no suspect has been clearly identified, is sharply criticized by the evaluators. They have difficulty perceiving where investigative efforts might be pared and they are troubled by a loss in deterrence if some crimes were not investigated.

Our observations suggest, consistently with our data, that a substantial proportion of an investigator’s time is expended on efforts applied to cases that are unlikely to be solved. In particular, the Kansas City data base disclosed that approximately 24 percent of an investigator’s time could be thus attributed.¹⁷ Furthermore, not all of the cases for which such efforts are likely to be futile involve crimes of a grave nature. The evidence suggests to us that better case screening would make savings of investigative time possible by diverting investigators from unpromising cases. We also believe that some of the non-casework time of investigators is actually “overhead” related to casework, so that a portion of this time could also be saved by case screening.

The potential effectiveness of case screening is supported by the Rochester study: “[A] factor accounting for the greater success of the teams in making arrests for burglary and robbery as a result of follow-up investigations was the teams’ use of the ‘early case closure’ procedure. This procedure was used to weed out potentially worthless cases from potentially worthwhile cases, that is, cases in which follow-up investigation was likely to be productive.”¹⁸

It is not true, as the evaluators intimate, that the deterrent value of investigative efforts went unconsidered. We discussed the issues involved and gave reasons why we would

not attempt to measure this value.¹⁹ We are not aware of evidence that crime rates would be significantly affected if unsolvable crimes were generally not investigated, though we accept this as a possibility. Since investigative efforts applied to unsolvable cases do not increase the apprehension rate, any deterrent effect would depend upon the offenders being aware that the investigation is taking place. For publicly visible crimes this, of course, occurs, but further research will be needed to ascertain its likelihood in other types of cases.

Reform 2, which proposes that generalist investigators (who would handle the obvious leads in routine cases) be assigned to the local operations commander, prompts the evaluators to question our findings on how cases are solved and to assert incorrectly that we concluded “no investigative expertise” is required for handling routine cases. To the contrary, our conclusion was that the vast majority of crimes required no specialized skills over and above what a well-trained police officer would be expected to possess in handling a felony complaint. Our data disclosed that the investigative activities of crime-scene search, suspect interrogation, and obtaining search warrants infrequently produced crime solutions, so the examples advanced by the evaluators do not substantially undermine our proposal.

The challenge to this proposal made by these evaluators is particularly puzzling since it is consistent with recent changes in the Los Angeles Police Department’s organizational structure — namely, elimination of the chief of detective’s position, assignment of primary investigative responsibilities to area commanders, and adoption of team-policing concepts at the area level.

Reform 4, proposing that serious offense investigations be assigned to closely supervised teams rather than to individual investigators, is challenged in that it does not directly deal with the problem of improper supervision. To the contrary, this proposal is intended to expand the supervisor’s role and provide him with opportunities to use his experience. The evaluators’ skepticism about the potential value of organizational changes to improve supervision appears to reflect a concern that superior officers are in some sense incapable of better supervision, a thought that we do not share and that is also controverted by the Rochester findings related to centralized case management.²⁰

Reform 8, placing post-arrest investigations under the authority of the prosecutor, is disputed on a number of grounds. For one thing, the evaluators contend that we have not offered data to support the finding that case dismissals or pleas to reduced charges might be the consequence of inadequate reporting of investigative work (which, in turn, might be the consequence of inadequate investigation). Yet the body of Chapter 8, Volume III, is entirely directed to that finding. The results were admittedly inconclusive in various respects, so the finding itself is grounded on views expressed to us as well as on hard data. Here again we have urged that further research be done to evaluate this finding.

We do not believe, as the evaluators intimate we do, that police are incapable of mastering case law and case preparation. But we do believe that their application by the police is seldom of the highest priority.

The evaluators further assert that political considerations alone would render our proposal absurd in most jurisdictions. Regrettably, they did not elaborate on this point. Several of LEAA’s Career Criminal Cities have assigned senior investigators to work with the prosecutor without encountering political repercussions.

Finally, the evaluators insist that the proposed reform would produce redundant efforts between police investigators and prosecution investigators. In rebuttal, we observe that many suspects are handled by police investigators not at all. They are arrested by a patrol officer,

and the information on the offense that is communicated to the prosecutor is solely that contained in the patrol officer's report. In such instances redundancy would not occur.

But suppose that police investigators have worked on a case. Must it be regarded as an unnecessary burden on them to inform prosecution investigators of what they have done? Such information would have to be communicated for supervision and prosecution purposes in any event. Only if police investigators fail to document their efforts — a situation we frequently encountered — would there be an added burden imposed by this proposed reform.

As a final note, we regret that our findings and proposals were first communicated to most police administrators

through their local media, rather than by direct presentation from us. Those who have heard us present our findings or have had an opportunity to read all our reports on this study realize that we have given a balanced appraisal that cannot be captured by a few highlighted sentences. We are dismayed that some municipal officials are employing what they believe to be the results of our study as a rationale to reduce police budgets at a time when law enforcement personnel as a whole are more acutely needed than ever. We continue to hope that the results of our work will provide an objective basis for police administrators to explore more productive uses of their manpower and for the public to reach a more realistic appreciation of what law enforcement can reasonably be expected to accomplish. ★

¹D. F. Gates and L. Knowles, "An Evaluation of the Rand Corporation's Analysis of the Criminal Investigation Process," *The Police Chief*, July 1976, p. 21.

²P. W. Greenwood and J. Petersilia, *The Criminal Investigation Process*, Vol. I: *Summary and Policy Implications*, R-1776-DOJ, The Rand Corporation, October 1975.

³J. M. Chaiken, *The Criminal Investigation Process*, Vol. II: *Survey of Municipal and County Police Departments*, R-1777-DOJ, The Rand Corporation, October 1975.

⁴P. W. Greenwood, et al., *The Criminal Investigation Process*, Vol. III: *Observations and Analysis*, R-1778-DOJ, The Rand Corporation, October 1975.

(These reports are sometimes referred to in the text simply as Vol. I, Vol. II, and Vol. III.)

⁵J. M. Chaiken, P. Greenwood, and J. Petersilia, *The Criminal Investigation Process: A Summary Report*, P-5628, The Rand Corporation, April 1976 (rev. June 1976).

⁶Peter B. Bloch and James Bell, *Managing Investigations: The Rochester System*, The Urban Institute, Police Foundation, 1976.

⁷Greenberg, et al., *Felony Investigation Decision Model—An Analysis of Investigative Elements of Information*, Stanford Research Institute, December 1975.

⁸Greenwood and Petersilia, Vol. I, op. cit., p. xi.

⁹Herbert H. Isaacs, "A Study of Communications, Crimes, and Arrests in a Metropolitan Police Department," Appendix B of Institute of Defense Analyses, *Task Force Report: Science and Technology, A Report to the President's Commission on Law Enforcement and Administration of Justice*, U.S. Government Printing Office, Washington, D.C., 1967.

¹⁰John Conklin, *Robbery and the Criminal Justice System*, J.B. Lippincott Co., Philadelphia, 1972.

¹¹William Smith, "Robbery: Getting Caught," Chapter 2 in Floyd Feeney and Adrienne Weir, *The Prevention and Control of Robbery, Volume IV: The Response of the Police and Other Agencies to Robbery*, The Center on Administration of Criminal Justice, University of California at Davis, 1973.

¹²Greenberg, et al., *Felony Investigation Decision Model—An Analysis of Investigative Elements of Information*, Stanford Research Institute, December 1975.

¹³Peter B. Bloch and James Bell, *Managing Investigations: The Rochester System*, The Urban Institute, Police Foundation, 1976.

¹⁴D. F. Gates and L. Knowles, op. cit., p. 24.

¹⁵P. W. Greenwood, et al., *Prosecution of Adult Felony Defendants in Los Angeles County: A Policy Perspective*, The Rand Corporation, R-1127-DOJ, March 1973.

¹⁶See, for example, Vol. I, p. 20, and Vol. III, p. 104.

¹⁷See our comments on this matter on p. 123, Vol. III.

¹⁸P. W. Greenwood, et al., Vol. III, op. cit., p. 119.

¹⁹Volume III, p. 123.

²⁰The evaluators fault our study for overreliance on the Kansas City data base. Early in our study we determined that no other data source in the country was comparable to the Kansas City data base in the nature and detail of its contents. We did not single out the Kansas City data resources from a number of alternatives for the purpose of economizing on our efforts. Instead we subjected this data base to intensive analysis because it was the only existing comprehensive source of certain types of data. Then, having performed this analysis, we exerted our efforts to ascertain the relevance of Kansas City experience to other communities.

²¹Bloch and Bell, op. cit., p. 45.

²²Greenwood, et al., Vol. III, op. cit., pp. 35, 36.

²³Bloch and Bell, op. cit.

Part IV
The Criminal Investigation Process:
A Summary Report
The Rand Paper Series



THE CRIMINAL INVESTIGATION PROCESS:

A SUMMARY REPORT

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ABSTRACT

The criminal investigation process in municipal and county police departments was studied by survey, interviews and observations, and special data collection. Investigators spend about 7 percent of their time on activities that lead to solving crimes. Case solutions reflect activities of patrol officers, members of the public, and routine clerical processing more than investigative techniques. Nearly half of investigators' case-related activities are devoted to post-arrest processing; these activities are inadequately responsive to the needs of prosecutors. Collecting physical evidence at crime scenes does not help solve crimes unless evidence processing capabilities are adequate. Policy implications are discussed.

NOTE: A version of this paper will appear in the journal Policy Analysis, Volume 3:2, Spring 1977.

The criminal investigation process is one of the more important functions of municipal and county police departments. Yet many police administrators know little about the nature or effectiveness of their own department's investigative operations and even less about other departments.

At the request of the National Institute of Law Enforcement and Criminal Justice, The Rand Corporation undertook a nationwide study to fill some of these knowledge gaps.¹ The objectives of the two-year study were:

- o To describe, on a national scale, current investigative organization and practice.
- o To assess the contribution that police investigation makes to the achievement of criminal justice goals.
- o To ascertain the effectiveness of new technology and systems being adopted to enhance investigative performance.
- o To reveal how investigative effectiveness is related to differences in organizational form, staffing, procedures, etc.

While the objectives were broad, many questions of potential interest had to be excluded from consideration in order to have a study of manageable size. In particular, the study was focused on investigations of Part I crimes,² thereby excluding analysis of how misdemeanors and vice, narcotics, and gambling offenses are investigated. Also, little attention was paid to personnel practices such as selection, promotion, and motivation of investigators.

Several principles guided our design of the study. First, it had to be conducted with the participation and oversight of experienced police officials from around the country. Second, information had to be collected from many police departments, since single-city studies had already been conducted and failed to be persuasive by virtue of the possibility that the host department was unique in some way. Third, in as many departments as possible, information had to be obtained by direct on-site interviews and observations.

Participation by the law enforcement community was accomplished by appointing an advisory board,³ retaining a prosecutor and retired federal and local investigators as consultants,⁴ and assembling a panel of currently working investigators. The advisory board reviewed and vigorously criticized our research approach, data-collection instruments, findings, and interpretations of the findings. The consultants assisted in designing data instruments and participated with Rand staff in on-site interviews in many locations. The panel of working investigators commented on the validity of our observations in other cities, by comparing them with their own daily experiences, and highlighted important issues that could not be captured by numerical data.

Collection of data from a large number of departments was accomplished by developing a comprehensive survey questionnaire and distributing it to all municipal or county law enforcement departments that had 150 or more full-time employees or that served a jurisdiction whose 1970 population exceeded 100,000. This survey produced extensive information from 153 jurisdictions (of the 300 solicited) on such topics as department characteristics, investigator deployment, investigator

training and status, use of evidence technicians, nature of specialization, evaluation criteria, prosecutorial interaction, case assignment, use of computer files, and crime, clearance, and arrest rates.⁵ For example, the number of officers assigned to investigative units was found to average 17.3 percent of the police force. Thus, the investigative function costs about \$1 billion per year in the United States, approximately the same as the entire court system.⁶

On-site interviews were conducted in more than 25 of the 153 police agencies. Many of these were selected because they were known to have implemented novel investigative practices that were reportedly successful, while others were selected based on their survey responses. Project staff and consultants visited each of these departments, observing and participating in the operations of the investigative units and discussing their procedures with personnel at various departmental levels. In some cities, Rand staff monitored individual investigators and their supervisors continuously over a period of several days to obtain realistic profiles of their activities.

From some departments we obtained written evaluations of their investigative programs. In addition, several departments cooperated closely with the Rand staff and provided access to data that were subsequently used in one of the component studies.

One useful data source located during the course of the survey and made available was the Kansas City (Missouri) Detective Case Assignment File, which had been maintained in that department since 1971. On the basis of daily information submitted by individual detectives, this computer file permitted us to determine, for each investigator and each

investigative unit, a description of the time spent on various activities, the number of cases handled, and the number of arrests and clearances produced. This unique information source greatly facilitated the analyses of how detectives spend their time and to what purposes and effects.

Additional sources of information used in the study included a computer-readable file of 1972 Uniform Crime Reporting data provided by the FBI and a limited telephone survey of robbery and burglary victims.

ARREST AND CLEARANCE RATES

Several earlier studies, each conducted in a single city or a small number of nearby cities, had shown that department-wide clearance⁷ and arrest statistics are not suitable measures of the effectiveness of investigative operations. Our own study, using data from cities across the country, confirmed this observation in several different ways. The implication is that measures of effectiveness related to solving crimes must be defined carefully and can only be interpreted in conjunction with other information related to prosecution of arrestees, public satisfaction with the police, deterrence effects, and so forth.

In a study in New York City published in 1970, Greenwood⁸ found that the average number of clearances claimed for each burglary arrest varied from 1 to 20 across the city's precincts, depending on how frequently clearances were credited on the basis of modus operandi only. Similarly, Greenberg's 1972 study⁹ in six California departments found wide variations in clearance rates that arose from differences among departments in the strictness of their application of FBI "exceptional clearance" guidelines. Our own study,¹⁰ using 1972 data from all departments with 150 or more employees, showed that the average number

of clearances claimed for each arrest for a Part I crime ranged from a low of 0.38 to a high of 4.04, a factor of over 10. The ratio from high to low was even larger for each individual crime type, such as robbery or auto theft. Some departments claim a clearance for an auto theft whenever the vehicle is recovered, while others will not claim a clearance unless the perpetrator is arrested and charged for the instant offense. Clearance statistics are also affected by the amount of effort devoted to classifying reported crimes as "unfounded" (i.e., the police find there is no evidence that a crime was actually committed). This practice reduces reported crime rates as well as increasing reported clearance rates.

With administrative discretion playing such a large role in determining a department's clearance rates, any attempt to compare effectiveness among departments using clearance rates is evidently meaningless. Even comparisons over time within a single department are unreliable unless steps are taken to assure that no change occurs in administrative practices concerning clearances and classification of crimes. Arrest rates are also unreliable measures of effectiveness, since arrests can be made without resulting in any clearance.¹¹ The frequency of such events can be judged from the fact that in half of all departments the number of arrests for Part I crimes exceeds the number of clearances.¹²

Quite apart from the unreliability of arrest and clearance rates is the fact that they reflect activities of patrol officers and members of the public more than they reflect activities of investigators. Isaacs,¹³ Conklin,¹⁴ and our own study showed that approximately 30 percent of all clearances are produced by pickup arrests by patrol officers who respond to the scene of the crime.¹⁵ In roughly another

50 percent of cleared crimes (less for homicide and auto theft), the perpetrator is known when the crime report is first taken, and the main jobs for the investigator are to locate the perpetrator, take him or her into custody, and assemble the facts needed to present charges in court. (See Table 1.) This means that around 20 percent of cleared crimes could possibly be attributed to investigative work, but we found¹⁶ that most of these were also solved by patrol officers, members of the public who spontaneously provide further information, or routine investigative practices that could also have been followed by clerical personnel.

In fact, we estimate that at most 2.7 percent of all Part I crime clearances can be attributed to special techniques used by investigators. (These are called "special action cases" in Table 2.) The remaining 97.3 percent of cleared crimes will be cleared no matter what the investigators do, as long as the obvious routine follow-up steps are taken. Of course, included in the 2.7 percent are the most interesting and publicly visible crimes reported to the department, especially homicides and commercial burglaries. But the thrust of our analysis is that all the time spent by investigators on difficult cases where the perpetrator is unknown results in only 2.7 percent of the clearances.

This finding has now been established for a sufficiently large number of departments that there can be little doubt of its general correctness, with some variation, in all departments. By establishing a restricted interpretation of what constitutes "routine processing," a department might find that investigative skill or "special action" contributes to as much as 10 percent of all its clearances. Even so, the basic conclusion remains the same. Only in cases of homicide,

Table 1

CLEARED CASES HAVING INITIAL IDENTIFICATION OF PERPETRATOR
(As a percent of all cleared cases)

Crime Type	Kansas City				Total Initial ID From Five Other Departments ^b
	Arrest at Scene	Complete ID by Victim or Witness	Uniquely Linking ^a Evidence	Total Initial ID	
Forgery/fraud	30.6	20.0	39.7	90.3	90.9
Auto theft	38.5	12.7	<7.8	>51.2 ^a	47.4
Theft	48.4	8.6	17.2	74.2	70.0
Commercial burglary	24.4	16.9	16.9	58.2	80.0
Residential burglary	26.7	42.7	<6.2	>81.7 ^a	80.0
Robbery	28.4	20.9	10.6	59.9	53.4
Felony morals	25.8	27.8	27.8	81.4	72.8
Aggravated assault	28.6	63.4	7.9	>94.1 ^a	100.0
Homicide	28.3	34.8	10.9	74.0	42.9

NOTE: Numbers may not add to total because of rounding error.

^a If no cases of uniquely linking evidence were found in the sample, or no cases other than initial identification, 95% confidence points are shown.

^b Berkeley, Long Beach and Los Angeles, Ca.; Miami, Fla., Washington, D.C.

Table 2
SPECIAL ACTION CASES
(Percent of all cleared cases)

Crime Type	Kansas City		Five Other Departments ^a	
	Sample Estimate	Maximum Estimate at 95% Confidence	Sample Estimate	Maximum Estimate at 95% Confidence
Forgery/fraud	0	5.7	0	12.7
Auto theft	0	6.9	0	14.6
Theft	0	3.2	0	25.9
Commercial burglary	4.9	12.4	10	39.4
Residential burglary	0	3.5	0	13.9
Robbery	7.1	16.6	9.5	15.6
Felony morals	0	14.5	9.1	36.4
Aggravated assault	0	5.9	0	25.9
Homicide	10.2	37.3	0	34.8
All types ^b	1.3	2.7		

^aBerkeley, Long Beach and Los Angeles, Ca.; Miami, Fla., Washington, D.C.

^bThis figure is shown for Kansas City only and reflects the relative numbers of cleared cases of each type in that city. The maximum estimate for the total is lower than the estimate for any single crime type because the sample size is larger.

robbery, and commercial theft did we find that the quality of investigative efforts could affect the clearance rate to any substantial extent. Conversely, the contribution of victims, witnesses, and patrol officers is most important to the identification and apprehension of criminal offenders.

VARIATIONS WITH DEPARTMENTAL CHARACTERISTICS

Once the nature of investigators' contributions to arrest and clearance rates is understood, it must be anticipated that variations in these rates among departments are explained primarily by characteristics that have nothing to do with the organization and deployment of investigators. This is in fact what we found from our survey data.¹⁷ The three most important determinants of a department's arrest and clearance rates are its size, the region of the country it is located in, and its crime workload.

Large departments (measured by number of employees, budget, or population of the jurisdiction) claim more clearances per arrest in all crime categories than do smaller departments. However, the arrest rates of large departments do not differ from those in small departments.

Departments in the South Central states claim higher clearance rates than those in other regions, which follow in the order North Central, South Atlantic, Northeast, and West. However, arrest rates vary in almost exactly the reverse order. Evidently these differences reflect administrative practices or patterns of crime commission rather than differences in effectiveness.

In regard to crime workload, we found that departments having a large number of reported crimes per police officer have lower arrest

rates than other departments. This relationship arises in the following way. The number of arrests per police officer in a year was found to rise nearly (but not quite) in direct proportion to the number of reported crimes per police officer until a certain threshold was reached. Beyond this threshold, increasing workload is associated with very small increases in the number of arrests per police officer. The thresholds are at approximately 35 Part I crimes per police officer per year and 3.5 crimes against persons per police officer per year. These thresholds are fairly high, as only about 20 percent of departments have greater workload levels.

These findings are consistent with the assumption that a city can increase its number of arrests or decrease the number of crimes (or both) by increasing the size of its police force, but the effect of added resources would be greatest for cities above the threshold.

In regard to clearance rates, the data showed that departments with high crime workload tend to claim more clearances per arrest than cities with low crime workload. As a result, clearance rates are less sensitive to workload than arrest rates. Although clearance rates for every crime type were found to decrease with increasing workload, the decreases were not significant for some types of crimes.

These workload relationships apply to all police officers, not just investigators. Although investigators are known to make more arrests per year than patrol officers, and our data confirmed this, the effect was not large enough that we could find a significant variation according to the fraction of the force in investigative units. In other words, if the total number of officers in a department is kept fixed,

switching some of them into or out of investigative units is not likely to have a substantial effect on arrest or clearance rates.

Aside from the effects of size, region of the country, and workload on clearance and arrest rates, we did find a few smaller effects of possible interest. Departments that assign a major investigative role to patrolmen have lower clearance rates, but not arrest rates, than other departments. This appears to reflect the fact that patrolmen cannot carry files around with them and therefore do not clear old crimes with new arrests. Departments with specialized units (concentrating on a single crime such as robbery) were found to have lower arrest rates, but not clearance rates, for the types of crimes in which they specialize, as compared with departments having generalist investigators. Departments in which investigators work in pairs had lower numbers of arrests per officer than those in which they work singly. Since we did not collect data permitting a comparison of the quality of arrests produced by solo and paired investigators, this finding must be interpreted with caution. The practice of pairing investigators, which is common only in the Northeast, is nonetheless brought into sufficient question that further research appears warranted.

Most other characteristics of investigators were found to be unrelated to arrest and clearance rates. These include the nature and extent of training for investigators, their civil service rank or rate of pay, and the nature of their interactions with prosecutors. However, this absence of correlations probably indicates more about the inadequacies of arrest and clearance rates as measures of effectiveness than about the inherent value of training and other characteristics.

HOW INVESTIGATORS' TIME IS SPENT

From an analysis of the computer-readable case assignment file maintained by the Kansas City (Missouri) Police Department, and observations during site visits, it was determined that although a large proportion of reported crimes are assigned to an investigator, many of these receive no more attention than the reading of the initial crime incident report; that is, many cases are suspended at once. The data show that homicide, rape, and suicide invariably resulted in investigative activity; while other serious types of cases received significant attention (i.e., at least a half-hour of a detective's time) in at least 60 percent of the instances. Overall, however, less than half of all reported crimes receive any serious attention by an investigator, and the great majority of cases that are actively investigated receive less than one day's attention. Table 3 shows, for several crime types, the percentage of cases that detectives worked on during the study period (May 1, 1973, to April 30, 1974).

The net result is that the average detective does not actually work on a large number of cases each month, even though he may have a backlog of hundreds or thousands of cases that were assigned to him at some time in the past and are still theoretically his responsibility. Table 4 shows the number of worked-on cases per detective per month in the various units of the Kansas City Police Department.¹⁸ The number of worked-on cases per detective is generally under one per day, with the exception of the Missing Persons Unit. If we imagine that each case is assigned to a particular investigator as his responsibility, the table shows the average number of cases that an investigator would be responsible for and work on in a month.

Table 3

PERCENT OF REPORTED CASES THAT
DETECTIVES WORKED ON

Type of Incident	Percent
Homicide	100.0
Rape	100.0
Suicide	100.0
Forgery/counterfeit	90.4
Kidnapping	73.3
Arson	70.4
Auto theft	65.5
Aggravated assault	64.4
Robbery	62.6
Fraud/embezzlement	59.6
Felony sex crimes	59.0
Common assault	41.8
Nonresidential burglary	36.3
Dead body	35.7
Residential burglary	30.0
Larceny	18.4
Vandalism	6.8
Lost property	0.9
All above types together	32.4

SOURCE: Kansas City Case Assignment File, cases reported May-November 1973.

Table 4

AVERAGE NUMBER OF WORKED-ON CASES
PER DETECTIVE PER MONTH

Unit	Number of Cases
Crimes against persons	9.2
Homicide	11.2
Robbery	7.7
Sex crimes	6.2
Crimes against property	16.9
Auto theft	19.5
Nonresidential burglary	9.4
Residential burglary/larceny	22.9
General assignment	18.6
Incendiary	7.8
Forgery/fraud/bunco	10.4
Shoplifting/pickpocket	20.9
Youth and women's	26.0
Missing persons	88.4

SOURCE: Kansas City Case Assignment
File.

Our data revealed that an investigator's time spent on casework is preponderantly consumed in reviewing reports, documenting files, and attempting to locate and interview victims. For cases that are solved (i.e., a suspect has been identified), an investigator spends more time in post-clearance processing than he does in identifying the perpetrator. A substantial fraction of time is spent on noncasework activities.

In Kansas City, the breakdown of investigators' time was as follows. About 45 percent was spent on activities not attributable to individual cases. This includes administrative assignments, speeches, travel, reading teletypes, general surveillance of junkyards, pawnshops, gathering spots for juveniles, and the like, as well as slack time (for example, in a unit that is on duty at night to respond to robberies and homicides). The remaining 55 percent of the time is spent on casework. Of this, 40 percent (or 22 percent of the total) is spent investigating crimes that are never solved, just over 12 percent (or 7 percent of the total) is spent investigating crimes that are eventually solved, and nearly 48 percent (or 26 percent of the total) is spent on cleared cases after they have been solved. While these figures apply only to Kansas City, we reviewed them, as well as more detailed tabulations, with investigators from other cities and compared them with our observational notes. We concluded they are approximately correct for other cities, with variations primarily in the areas of slack time (if investigators are not on duty at night) and time spent in conference with prosecutors.

Thus, investigators spend about 93 percent of their time on activities that do not lead directly to solving previously reported crimes.

How are they to be judged on the quality of these activities? The time they spend on cases after they have been cleared serves the important purpose of preparing cases for court; this activity will be discussed below. The time they spend on noncasework activities serves a general support function for casework activities and therefore may be useful in ways that are difficult to quantify. The time they spend on crimes that are never solved can only be judged in terms of its public relations value and a possible deterrent value, because most of these crimes can be easily recognized at the start. (They are primarily the ones for which there is no positive identification of the perpetrator available at the scene of the crime.) Police administrators must ask themselves whether the efforts devoted to investigating crimes that are initially unsolved are justified by either the small number of case solutions produced by these activities or the associated public relations benefits.

COLLECTING AND PROCESSING PHYSICAL EVIDENCE

The ability of a police agency to collect and process the physical evidence at crime scenes is thought to be an important component of the criminal investigation process. However, in our study we focused on the role of physical evidence in contributing to the solution of crimes, as distinguished from its value in proving guilt once the crime is solved.

Earlier studies showed that in only a small number of felony offenses were evidence technicians requested to process the crime scene,¹⁹ and even when the crime scene was processed a significant portion of the available evidence might not be retrieved.²⁰ Police administrators, aware of these deficiencies, have begun to experiment with a variety of

organizational changes designed to increase the number of crime sites processed for physical evidence.

Our analysis of the physical evidence collection and processing activities of six police departments which employ different procedures²¹ confirmed that a department can assure a relatively high recovery rate of latent prints from crime scenes by a sufficient investment in evidence technicians and by routinely dispatching technicians to the scene of felonies. The latent print recovery rate is also increased by processing the crime scene immediately following the report of the incident rather than at a later time. Some of our data supporting these conclusions are shown in the first three lines of Table 5.

However, the last line of Table 5 shows that the rate at which fingerprints were used to identify the perpetrator of a burglary was essentially unrelated to the print recovery rate. In fact, 1 to 2 percent of the burglary cases in each of three departments were cleared by identification from a latent print, despite substantial differences in operating procedures. In Richmond, evidence technicians are dispatched to nearly 90 percent of the reported burglaries and recover prints from 70 percent of the scenes they process, but the fraction of burglaries solved by fingerprints is about the same as in Long Beach or Berkeley where evidence technicians are dispatched to the scene less frequently and lift prints less often.

The most plausible explanation as to why lifting more prints does not actually result in a higher rate of identifications appears to be that the fingerprint file searching capabilities of police departments are severely limited. If a suspect is known, there is little difficulty

Table 5

THE PRODUCTIVITY OF CRIME SCENE PROCESSING FOR FINGERPRINTS,
RESIDENTIAL BURGLARY SAMPLE^a

Item	Long Beach	Berkeley	Richmond
Percentage of cases in which technicians were requested	58.0	76.6	87.6
Percentage of technician-requested cases in which print recovery was made	50.8	42.0	69.1
Cases in which print recovery was made, as percentage of total cases	29.4	32.2	60.5
Cases in which perpetrator was identified as a result of lifted prints, as percentage of total cases	1.5	1.1	1.2

^a200 randomly selected residential burglary cases from each of three departments (cleared or uncleared).

in comparing his prints with latent prints that have been collected. Thus, latent prints may help to confirm suspect identifications obtained in other ways. But in the absence of an effective means to perform "cold searches" (where the suspect is unknown), the availability of a latent print cannot help to solve the crime.

From a comparison of the fingerprint identification sections in Washington, Los Angeles, Miami, and Richmond, we determined that 4 to 9 percent of all retrieved prints are eventually matched with those of a suspect in each of the departments. However, the number of "cold-search" matches produced per man-year differed substantially among departments, according to the size of their inked print files and the attention devoted to this activity. In some departments, technicians performing cold searches produced far more case solutions per man-year than investigators.

The inference we reached was that an improved fingerprint identification capability will be more productive of identifications than a more intensive print collection effort. Although some techniques and equipment currently available to police departments were found to enhance identification capability, the technology needed to match single latent prints to inked prints is not fully developed and appears to us to be a high-priority item for research.

PREPARING THE CASE FOR PROSECUTION

Police investigation, whether or not it can be regarded as contributing significantly to the identification of perpetrators, is a necessary police function because it is the principal means by which all relevant evidence is gathered and presented to the court so that

a criminal prosecution can be made. Thus, police investigators can be viewed as serving a support function for prosecutors.

Prosecutors have frequently contended that a high rate of case dismissals, excessive plea bargaining, and overly lenient sentences are common consequences of inadequate police investigations. The police, in response, often claim that even when they conduct thorough investigations, case dispositions are not significantly affected. We undertook a study to illuminate the issues surrounding the controversy between police and prosecutor about responsibilities for prosecutorial failures.

A data form containing 39 questions that a prosecutor might want the police to address in conducting a robbery investigation was developed on the basis of discussions with prosecutors, detectives, and police supervisors. When this form was used to analyze the completeness of robbery investigations in two California prosecutors' offices, chosen to reflect contrasting prosecutorial practices concerning felony case screening, but similar workload and case characteristics,²² it was found that the department confronted by a stringent prosecutorial filing policy (called Jurisdiction A) was significantly more thorough in reporting follow-on investigative work than the department whose cases were more permissively filed (Jurisdiction B). Yet, even the former department fell short of supplying the prosecutor with all of the information he desired; the data show that each of 39 evidentiary questions considered by a prosecutor to be necessary for effective case presentation was, on the average, covered in 45 percent of the cases in Jurisdiction A, while 26 percent were addressed by the department in Jurisdiction B.

Table 6 lists questions that experienced prosecutors informed us should be addressed by a police investigation to facilitate the presentation of a robbery case. The summary entries indicate the percentage of cases where a question could be answered from information in the documents provided by the police to the prosecutor.

We then determined whether the degree of thorough documentation of the police investigation was related to the disposition of cases, specifically to the rate of dismissals, the heaviness of plea bargaining, and the type of sentence imposed. Our analysis showed differences between the two jurisdictions. For example, none of the sampled cases was dismissed in Jurisdiction A; furthermore, 60 percent of the defendants pled guilty to the charges as filed. By comparison, in Jurisdiction B about one-quarter of the sampled cases were dismissed after filing, and only one-third of the defendants pled guilty to the charges as filed.

A comparison between the two offices concerning the heaviness of plea bargaining is shown in Table 7. Although plea bargaining appears lighter in Jurisdiction A, this may simply reflect that the gravity of criminal conduct in the A cases was less than in the B cases, i.e., special allegations were considerably more frequent to begin with in B. One cannot conclude that only the quality of documentation of the police investigation accounted for the difference.

A similar conclusion was reached with respect to sentence imposed. That is, differences in sentencing were found, but in light of variations in other case characteristics these differences might not necessarily be related to thoroughness of documentation. This analysis leads

Table 6

PRESENCE OF INFORMATION IN POLICE REPORT^a
(In percent)

Case Information Desirable for Prosecution	Jurisdiction A ^a Information From at Least One Source ^b	Jurisdiction B ^a Information From at Least One Source ^b
1. What INTERVIEWS were conducted?	100.0	100.0
Offense		
2. Is there a verbatim report of the instant OFFENSE?	90.4	95.2
3. Is there a verbatim report of the FORCE USED?	95.2	36.5
4. What was the PHYSICAL HARM to the victim?	47.6	18.5
5. Is there a detailed description of the PROPERTY taken?	90.4	27.2
6. What was the method of S(uspect)'s ESCAPE?	71.4	45.4
7. What type of VEHICLE was used by S?	38.0	45.4
8. What type of WEAPON was used by S?	85.7	63.6
9. If a gun was used, was it LOADED?	19.0	13.5
10. If a gun was used, when was it ACQUIRED?	28.4	.0
11. Where is the LOCATION of the weapon now?	9.5	18.1
Suspect		
12. Was S UNDER THE INFLUENCE of alcohol or drugs?	42.8	22.7
13. What are the details of S's DEFENSE?	18.9	.0
14. What is S's ECONOMIC STATUS?	14.2	4.5
15. Was S advised of CONSTITUTIONAL RIGHTS?	100.0	63.6
16. If multiple suspects, what is their RELATIONSHIP?	42.7	.0
17. Is there evidence of PRIOR OFFENSES by S?	66.6	9.0
18. Is there evidence of S's MOTIVES?	47.6	18.1
19. Is there evidence of past PSYCHIATRIC TREATMENT of S?	9.5	4.5
20. What is S's PAROLE OR PROBATION status?	37.8	18.1
21. Does S have an alcohol or drug ABUSE HISTORY?	23.8	9.0
22. Where is S EMPLOYED?	28.5	4.5
Victim/Witnesses		
23. What is the RELATIONSHIP between S and V(ictim)?	4.7	9.0
24. What is the CREDIBILITY of the W(itnesses)?	9.5	.0
25. Can the W make a CONTRIBUTION to the case prosecution?	23.8	13.5
26. Were MUG SHOTS shown to V or W?	51.7	4.5
27. If shown, are the PROCEDURES and RESULTS adequately described?	30.0	.0
28. Was a LINE-UP conducted?	53.0	.0
29. If conducted, are the PROCEDURES and RESULTS adequately described?	40.0	.0
30. Was an effort made to LIFT FINGERPRINTS at the scene?	41.0	4.5
31. If made, were USABLE FINGERPRINTS OBTAINED?	59.0	9.0
32. Were PHOTOS TAKEN at the crime scene?	35.0	4.5
33. Is the EXACT LOCATION from where the photos and prints were taken given?	29.0	.0
34. Did V VERIFY his statements in the crime report?	24.0	.0
35. Did V have IMPROPER MOTIVES in reporting the offense?	4.7	.0
Arrest		
36. What was the legal BASIS FOR SEARCH AND SEIZURE?	23.8	36.3
37. How was the LOCATION OF EVIDENCE learned?	33.3	32.0
38. How was the LOCATION OF S learned?	66.6	68.1
39. How was the ARREST OF S made?	85.7	72.7
Overall	45.0%	26.4%

NOTE: The percentages within the matrix refer only to the presence of information the police chose to record; they may not represent a complete picture of the information gathered by the police in the course of the investigation. It is possible that certain police officers record only "positive" information and assume that an omission of information automatically implies that the information is either not applicable or inappropriate in a specific case.

^a21 cases in each sample.

^bPercentage of cases that presented this information from at least one source.

Table 7 /

A COMPARISON BETWEEN A AND B OF DISPOSITIONS
BY PLEAS OF GUILTY

Disposition	Percentage in A Sample	Percentage in B Sample
Plea of guilty to original charges	61.1	31.8
Plea of guilty to original charges but with special allegations stricken or not considered	27.7	22.7
Plea of guilty to 2nd degree robbery reduced from 1st degree robbery	5.5	18.1
Plea of guilty to other lesser offense	5.5	4.5
Cases dismissed	--	22.7

NOTE: Columns do not add to 100 percent due to rounding.

us to suggest that police failure to document a case investigation thoroughly may have contributed to a higher case dismissal rate and a weakening of the prosecutor's plea bargaining position.

RELATIONS BETWEEN VICTIMS AND POLICE

Many investigators, as well as top-ranking police officials, have defended the investigative function, not because it contributes significantly to the identification of perpetrators, but because it is one of the principal contacts the police maintain with the victims of serious crimes. But although the police verbally espouse the public service function as an important part of the investigative role, our observations in departments across the country indicate that most police merely respond initially to the crime scene and file a cursory report; subsequent police contacts with the victims concerning the progress of the case are rare. This is understandable given the rising number of reported crimes and relatively stable police budgets.

If the public's confidence in their local police department is to be strengthened, it seems reasonable that when the perpetrator has been identified, the victim should be notified. However, a policy of routinely providing case information feedback to crime victims poses some risk of being self-defeating. For example, if a victim is informed that the perpetrator of his crime has been apprehended but not charged with his offense and is being prosecuted on another, the victim, rather than feeling more confident in the police or the criminal justice system, may in fact be disillusioned by such information. A resentful victim also could become highly vocal about his dissatisfactions and cause other citizens to be negative about police performance.

How much information to give the victim and when it is appropriate to convey it were the questions behind a telephone survey taken of robbery and burglary victims. This study must be regarded as exploratory; the survey was conducted simply as an initial attempt to explore how victims feel about receiving information feedback regarding their specific case, and which types of information they feel are most important.

The inquiry summarized by Table 8 was accompanied by two pairs of questions, with the first question of each pair addressing the victim's desire to have feedback on a specific matter and the second eliciting his probable reaction if the feedback occurred. Table 9 displays the responses on whether or not the victim desired to be told of a police decision to suspend or drop investigative effort on his case if such a decision were made. These suggest a consistent preference for knowledge about this police decision, but with an observable tendency in cleared robbery cases (a relatively small segment of the underlying population) to the contrary.

Table 10 exhibits the responses that the victims made when asked what their reactions would be if they had been told that no further investigation was intended on their cases. We note that approximately one-third of our sample would react negatively to unfavorable feedback (and the proportion would be higher if the data were weighted to reflect the relative numbers of each crime type).

To the extent that our survey results may reach beyond the confines of our small sample, they broadly underscore the belief that there exists a strong market for information feedback to victims from the police. But they also tend to confirm the view that giving unfavorable

Table 8

KIND OF INFORMATION DESIRED BY VICTIMS

Survey Question: As a Victim, Did You Want the Police to Inform You?				If Your Answer Was "Yes" How Important Was It to You to Be Informed?	
	Yes	No	Indif- ferent	Very	Somewhat
If your case was solved?	32 (89%)	1 (3%)	3 (8%)	26	6
If a suspect was arrested?	30 (83%)	5 (14%)	1 (3%)	22	8
If a defendant was tried?	27 (75%)	4 (11%)	5 (14%)	15	12
If a defendant was sentenced?	27 (75%)	4 (11%)	5 (14%)	16	11
What sentence was imposed?	27 (75%)	4 (11%)	5 (14%)	16	11
If the defendant was released from custody?	18 (50%)	11 (31%)	7 (19%)	11	7

Table 9

RESPONDENT'S DESIRE TO BE TOLD OF POLICE DECISION
TO SUSPEND INVESTIGATION OF HIS CASE

Victim's Response	Bur_lary	Robbery	Total
Yes	16	10	26 (72%)
No	3	4	7 (19%)
Indifferent or no answer	1	2	3 (8%)
Total	20	16	36 (100%)

Table 10

VICTIM'S PREDICTED REACTIONS TO INFORMATION THAT POLICE
INVESTIGATION OF HIS CASE WOULD BE SUSPENDED

Victim's Prediction of his Reaction	Burglary	Robbery	Total
Appreciative of being told and agreeable to police decision	3	1	4 (12%)
Understanding and resigned	11	7	18 (53%)
Disturbed and resistant	4	1	5 (15%)
Angry and resentful	2	5	7 (21%)
			34 ^a (100%)

^aTwo victims were omitted: the response to one was not applicable and the other declined to answer.

information to victims creates undesirable reactions in attitude toward the police in some of these victims. Finally, our results suggest that other repercussions from information feedback, of which the police are sometimes apprehensive, are of slight significance. Few victims, no matter how much distressed by information coming to them from the police, indicated they would act inimically to police interests.

PROACTIVE INVESTIGATION METHODS

In contrast to the typically reactive mode (so called, because the investigator does not focus on the case until after a crime has occurred) of most investigators assigned to Part I crimes, some police departments have shifted a small number of their investigators to more proactive investigation tactics. These units are usually established to deal with a particular type of offender such as known burglars, robbery teams, or active fences. A number of such units have been supported on an experimental basis with LEAA funds.²³

The proactive team members often work quite closely with other investigators, but unlike regular investigators they are not assigned a caseload of reported crimes. Instead they are expected to generate other sources of information to identify serious offenders. These other sources may include informants they have developed, intelligence data from surveillance activities, or undercover fencing operations which the police operate themselves.

The primary objective in establishing these units is to reduce the incidence of the target crime. The reduction is supposed to result from the containment effect of successfully arresting and prosecuting offenders and the deterrent effect which the publicity given these

programs is expected to have on others. Therefore, the arrest productivity of these units is typically used as a measure of their primary effect. Changes in the incidence rate for the target crime type is also cited for this purpose. The chief problem in using these two measures is the difficulties in isolating the unique effects of the proactive units from either other activities of the police department or external factors affecting crime or arrest rates.

In the course of our study we looked at several such units by either examining evaluation reports or direct observation. In general, they all seemed to result in a much higher number of arrests for the officers assigned than other types of patrol or investigative activities. Consistent effects on targeted crime rates could not be identified.

In order to determine which activities of these units actually resulted in arrests, we examined a sample of cases from two of them in considerable detail. These units were the Miami Stop Robbery Unit and the Long Beach (California) Suppression of Burglary unit.

By examining a sample of robbery cases in Miami, we determined that although the Stop officers averaged 4 arrests per man-month, half of which were for robbery, in 10 out of 11 of these arrests the Stop officer was simply executing a warrant obtained by some other unit or accompanying another officer to make the arrest.

In Long Beach, the Suppression of Burglary officers averaged 2.4 arrests per man-month, half of which were for burglary or receiving stolen property. An analysis of 27 of their arrests disclosed that just half (13) resulted from their own work, with the remainder representing referral arrests or routine investigation which any other unit could have handled.

Our general conclusion from these observations was that proactive techniques can be productive in making arrests, particularly for burglary and fencing. To be effective, such units must be staffed with highly motivated and innovative personnel. Their efforts must also be carefully monitored to ensure that they do not become diverted to making arrests for other units and that their tactics do not become overly aggressive so as to infringe on individual liberties.

POLICY IMPLICATIONS

We have identified several distinguishable functions performed by investigators: preparing cases for prosecution after the suspects are in custody, apprehending known suspects, performing certain routine tasks that may lead to identifying unknown suspects, engaging in intensive investigations when there are no suspects or it is not clear whether a crime has been committed, and proactive investigations. In addition, investigators engage in various administrative and paperwork tasks related to these functions.

The information we obtained about the effectiveness of each function is adequate to begin asking whether the function should be performed at all and, if so, who should do it. The notion that all these functions must be performed by a single individual, or by officers having similar ranks or capabilities, does not stand up to scrutiny, and in fact many police departments have begun to assign distinguishable functions to separate units. Our own suggestions, to be presented below, support this development and extend it in certain ways. If a function now assigned to investigators can be performed as well or better, but at lower cost, by patrol officers, clerical personnel, or information

systems, it should be removed from investigators; if it serves the objectives of the prosecutor, then it should be responsive to the needs of the prosecutor; and if especially competent investigators are required, the function should be assigned to a unit composed of such officers.

In this section we describe the implications of our findings for needed changes in the organization of the investigative function, the processing of physical evidence, and the role of the public.²⁴

Preparing Cases for Prosecution

Post-arrest investigative activity is not only important for prosecution but is also one of the major activities now performed by investigators. This activity can perhaps be performed in a less costly or more effective manner.

From our observations, the current coordination, or lack thereof, between the police and prosecutorial agencies does not support a healthy working relationship. It allows a situation where each can blame the other for outcomes in court that they view as unfavorable.

Most prosecutors do not have investigators on their staff. If they do, these investigators are usually occupied with "white-collar" offenses rather than street crime. Generally, then, the prosecutor relies on police investigators to provide the evidence needed to prosecute and convict arrestees. But this situation contains an inherent conflict between prosecutor and police. An arrest is justified by probable cause--i.e., an articulatable, reasonable belief that a crime was committed and that the arrestee was the offender. Often, the police are satisfied to document the justification for the arrest rather than

expending further investigative efforts to strengthen the evidence in the case. The prosecutor, on the other hand, may be reluctant to file the charges preferred by the police, or to file at all, if he believes the evidence would not suffice for a conviction, i.e., proof beyond a reasonable doubt. Many cases appear to be affected by the conflicting incentives of police and prosecutor, as reflected in failures to file, lenient filing, early dismissals, or imbalanced bargaining.

One way of ameliorating this problem is to make explicit the types of information the prosecutor and police agree are appropriate to collect and document, given the nature of the crime. The form we designed for robbery cases (summarized in Table 6) gives an example of how such information can be made explicit. Each jurisdiction should develop appropriate forms for major categories of crimes. Such written documents would assist the police in becoming more knowledgeable about the type and amount of information that a prosecutor requires to establish guilt for each type of offense and in allocating their investigative efforts to provide this information.²⁵

We observed that the strictness of the prosecutor with respect to filing decisions can affect the thoroughness of case preparation. In turn, the thoroughness of documentation may affect the percentage of cases subsequently dismissed and the degree of plea bargaining. Given this finding, we suggest that prosecutors be mindful of the level of investigative documentation in their jurisdictions, especially in offices where the officer presenting the case may not have participated in the investigation.

One rationale advanced in some police departments for minimizing

the factual content of formal investigative reports is that these reports are subject to discovery by defense counsel and thereby facilitate the impeachment of prosecution witnesses, including policemen. Such departments believe the results of detailed investigations are better communicated orally to the prosecutor's office. The results of our research would tend to refute this argument, although they are not conclusive. In the jurisdiction where detailed documentation is prepared, no such negative consequences were noted, but in the jurisdiction having less information in the documentation, oral communication failed in some instances to reach all the prosecutors involved with the case.

Above and beyond merely improving coordination between police and prosecutors, it is worthy of experimentation to assign the prosecutor responsibility for certain investigative efforts. We feel that a promising approach would be to place nearly all post-arrest investigations under the authority of the prosecutor, either by assigning police officers to his office or making investigators an integral part of his staff, depending on the local situation. A test of this arrangement would permit determining whether it is an effective way of assuring that the evidentiary needs for a successful prosecution are met.

Apprehending Known Suspects

We have noted that in a substantial fraction of cases ultimately cleared, the perpetrator is known from information available at the scene of the crime. If he or she is already in custody, the case becomes a matter for post-arrest processing, as discussed above. If the perpetrator is not in custody, it is important for the responding officer(s), whether from investigative or patrol units, to obtain and make

a record of the evidence identifying the suspect. This requires that the responding officers be permitted adequate time to conduct an initial investigation, including interviewing possible witnesses, and that the crime-reporting form be designed in such a way that the presence of information identifying a suspect is unmistakably recorded.

Apprehending a known suspect may or may not be difficult. Assigning all such apprehensions to investigators does not appear to be cost-effective, especially if the investigators are headquartered at some distance from the suspect's location and a patrol officer is nearby. We believe that certain patrol officers, whom we shall call generalist-investigators, could be trained to handle this function in such a way that the arrests are legally proper and a minimum number of innocent persons are brought in for questioning. Only when apprehension proves difficult should investigative units become involved.

Routine Investigative Actions

For crimes without an initial suspect identification, we found that many of those eventually cleared are solved by routine investigative actions. These actions include listing a stolen automobile in the "hot car" file, asking the victim to view a previously assembled collection of mug shots for the crime in question, checking pawnshop slips, awaiting phone calls from the public, tracing ownership of a weapon, etc.

One implication of this finding is that any steps a police department can take to convert investigative tasks into routine actions will increase the number of crimes solved. Technological improvements, especially information systems, produced many of the clearances we identified as "routine." Such clearances might never have occurred in the

absence of such systems or might have been difficult to achieve. The ability of patrol officers to check rapidly whether a vehicle is stolen or, more important, whether the owner is wanted for questioning produced numerous case solutions in our samples. Well-organized and maintained mug shot, modus operandi, or pawn slip files also lead to clearances.

A second implication is that it may not be necessary for investigators, who are usually paid more than patrol officers or clerks, to perform the functions that lead to routine clearances. We believe an experiment should be conducted to determine the cost and effectiveness of lower-paid personnel performing these tasks.

Once clerical processing is complete, some action by a police officer may still be needed (e.g., apprehending the suspect). Such cases should be assigned to the generalist-investigators.

Investigating Crimes Without Suspects

Basically, two different objectives are served by taking more than routine investigative action when the suspect is unknown. One is a genuine desire to solve the crime, and the other is to perform a public service function, demonstrating that the police care about the crime and the victim. The latter function can be performed by generalist-investigators who are responsible to a local commander who is concerned with all aspects of police-community relations. This type of investigative duty does not require specialized skills or centralized coordination. The officers performing it could readily shift between patrol and investigative duties. In departments with team policing, such investigations could be a duty rotated among team members.

If the objective is actually to solve the crime, police departments must realize that the results will rarely be commensurate with the effort involved. An explicit decision must be made that the nature of the crime itself or public concern about the crime warrants a full follow-up investigation. A significant reduction in investigative efforts would be appropriate for all but the most serious offenses. If a thorough preliminary investigation fails to establish a suspect's identity in a less serious offense, then the victim should be notified that active investigation is being suspended until new leads appear, for example, as a result of an arrest in another matter.

Serious crimes (homicide, rape, assault with great bodily injury, robbery, or first-degree burglary) warrant special investigative efforts. These efforts can best be provided by a Major Offenses Unit, manned by investigators who are well-trained and experienced in examining crime scenes, interpreting physical evidence, and interrogating hostile suspects and fearful witnesses, and who are aided by modern information systems. One reason to establish such a unit is to identify the investigative positions that require special skills and training and that demand knowledge of citywide crime patterns and developments. Our observations suggest, by way of contrast, that with current staffing patterns, most investigators rarely see these highly serious cases. Therefore, when they arise, the investigators are frequently ill-equipped to cope with them and unduly distracted by the burden of paperwork on their routine cases.

The Major Offenses Unit would concentrate efforts on a few unsolved serious felonies. The team would consist of a relatively small

number of experienced investigators who would be closely supervised by a team commander. From our observations, the most serious impediment to high-quality investigative work appears to us to be the traditional method of case assignment and supervision. In nearly every department, cases are normally assigned to an individual investigator and become his sole responsibility whether he is a generalist, specialist, or engaged in team policing. Supervisors do not normally review the decisions he makes on how to pursue the case investigation--decisions that are largely unrecorded in the case file. Consequently, the relative priority an investigator gives to the tasks on one case assigned to him results largely from the number and nature of his other case assignments and from his personal predilections and biases. It may frequently turn out that caseload conflicts and personal predilections lead an investigator to unduly postpone or improperly perform important elements of a particular case assignment.

Assigning cases to investigative teams rather than to individuals could eliminate this impediment. For effective operations, this team should number approximately six men and be led by a senior investigator who is knowledgeable in the local crime situation, in criminal law, and in police management. The leader's primary responsibility would be to keep informed of progress on the cases assigned to his team and make the broad tactical decisions on the team's expenditure of effort. Each day the subordinate investigators would perform individually assigned tasks. A clerk delegated to the team would prepare progress reports to document the daily accomplishment on open cases and assist the leader in making the allocation for the following day. These

reports would also help the leader identify which of his men was most effective at which tasks. This approach should assure that significant steps in an investigation are objectively directed by a senior experienced investigator.

Proactive Investigations

Our research into proactive investigations, or strike force operations, leads us to conclude that these units can be relatively productive. In instances where such units did achieve an advantage, the units were manned by motivated and innovative personnel. The gain in employing them becomes illusory when mere quantity of arrests is emphasized, for then the efforts of this force tend to be diverted into making arrests that are not the result of unique capabilities. We feel that departments should employ strike forces selectively and judiciously. The operation of strike forces necessitates careful procedural and legal planning to protect the involved officers and to ensure that the defendants they identify can be successfully prosecuted. They also require close monitoring by senior officers to ensure that they do not become overly aggressive and infringe on individual privacy.

In all likelihood, the relative advantage of strike force operations in a particular department will not persist over a long period of time. The department must accustom itself to creating and then terminating strike forces, as circumstances may dictate.

Processing Physical Evidence

Most police departments collect far more evidence (primarily fingerprints) than they can productively process. Our work shows that

cold searches of inked fingerprint files could be far more effective in increasing the apprehension rate than routine follow-up investigations.

We believe that fingerprint-processing capabilities should be strengthened as follows. First, the reference print files should be organized by geographic area, with a fingerprint specialist assigned to each area, of no more than 4000 to 5000 sets of inked prints. Second, to assure a large number of "request searches," which imply a cooperative effort between investigator and fingerprint specialist, some communication links should be devised to help motivate and facilitate the reciprocal exchange of information between these two parties. And, third, the persons performing this function should be highly trained, highly motivated, and not overloaded with other tasks which detract from their primary function.

Several existing systems for storing and retrieving inked prints having specified characteristics (of the latent print or the offender) appear useful and were widely praised by departments that have them. However, further research might contribute a major technological improvement in the capability of police departments to match latent prints with inked prints.

Role of the Public

Our research persuaded us that actions by members of the public can strongly influence the outcome of cases. Sometimes private citizens hold the perpetrator at the scene of the crime. Sometimes they recognize the suspect or stolen property at a later time and call the investigator. In other cases, the victim or his relatives conduct a

full-scale investigation on their own and eventually present the investigator with a solution. Collectively, these types of citizen involvement constitute a sizable fraction of cleared cases.

Police departments should initiate programs designed to increase the victim's desire to cooperate fully with the police. Resources allocated to such programs may serve to increase apprehension rates as well as improve the quality of prosecutions. Specifically, police departments should announce, when major crimes are solved, the particular contribution of members of the public, although of course their desires for anonymity should be respected. A realistic picture of how crimes are solved will help eliminate the public's distorted image of detectives and will impress on them the importance of their cooperation with police in order to solve crimes.

Reallocation of Investigative Resources

If, after appropriate test and evaluation, the suggestions we have made for improving the investigative function prove to be effective, the ultimate implication of our work would be a substantial shift of police resources from investigative units to other units. First, most initial investigations would be assigned to patrol units under the direction of local commanders. To improve the quality of initial investigations, the patrol force would have to be augmented with a large number of generalist-investigators. These officers would also perform certain follow-up work such as apprehending known suspects and improving communications with victims and witnesses of crimes. The resources needed to field generalist-investigators would be obtained by reducing the number of investigators.

Additional major reallocations of resources away from "traditional" reactive investigative units are implied by our suggestions to have clerical personnel and generalist-investigators perform routine processing of cases, to increase the use of information systems, to enhance capabilities for processing physical evidence, to increase the number of proactive investigative units, and to assign investigative personnel to the prosecutor for post-arrest preparation of cases. If all these changes were made, the only remaining investigative units concerned with Part I crime would be the Major Offenses Units. The number of investigators assigned to such units would ordinarily be well under half the current number of investigators in most departments.

Our study does not in any way suggest that total police resources should be reduced. On the contrary, our analysis of FBI data suggests that such a reduction might lower arrest and clearance rates. Reallocating resources may lead to somewhat increased arrest and clearance rates, but our suggestions are primarily intended to result in more successful prosecution of arrestees and improved public relations.

Most of our suggestions for change are known to be practical, because we observed them in operation in one or more departments. For example, a number of departments have recently introduced "case screening," which means that each crime report is examined to determine whether or not a follow-up investigation should be conducted. Our findings indicate that the decision rule for case screening can be quite simple. If a suspect is known, the case should be pursued; if no suspect is known after a thorough preliminary investigation, the case should be assigned for routine clerical processing unless it is

serious enough to be assigned to the appropriate Major Offenses Unit. The definition of "serious" must be determined individually by each department, since it is essentially a political decision.

Another current innovation is "team policing," in which investigators are assigned to work with patrol officers who cover a specified geographical area. While there are many organizational variations on team policing,²⁶ most forms would permit the introduction of generalist-investigators having the functions we describe, and some already include such personnel.

We are not aware of any jurisdiction in which the prosecutor currently administers post-arrest investigations, although investigators have been assigned to several prosecutor's offices (for example, in Boston, New Orleans, and San Diego) to facilitate interactions with the police. To determine the feasibility and effectiveness of prosecutor responsibility for post-arrest investigations, a careful experiment will be required.

The National Institute of Law Enforcement and Criminal Justice plans to fund the introduction of revised investigative procedures in approximately ten jurisdictions. The experimental changes, which are based partly on the findings of our study, will be carefully evaluated to determine whether, to what extent, and under what circumstances they actually lead to improved effectiveness.

FOOTNOTES

1. This article summarizes the work of all the Rand research staff engaged in the study of criminal investigation. In addition to the authors, they are: Robert Castro, Konrad Kellen, Eugene Poggio, Linda Prusoff, and Sorrel Wildhorn.
2. Part I crimes are criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, and auto theft. The FBI definitions of these crimes include attempts, except for homicide.
3. The advisory board consisted of Cornelius (Neil) J. Behan (New York City Police Department); James Fisk (member of the Los Angeles Police Commission); Thomas Hastings (Rochester, New York Police Department); Jerry Wilson (former Chief, Washington, D.C. Police Department); and Eugene Zoglio (professor, Prince George's Community College).
4. Consultants were Sydney Cooper, Carmine Motto, Albert Seedman, Seymour Silver, and Raymond Sinetar.
5. The complete results of the Rand survey are reported in Chaiken, Jan M., The Criminal Investigation Process: Volume II. Survey of Municipal and County Police Departments, The Rand Corporation, R-1777-DOJ, October 1975.
6. See, for example, "Expenditure and Employment Data for the Criminal Justice System," National Criminal Justice Information and Statistics Service, U.S. Government Printing Office, Washington, D.C., updated annually.
7. A crime is cleared when a perpetrator is apprehended or is identified as unapprehendable. The latter possibility is intended to apply in "exceptional" circumstances, such as when the perpetrator is dead.

8. Greenwood, Peter W., An Analysis of the Apprehension Activities of The New York City Police Department, The New York City-Rand Institute, R-529-NYC, September 1970.
9. Greenberg, Bernard, et al., Enhancement of the Investigative Function, Volume I: Analysis and Conclusions; Volume III: Investigative Procedures--Selected Task Evaluation; Volume IV: Burglary Investigative Checklist and Handbook, Stanford Research Institute, Menlo Park, California, 1972. (Volume II not available.)
10. The Criminal Investigation Process: Volume II, pp. 36,37.
11. In some jurisdictions, persons may be arrested "for investigation," without a crime being charged. In all jurisdictions persons are occasionally arrested by error and are subsequently released by a prosecutor or magistrate without any clearance being claimed by the police.
12. Instances in which several perpetrators are arrested for a single crime may also explain an arrest/clearance ratio over 1.
13. Isaacs, Herbert H., "A Study of Communications, Crimes, and Arrests in a Metropolitan Police Department," Appendix B of Institute of Defense Analyses Task Force Report: Science and Technology, A Report to the President's Commission on Law Enforcement and Administration of Justice, U.S. Government Printing Office, Washington, D.C., 1967.
14. Conklin, John, Robbery and the Criminal Justice System, J. B. Lippincott Co., Philadelphia, 1972.
15. After initial publication of the Rand study, this finding was further confirmed by a Police Foundation study, "Managing Investigations: The Rochester System," by Peter B. Bloch and James Bell. While this

study was primarily intended to compare team policing with non-team policing, the report presents data permitting a calculation of the ratio of on-scene arrests to all clearances by arrest for three crimes. The data show that in Rochester 31.7 percent of burglary clearances by arrest, 31.1 percent of robbery clearances by arrest, and 28.7 percent of larceny clearances by arrest were the result of on-scene arrests.

16. See Chapter 6 in The Criminal Investigation Process: Volume III. Observations and Analysis, by Peter W. Greenwood, Jan M. Chaiken, Joan Petersilia, Linda Prusoff, Bob Castro, Konrad Kellen, Eugene Poggio, and Sorrel Wildhorn, The Rand Corporation, R-1778-DOJ, October 1975.
17. See The Criminal Investigation Process: Volume II, pp. 38-47.
18. "Worked-on" means that at least one-half hour was spent on the case. The types of cases assigned to each unit are described in The Criminal Investigation Process, Volume III, pp. 53-55. For example, the homicide unit handles suicides and unattended deaths from natural causes as well as homicides.
19. Parker, Brian, and Joseph Peterson, Physical Evidence Utilization in the Administration of Criminal Justice, School of Criminology, University of California at Berkeley, 1972.
20. President's Commission on Crime in the District of Columbia, Report of the President's Commission on Crime in the District of Columbia, U.S. Government Printing Office, Washington, D.C., 1966.
21. The study departments were Berkeley, Long Beach, Los Angeles, and Richmond, California; Miami, Florida; and Washington, D.C. See

Chapter 7 of The Criminal Investigation Process. Volume III for further details.

22. Greenwood, Peter W., et al., Prosecution of Adult Felony Defendants in Los Angeles County: A Policy Perspective, The Rand Corporation, R-1127-DOJ, March 1973, led us to expect significant differences in police investigative effort and prosecutorial posture between the two selected jurisdictions.
23. For a description of five antirobbery units of this type, see Richard H. Ward, et al., Police Robbery Control Manual, National Institute of Law Enforcement and Criminal Justice, 1975.
24. An expanded discussion of the policy implications is reported in Greenwood, Peter W., and Joan Petersilia, The Criminal Investigation Process: Volume I. Summary and Policy Implications, The Rand Corporation, R-1776-DOJ, October 1975.
25. Other alternatives which might accomplish some similar aims include having the prosecutor provide the investigator with periodic evaluations of their case preparation efforts; training for new investigators in case preparation; or on-call attorneys to assist in the preparation of serious cases.
26. See, for example, Bloch, Peter B., and David Specht, Neighborhood Team Policing, National Institute of Law Enforcement and Criminal Justice, December 1973.