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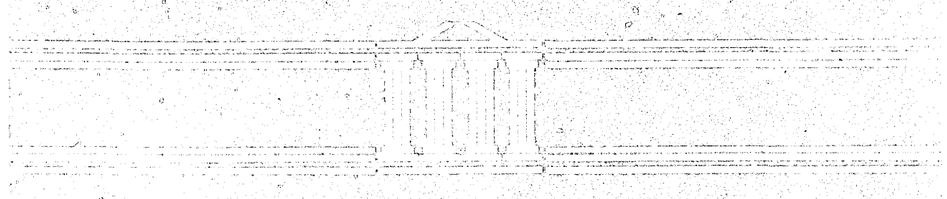

SOLVING CRIMES:

The Investigation of Burglary and Robbery

National Institute of Justice nij U. S. Department of Justice

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John E. Eck

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The Police Executive Research Forum is a national membership organization composed of chief executives from municipal, county, and state law enforcement agencies. The Forum's goal is to improve the delivery of police services through professionalization of police executives and officers, development of new knowledge through research and experimentation, and open debate on criminal justice issues.

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PREFACE

This is a report of a Police Executive Research Forum study which for the first time sought to document what detectives do, how long it takes them, and what are the results of their work. Some previous research indicated that the work of detectives was unproductive. In the shorthand of headline writing, the results of that research came to suggest that the work of detectives is of little value and a waste of taxpayers' money. So widespread had this idea become that Forum researchers would not have been surprised had they arrived at a similar conclusion. The data in this report proves otherwise. The report shows that, although criminal investigations obviously do not solve all crimes, the work of detectives is indispensible to solving many crimes. Detectives and many of us in police administration believed this was true. What we understood from experience has now been validated by research. This is not to say that the report is uncritical of the course of criminal investigations. It suggests to police managers many areas where they can make significant improvements in how both patrol officers and detectives conduct investigations.

One area where improvements can be made is in the treatment of victims. The police, as a service agency, should be concerned with being sensitive to the needs of victims. The police must avoid, at all costs, seeming to be calloused. It is important to give victims a sense of security and an understanding of how the police seek to

resolve the case. Unfortunately, concern for victims has led to the police practice of unnecessary repeat visits by detectives conducting follow-up investigations. Rarely do they gain additional evidence or elicit new leads. Instead of letting the victim go back to a normal life, the police, in the belief that frequent reinterviewing is the best way to please the victim, continually disrupt the victim's life. As an alternative, this report suggests that patrol officers do a thorough preliminary investigation, provide the sensitive help victims need, and elicit whatever information the victim can give. Further interviews of the victim by detectives should not be conducted unless the victim has additional or new information to convey.

Police agencies have neglected a very important source of information, themselves. The report shows that a great deal of important information used in successful investigations is obtained by members of the police agency discussing cases with each other and by detectives using police agency records. More emphasis should be placed on cooperation and information sharing among police officers and detectives. Additionally, police managers and executives should pay close attention to how criminal records are filed and organized to make sure that they are easily accessible by investigators and that they contain information that investigators need. To lose a case because a witness is not available is unfortunate; to lose a case because the detective cannot find information that the department already has in its files is inexcusable.

Not only has this report produced new information regarding how investigations are conducted, but the information has been combined with findings from previous studies to form a comprehensive set of quantifiable measures of investigative productivity. Use of these productivity measures not only show how well an investigation unit is performing, but suggest ways in which productivity can be improved. Additionally, the study shows how investigation case flow can be regulated, and suggests an alternative approach (targeted investigation) to traditional methods of conducting criminal investigations.

Police executives now have empirical proof to show detectives can be productive in solving crime. But they should also be mindful that they have an obligation to manage and conduct their investigations with the proven procedures indicated in this report.

John F. Duffy
President
Police Executive Research Forum
Sheriff, San Diego County

FOREWORD

This illuminating study represents a significant advance in our knowledge and understanding of a fundamental police function--the investigation of crime. It continues a line of inquiry begun several years ago by the National Institute of Justice to explore what was then the largely unexamined question of how the investigative process could be better managed.

One of the hoped-for benefits of research--influence on day-to-day practice--is apparent in the findings of this study. Although the critical findings of earlier research sparked much debate in the police community, many administrators used the results to examine their operations and make substantial improvements in the management of the criminal investigation process--positive changes that are documented in this report.

Among the important advances noted in this study is the increasing recognition of the value of case screening in managing investigative resources. Rigorous screening systems are essential for targeting on serious crimes and serious criminals. Research by the National Institute of Justice has corroborated what every experienced police officer knows: a relatively small number of highly active criminals account for most of the serious crime. The growing number of special police units focusing on the serious, habitual offender is a trend encouraged by this study, which makes

a number of valuable suggestions for improving the management of targeted investigations and expanding their scope to include, for example, specific investigative strategies based on analysis of crime patterns.

This new research also helps resolve a number of issues highlighted in previous studies. By tracking precisely what happens after police respond to a burglary or robbery--the two types of crimes examined in the research--the study brings into sharper focus exactly what detectives do in follow-up investigations. It confirms that police investigators do solve many crimes. In looking at the details of actual investigations presented in this report, it is clear that detectives pursue logical lines of inquiry to obtain leads and focus their efforts where they will do the most good.

At the same time, the study corrects a misperception stemming from earlier research, which recommended that responding patrol officers play a more active role in the initial investigation. This eminently sound recommendation was subsequently adopted by many police departments. To some, however, the patrol officer's expanded role tended to imply a less important role for the investigator, at least in the initial phase of an investigation. That implication is laid to rest in the findings of this study. The results presented here show that the patrol officer and the detective must play complementary roles, each carrying out different but equally crucial responsibilities in solving crimes.

The National Institute of Justice is pleased to make the results of this research available to the police community. We believe the concrete and practical suggestions it offers will enable police departments to move even farther toward their goal of efficient and effective management of criminal investigations.

The study typifies the kind of useful, relevant research that is the Institute's priority. We commend Sheriff John Duffy, President of the Police Executive Research Forum, and the Forum staff for their able work in conducting this valuable inquiry. To the chiefs and staffs of the police departments whose cooperation made the research possible--DeKalb County, Georgia; Wichita, Kansas; and St. Petersburg, Florida--we express the deep appreciation of the National Institute of Justice. They exemplify the receptivity to research and innovation that has stimulated much of the recent progress in policing.

James K. Stewart
Director
National Institute of Justice

ACKNOWLEDGEMENTS

To list and adequately thank all of those who provided advice and assistance throughout this study would require a volume of greater length than this report. Unfortunately, this abridged and inadequate summary must suffice.

A special debt of gratitude is owed the officers and chief executives of the three police agencies studies. Director Richard Hand of the DeKalb County Department of Public Safety, Chief Richard L. LaMunyon of the Wichita Police Department, Chief Mack Vines of the Charlotte Police Department (and formerly Chief of the St. Petersburg Police Department), and Chief Samuel Lynn of the St. Petersburg Police Department deserve special thanks for their interest, cooperation and assistance throughout the study.

For providing daily assistance and support many thanks must be given Major Darrell Behrend, Lieutenant Colonel Donald Farrar, Captain J.R. Howington, Lieutenant Gil Kerlikowske and Deputy Chief Rick Smith. Without the aid of patrol officers, detectives, and other police officials from these agencies, who contributed a great deal to this study, this research would have been impossible.

The staff of the Police Executive Research Forum and especially those who worked on this study should not be forgotten. Gary Hayes, Executive Director of the Forum, was supportive throughout and provided

excellent comments on early drafts of this report. The advice, criticisms, and willingness to listen of Michael Farmer and Dale Brown were instrumental in the early and later stages of this study. Throughout the project, assistance and support were provided by Roy McLaren, Nancy Loving, Greg Thomas, Susan McCampbell, Sue Johnson and Dave Konstantin of the Forum Staff. Jennifer Brooks, Linda Cary, and Bonnie Meyers gave considerable energy to revising drafts of the final report.

Not enough can be said about the project staff. Field Research Assistants Glenn Cournoyer, Gary Sanders, and Janice Stahl did excellent jobs, and worked long hours to collect the data. Raphael Marrone and William Spelman made substantial contributions checking the data for errors and performed the data analysis. Mary Grace not only provided secretarial support for the study but also contributed to data quality control, designed the graphical materials, and established order. Without her, this endeavor would have been much more difficult and time-consuming.

Throughout the study, advice was solicited from a large number of people outside the three agencies and the Forum. Thomas Hastings, Dr. Peter Manning, and Dr. Richard Ward were of invaluable assistance as members of the project advisory board.

Chief Jerry Williams of the Arvada, Colorado Police Department not only provided useful advice but, along with Dr. Manning, helped to train the field staff.

Reviews of drafts of this report were provided by a number of individuals whose advice was excellent. Special acknowledgements must be given to Pierce Brooks, Dr. Herman Goldstein, Dr. Mark Moore, Dr. George Kelling, Jerry Miron, Michael McCampbell, Dr. Carl Klockars, Chief David Couper, and Dr. Duncan Chappell.

Steve Gibson and Margaret Gentry provided excellent editorial support in the preparation of the report and Executive Summary.

Finally, but certainly not least, thanks must be given to the National Institute of Justice which funded this study, but most especially Director James K. Stewart, and Shirley Melnicoe, the project monitor. Ms. Melnicoe's continued and unwavering support for this study, not to mention her patience, deserves special recognition.

Thank you.

EXECUTIVE SUMMARY

Police detectives and patrol officers contribute equally to the solution of robbery and burglary cases. But the investigation of such cases rarely consumes more than four hours, spread over as many days, and three-quarters of the investigations are suspended within two days for lack of leads. In the remainder of cases, the follow-up work by detectives is a major factor in determining whether suspects will be identified and arrested. However, detectives and patrol officers alike rely too heavily on victims, who seldom provide information leading to an arrest, and makes too little use of those sources of information most likely to lead to arrest--witnesses, informants, their own colleagues, and police records.

Those are the major findings of the Police Executive Research Forum's two-year study of criminal investigations of burglary and robbery in three jurisdictions: DeKalb County, Georgia; St. Petersburg, Florida; and Wichita, Kansas. The findings demonstrate that investigations are not necessarily as wasteful or mismanaged as earlier studies suggested, perhaps because those studies stimulated management improvements. The findings show, in addition, that the follow-up investigations by detectives are more valuable than described in the earlier research in identifying and arresting suspects. Finally, the Forum research points the way toward a series of management changes

which could make for wiser and more efficient use of investigative resources.

The study involved the analysis of investigative data from more than 320 robberies and 3,360 burglaries in the three jurisdictions. For each case, crime reports and other official records were collected, and patrol officers and detectives completed logs of the actions they took, the amount of time these actions consumed, and the information obtained as a result. More than 5,500 activity logs were collected and analyzed. In addition, field research assistants in each site accompanied patrol officers and detectives and observed their actions.

The most significant findings and policy implications are summarized in the next few pages, but a thorough understanding can be gained only by reading the full report. Page numbers in the margins of the summary show where the findings and implications are discussed in the full text.

Findings

Early Research Generally Critical of Investigators

Police departments from their earliest days have ranked the investigation of crime as one of their most important duties. Despite

the preeminence of the mission, few have examined precisely how investigations are--or should be--conducted and how agency officials manage--or should manage--the investigative operations as a whole. That began to change in the late 1960s and early 1970s with publications of several studies analyzing certain aspects of investigative procedures and reaching conflicting conclusions about the effectiveness of investigations.

In general, those studies characterized investigative operations as wasteful and mismanaged, reported that few cases receive more than superficial attention, and declared that the most important factor in solving a case is not diligent follow-up investigation but the information the patrol officer obtains from the crime victim. The 1975 Rand Corporation study, which included those findings, is the best known and most controversial of the research of that period.

Building upon the earlier studies, Forum researchers have sought to determine what specific actions are taken during preliminary and follow-up investigations, how much time those actions take, and which actions produce the most important information and are most likely to lead to arrests.

Investigations Short, with Changing Focus

The vast majority of burglary and robbery cases are investigated for no more than four hours, counting both the preliminary work

by patrol officers and the follow-up by detectives. The investigations usually last no more than three days, though they are not necessarily consecutive so that an average of 11 days elapses between the initial report of the crime and the suspension of all investigative activity. As the investigation proceeds, the focus shifts from the victim to the suspect and the pattern of action becomes less routine and increasingly unique.

On the day of the crime report, patrol officers spend about an hour on the preliminary investigation, and sometimes slightly more than that in robbery cases. In roughly nine out of ten cases, patrol officers interview the crime victims. They also frequently check the crime scene, particularly in burglary cases. Patrol officers interview witnesses in less than 17 percent of the burglaries and more than 44 percent of the robberies. But they collect physical evidence in only one out of ten cases, and canvass neighborhoods for other possible witnesses in fewer than two of ten cases. The preliminary investigation tends to be longer for robbery cases, probably because victims are more likely to have seen the suspect, there is a greater likelihood of witnesses, and robbery is considered a more serious offense.

Nearly half of the reported burglaries were screened out for lack of leads immediately after the preliminary investigation. Although all robbery cases were assigned to detectives for follow-up,

three-quarters of the robbery cases and the assigned burglary cases were suspended for lack of leads after just one more day of investigation. Only 12 percent of both types of cases were investigated actively for three or more days.

The screening process, whether formal or informal, brings about a shift in focus as the investigation progresses. Preliminary investigations and the early stage of follow-up investigations focus on the victim and other sources of information (such as the crime scene) which are outside the control of the police department. In cases which are pursued longer, the focus shifts to suspects and to sources of information within department control, such as records, informants, and other police officers. This means that detectives, in both robbery and burglary cases, frequently go back to the victims for additional interviews as one of their first actions in the follow-up investigation. But as the case progresses to the third and fourth days of investigation, they are more likely to search department records, discuss the case with colleagues and interview suspects. At this stage, no action can be considered routine and the steps that are taken are adapted to fit the leads developed in each case.

Investigative Process an Implicit Triage System

Whether or not an agency applies formal cases screening policies, screening occurs during the investigative process. It might

be called an implicit triage system, which divides cases into three groups:

- Those cases that cannot be solved with a reasonable amount of investigative effort.
- Those cases that have already been solved by circumstances, and only require the suspect to be picked up, booked and interrogated.
- Those that, with a reasonable amount of effort, may be solved but certainly will not be solved without such effort.

Cases in the first group are either screened out during the case assignment phase or, if assigned, are suspended soon afterward. These cases have few or no leads and few resources are expended on them.

Cases in the second group are processed, but little effort need be devoted to identifying the suspect. The suspect already has been identified, and the major work involves preparations for prosecution.

It is the last group of cases that receive the bulk of investigative work because the suspect must be identified. There are sufficient leads to believe that these cases may be solved, but the initial evidence is insufficient to identify or arrest a suspect.

Investigators Rely too Much on Victims for Crime Information

The search for the name of the suspect, the description of the suspect, and related crime information form the core of the investigation. The goals are appropriate, but the sources of information employed in the search are skewed unproductively. The data shows this: for information that could lead to the arrest of a suspect obtained in an investigation, the most likely source was a crime victim; but in any given case, victims were one of the least likely sources to provide information leading to the arrest of the suspect. In other words, investigators get most of their information from victims simply because they interview practically all of them. But of all the victims interviews, a very small percentage provide fruitful information. By contrast, four other sources of information--witnesses, informants, other members of the department, and department records--are consulted far less often. But when they are consulted, they are more likely to yield fruitful information.

For example, in robbery cases in which detectives obtained the name of the suspect, the robbery victims provided that name in more than 40 percent of the cases. But the probability that a robbery victim could provide a suspect's name to a detective was little more than ten percent; the probability that an informant could provide the name was 30 percent. The probability that the name could be learned from informants or department records was over 50 percent. Witnesses

and patrol officers were also more likely than victims to provide suspect names to detectives.

There are several reasons for the relatively infrequent use of witnesses, informants, department records, and others in the department as sources of information in burglary and robbery investigations. Some relate to the natural limitations of investigative work. In many cases, there are no witnesses. The informants most likely to have knowledge about a particular case may be unreliable. There may not be enough leads to show what records to check. But other reasons involve situations the department can control. Records can be organized more systematically and automated for easier access. More witnesses may be produced through broader use of neighborhood canvassing. And informants and street contacts can be cultivated more aggressively.

Patrol Officers and Detectives Contribute Equally to Solving Cases

Preliminary investigations by patrol officers and follow-up work by detectives are equally important in determining whether cases will be solved with arrests. That conclusion is based on analysis of those cases which resulted in the arrest of at least one suspect during the follow-up investigation and in which no arrest was made during the preliminary investigation. Only those cases could provide a true test of the results of investigative actions.

Patrol officers' conduct of preliminary investigations is important because most follow-up work is based on leads developed in the preliminary investigation. If few or no leads are developed, the case is likely to be screened out and never assigned for follow-up or, if assigned, the follow-up will be quickly suspended.

In general, arrests were made in either the preliminary or follow-up investigation in eight percent of the burglary cases and 18.8 percent of the robbery cases. There was considerable variation among the three jurisdictions as to whether preliminary investigations by patrol officers or follow-up investigations by detectives led to more arrests. The variations may be because of geographic or demographic differences among the sites or differences in investigative management. However, the evidence leads to the tentative conclusion that a higher arrest rate may be achieved in burglary cases by emphasizing the preliminary investigation by patrol officers. But that conclusion does not apply to robbery cases, probably because of the already greater emphasis on robberies at both stages of the investigation.

The data establishes the value of both preliminary and follow-up investigations in solving cases, and sheds fresh light on which investigative actions are most likely to lead to arrest. In follow-up investigations, interviews of victims by detectives are not significantly related to the making of arrests. In most cases, the

patrol officer already has obtained whatever useful information the victim can offer during the preliminary investigation. Although there are exceptions, the second interview with the victim usually yields nothing new. Witnesses are more valuable sources of information. Informants were the single most important follow-up activity conducted by detectives. The exchange of information among police investigators and the checking of police records also were significant contributors to the making of arrests.

Sound preliminary investigations are important primarily because they are major factors in determining which cases are assigned for follow-up. But once a case is assigned, the preliminary investigation is a much less accurate predictor of whether a follow-up arrest will be made. At the follow-up stage, the more accurate predictor is the work of detectives. Even when the preliminary report contains no suspect information, detectives can get the suspect's name in about 14 percent of such cases and make an arrest in almost eight percent of those cases. The point is that preliminary and follow-up investigations are complementary, and to emphasize either to the detriment of the other is counterproductive.

It is important that detectives carry out certain routine functions, such as interviewing witnesses. But the routine of detectives interviewing victims is inappropriate and unproductive.

Detectives must have the flexibility to fit their actions to the demands and leads of each case. The actions will vary as the cases vary, and police management must allow detectives enough autonomy to exercise their own judgment about the most productive actions to take.

Findings Differ from Earlier Research for Several Reasons

The major point of difference between the Forum's findings and those of earlier researchers concerns the role of detectives and the value of follow-up investigations. Earlier studies tended to emphasize the importance of patrol officers and preliminary investigations while downgrading the worth of follow-up. This study reaches the quite different conclusion that patrol officers and detectives contribute equally important work toward the solution of cases.

Two factors may explain the different conclusions. Unlike previous studies, this research documented the specific actions detectives take and the information they gather in follow-up investigations. The absence of such data made it impossible for previous researchers to measure the results of what detectives actually do.

The second factor is that changes no doubt have occurred in investigative management as a result of the earlier studies. Five years have elapsed since publication of the last of those studies, and all had a profound influence on investigative management today. For

instance, there has been greater emphasis on case screening and on increasing the role of patrol officers in investigations.

Policy Implications

This section summarizes the numerous policy implications of this study and previous research on investigative practices. Chapter 9 discusses these implications fully. They are divided into three categories: measures to improve information collection, steps to improve the management of follow-up investigations, and a proposal for an alternative approach to organizing investigations.

Improving Information Collection

Preliminary Investigations

1. **Greater emphasis should be put on physical evidence collection when such evidence can be used.** Physical evidence is seldom used to identify an unknown suspect but is valuable in corroborating identifications made through other means. Few agencies have the resources to send trained evidence technicians to all crime scenes, but few have developed policies defining when technicians should or should not be sent. As a result, technicians are over-used, the quality of their work declines, and more evidence is collected than can be used.

Guidelines should be developed for the use of evidence technicians in routine cases such as robberies and burglaries without serious injuries or extremely high losses. The criteria should take into account the fact that physical evidence is not likely to be useful unless the suspect is identified by other means. The criteria should provide for the use of evidence technicians when:

- A suspect is arrested at or near the scene, and physical evidence from the crime scene will be useful in the prosecution.
- A suspect has been identified but not arrested, and physical evidence can be used to corroborate the identification.
- There are sufficient leads to make it possible that the suspect will be identified, and physical evidence should be collected to corroborate any future identification.
- There are peculiar circumstances to the crime, indicating that it may be part of a pattern, and physical evidence may be useful in corroborating the identification of a suspect traced through investigation of other crimes in the series.

2. **Greater effort should be devoted to canvassing neighborhoods for witnesses.** Considerable evidence establishes the importance of witnesses in identifying suspects and leading to arrests and convictions. Yet patrol officers often fail to canvass neighborhoods near crime scenes in order to find witnesses. Relying solely on

victims and those witnesses immediately available at the crime scene obstructs the effectiveness of further investigative efforts. It is crucial that patrol officers conducting preliminary investigations routinely search for potential witnesses who are not at the crime scene when officers arrive.

3. Patrol officers should use department records more extensively. Checking department records was found to be an especially productive activity for patrol officers. But they did so with varying frequency in the agencies studied. Officers may believe they are tied to their vehicles and that records are difficult and time-consuming to locate. Police managers should design record systems that enhance radio and telephone accessibility for patrol officers.

4. Patrol officers should make greater use of informants. Informants have been found to be particularly useful in identifying suspects and bringing about arrests. But patrol officers rarely use them, perhaps because they are untrained in the skills of cultivating informants. Patrol managers should make greater efforts to provide the necessary training and encouragement to help patrol officers develop informants.

Follow-up Investigations

1. Law enforcement agency records should be used more effectively. The effective use of records is as important in follow-up investigations as in preliminary work. Good organization is the key. Fingerprint files should be organized so that a large number of prints can be searched rapidly. The success of single print files for identifying suspects demonstrates how this can be accomplished. Mugshot files should be indexed by facial and other characteristics as well as by race and sex. Files of stolen property and information obtained from dealers in used merchandise should be more widely used. Some success has resulted from matching automated stolen property files to automated repair and warranty records maintained by private firms.

2. Detectives should make more extensive use of informants and agencies should have policies defining how informants are to be handled. Though informants are a traditionally important source of information, they are not extensively used in robbery and burglary investigations. This must be changed. But police agencies at the same time must implement policies governing the use of informants. Without clear policies, an array of legal and constitutional problems can develop. The policies should define how and when informants are compensated, the types of bargains that can be made with informants, which officers have the authority to bargain, confidentiality of

files, control over informant activities, the agency response to any criminal acts by informants, and the protection of the informant's identity.

Improving Management of Follow-up Investigations

Steps to improve the management of follow-up investigations fall into three categories: requlating case flow, monitoring investigative activities, and assessing performance.

Regulating Case Flow

The flow of cases must be regulated to ensure that resources are applied to those cases where they will yield the greatest return. Three mechanisms should be applied:

- Formal case screening to minimize wasting resources on cases that will not be solved and to provide managers with realistic forecasts of investigative results.
- Policies governing the length of time investigations can continue before the status of the investigations must be reported to supervisors. This focuses attention on cases requiring more attention, encourages supervisory involvement in longer investigations, forces the sharing of information, and provides supervisors with more accurate data about investigators caseloads.
- Caseload criteria should be established to ensure that investigators are neither overburdened with cases nor under-utilized.

Monitoring Investigative Activities

Investigations should be monitored to ensure that resources are used effectively. Three types of monitoring can be applied:

- Investigator Assignment Monitoring. The supervisor assigns cases to investigators who have responsibility for conducting the cases as they see fit. The supervisor monitors the cases when they are assigned and when the investigation is terminated.
- Unit Assignment Monitoring. Cases are assigned to the entire unit, rather than to an individual. The supervisor assigns specific tasks to individual investigators. Cases are monitored continually as tasks are assigned and the results reported.
- Triage Assignment Monitoring. This combines aspects of the first two types of monitoring. Cases are divided into three groups: those that cannot be solved, those that require little time and effort to solve; and those that will require extensive resources to solve. The first group is screened out, the second group assigned to individual detectives and monitored through the case assignment method, and the third group assigned to the unit and monitored in the unit assignment method.

Measuring Productivity of Investigative Units

Supervisors must employ measures of productivity to determine how well investigative units are meeting their goals. A measurement system described in Chapter 9 can be used with a triage assignment monitoring method and takes into account investigative results in terms of suspects and cases. The measures for cases include: the

screening decision, reasons for unsolved cases, how suspects were identified, arrests expected, arrests obtained, acceptance by the prosecutor, and convictions. The measures for suspects include: suspects identified, suspects arrested, reasons for non-acceptance by prosecutors, charges against suspects, and convictions of suspects.

Management of Target Investigations

Investigations work is primarily reactive. Investigators react to citizens' reports of crimes committed. Management improvements may increase the effectiveness of this approach but will not diminish its underlying weakness: the investigation takes place after the fact and forces investigators to respond to events outside their control. Managers seldom step back from the daily case flow to examine its sources, diagnose the problems, and design new and innovative programs and policies to deal with them. Targeted investigations are an attempt to do that.

An example of targeted investigations is the effort in an increasing number of departments to focus on a small number of repeat offenders and career criminals who commit a large number of crimes. But targeted investigations should not be limited to career criminals. For example, an analysis of crime patterns might reveal that truant juveniles commit a large proportion of the daytime residential burglaries in a particular section of a city. This could lead to

specific investigative actions such as checking with school officials to determine which juveniles have been consistently absent from school on the days the burglaries occurred. And it could lead to broader law enforcement policies such as a joint effort by the police and the school system to enforce truancy laws strictly.

Targeted investigations can be divided into four stages: defining the problem and selecting the target; planning the strategy; conducting the investigations; and evaluating performance. The targeted investigation team should not be designed as a permanent fixture of the investigative unit, but it should operate long enough to alleviate the particular problem designated as the target. Lessons from such investigations can then be applied to normal investigative operations and to the design and operation of future targeted investigations.

Conclusions

The findings and implications summarized here are explained in greater detail in the full report. The single conclusion that unites all of the individual findings, as well as the policy recommendations, is that sound management is required to ensure that investigations are effective and that resources are not wasted.

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Section I

BACKGROUND

"It is truly wonderful," he said, "how easily Society can console itself for the worst of its shortcomings with a little bit of claptrap. The machinery it has set up for the detection of crime is miserably ineffective - and yet only invent a moral epigram, saying that it works well, and you blind everybody to its blunders from that moment."

Count Fosco in The Woman in White. By Wilke Collins. Harper and Brothers. 1860.

"We must not judge of the means," said Dupin, "by this shell of an examination. The ... police, so much extrolled from acumen, are cunning, but no more. There is no method in their proceedings, beyond the method of the moment."

Dupin in "The Murders in the Rue Morgue." By Edgar Allan Poe, Graham's Magazine. 1841.

CHAPTER 1

INTRODUCTION

The investigation of criminal acts has been a principal function and responsibility of modern police agencies since their establishment. Despite this fact, relatively little attention has been paid to, and few studies conducted on, the workings of the investigatory process and what investigators do that may contribute to the solution of crimes. The lack of information has, in turn, hindered the effective management of this function. This study was designed to provide such information, specifically: How much do preliminary and follow-up investigations contribute to crimes being solved? In an attempt to address this issue the following questions were posed:

- How much time does a "typical" investigation take to conduct?
- What actions are performed during an investigation?
- What information is obtained during investigations?
- What are the sources of information gained during investigations and how often do such sources provide information?
- What is the relative importance of the role patrol officers and detectives play in conducting investigations?
- What actions taken or information gained by investigators contribute to the arrest of suspects?

The purpose behind asking these questions and attempting to shed some light on their answers is to improve the management and administration of the investigative function in police agencies.

Scope of this Study

This research was conducted in three police agencies--the DeKalb County Department of Public Safety (Georgia), the St. Petersburg Police Department (Florida), and the Wichita Police Department (Kansas)--and involved the collection and analysis of data regarding burglary and robbery investigations.

Burglary and robbery were chosen for this research for two reasons:

- They are relatively common offenses (the 1980 Uniform Crime Reports of the Federal Bureau of Investigation show that 548,809 robberies, and 3,759,193 burglaries were reported to the police in 1980) and are also considered to be serious crimes. .
- Burglary and robbery investigations consume a large amount of police resources.

Furthermore, two characteristics of these offenses also make a study of their investigation interesting.

- The offenders are seldom known to the victims (Reppetto, 1974; and Normandeau, 1969) thereby making the investigations difficult.
- Comparisons of burglaries and robberies are useful, because the two crimes differ in one

major respect--there is almost always some contact between the offender and the victim in robberies; this contact often results in information being gained about offenders that may lead to their capture. Burglary is typically a crime of stealth--offenders generally take great pains to avoid contact with the victim--and thus provide little information upon which to conduct an investigation.

Whether burglary and robbery investigations are representative of the investigations of other offenses is not easy to determine. Investigations involve the ordered collection of information directed toward achieving three objectives: identifying the person(s) who committed the offense; apprehending the suspect(s); and providing information to the prosecutor that can be used to establish guilt. As a general proposition, the difficulty in achieving each objective will vary according to the type of offense investigated. For example, the first objective may be easier to satisfy in a robbery investigation than in a burglary investigation. Even once the first objective has been achieved, however, the second and third objectives are difficult to attain for both offenses. The major problem in some fraud investigations is not in determining who committed the fraud but in developing the evidence to prove the case in court. The same is true in many homicide cases. Because the difficulty of obtaining each of these three objectives is related to the type of crime being investigated, specifics of burglary and robbery investigations may not apply to other types of investigations. Therefore, generalization of the findings of this study to the investigation of all crimes may not always be valid.

Focusing on burglary and robbery investigations precludes observations of other types of investigations. The police response to robberies and burglaries is primarily reactive--a citizen calls the police to report a crime in progress or already completed, or a patrol officer chances upon the scene of an ongoing offense. Responding to crimes after the fact is only one mode of investigation. Vice and narcotics investigations often begin prior to the initiation of the particular offense the suspect might be charged with (Manning, 1980; Moore, 1977). Undercover operations, decoy tactics, and other such proactive efforts were not systematically studied during this research, although aspects of this type of investigation were occasionally observed.

Terminology

Data on the behavior of officers from three types of police units were collected during this study: patrol officers, evidence technicians, and detectives. Because the titles for these types of officers vary from department to department, the definitions for these officers as used throughout this report are provided.

- Patrol officers--uniformed, sworn officers who patrol the jurisdiction. Usually the first officers to arrive on a crime scene.
- Evidence Technicians--employees of the police agency who may or may not be sworn or in uniform, and who are responsible for the recovery of physical evidence at crime scenes and analyzing such evidence.
- Detectives--sworn, non-uniformed officers who conduct follow-up investigations of offenses.
- Investigators--any of the above.

Data Collection

Data collection at the three sites spanned an eight month period from March 1 through October 31, 1980. During this period, three types of data were collected: official department records, self-report forms, and direct observations. Official records and self-report forms completed by patrol officers and detectives served as the primary sources of data. Most of the study's findings are based on the analysis of the data from these two sources. Direct observational data gathered by Forum staff members assigned to each department (from February through December, 1980) were intended to complement the more quantitative measurements taken. These recorded observations were also used to shed light on aspects of the investigative process not covered by the other data sources. More importantly, the observational data permitted us to determine whether or not the self-report data were valid indicators of how investigations were conducted.

In order to insure a sample of representative burglary and robbery investigations each site was divided into three or more geographic areas based on existing police administrative boundaries. The DeKalb County Department of Public Safety divides the county into three areas for patrol car deployment; St. Petersburg is divided into three dispatch areas; in Wichita, six team police areas exist. The study was, therefore, divided into three phases in DeKalb County and St. Petersburg, lasting two and two-thirds months each, and into six overlapping two-month phases in Wichita. Each geographic area was assigned to one of the study phases and every burglary and robbery occurring within the geographic area during its

study phase was included in the sample. All investigators responsible for investigating these offenses completed self-report forms called Activity-Time Information Logs (ATILs) for each case-day[1] a burglary or robbery was investigated. Data from official reports and departmental records were collected for each case. Burglary case screening data were also collected from forms completed by the first-line detective supervisor: in DeKalb County, an official report form was used; in the other two sites, forms developed by the Forum specifically for this study were used.

For a detailed description of data collection methods and copies of the data collection instruments used, see the technical appendicies for this study, published as a separate volume.

Organization of This Report

This report is divided into three sections: Background, Research, and Implications. The first section contains three chapters that describe the context within which this study was conducted. This chapter has outlined the scope of the study.

The background provided by previous research on the investigative function is described in Chapter 2. This chapter also introduces the major issues addressed in later chapters. A brief history of investigations is provided because the history of investigations is important for developing improved investigative management policy.

A description of the jurisdictions and agencies in which the research was conducted and the characteristics of burglary and robbery in these sites are provided in Chapter 3. This background information gives additional contextual information for understanding later chapters.

The second section contains four chapters describing the research findings based on research at the three site departments.

Chapter 4 describes the investigation process in the three agencies. Direct observations of the daily behavior of patrol officers and detectives provide the basis for this chapter. Chapter 4 introduces a theme which reappears in all following chapters--the unpredictability and uncertainty of investigations.

The fifth chapter describes how long investigations last and the activities of patrol officers and detectives while investigating burglaries and robberies. The two major issues of this chapter are the attrition of cases from the investigative process and the decreasing "routineness" of cases that do not drop out of the process early. This chapter also analyzes whether investigative results are due to detective effort or due to circumstances beyond the control of the police.

Information collected by patrol officers and detectives is the concern of Chapter 6. In this chapter, the sources of information and the frequency with which these sources can be expected to produce various types of information are explored. The uncertainty of investigative information sources further illustrates the theme, first introduced in Chapter 4, that even apparently similar cases can be very different.

Factors leading to the follow-up arrest of a suspect are discussed in Chapter 7. In this chapter, information provided by patrol officers and detectives and follow-up investigation activities by detectives are analyzed to determine if they have any effect on the probability a suspect will be apprehended. The importance of good preliminary and follow-up investigations is stressed.

The final section contains two chapters describing further research topics and policy implications.

Chapter 8 suggests further research topics on investigations.

Chapter 9 is prescriptive in nature, describing investigative management policies that will improve investigative performance.

NOTES

1. A case-day is a day during which a given case was worked by an officer, whether the officer spent one minute or the entire shift investigating the case. For example, six robberies investigated on the same day will have six separate ATIL's completed, since each of the six cases was investigated for one case-day. A burglary case investigated on five different days over a month's time will have five ATILs completed because the case was investigated for five case-days.

CHAPTER 2

PREVIOUS STUDIES OF CRIMINAL INVESTIGATIONS

History

The management of investigations has challenged police executives since the creation of modern police forces in the early nineteenth century. Although the highly visible uniformed constables of the London Metropolitan Police were meant to deter crime by their presence, their visibility presented a problem when it came to the investigation of offenses (Miller, 1977). Fears of the abuse of power by plain-clothes officers kept the detective force of the Metropolitan Police small for the first 50 years of the agency's existence, and detectives were prohibited from associating with criminals. The fears proved to be well founded when, in 1877, three of the four Metropolitan Police detectives were found guilty of corruption (Critchley, 1979).

The autonomony of detectives in the United States made them valuable to the local political interests that controlled many cities. The political machines which ran the cities often ran the police departments as well. Detectives not only mixed with the criminal element, but sometimes regulated criminal enterprise for the benefit of the local politicans--and themselves (Richardson, 1970; Fogelson, 1977). It appears from descriptions of 19th century detective work (Lane, 1967; Richardson, 1970; Byrncs, 1886) that detectives were much more concerned with "working" offenders than working individual cases:[1] working offenders made sense not only

because of the regulatory nature of the job, but also because the primary source of information for detectives was the criminal element (Richardson, 1970). This differs from the current practice of assigning detectives to, and making them responsible for, specific cases (see Chapter 4).

Because of its value to the political machine, the detective bureau was, in many instances, a power unto itself (Reppetto, 1978a)--a situation which in some circumstances carried over to the mid-twentieth century.[2] The political machine needed the police to regulate criminal commerce and plainclothes detectives were the logical choice for performing the job (Fogelson, 1977). Consequently, the detective bureau was less responsive to the chief of the department than to politicians. This circumvention of the chain of command was perpetuated by the direct interference of politicans in the appointment of detectives (Fogelson, 1977).[3]

As the political machines weakened, the power of the police chief increased. The chief executives of police agencies began to consolidate their power[4]--an event made possible by the loosening of the ties between the politicians and mid-level police managers (Fogelson, 1977). Detective bureaus were one of the greatest sources of independent power within police agencies, in large part owing to the connections they held with city politicians, but also because of the autonomy they had in investigating offenders. Police reformers advocated several changes in investigative management designed to weaken the hold of politicians and to improve performance. Among these were closer supervision of detectives and better records systems (Fosdick, 1920), and the creation of specialized investigative

squads (Fogelson, 1977). Additionally, the focus of detective activity was shifted from investigating offenders to investigating cases. Working offenders starts with knowing who is actively engaged in criminal activity on a regular basis and then attempting to gather sufficient evidence to arrest these people for committing a particular offense. Working cases starts with the report of a criminal offense and then attempting to establish the identity of the offenders in order to make arrests. Working cases permitted numerical productivity measures (e.g., clearance and arrest rates) to be used in order to exercise greater control over the members of the detective bureau. However, working cases also meant that detectives no longer could rely to the degree they had on the criminal element for information.

Today, follow-up investigations comprise the greater part of the work undertaken by detectives. Although there are attempts to work offenders, most investigations (excluding investigations of drug trafficking and vice) involve the working of cases. The previous research on criminal investigations clearly corroborates this fact (Sanders, 1977; Waegal, 1979), as do our findings. Offender-based investigation programs are currently considered new and innovative, resulting in case studies and "model programs" for other agencies to try.[5]

Modern Descriptions of Investigations

Several descriptions exist of how criminal investigations are currently conducted. Four descriptions are contrasted in this section. Each

description focuses on a different aspect of investigations, so although each is incomplete, each contains important elements of the investigative process not dealt with by the others.

Greenwood

Greenwood (1970) was one of the first researchers to attempt to determine how crimes are solved. Using data gathered from the New York City Police Department, Greenwood found little relationship between caseloads of detectives and arrest rates. Moreover, he found that high priority cases were no more likely to be solved than low priority cases. He concluded that

> [The] solution of any particular property crime is a chance event, insensitive to the amount of investigation conducted.
>
> (Greenwood, 1970)

Although the data he presented indicate that the caseload data used may be an inappropriate measure of workload (see Chapter 8 of this report), and value of loss may not be a good measure of case priority, Greenwood's description set the tone for further research on investigations. In addition, this description points directly at an important concept in investigations: the uncertainty of events and limits on predicting case solution.

Folk

Another early attempt to describe the investigative process was made by Folk (1971). Folk defined investigations as a process in which an

investigator selects activities that are likely to produce leads, and involve minimum costs (i.e., time required to perform specified activities), given certain basic information about the case. As new leads develop, new activities are selected. This continues until the case is solved or the time allowed for the investigation is used up.

The concept of activities producing leads which, in turn, produce more leads, until the case is solved or all leads are exhausted is an approach to describing investigations that is relatively common--one that serves as the basis for much movie and television detective drama. This approach is useful mainly because it focuses attention on the types of actions taken, the time taken conducting these activities, and the way in which these actions contribute to crimes being solved. Folk's description of detective work directly contradicts Greenwood's because Folk implies that detective actions and information gathering are related to crime solution, whereas Greenwood's description implies the opposite. These two opposing theories are explored further in Chapters 5 and 7.

Wilmer

Information Theory concepts were used by Wilmer (1970) to provide another description of investigative processes. According to Wilmer, investigations involve a "battle" over information between the police and criminals. In the wake of every crime a trail of information is left by the offender. The offender attempts to minimize the amount of information left and the police try to collect and process the information. This

information is used to reduce the size of the "suspect set" (or list of possible suspects) until the person or persons remaining in the set can be charged with the offense. A suspect set can comprise the entire community or a single person. Unfortunately, there is little evidence that investigations are normally conducted in the manner Wilmer describes. Still Wilmer's approach is illuminating in that it again shows the importance of gathering information and introduces the concept of the "suspect set" on which investigations focus. Furthermore, like Folk, Wilmer proposes an analytical model of investigations that is in conflict with Greenwoods' description. Both Wilmer and Folk suggest that investigative effort contributes to crime solution while Greenwood claims that crime solution is a chance event.

Sociological Approaches

A completely different approach to describing the work of modern detectives was offered by Sanders (1977), Waegel (1979) and Ericson (1981). These authors observed detectives in three different jurisdictions in the United States and Canada. Although somewhat different in their perspectives they are concerned with the same issue: How do detectives use their autonomy to perform their jobs? Of particular concern was the decision as to whether or not to investigate a particular case. In all three studies detectives were found to operate with relatively little organizational control over their behavior. A great deal of latitude was left the individual detective to decide which cases would be pursued, what information was relevant, and, as Ericson argues about Canadian detectives, who would be

arrested and charged. Furthermore, detectives were found to have developed standard methods of handling cases based on certain basic case characteristics (harm and availability of useful leads). The autonomy of detectives described in these studies has important implications for investigative management as will be discussed later in this report.

This section has presented four contrasting descriptions of how investigations are conducted. Central to all four descriptions is the importance of gathering useful information; apart from this common finding, three important differences exist. First, the descriptions do not address the same issues. Greenwood, Folk, and Wilmer are concerned with how crimes are solved whereas the sociological descriptions of Sanders, Waegel, and Ericson deal with how detectives use their autonomy when performing investigations. Second, although Greenwood, Folk, and Wilmer all address how crimes are solved, their conclusions differ. Greenwood asserts that detectives only solve crimes when "chance events" occur; Folk and Wilmer, on the other hand, imply that the effort of detectives is crucial to crimes being solved. Finally, Folk and Wilmer disagree with respect to how information gathered by detectives during follow-up investigations is used to solve crimes. According to Folk, detective work involves the collection of information that leads to the identification of suspects; Wilmer, on the other hand, describes how information is used to eliminate possible suspects.

The difference between Greenwood's description (chance events lead to crimes being solved), and Folk's description (investigative effort leads to crimes being solved) is particularly important. Greenwood's

description forms the foundation of much of the management research reviewed in the following section. Additionally, these two opposing descriptions are tested in Chapter 5 and Chapter 7 of this report.

Management Research

Isaacs

One of the first empirical studies of criminal investigations was conducted for the President's Commission on Law Enforcement and the Administration of Justice by the Institute for Defense Analyses. This study (Isaacs, 1967) resulted in several findings, based on records of the Los Angeles Police Department, which were to be confirmed by almost every succeeding empirical study of criminal investigations.[6]

1. The patrol force made most of the arrests although the detective force identified a substantial proportion of the offenders arrested.

2. Information about the suspect provided to the patrol officer by the victim was one of the most important determinants of whether the crime was cleared, and the ability to identify the suspect at the crime scene varied dramatically by crime type.

3. Most arrests occurred relatively quickly after a crime was reported. Within a day of the crime being reported more than half of the arrests that would be made were made.

4. Follow-up investigation by detectives was generally limited to those cases where a suspect had been named or otherwise identified in the patrol officer's report.

5. For burglary and other theft cases, it was found that follow-up investigations were less found that follow-up investigations were less effective than rapid patrol response to the crime. The report therefore recommended increased use of plain-clothes, tactical patrol directed against burglaries and thefts.

There were several methodological problems with the study. First, although some attempts were made to differentiate among crime types, most conclusions drawn were based on an aggregation of data comprising many different crime types. Second, there were no measures of the amount of time devoted to cases by detectives: only the number of reports submitted was recorded. Finally, owing to the reliance on official reports, no effort was made to determine what detectives and patrol officers actually did to solve crimes.

Although exploratory in nature, this first major study of criminal investigations raised serious questions about the effectiveness of case-focused investigations by detectives. The study set the agenda and "tone" of future research on investigations. Many of the themes of subsequent research were first set forth in Isaacs' work. Among them were the following:

- That a limited amount of effort is put into follow-up investigations.
- That the information obtained by patrol officers conducting preliminary investigations is of primary importance.
- That suspect names and descriptions supplied by victims and witnesses are the most important pieces of information in property crime investigations.

- That follow-up investigations are neither effective nor particularly important in leading to the arrest of suspects.

Greenwood

In 1970 the New York City Rand Institute published a study of how arrests were made by the New York City Police (Greenwood, 1970). In addition to the description of investigations presented above, Greenwood found that a large amount of detective time was wasted on the investigation of cases that could not be solved. Greenwood's suggestion that cases be selected for investigation on the basis of their likelihood of solution supported a similar conclusion drawn earlier by Issacs; a conclusion that foreshadowed the direction of much future research. Greenwood also supported the conclusions of Issacs when he called for increasing the use of plain-clothes patrol by officers in unmarked cars as a method of increasing arrests.

Ward

A doctoral dissertation by Richard Ward (1971), shed further light on the subject of investigations. Ward found that detectives spent little time investigating cases they were assigned to handle (thus confirming some of the findings of the President's Commission study). The average caseload of detectives for the 52 agencies surveyed was 51.2 cases per month. When the time available for working cases was accounted for, it was found that detectives handled an average of one case every two working hours, and sometimes as many as one case per hour.[7] Ward stated,

> Assuming that this figure compares favorably with those of other departments, it becomes apparent that there is little time for investigation, at least the kind of investigation that might produce greater results. The implications of these findings are far reaching, for they tend to indicate that detectives are physically unable to handle the number of cases assigned to them.
> (Ward, 1971)

Ward's study did suffer from several limitations. It relied heavily on data gathered by mail survey and from official documents of 21 police agencies. The use of a small sample that may or may not have been representative of the population of police agencies in the United States raises questions about the generality of the findings. Nevertheless, Ward's contribution was significant, for although he confirmed Greenwood's (1970) finding that detectives worked a great number of cases, his conclusions about the effects of caseloads on investigative performance were contrary to those of Greenwood. Whereas Greenwood claimed that variations in caseloads had no influence on investigative performance, Ward claimed that the high caseloads prevented detectives from effectively working cases.

Greenberg and Others

In 1973, the Stanford Research Institute (SRI) published the findings of a study of burglary investigations that was to have a large impact on criminal investigations management. The authors of that study noted that "the crime of burglary provides minimal clues as to the perpetrator and the cost of the investigation often exceeds the property loss value, upgrading the investigative process thus presents a major challenge"

(Greenberg, et al., 1973). Using a sample of 500 burglary case reports from six California police agencies, the authors explored the relationship between information gathered and the arrest of suspects. These researchers (Greenberg, et al., 1973) found that:

1. Almost all burglaries that were cleared by arrest were cleared within 30 days of the report of the burglary and over 50 percent were cleared by arrest within 48 hours.

2. Information provided by patrol officers from their preliminary investigations was an extremely important determinant of whether a follow-up investigation of the burglary resulted in an arrest, and that this information could be used to screen cases prior to assigning them to detectives so that only cases with a reasonable chance of solution would be assigned.

A follow-up study by SRI explored the feasibility of constructing weighted screening models for several other serious felonies (Greenberg, et al., 1975). The researchers were only successful in constructing such a model for robbery cases because, for the crimes of assault with a deadly weapon, motor vehicle theft, and rape, the biggest single determinant of an arrest was whether the patrol officer was able to get a suspect identification from the victim. The importance of any other information was minimal in comparison. Both of the SRI studies reinforce the point made by the President's Commission that preliminary investigations conducted by patrol officers comprise an extremely important part of the investigative function.

The Police Executive Research Forum tested the SRI burglary screening model on a sample of 1200 cases from 26 police agencies

throughout the United States. These tests showed that the SRI Model was 85 percent accurate in predicting burglary follow-up investigative results from information gathered by patrol officers during preliminary investigations, and demonstrated that the original conclusions were applicable nationwide (Eck, 1979). Another study in four Minnesota jurisdictions tested both the burglary and robbery models, providing further support (Johnson and Healy, 1978). One conclusion that can be drawn from these studies is that the problems investigators have in solving crimes have less to do with departmental policy than with the nature of burglaries and robberies themselves.

The Stanford Research Institute studies of case screening and the replications of these studies all suffered from the same methodological problem--reliance on data from already-investigated cases. This meant that these studies could not show how much effort went into investigations and whether increased amount of investigative effort for cases with little information would have led to arrests. Lack of information may not predict that the case will not be solved once investigated; instead, lack of information may predict that an investigator will not work on the case further, thus guaranteeing the absence of an arrest.

Rand

By far the best known study of the investigative function, and the only study to date to attempt to explore the entire investigative process, was conducted by Rand in 1975. Using data from a survey of police agencies, visits to a number of police agencies, and data from the Kansas

City Police Department (Missouri), the authors of this report came to a number of controversial[8] conclusions. Among their conclusions the authors state:

- On the use of investigators' time: Substantially more than half of all serious reported crimes receive no more than superficial attention from investigators.
- 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.
- On investigative effectiveness: Differences in investigative training, staffing, workload, and procedures appear to have no appreciable effect on crime, arrest, or clearance rates.
- The method by which police investigators are organized (i.e., team policing, specialist versus generalists, patrolmen-investigators) cannot be related to variations in crime, arrest, and clearance rates.

(Greenwood and Petersilia, 1975)

The Rand study unfortunately also had serious methodological shortcomings. Data were collected from three sources: a mail survey of large police agencies, site visits to several departments and data from the Kansas City Police Department. The mail survey had a response rate of only slightly more than 50 percent (Chaiken, 1975). Therefore, the possibility that the sample may have been biased cannot be rejected. Since the last two findings (above) depend heavily on these data, their validity is questionable. Very small sample sizes were collected from the sites visited

(except Kansas City), thereby limiting the usefulness of this data. Finally, there was no attempt to link what officers did to the information they acquired or to investigative results.[9]

Despite these shortcomings, the findings of the Rand study were generally consistent with those of previous studies. The assertion that most serious reported crimes received only "superficial attention from investigators" was supported by the President's Commission (Isaacs, 1967), Ward (1971), Folk (1971), and Cottell (1971). The finding that the information supplied to the patrol officer by the victim is the "single most important determinant of whether or not a case is solved" and if the patrol officer does not receive this information at the time of the preliminary investigation the case will not be solved is supported by the President's Commission (Isaacs, 1967), Greenberg, et al., (1973), Greenberg, et al. (1975), and Eck (1979).

Prior research conducted by Greenwood (1970) supports his findings in this later Rand study that workload has no effect on investigator effectiveness. But, as noted above, this is contradicted by Ward (1971).

There has been no other research to date either contradicting or affirming the finding that "differences in investigative training, staffing, ... and procedure appear to have no appreciable effect on crime, arrest, or clearance rates." However, this finding is consistent with the other findings in the Rand study that most offenses receive little investigative attention and that victim information given to the patrol officer is crucial to solving the crime. If little effort goes into most

investigations, and the results of investigations are overwhelmingly determined by victims and witnesses interviewed by patrol officers, then one should not expect much difference in investigative effectiveness due to training, staffing, and procedures.

The finding of the Rand study that the organization of the investigative function has little or no effect on crime, arrest, and clearance rates is contradicted by several other studies. Descriptions of some of these studies and their findings follows.

Experiments and Planned Change

Syracuse

Several studies have been made of successful attempts by police agencies to increase the role of patrol in investigations. Elliot and Sardino (1971), describe one such effort in Syracuse, New York. In the Syracuse study it was found that making a "crime control team" responsible for investigating each criminal incident, from preliminary investigation through to the end, produced higher clearance rates than the traditional approach of dividing the work between patrol officers and detectives (Elliott, 1978).

Rochester

Unlike the crime control team approach, two Police Foundation studies of team policing looked at the effect of decentralizing detectives

to small geographical areas within a jurisdiction. Bloch and Bell (1976) reported on a study of the effectiveness of such a team policing approach in Rochester, New York. Several precincts in Rochester used a decentralized approach to investigations (team areas) while other precincts maintained the traditional centralized investigative organization wherein headquarters detectives were responsible for all follow-up investigations. The results (Bloch and Bell, 1976) showed that:

1. Team areas (decentralized) made a greater percentage of arrests for larcenies, burglaries and robberies than non-team areas (centralized);
2. Team areas showed a greater number of on-scene arrests and follow-up investigation arrests than non-team areas;
3. Team investigators gathered more information during follow-up investigations and seemed to use this information better than non-team investigators;
4. There were no differences between team and non-team areas in terms of the ability to obtain descriptions of suspects from witnesses during preliminary investigations; and
5. There were no differences between the team and non-team areas in terms of arrests that resulted in prosecutions.

These mixed results suggest that although it may be relatively easy to increase arrest rates, it is more difficult to increase the number of prosecutable cases because increasing the number of cases with good suspect descriptions is largely, out of the hands of investigators or managers.

Cincinnati

Another study of team policing sponsored by the Police Foundation was an evaluation of the Cincinnati Team Policing Experiment. The authors of this study found that for Part I crimes:

> Team policing, with investigations handled at the team level, produced a higher clearance by arrest rate than either a fully or partly centralized approach.
>
> (Schwartz and Clarren, 1977)

Unfortunately, this study did not look at information acquisition or the prosecution of offenders so it is impossible to directly compare these results to those of Rochester.

In all three of these studies, uniformed patrol officers were given a much greater role in the investigation of offenses, and, in two studies, detectives were decentralized. The consensus of these studies is that patrol officers can effectively handle a much greater part of the investigative function (at least for such property crimes as larceny, burglary, and robbery), than they typically have been asked to handle. In addition, detectives handling property crimes can be decentralized without diminishing their effectiveness.

These studies contradict the Rand study conclusions that the organization of the investigative function has little effect on crime, arrest, and clearance rates. The Syracuse study and the Cincinnati evaluation show that increasing the role of patrol officers in investigations can increase clearance rates. Arrest rates improved in Rochester after

investigators were decentralized to teams. Both the Rochester and Cincinnati studies present evidence that indicates burglary crime rates may have been reduced by the organizational changes.

Despite these differences, three general conclusions can be drawn:

- Names and descriptions of suspects supplied by victims and witnesses and collected by patrol officers are the most important leads in property crime investigations;
- Preliminary investigations conducted by patrol officers are extremely important with respect to the making of arrests, and the role of patrol officers in investigative work can and should be increased; however,
- Follow-up investigations are less useful with respect to the making of arrests.

The following section offers explanations for these results.

Explanations

There are two explanations for these three findings: ineffective management and the nature of property crimes.

Management

The first explanation is that poor management of the investigative function is responsible for the current state of affairs in criminal investigations and, therefore, improvements in investigative management will increase the effectiveness of the investigative process. Based on

this assumption, the Law Enforcement Assistance Administration developed the Managing Criminal Investigations (MCI) program. This program, according to Cawley, et al. (1977), sought to upgrade the investigative function by improving five areas of criminal investigations:

1. Upgrading the role of patrol in investigations by improvement of the preliminary investigation;
2. Focusing follow-up investigation effort on those crimes which are likely to be solved, through the use of case screening methods;
3. Improving the management of follow-up investigations by having first-line supervisors monitor investigative work more closely;
4. Increasing the number of prosecutable cases and improving the quality of case investigation and preparation by upgrading police-prosecutor relations; and finally,
5. Improving police management decisions regarding criminal investigations by providing police managers with timely and pertinent information regarding criminal investigations and their effectiveness through the development of a criminal investigation case monitoring system.

When the MCI program was first developed, it was claimed that this program would "assure cost effective utilization of (investigative) resources," and

> ...one of the major outcomes to be derived from changing the old way of conducting criminal investigations is an increase in the number of arrests for serious crimes that can be accepted for prosecution and may ultimately result in an increased number of convictions. (Cawley, et al., 1977)

Grants were made to five police agencies[10] to implement the MCI program.

An after the fact assessment of the effect of implementing the MCI program in the five agencies was conducted by the Urban Institute (Regan, et al., 1979). These researchers concluded that arrest and conviction rates either remained unchanged by MCI or that changes that did occur could not necessarily be attributed to the implementation of the MCI program. In three sites, no change was registered in clearance rates; in the other two agencies, slight increases in clearance rates could be attributed to the MCI program (Regan, et al., 1979). These ambiguous findings cast some doubt on the hypothesis that poor management is responsible for the current state-of-affairs in criminal investigation effectiveness and that effectiveness can be improved by improving management.[11] Unfortunately, this assessment took place after the program was implemented. Thus, the findings are weak evidence that the MCI program was only slightly effective.

Another study of the MCI program by Abt Associates also presented evidence that the MCI program has had a limited impact. Although acknowledging the fact that the MCI program was intended to increase crime control effectiveness, the report states that:

> ...it would be unreasonable to attribute changes in investigative outcomes totally to changes in the investigative process. Indeed, in the absence of controlled experimentation, it is impossible to determine the contribution these procedural changes have made to observed changes in outcomes. Thus, while the goals of

> the investigative process cannot be ignored in an assessment of MCI, the success of the program cannot be measured in these terms. Rather, the success of MCI is to be measured in terms of the efficiency of the process itself.
> (Greenberg and Wasserman, 1979)

Unfortunately, the authors show that even in light of these measures of success, the MCI program was not as successful as had been hoped. Only two of the five agencies participating in MCI were able to save sufficient resources to divert officers from the detective unit to other units. The efficiency with which investigations were conducted showed only limited and inconsistent improvement (e.g., average monthly caseloads of investigators were reduced in some agencies but not in others, patrol time on initial investigations increased in some sites but not in others, and follow-up investigative time decreased in some agencies but not in others).

Finally, there were no significant changes in arrest, clearance or conviction rates, although two sites reported improved prosecution rates (Greenberg and Wasserman, 1979). In the words of the authors, "it appears that the achievements of the [MCI] program have been modest along each of the three valued dimensions: resources saved, investigative efficiency, and investigative effectiveness" (Greenberg and Wasserman, 1979).

If poor investigative management is responsible for poor investigative performance, then improvements in investigative management should lead to improvements in investigative performance. The MCI program was

designed to improve investigative management, but even sympathetic reviewers (Greenberg and Wasserman, 1979) concluded that the MCI program was only modestly successful in improving performance. Several plausible explanations for these modest improvements are possible:

- The MCI program's modest improvements are the maximum that can be expected from changes in investigative management;
- The MCI program represented a substantial improvement in investigative management, but its implementation was not adequate;
- The MCI program did not represent a substantial improvement in investigative management although substantial management improvements are possible and would produce marked increases in performance;
- Measures of the effectiveness of the MCI program were inadequate to determine whether the MCI program did improve investigative effectiveness; and
- Investigative management improvements take a long time to produce any major noticeable increases in investigative effectiveness, and the assessments of the MCI program were premature.

Although there are no definitive conclusions regarding the impact on investigative effectiveness of management improvements, research into the nature of property crimes leads to another possible explanation: that property crime investigations are a police function with inherently low returns. An examination of this explanation follows.

Nature of Property Crimes

A second explanation for the research findings regarding investigative effectiveness is that the very nature of property crimes places

inherent limits on the extent to which investigations can be effective (Skogan and Antunes, 1979). This explanation postulates that arrests, prosecutions, and convictions can only be made when sufficient information exists; and, since most of this information comes from victims and witnesses, the success of investigations depends solely on what victims and witnesses know about the crimes and offenders. Greenwood's (1970) description of case solution being a chance event, indirectly supports this hypothesis. Skogan and Antunes (1979) go further by using victimization data to demonstrate that victims of property crimes seldom know anything about the suspect. Given these circumstances, improved investigative techniques and advances in investigation management should have little impact on the effectiveness of criminal investigations because in most cases there will be very little information on which to conduct an effective investigation. As Skogan and Antunes suggest, relying on victims to provide information to solve crimes is not productive; other sources of information available to investigators, that may increase their effectiveness, must be used. Departmental records, informants, and the knowledge of other investigators are important sources of information for investigators.

Conclusion

To date research on investigations has been generally negative in character and often contradictory. Ultimately, only three conclusions are supported, without contradiction, by the current literature:

- That the patrol officer's preliminary investigation is very important because of the information received from victims and witnesses;

- That the number of cases per detectives is generally very high; and
- That selective assignment of cases through the use of formal case screening procedures could increase investigative effectiveness.

Although the productivity of detectives has been shown to be low, the reasons for this are unclear. Furthermore there is uncertainty as to the degree to which improved management of the investigative function can increase this low productivity. Except for increasing the role of patrol officers in investigations, there is little known about how investigations should be organized. The biggest gap in the research conducted to date concerns what detectives and patrol officers do to produce information and how this information and these activities lead to crimes being solved. It is this issue that this report addresses.

NOTES

1. Fosdick (1920) describes the haphazard methods of case assignments in many detective bureaus. From his description, it appears that investigating complaints of crimes from citizens had a very low priority.

   An often humorous and informative description of how detectives used criminals to solve crimes is provided by the former head of the New York City Police Department's Italian Squad, Michael Fiaschetti (1930). The reasons behind Fiaschetti's resignation further illustrates the point about politicians and the police.

   For an interesting, if self-serving, account of how working offenders can pay off in terms of low crime rates, see "Detectives at the St. Louis World's Fair" in The Blue and The Brass (Dilworth, 1976). This book contains many interesting accounts by police officials of police work around the turn of the century.

2. Patrick V. Murphy provided an interesting description of this type of situation when he became Police Commissioner of New York City in 1970 (Murphy and Plate, 1977).

3. Until recently, this was still common practice for getting into and getting ahead in the Detective Bureau of the New York Police Department. See, for example, the autobiographies of former Chief of Detectives Al Seedman (Seedman and Hellman, 1974) and former Police Commissioner Patrick Murphy (Murphy and Plate, 1977). Fiaschetti (1930) is another good example.

4. For an interesting account of police executives trying to gain control over their detective bureaus, see Anderson (1978).

5. See, for example, Pate et al. (1976), Tien et al. (1978) and Halper and Ku (n.d.).

6. Several studies of burglary and robbery conducted in the early 1970's confirmed the findings of the President's Commission in regard to the importance of patrol and the ineffectiveness of follow-up investigations. For discussions of how robbers are caught and the role of detectives, see Conklin (1972), Feeney (1973), and Smith (1973). For data on how burglars are caught, see Conklin and Bittner (1973).

   A study by Glick and Riccio (1979) on police juvenile units and investigation shows that most information for a case was acquired by patrol officers and detectives primarily collected repeat information or information that verified earlier information.

7. An internal study of the New York City Police Department's Detective Bureau, using detectives as observers of other detectives, found that only five hours and 49 minutes were spent on the average robbery case of which 15 percent resulted in an arrest. However, 25 percent of the time was spent on travel, clerical work and in arrest and booking, leaving only four hours and 22 minutes for investigation time. For burglary cases, of which five percent resulted in an arrest, an average total of three hours and eight minutes were spent on the case. Seventy-one percent of the time, or two hours and 14 minutes was spent on investigating the average burglary. The average amount of time spent on all types of cases was four hours and 21 minutes of which 69 percent, or three hours, was spent on the investigative activities (Cottell, 1973).

8. For a summary of the controversy, see National Institute of Law Enforcement and Criminal Justice (1977). Although some of the controversy stems from the methods used in the Rand study, it is probably safe to say that a great deal of the criticism was due to the style of the report and what were considered unnecessary attacks on detectives.

9. For a description of the methodological shortcomings of the Rand report, see Gates and Knowles (1976).

10. Birmingham, Alabama; Montgomery County, Maryland; Rochester, New York; St. Paul, Minnesota; and Santa Monica, California.

11. The Urban Institute report also casts doubt on whether the MCI program actually made substantial changes in the investigative operations of the five agencies. All of the agencies had already adopted some of the MCI recommendations prior to beginning the program, and the adoption of other recommendations was not systematic across all sites (Regan et al., 1979). It may be unfair to assume that the modest success of the MCI program in demonstrating improvements in arrests, clearances and convictions was because poor management is not the problem. Rather, because crucial management changes had an impact prior to implementation of the MCI program, the Urban Institute's assessment failed to discover the full scope of what such management changes can produce.

CHAPTER 3

CONTEXT

Investigations take place within a context defined by the community, the crimes being investigated, and the police organization. Although the relationships between investigations and the context within which they are conducted is difficult to determine, understanding this context is necessary if one is to interpret the study's findings and appraise its applicability to agencies not studied. This chapter defines the context within which this study was conducted.

The first section of this chapter briefly describes the characteristics of the three site jurisdictions. This is followed by a description of the characteristics of the burglaries and robberies committed at each site. Finally, the third section presents a description of each department and provides an overview of the investigative process.

Sites

Three sites were selected for this study based on the following criteria:

1. At least one agency had to utilize a team policing approach to investigations; and at least one site had to use a traditional approach to investigation by distinguishing

between the uniformed patrol branch and the plain-clothes detective branch.

2. A sufficient number of burglaries and robberies had to be reported to the police in order to be able to adequately describe how these two offenses are investigated.

3. The cooperation of the police chief executive and other police managers had to be explicitly obtained and there could not be any major expected changes in departmental policies (e.g., a change from traditional policing to team policing or vice versa) or in the chief executive position.

Twenty-two police chief executives, all members of the Police Executive Research Forum, volunteered to have their agencies serve as sites for the study. DeKalb County, Georgia; St. Petersburg, Florida; and Wichita, Kansas; were selected because this combination of departments presented the greatest diversity in terms of investigative organization, while providing a sufficient number of cases in each site. Table 3-1 provides selected data on each site jurisdiction.

Several attributes of the sites are described to show both the diversity and similiarity among communities. The size (in terms of land area and population), minority representation, and economic foundations (major industries and income levels) of the jurisdiction can influence the frequency with which certain offenses are committed and the types of people likely to be victimized. As will be shown later, the types of robberies committed in the jurisdictions vary, in part, because of the ages of the populations and the availability of different robbery targets (small businesses versus pedestrians). Differences in the types of offenses committed

Table 3-1
Selected Characteristics of Site Jurisdictions*

	DeKalb County	St. Petersburg	Wichita
Land Area (square miles)	269	56	95
1980 Population	483,024	238,647	279,272
Percent Black (1980)	27.1	17.2	10.8
Percent Age 65 and Over (1980)	7.0	25.8	10.6
Population Changes (Percent)			
1975 to 1980	7.2	1.8	5.4
1970 to 1975	10.2	8.4	-4.2
1960 to 1970	61.8	19.2	8.6
Median Family Income (1980)	$ 23,404	$ 15,476	$ 20,893

United States Department of Commerce, Bureau of the Census.

and victims may affect how investigations are organized and conducted (although we could not test such relationships).

DeKalb County, Georgia

DeKalb County, bordering the eastern edge of Atlanta, is the second largest county in Georgia. As one of the seven counties that make up the Atlanta Standard Metropolitan Statistical Area, it covers 269 square miles and contains over 480,000 residents. As well as being the only suburban jurisdiction studied, it is also the largest of the three sites in terms of area and population.

Most of the population is concentrated on the western side of the county near the border with Atlanta, and approximately 80 percent is concentrated in the predominantly white middle-class residential communities of North and Central DeKalb County. Blacks make up the largest minority group in the county comprising more than a quarter of the population. Most blacks live in the central and southern areas of the county.

Although many residents of DeKalb County work in Atlanta, a substantial portion work within the county borders. In fact, DeKalb County has become a major center of employment in the region with 40 percent of the people who work in DeKalb County commuting from other parts of the Atlanta metropolitan area.

North and Central DeKalb County contain the bulk of the industry and commerce in the county. White-collar jobs dominate the employment market to which the public sector and service industries and the wholesale

and retail trades are major contributors. Blue-collar workers account for only 14 percent of DeKalb County's total work force. The median family income for the county was $23,404 in 1980.

St. Petersburg, Florida

St. Petersburg is located on a peninsula directly opposite the city of Tampa on the western side of Tampa Bay. It is a city of more than 238,000 inhabitants and spans 56 square miles. As such, it is the smallest of the three sites, both in area and in population.

The population of the city is predominantly white. With a 17 percent black population St. Petersburg contains the second largest proportion of minority residents of the three sites studied. Blacks live primarily in the southern part of the city with the northern and western areas containing a predominantly white population.

The biggest industry of the city is tourism. A large number of residents commute to Tampa and other areas of the Tampa Bay region to work. With over 25 percent of the population aged 65 years or over, a substantial proportion of the inhabitants of St. Petersburg are retired and subsist on government and private pensions. The median family income for St. Petersburg residents in 1980 was $15,476, the lowest of the sites.

Wichita, Kansas

Wichita is located in the south-central portion of Kansas and, with a population of 279,000 persons, is the second largest city in the

state. The land area of Wichita at the time of the study was 95 square miles.

Wichita has the smallest proportion of minority residents of the three sites. Blacks constitute the largest minority group, being just over ten percent of the city's population, residing primarily in the north, central, and northeastern areas of the city.

Wichita's labor force is primarily blue-collar, with the aircraft industry being the largest employer. The median family income for 1980 was $20,893.

Crime

Table 3-2 presents data from the FBI Uniform Crime Reports showing the number of serious crimes reported to the police and the ratio of reported crimes to population in the three jurisdictions. Although St. Petersburg ranks last in the absolute number of burglaries and robberies, when the population of the sites is accounted for it has the second highest robbery rate and the highest burglary rate of the three sites. Wichita has the second highest burglary rate and highest robbery rate of the three sites, and DeKalb County has the lowest rate for both offenses.

Since variations in the characteristics of burglaries and robberies may influence how they are investigated, we will explore the attributes of these two offenses in greater detail.

Table 3-2
Reported Crime in the Three Sites
1980*

	DeKalb County	St. Petersburg	Wichita
Homicide	19 (0.04)**	22 (0.09)	32 (0.11)
Forcible Rape	195 (0.40)	155 (0.65)	202 (0.72)
Robbery	830 (1.72)	735 (3.08)	826 (2.96)
Aggravated Assault	512 (1.06)	1,711 (7.17)	763 (2.73)
Burglary	8,276 (17.13)	5,863 (24.57)	6,504 (23.29)
Larceny Theft	14,559 (30.14)	11,931 (49.99)	14,953 (53.54)
Motor Vehicle Theft	2,153 (4.46)	650 (2.72)	1,282 (4.59)
Total	26,544 (54.95)	21,067 (88.28)	24,562 (87.95)

*Federal Bureau of Investigation. (1980). Crime in the United States--1980, Washington, D.C.: United States Department of Justice.

**Crimes per 1,000 population. See Table 3-1 for population data.

Characteristics of Burglaries

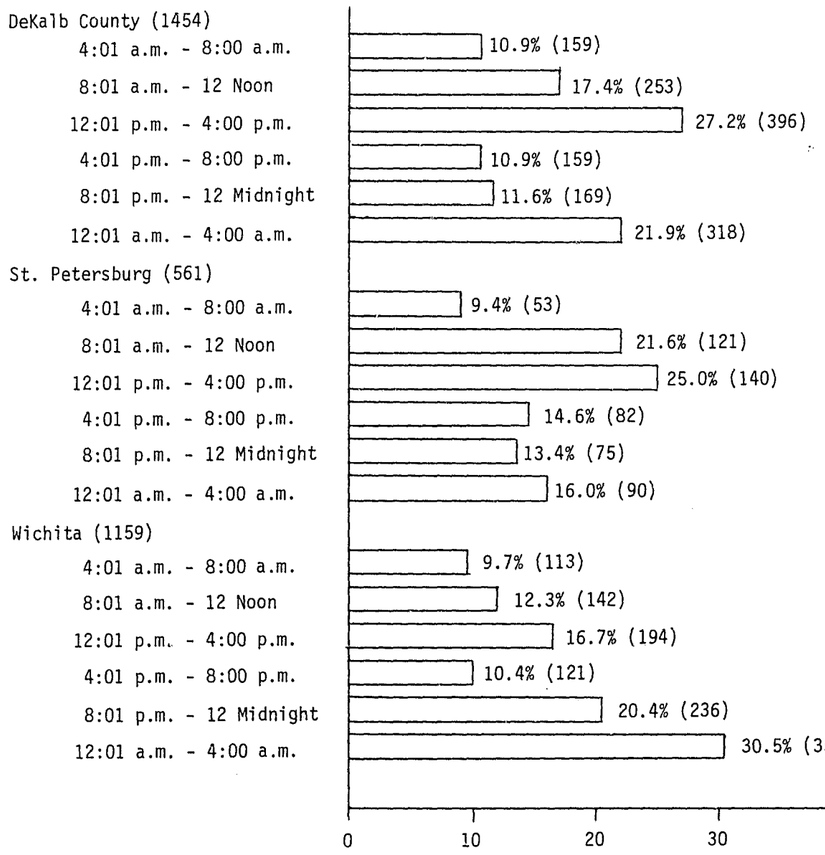
Table 3-3 describes the locations of burglaries in the three sites. The overwhelming majority of burglaries committed within the jurisdictions are residential burglaries; the vast majority of these are burglaries of houses. Overall, approximately 27 percent of the burglary locations are non-residential targets, and, in all sites, most of these targets are commercial establishments.

The times of occurrence for burglaries in the three sites are shown in Figure 3-1. Since victims of burglaries cannot often give a precise time for the occurrence of burglaries, we estimated the time of occurrence by picking the midpoint between the earliest and the latest time the burglary could have occurred. This means that the percentage figures representing the number of burglaries said to occur in each of the four- hour intervals shown in Figure 3-1 are not extremely precise estimates of the actual time of occurrence. In all three sites, the frequency of burglaries increases from 4:00 a.m. until 4:00 p.m., and then decreases substantially between 4:00 p.m. and 8:00 p.m. The rate then rises until the interval between Midnight and 4:00 a.m., reaching a second peak. In DeKalb County and St. Petersburg approximately 45 percent of reported burglaries are committed between the times of 8:00 a.m. and 4:00 p.m.--normal working hours. In Wichita, only 29 percent of the burglaries occur during this time period. The double peak in burglary occurrences reflects the separate nature of residential and commercial burglaries: residential burglary rates peak during daylight hours; commercial burglary rates during the hours when most commercial establishments are closed.

Table 3-3
Locations of Burglaries

	DeKalb County (1499)	St. Petersburg (701)	Wichita (1165)
Residential	**73.4% (1101)**	**85.6% (600)**	**65.4% (762)**
House	69.0% (760)	50.8% (305)	64.7% (493)
Apartment	29.2% (321)	34.0% (204)	26.4% (201)
Other Residence	1.8% (20)	15.2% (91)	8.9% (68)
Non-Residential	**26.6% (398)**	**14.4% (101)**	**34.6% (403)**
Commercial Establishment	71.1% (283)	64.4% (65)	79.7% (321)
Public Building	25.6% (102)	34.7% (35)	7.2% (29)
Other	3.3% (13)	1.0% (1)	13.2% (53)

Figure 3-1
Time of Occurrence for Burglaries



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1 OF 5

Table 3-4 shows how burglars entered the target structures. Forcing a window or door seems to be the most popular method for entering target buildings. The rate for such entries ranges from 48 percent of the burglaries in St. Petersburg to 80 percent of the burglaries in Wichita. In all three jurisdictions, offenders also frequently enter through unlocked windows or doors. This varies from approximately 15 percent of cases in Wichita to 36 percent in St. Petersburg. The almost total absence of unsuccessful burglaries does not necessarily indicate that burglars always get in, but, rather, that unsuccessful burglaries may not be discovered or reported and when reported may be classified as vandalism or destruction of property.

Table 3-5 describes the kinds of property stolen and the average loss incurred as a result of burglaries in the three sites. Approximately one-fifth of the burglaries in the three sites involve the loss of cash. Jewelry seems to be a particularly attractive item for theft in DeKalb County and televisions, radios, cameras, and other household appliances are extremely popular choices in both DeKalb County and in Wichita. The value of loss for burglaries varies greatly among the three sites. St. Petersburg shows the lowest median loss reported in burglaries (possibly due to the large number of burglaries in which nothing was taken), whereas DeKalb County shows the highest median loss.

Table 3-6 shows the frequency with which the victim/suspect relationship is known or unknown to the patrol officer taking the burglary report. For those cases in which the relationship is known, the percentage of each type of relationship is presented. This information is typically

Table 3-4
Point of Entry for Burglaries

	DeKalb County (1395)	St. Petersburg (699)	Wichita (1142)
Unlocked Portal	**27.4% (382)**	**36.2% (253)**	**14.5% (166)**
Window	41.4% (158)	55.3% (140)	16.9% (28)
Door	58.6% (224)	44.7% (113)	83.1% (138)
Forced a Portal	**59.5% (830)**	**48.1% (336)**	**80.4% (918)**
Window	53.0% (440)	44.9% (151)	34.6% (318)
Door	47.0% (390)	55.1% (185)	65.4% (600)
Other	**11.7% (163)**	**15.7% (110)**	**5.1% (58)**
Failed	**1.4% (20)**	**0.0% (0)**	**0.0% (0)**

Table 3-5
Type and Value of Loss for Burglaries

	DeKalb County	St. Petersburg	Wichita
ITEMS TAKEN			
Cash	23.0% (322/1401)	18.2% (117/643)	21.2% (234/1103)
Jewelry	23.1% (324/1400)	8.9% (57/643)	11.2% (123/1103)
Television, Radio, Camera, Appliances	28.9% (404/1400)	8.9% (57/643)	27.7% (306/1103)
Firearms	7.3% (102/1400)	2.2% (14/643)	6.6% (73/1103)
Clothing	6.1% (85/1400)	5.4% (35/643)	4.9% (54/1103)
Office Equipment	4.4% (61/1400)	2.2% (14/644)	2.0% (22/1103)
Drugs	2.4% (34/1400)	0.9% (6/643)	2.7% (30/1103)
Other	35.0% (489/1399)	30.3% (195/643)	42.2% (466/1103)
Nothing Taken	17.3% (245/1419)	41.4% (288/696)	22.8% (263/1151)
VALUE OF LOSS			
Mean	$1185.70	$122.30	$ 636.80
Standard Deviation	$3824.10	$522.90	$2291.60
Median	$ 315.00	$ 20.40	$ 114.00
n	1341	694	1023

Table 3-6
Victim/Suspect Relations
in Burglary Cases

	DeKalb County (1491)	St. Petersburg (702)	Wichita (1167)
PERCENT OF ALL BURGLARIES			
Unknown	77.3% (1152)	96.0% (674)	85.8% (1001)
Known	22.7% (339)	4.0% (28)	14.2% (166)
PERCENT OF BURGLARIES IN WHICH THE VICTIM/SUSPECT RELATION IS KNOWN			
Stranger	56.7% (192)	25.0% (7)	31.9% (53)
Friend or Acquaintance	24.5% (83)	57.1% (16)	37.3% (62)
Family Member	5.3% (18)	10.7% (3)	13.3% (22)
Neighbor	7.7% (26)	7.1% (2)	7.2% (12)
Co-Worker	4.7% (16)	0.0% (0)	5.4% (9)
Relative	1.2% (4)	0.0% (0)	4.8% (8)

supplied by a victim or witness. For the overwhelming number of cases, the relationship between the suspect and the victim is not known. Even in those situations where a suspect is known, the relationship between the suspect and burglary victim varies greatly between sites. In DeKalb County, in the 339 cases in which the patrol officer knew the victim/suspect relationship, more than 56 percent of the burglary suspects are strangers to the victims. However, in St. Petersburg, this figure is only 25 percent (of the 28 cases in which the relationship was known), and in Wichita in 32 percent of the 166 cases in which the victim/suspect relationship was known, the suspect is a stranger. Since we would expect burglaries in which the offender is a stranger to the victim to be more difficult to solve than burglaries in which the suspect is acquainted with the victim, these differences should be kept in mind. Note, however, that in all three sites, suspects are either strangers to the victim or their relationship to the victim is unknown for more than 90 percent of the burglaries.

Characteristics of Robberies

In contrast to burglaries, there seems to be wide variation in the locations of robberies among the three sites. This is shown in Table 3-7. In DeKalb County, more than 60 percent of the robberies are committed against businesses or commercial establishments; fewer than 30 percent of robberies are committed outside or on streets, and extremely few occur in residential structures. At the other extreme, 15 percent of the robberies committed in St. Petersburg are of commercial establishments and more than 70 percent are committed outside or on the street. Almost 14 percent of

Table 3-7
Locations of Robberies

	DeKalb County (121)	St. Petersburg (88)	Wichita (114)
Business/Commercial Establishment	63.6% (77)	14.8% (13)	41.2% (47)
Street/Outside	28.9% (35)	70.5% (62)	45.6% (52)
Residential Structure	5.0% (6)	13.6% (12)	9.6% (11)
Other	2.5% (3)	1.1% (1)	3.5% (4)

the robberies within St. Petersburg occur in residences. In Wichita, the number of robberies of commercial establishments is about the same as those which are committed outside on the street; slightly fewer than ten percent of the robberies occur in residences.

The extremely high proportion of street robberies found in St. Petersburg can be attributed to the large number of retired people living in the city. This, combined with the warm climate and the large number of people on the street, provides many more street robbery targets. The high proportion of business and commercial robberies in DeKalb County relative to street robberies may be indicative of the suburban character of the jurisdiction. Because of the low population density of DeKalb County more people are likely to be driving cars and fewer people are likely to be walking along streets and outside where they can be easily robbed. The primary robbery targets, therefore, are commercial establishments.

Figure 3-2 shows the time of occurrence for robberies. Across all sites, the time between 4:00 a.m. and 8:00 a.m. has the lowest proportion of robberies. The proportion of robberies increases until the time period between 8:00 p.m. and midnight, when, in all three sites, the proportion of robberies reaches its peak.

Table 3-8 shows the type of force that is used in robberies. In both DeKalb County and St. Petersburg verbal threats seem to be used more than physical threats or displays of weapons; nevertheless, display of a weapon is the second most common type of force applied. In Wichita, almost

Figure 3-2
Time of Occurrence for Robberies

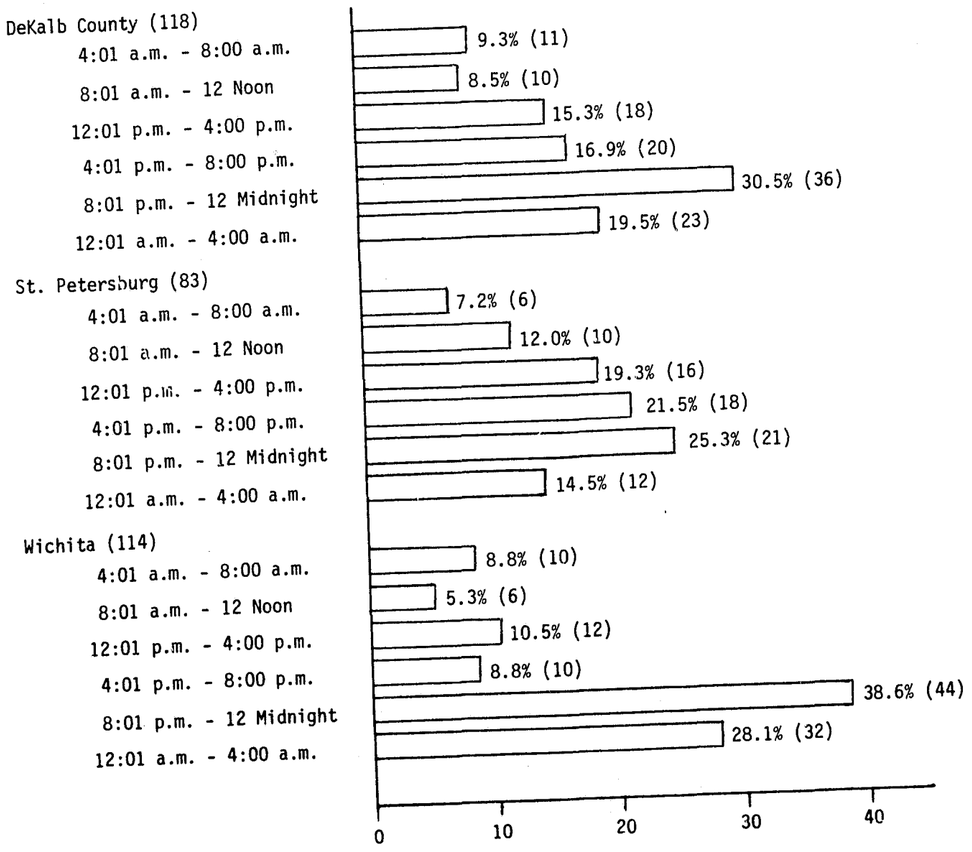


Table 3-8
Force Used by Offenders in Robberies

	DeKalb County	St. Petersburg	Wichita
Type of Force			
Verbal Threat	44.2% (53/120)	27.6% (24/87)	15.0% (17/113)
Physical Threat	15.1% (18/119)	20.7% (18/87)	30.1% (34/113)
Weapon	38.3% (46/120)	21.8% (19/87)	64.9% (74/114)

65 percent of the robberies involve the display of a weapon; physical threats are the second greatest in number.

The level of injury incurred by victims of robberies is shown in Table 3-9. In all three sites, if an injury occurs, it is likely to be a minor one. Wichita has a noticeably higher rate of hospitalizations and killings of robbery victims than the other two sites combined. This may be owing to the more frequent use of weapons in robberies in Wichita.

Most robberies involved the loss of cash, as shown in Table 3-10; however, 30 to 40 percent of the robberies in the three jurisdictions involve the loss of miscellaneous items as well. There are large differences in the number of robberies in which nothing is taken: In St. Petersburg, 27 percent of the robberies involve no loss; in DeKalb County only three percent of the robberies involve no loss. This may account for the variation in the median value of loss due to robberies in the three areas, ranging from $31.50 in St. Petersburg to $183.50 in DeKalb County.

Table 3-11 shows the percentage of robberies in which the victim/suspect relationship is known to the patrol officer taking the report, and, of those where the relationship is known, the frequency of each type of victim/suspect relationship. There are great differences among the sites in the number of cases for which the victim/suspect relationship is unknown. There are two explanations. Most of the robberies in DeKalb County are of commercial establishments, and victim/suspect interactions are longer in these robberies. Therefore, the victims are more likely to identify the offender as a stranger or someone they know. This explains why there

Table 3-9
Injuries Sustained by Victims of Robberies

	DeKalb County	St. Petersburg	Wichita
Injury			
Minor	11.6% (14/121)	44.8% (39/87)	21.1% (24/114)
Treated and Released	0.8% (1/119)	12.6% (11/87)	7.9% (9/114)
Hospitalized	2.5% (3/120)	1.1% (1/87)	6.1% (7/114)
Killed	0.8% (1/120)	1.1% (1/87)	4.4% (5/114)

Table 3-10
Type and Value of Loss for Robberies

	DeKalb County (121)	St. Petersburg (86)	Wichita (111)
ITEMS TAKEN			
Cash	91.7% (111)	69.8% (60)	78.4% (87)
Jewelry	9.9% (12)	14.0% (12)	9.0% (10)
Other	28.9% (35)	34.9% (30)	41.4% (46)
Nothing	3.3% (4)	26.7% (23)	10.8% (12)
VALUE OF LOSS			
Mean	$ 778.50	$ 257.60	$ 312.80
Standard Deviation	$1346.40	$1150.40	$1053.00
Median	$ 183.50	$ 31.50	$ 73.50
n	114	88	100

Table 3-11
Victim/Suspect Relations
in Robbery Cases

	DeKalb County (119)	St. Petersburg (88)	Wichita (111)
PERCENT OF ALL ROBBERIES			
Unknown	2.5% (3)	98.9% (87)	70.3% (78)
Known	97.5% (116)	1.1% (1)	29.7% (33)
PERCENTAGE OF ROBBERIES IN WHICH THE VICTIM/SUSPECT RELATIONSHIP IS KNOWN			
Stranger	94.0% (109)	100.0% (1)	75.8% (25)
Friend or Acquaintance	6.0% (7)	0.0% (0)	24.2% (8)

are fewer robbery cases in DeKalb County where the victim/suspect relationship is unknown. St. Petersburg robbery cases are overwhelmingly street robberies where victim/suspect interactions are shorter and the victim/suspect relationship is more likely to be unknown. Thus the greater number of robberies with unknown victim/suspect relationship. In Wichita, robberies are almost equally split between the two types. The second explanation is that DeKalb County patrol officers are more likely to assume the offender was a stranger when the victim/suspect relationship is unknown. Therefore, the victim/suspect relationship is entered on the preliminary investigation report as "stranger" for cases in which the patrol officer does not know the victim/suspect relationship.

In DeKalb County the relationship between the victim and the suspect is not known in less than three percent of the robbery cases; when the relationship is known, 94 percent of the robbery suspects are strangers to the victim. In St. Petersburg, the relationship between the victim and the suspect is unknown in virtually all of the robbery cases. Finally, in Wichita, in more than 70 percent of the cases, the relationship between the suspect and the victim is unknown to the patrol officer, but when the relationship is known, almost 76 percent of the cases involve a suspect who is a stranger to the victim. In all three sites the overwhelming majority of robbery cases involve victims who either do not know if they are acquainted with the offender or know that the suspects are strangers.

Agencies

Previous sections have described differences in the demographic characteristics of the jurisdictions studied and the characteristics of

burglaries and robberies. This section describes the police agencies themselves, emphasizing the way in which burglary and robbery investigations are organized.

Table 3-12 presents selected characteristics of the three agencies. Despite differences in the number of crimes committed, population size, and geographic area, the number of sworn officers in each agency is similar, as is the percent of sworn officers who are detectives. Both the DeKalb County Police Department and the St. Petersburg Police Department have separate uniformed patrol and plain-clothes detective divisions whereas Wichita uses a team policing organizational structure that decentralizes generalist detectives to geographically based teams with six detectives per team. Figures 3-3 through 3-5 show the location of specialist investigative units relative to patrol operations in the organization of the three departments.

In all three agencies follow-up investigation of robbery cases are handled by a different group of detectives than burglary/theft cases. This specialized detective unit is called Major Felony in DeKalb County, Personal Crimes in St. Petersburg, and Major Crimes in Wichita. The St. Petersburg Police Department is the only agency to distinguish between burglary detectives and other detectives who investigate larceny/theft cases although, in all agencies, relatively informal specialization does occur. In DeKalb County, for example, detectives within the General Investigations section are known as burglary or theft specialists even though they may handle cases outside their specialty.

Table 3-12
Selected Characteristics of Site Agencies
1977

	DeKalb County	St. Petersburg	Wichita
Budget* (thousands of dollars)	9,500	12,400	7,800
Sworn Officers*	374	445	386
Percent of Sworn Officers that are Detectives*	13.3	10.0	14.1
Patrol Officers/Car	One	One	One
Single or Paired Detectives	Single	Single	Single
Organization of Investigations			
Team Policing	No	No	Yes
Robbery Cases handled by Violent Crime Unit	Yes	Yes	Yes
Burglary Cases and Other Property Theft Cases Handled by Separate Units	No	Yes	Yes

*For DeKalb County and St. Petersburg--Michael T. Farmer, ed., Survey of Police Operational and Administrative Practices-1977; Washington, D.C.: Police Executive Research Forum, 1978. For Wichita--John F. Heaphy, ed., Police Practices: The General Administrative Survey; Washington, D.C.: Police Foundation, 1978.

Figure 3-3
Organization of the DeKalb County Department of Public Safety

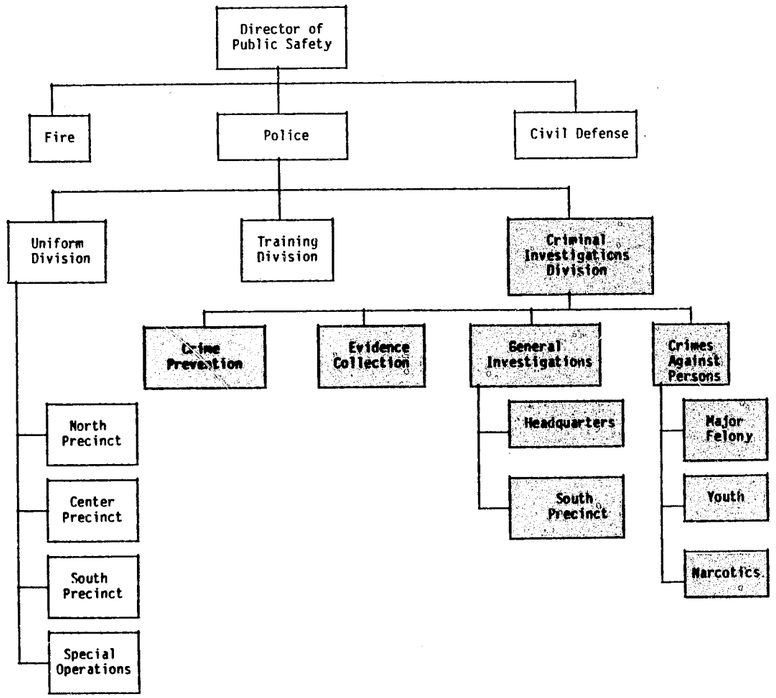
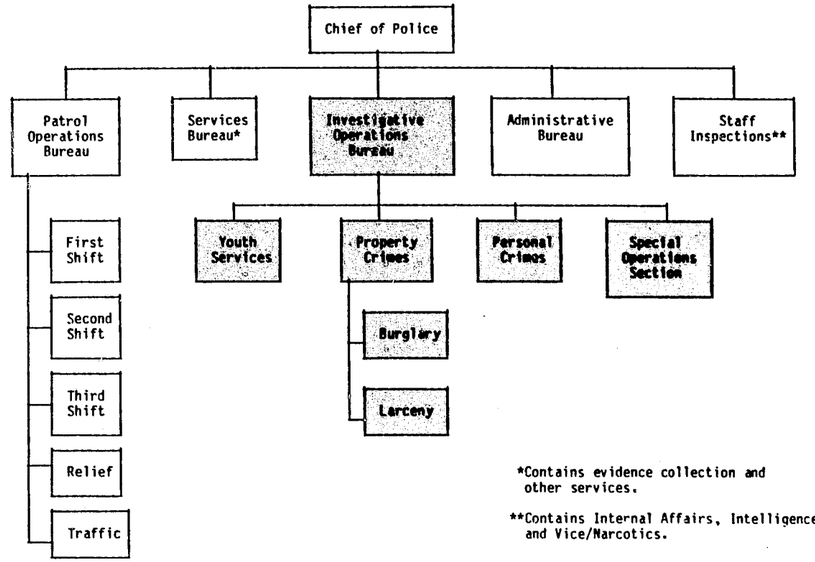


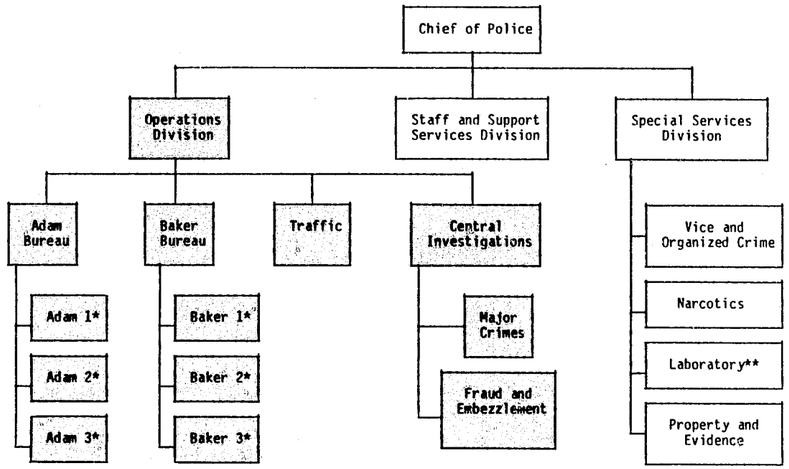
Figure 3-4
Organization of the St. Petersburg Police Department



*Contains evidence collection and other services.

**Contains Internal Affairs, Intelligence and Vice/Narcotics.

Figure 3-5
Organization of the Wichita Police Department



*Each team contains both patrol officers and general investigations detectives.

**Collects physical evidence at crime scenes as well as processing physical evidence in the laboratory.

The investigative function has been a concern of police managers at all three sites, and substantial interest has been expressed by these officials in methods for improving this function. This concern was demonstrated by the active cooperation of site agency police officials in carrying out this study, and by the fact that the police chief executives of these agencies volunteered to participate in this study. This strong concern for how investigations are handled in these agencies calls into question how typical these three agencies are of all moderate size police agencies. Although impossible to determine, it is likely that these three agencies have better managed investigative functions than the average police agency. To the extent that this is true, and to the extent that better management leads to greater investigative effectiveness, some of the results of this study may be descriptive only of well managed police agencies. Therefore, the findings regarding investigative effectiveness are not necessarily typical of all medium size police agencies. Those agencies where little attention is paid to investigative management issues may not have as effective an investigative function as was found in the three site agencies.

Conclusions

The sites studied presented a range of different types of communities, burglary and robbery characteristics, and police organizational styles. The following chapter presents a description of how burglaries and robberies are investigated in these agencies, based on observations made by the project staff.

Section II

RESEARCH

"This is an ordinary, although atrocious, instance of crime. There is nothing peculiarly outre' about it. You will observe that, for this reason, the mystery has been considered easy, when, for this reason, it should have been considered difficult of solution."

Dupin in "The Mystery of Marie Roget'" by Edgar Allan Poe. Southern Literary Messanger. 1842-43.

"Your fatal habit of looking at everything from the point of view of a story instead of as a scientific exercise has ruined what might have been an instructive and even classical series of demonstrations. You slur over work of the utmost finesse and delicacy in order to dwell upon sensational details which may excite, but cannot possibly instruct, the reader."

Sherlock Holmes to Dr. Watson in "The Adventure of the Abbey Grange" by Sir Arthur Coran Doyle. The Strand Magazine. 1904.

CHAPTER 4

OVERVIEW OF INVESTIGATIONS

This chapter presents a description of how burglary and robbery cases are investigated by the three agencies studied. Examples are used to illustrate and clarify various facets of the investigative process. These examples are not necessarily typical, but were selected from observations made during this study to illustrate particular points. What follows is intended to give the reader a "feel" for investigations and the problems investigators encounter.

Although each individual case may be relatively easy to understand, the overall investigative process is complex. This will be a recurring theme throughout this chapter and report. Generalities about how investigations are conducted and what leads to crimes being solved may contain a great deal of truth, but they often fail to account for the complexity, diversity, and uncertainty inherent in investigations. This uncertainty is, in many respects, owing to the fact that each case is unique: victims vary with regard to their knowledge of the offense, reliability, and honesty. Some victims and witnesses may know less than they seem to; others may know more. Information about a suspect may solve one case but leave another unsolved. The lack of information early in an investigation often means that the case will not be solved, but this is not always true.

The uncertainty of investigations will be an underlying theme throughout this report. Although the following chapters will attempt to

predict actions, information, and results based on various features of the case and the investigation, it will be apparent that very little about an investigation is highly predictable. This chapter attempts to illustrate, with examples, why this occurs.

The three sections comprising this chapter address issues concerned with preliminary investigations, assigning cases, and follow-up investigations. How patrol officers attempt to answer three basic questions is described in the first section on preliminary investigations. The basic questions are: What occurred? Who committed the offense? and, What information is available? The case assignment section describes burglary case screening procedures (robbery cases are not screened) in the three agencies. Finally, the section on follow-up investigations describes the actions taken by detectives, and how information is gathered.

Preliminary Investigations

Despite the fact that investigative units were organized differently at the three sites studied, our observations indicated that the overall process of investigating burglaries and robberies was relatively similar. After receiving a report of an offense, communications dispatched a patrol officer to the crime scene. If there was a reasonable likelihood that the offender was still at the scene or if the patrol workload was light, several officers might respond (although only one officer was responsible for conducting the preliminary investigation and writing the reports). The other officers would either return to service as soon as the excitment died

down or would assist in conducting the preliminary investigation. In DeKalb County, detectives are dispatched to crime scenes to take over the investigation as soon as the responding patrol officer determines that a robbery took place. No similar formal policy existed in the other two sites, although detectives were free to investigate the scenes of serious crimes or particularly interesting events.

Preliminary investigations involve determining the answers to three basic questions:

- What occurred? Was it a crime, and, if so, what type of crime?
- Who committed the offense? Is the person present? Can the person be arrested?
- What information is available that may lead to the identification of a suspect?

All three questions are often difficult to answer and require that patrol officers, sometimes with the assistance of a supervisor, judge each event carefully.

What Occurred?

Although there are differences in the penal codes' definitions of burglary and robbery, at all three states the same basic definitions are used. Burglary is generally defined as:

> The unlawful entering of a building with the intent to commit a theft or a felony.

Robbery is generally defined as:

> The taking of property from another by the threat or use of force.

Although many criminal events are easily classified as burglaries or robberies, often patrol officers are confronted with ambiguous events, the classification of which may depend on seemingly innocuous detail. Four examples observed during this study illustrate this point. In the first example, the question was the intent of the suspect to commit a crime; a question which is not always easy to resolve.

> **Example One.** A patrol officer responded to a call dispatched as a burglary. On arrival, the officer interviewed the victim and her brother (who happened to be visiting). They told the officer that earlier in the evening while the victim was away and her brother was sleeping on the sofa, the victim's estranged husband had broken into the house through a rear window. The victim's brother awoke and confronted the man, who claimed he wanted to obtain some of his personal belongings. The victim's brother chased her estranged husband off and when the victim returned home, she called the police. The officer was uncertain as to whether this event was a burglary, or even a crime, so she requested that the first-line supervisor be sent to the location. After discussing the event with the officer and the victim the supervisor advised the officer that since the estranged husband was still legally married to the victim, he had a legal right to the property and, therefore, there could be no intent to commit a theft or felony. The event was not classified as a burglary or as a crime. The victim was informed that she may have the grounds for a civil action, and that if the estranged husband returned and caused further trouble, she should call the police for assistance.

In the next example, the problem with defining the incident revolves around whether unlawful entry occurred. This problem is compounded by the obvious fact that the officer must try to reconstruct the incident with incomplete information.

> **Example Two.** In the second example a patrol officer was dispatched to handle a burglary call at a house in a rather secluded location. The officer interviewed the elderly victim who claimed several pieces of jewelry were missing. There were no signs of a forced entry although the victim claimed to always lock her windows and doors. The victim suspected that several itinerant workers who were employed by a neighbor had committed the crime, and stated that she did not feel that her cleaning lady had taken the items, and that it was unlikely any of her relatives had removed them. The officer finally classified the case as a larceny since there were no signs of forced entry, and, as the officer told the researcher, if the cleaning lady took the jewelry the incident could not be a burglary since there could not have been an unlawful entry.

Some incidents are easily identified as fitting the definition of a particular crime as Example Three shows. It is interesting to compare this example of a burglary to Example One. In both examples, the suspect was a close acquaintance of the victim but the incidents were classified differently for apparently different reasons.

> **Example Three.** The responding officer interviewed the burglary victim and checked the crime scene. The victim stated that when she returned home that evening she had found many of her belongings strewn about the house, the back door open, and the door frame broken, as well as some jewelry missing. Further interviews of the victim revealed that her son, who lived several blocks away, was the only person who knew where the jewelry was hidden, and that the victim thought he had been involved in the burglary. This event was classified as a burglary and the victim's son listed as a suspect. The suspect had no lawful reason to enter the victim's dwelling, had entered the house, and taken items belonging only to the victim.

The fourth example illustrates that investigators sometimes check a victim's claims out of a concern that the victim could be inventing a story to cover another crime.

> **Example Four.** In one case, the victim, while travelling from his place of employment to a night deposit box with the

day's receipts, claimed to have been assaulted outside the bank by three masked assailants who then took the money. The description of the event sounded suspicious to the detective, and because there were no other witnesses, the victim was asked to submit to a polygraph examination, which he did. Detectives at the agency said that they are usually a bit suspicious of robberies that are said to have occurred under these types of circumstances. Later several suspects were arrested and charged with this and several other robberies.

Example Six (below) provides another illustration of this point.

Street robberies are especially problematic since the use of force may not be obvious. A purse snatch without physical contact between victim and offender may not be classified as a robbery since no force was threatened or used against the victim. However, if the victim fell the event might well be classified as a robbery. In an actual case described by one detective, the victim fell, hit her head and died. This case was classified as a homicide.

As these examples illustrate, determining what occurred and how it should be classified may be difficult. Although most cases observed fit the definition of a robbery or a burglary without much problem, some were sufficiently ambiguous that the patrol officer was uncertain as to how the event should be classified. Often a superior officer was consulted in order to fit the oval peg into the round hole.

Who Committed the Offense?

Those who committed burglaries and robberies in all three sites usually remained unidentified. This was primarily due to there being no leads pointing to any single person or group of individuals. Even when a

suspect is identified, however, there still may be a great deal of uncertainty as to whether this person committed the offense. The third example (in which the victim believed her son to be the offender), illustrates this point extremely well.

Example Three (Continued). The suspect stopped at the house while the preliminary investigation was still being conducted, but after he was named as a suspect. Although the officer conducting the preliminary investigation was relatively certain the son was the offender, the suspect provided no conclusive information linking himself to the crime. Even though the evidence technician removed several latent prints from the crime scene, and even if these prints were later matched to the suspect, the fact that the suspect may have left them on an earlier visit, during which he had a legitimate right to be in the victim's house, would make these pieces of physical evidence of dubious value. In short, the investigating officer felt he had insufficient evidence to detain the suspect, so he was not arrested.

In most cases, there is not even enough information present to identify a suspect, let alone enough to use as a basis for arrest.

What Information Is Available?

Discovering relevant information at a crime scene--information that may identify a suspect and link him to the crime--is a question of interpreting the attributes of the event and then deciding what actions to take. What constitutes relevant information depends on what the investigator expects.[1] A detective's belief that the employee of a commercial robbery victim was an accomplice to the crime may lead the officer to pursue a line of questioning designed to ferret out such information. Whether this is the appropriate line of questioning cannot be determined until the questions are asked and answers given. Example Four illustrated

a case in which the detective was suspicious of the victim's story. In that example the victim's description of the alleged robbery suspects may not have been the information that was important, although crucial in most other robbery cases. The important information was that the victim was alone, there were no witnesses, the suspect descriptions were too vague for identification purposes, the victim had the means and opportunity to have taken the money himself, and past experience with this type of incident has shown the officers that it was a distinct possibility that the victim was the thief.

Physical Evidence

Similarly, the question of what information is available depends on what actions are taken. Physical evidence will not be useful unless it is collected, but even then it still may be of little value unless a suspect is identified by it. Latent fingerprints and photographs of crime scenes present a good example of this type of problem. Even if a suspect is identified, as in Example Three (wherein the suspect was the son of the victim), physical evidence may be of little value. Table 4-1 shows the frequency with which evidence technicians were called to burglary and robbery crime scenes in the three sites. Evidence technicians are called to burglary and robbery crime scenes when the responding officer feels that physical evidence, usually in the form of latent prints, is present. Physical evidence was never observed to lead to the identification of a suspect at the three sites, but was only put to use once a suspect was identified. The many photographs taken are primarily for use as evidence

if the case goes to trial. The decision to call an evidence technician is, therefore, not based on whether any found physical evidence will be of use, but rather on the knowledge that it might become valuable at a later time. It should also be noted that evidence technicians and patrol officers often felt they were only putting on a show for the victim (a case of life imitating fiction), knowing that the collection of physical evidence at the particular scene was probably a waste of time.

Table 4-1
Frequency With Which Evidence Technicians
Were Called to Crime Scenes

	Burglary	Robbery
DeKalb County	17.1 (257)	38.8 (47)
St. Petersburg	33.8 (237)	27.3 (24)
Wichita	34.2 (400)	31.6 (36)

Interviewing

Since interviewing victims and checking the crime scenes are almost always done by responding patrol officers, most information regarding offenses will come from engaging in these two activities. Engaging in activities designed to elicit information from sources other than the victim and the crime scene depends primarily on the nature of the offense and

department procedures. If a witness or other person presents himself/ herself to the officer and claims to know something about the offense this will be recorded, but with the exception of St. Petersburg, canvassing for witnesses (i.e., talking to people who are present in the area surrounding the crime scene to determine if anyone has seen anything out of the ordinary during the time period the offense may have occurred) was done only rarely in burglary cases. In robbery cases, a greater effort was put into locating witnesses (see Chapter 5).

Once the preliminary investigation is completed, the patrol officer is responsible for completing a report of the offense. In DeKalb County and St. Petersburg these reports were always written by the patrol officer and reviewed by the field supervisor. In Wichita, written reports were used as was the phoning in of reports to an automatic taping system at the department. A secretary transcribed the tapes and provided a typed copy of the report to the team detectives as soon as possible. However, because of typing backlogs, detectives often proceeded on the basis of case summaries that were sent to the team detectives the day after the crime was reported.

Assigning Cases

In two of the three sites patrol officers' burglary and robbery reports were sent to the appropriate investigative supervisors, usually on the workday following the incident. The assignment of robbery cases differed in DeKalb County, where detectives were generally assigned cases

shortly after the patrol officer established that a robbery had occurred. In St. Petersburg, robbery cases were sent to the Personal Crimes section of the Investigative Operations Bureau. In Wichita only commercial robbery reports were sent to the Major Crimes section of Central Investigations; street robbery reports were sent to the teams for follow-up investigations. Burglary case reports were sent to burglary investigators in DeKalb County and St. Petersburg and to the appropriate team detectives in Wichita.

Although all robbery cases were assigned to detectives for follow-up investigation at the three sites, many burglary cases received no more than a preliminary investigation by a patrol officer. Burglary case screening procedures were markedly different in the three agencies. Figure 4-1 shows the form used by first-line detective supervisors for screening burglary cases in DeKalb County. In addition to the point scoring system shown on this form, cases in which more than 1,000 dollars worth of property was stolen were automatically assigned to investigators to be worked. This was the most formalized screening procedure used among the three agencies.

In St. Petersburg, the first-line supervisors reviewed patrol officers' burglary reports, without the aid of formal guidelines, to determine what information was present. Cases in which a suspects' name or description appeared, and those in which latent fingerprints were recovered, were usually assigned to a detective for follow-up investigation. Some cases may be assigned irrespective of the information available--cases where victims have suffered exceptionally high property losses and those in which police-public relations require that an investigation be conducted.

Figure 4-1
DeKalb County Police
Burglary Screening Decision Model

Weight (Circle)	Information Element	
	1. Suspect Information	
10	A. Positive Identification	
8	B. Tentative Identification	
6	C. Poor Identification	
	2. Vehicle Information	
10	A. Positive Identification (tag and/or other)	
8	B. Definitive Description	
6	C. Poor Description	
	3. Estimate Time Between Incident - Report	
4	A. Less than one hour	
3	B. One to twelve hours	
2	C. Twelve hours and over	
	4. Method of Reporting	
2	A. Witness and/or victim	
1	B. Officer on-view	
	5. Information Received	SECTION 5 TO BE USED ONLY IF INFORMATION AVAILABLE AT CODING OR TO ACTIVATE AN INACTIVE CASE
	A. Confidential Informant and/or victim	
10	1. Definitive information	
8	2. Possible information	
6	3. Poor information	
	B. Information shared from other investigator and/or agency	
10	1. Definitive information	
8	2. Possible information	
6	3. Poor information	
	6. Modus Operandi	
5	A. Definitive pattern	
4	B. Possible pattern	
3	C. Poor pattern	
	7. Fingerprints	
10	A. Identified with suspect	
1	B. Without suspect	
_____	TOTAL	CUT POINT FOR CASE ACTIVATION IS 10

Case: Active
Inactive (Circle)

Other factors not listed which cause the case to be active.

(Specify) _____

NOTE: This scale is to be used as a guideline only and is not intended to override nor interfere with the good judgement of a supervisor in assigning cases where there may be considerations not included in the scale.

CASE NUMBER _____ INVESTIGATOR _____

DATE _____ SCREENER _____

The Wichita Police Department also had a policy governing the screening of burglary cases, but adherence to the policy varied by team. According to the policy, burglary cases were screened out when no suspect name or description appeared, no property serial numbers or other leads were noted, or when the losses were valued under 500 dollars. Letters were to be sent to the victims explaining the decision to curtail further investigative effort. But the procedure generally followed was to assign a case to a detective if there was any perceived likelihood that it would result in an arrest, and then to let the detective decide how much effort should be expended on the investigation. In some teams, the detectives actually screened cases and sent investigatory termination letters after the case was assigned to them. In other teams, all cases were worked by recontacting the victim to see if any new information was available. Some of the detectives stated that this procedure was employed primarily for public relations purposes. One team captain stated that all burglary cases were assigned in his team because he felt that it was more important to spend time contacting victims and establishing rapport between the victims and the officers than to save detectives' time by screening out cases unlikely to result in arrest.

Follow-Up Investigations

Although follow-up investigations by detectives have been the focus of research, popular fiction, and mass media coverage, by the time a case is assigned to a detective much work has already gone into the case and many crucial decisions have been made. The patrol officer has already

documented the presence or, more often, the absence of the basic leads detectives need to begin a follow-up investigation. A decision has already been made as to the classification of the offense, to whose attention the case should be brought for further investigation, and the priority the case should be given. Decisions as to the crime type, whether physical evidence is present and should be collected, whether a canvass for witnesses should be conducted, or whether the case warrants further attention, are all made prior to a detective being assigned a burglary case, or, for that matter, a robbery case. Although many of these decisions can be reversed-burglaries and robberies are sometimes reclassified or unfounded, a search for physical evidence can still be conducted, a search for additional witnesses can still be mounted, or a screened-out case can be reactivated--these pre-existing conditions usually set the agenda for the detective work that follows.

This section contains descriptions of information gathering activities used by detectives conducting burglary and robbery follow-up investigations. Since detectives usually begin investigations with information contained in patrol officers' preliminary investigation reports, the first part of this section describes the activities used to follow-up these initial leads. Recontacting victims is the most common follow-up activity (see Chapter 5) because even if no leads exist, there is always a victim. This activity is discussed first. The problems encountered by detectives even when the preliminary investigation report contains the names of suspects or other good leads are covered in the following two parts. Although many investigations do not progress further than following up the

initial leads found in preliminary investigation reports, sometimes detectives are able to develop other sources of information. The last three parts of this section deal with obtaining related crime information, interviewing informants, and interrogating suspects.

Recontacting Victims

Once a case is received by a detective, a decision is made as to what can be done. In a large number of cases, the detective recontacted the victim, in person or by telephone, to verify the patrol officer's report, to determine if new or unrecorded information was available, or merely to attempt to appease the victim. Generally, no new information was forthcoming, and sometimes the public relation attempts backfired.

In the following example the detective reinterviews a victim who appeared to have no interest in the follow-up investigation. Because he thought nothing would come of the investigation, the victim was put off by being recontacted by the detective.

> **Example Five.** A detective, with several newly assigned cases, in addition to those he was already investigating, visited the victim of a burglary. Earlier that week the victim's property was broken into and several hundred dollars worth of electronic entertainment and citizens-band radio equipment was stolen. The victim expressed surprise at the appearance of the detective and stated that he had given the patrol officer all the information. The interview of the victim took approximately 20 minutes, provided no new information, and only confirmed the lack of any substantial leads. The victim seemed bothered by the amount of time the interview was taking. Finally, taking his cue from the victim's behavior, the detective left, having acquired no new leads.

Example Six illustrates a case in which recontacting the victim and searching for possible witnesses was not only unsuccessful, but also led to the detective becoming suspicious of the victim's claim.

> **Example Six.** The victim of a commercial burglary in which an expensive set of power tools was stolen was recontacted by a detective. The tools were highly specialized and were used in only one type of business, that in which the victim was employed. The detective was shown the crime scene and the victim recounted how he had discovered the theft. The victim employed numerous high school students and young adults in low-paying jobs and there was a high turnover of employees. The victim said, however, he suspected no current or former employee of committing the burglary. After interviewing the victim, the detective canvassed the neighborhood for any possible witnesses in the apartments overlooking the crime scene. Although several people were home at the time, no one had seen or heard anything suspicious. The detective stated after the canvass that the victim might have reported a false burglary in order to gain the insurance money, since very few people would have any use for the items taken. No further investigation was conducted.

Recontacting the victim does pay off in many cases, however.

The next example illustrates the point that some cases that have no good or apparent leads documented in the patrol report are not as hopeless as the original report indicated. For this type of case, recontacting the victim is useful.

> **Example Seven.** A detective checking the address of a strong-arm robbery victim found that he resided in a half-way home for juvenile delinquents. Upon arriving at the victim's residence, he was introduced to the victim by the adult supervisor. The detective asked the victim to explain, in greater detail than was in the patrol report, the circumstances of the robbery. After some hesitation, the victim stated that the suspect was known to him, but not by name, and that the victim and suspect had gone to the location of the incident together. After further inquiries, the victim admitted that he had wanted to purchase some marijuana from the suspect but the suspect had beaten him and taken his money. The victims relationship to the suspect had not been told to the patrol officer because the victim was afraid to incriminate himself. The detective assured the victim that no charges would be brought against him, and proceeded to confirm the suspect's description already obtained by the patrol officer. The detective then continued to investigate the case.

Named Suspects

Though not common, a suspect may be named in a patrol report assigned to a detective for investigation. When this happens, the detective may check department arrest records to see if the named suspect has any prior criminal record. Since the suspect may not have any record, either because he/she has never been involved with the particular agency, or because the suspect is a juvenile, this activity may not always be telling. Indeed, the identification of a suspect in a patrol report is no guarantee that the named suspect committed the offense, or had anything to do with it. Example Three illustrates this point. Although the victim believed her son was involved, and the investigating patrol officer thought that the victim's son was the primary suspect, the only evidence linking him to the offense was that, presumably, only someone who knew where the victim kept her valuables could have committed the burglary. Since no one witnessed the offender in the act of taking, only a confession or finding the stolen items in his possession could definitely link the suspect to the offense. When the researcher left the scene, the suspect was about to go home and displayed no signs of admitting to the burglary or allowing himself, his car, or apartment to be searched without a warrant.

Although a suspect named by a victim or witness can be arrested and charged with the offense, often the testimony of victims and witnesses leaves much to be desired. The victim may be only theorizing as to who committed the offense (as in Example Three) without having seen the suspect commit the act. Sometimes the victim or witness sees a person they know in the vicinity of the offense, but no other evidence can link the suspected person to the crime. The presence of a suspect name or a description in a patrol report may provide valuable leads, but they neither make the investigation particularly easy nor guarantee a solution. Example Eight illustrates this point.

> **Example Eight.** While conducting a follow-up burglary investigation, a detective found a juvenile suspect listed in the patrol report. The suspect had been named by the victim who claimed to have seen the suspect near her residence shortly after her house was broken into. The suspect's parents were contacted by phone and an appointment made for the next day at the suspect's home. At that time, the detective interviewed the suspect and discussed the case with his parents in the living room of the suspect's home. The suspect claimed not to be involved, but was aware of the incident; he also claimed that he could name the people who did commit the burglary. The suspect also provided the name of another person whom he said could verify that he was not involved. The detective was aware of the activities (not directly related to the offense under consideration) of some of the people named by the juvenile and felt that this suspect probably had little or nothing to do with the burglary. After warning the juvenile to stay away from some of his associates because of their links to known offenders, the detective left. The detective told the researcher afterward that although the suspect may not be completely innocent, he was certainly not deeply involved in the offense, and that his parents seemed to be the type to keep him on the "straight and narrow."

Good Leads

The amount of investigative effort required to follow-up a good lead is seldom mentioned in research on investigative work. However, as

the following example shows, even when good leads are available the investigation is not a simple matter of arresting the suspects. Instead, additional work must be conducted.

> **Example Nine.** A burglary victim called a detective to explain that she thought the offenders were two employees of a firm the apartment complex had hired to do some work in her apartment. The described suspects, names unknown, had been given a key in order to perform the necessary work. The burglary had been committed eight days later and there was no forced entry. The apartment manager, when contacted by the detective, denied that the suspects could have conducted the burglary, but provided the name of the firm that employed them. The owner of the firm testified to the suspects' good employment records and reliability. A message was left for the suspects to contact the detective. The suspects called back about a half hour later and gave the detective their full names, dates of birth, past criminal history and described the work done on the victim's apartment. The detective used this information to check his own department's records and also requested a record check on the suspects from a neighboring jurisdiction. The detective concluded after following up these leads that the suspects were not likely to have been the offenders, and closed out the investigation.

This example demonstrates that even when good leads are available, additional work is required to check them out, and even then the case still may not be solved.

Although information about the suspect may not be present in the preliminary investigation report, there may be enough evidence present to lead to the identification of a likely suspect. The following example is a continuation of the description of the robbery investigation involving a juvenile victim who had attempted to make a drug deal with the suspect. In this case, the preliminary report provided no useful information that could identify the suspect, but did include a few tenuous leads that proved to be

very useful. Of particular interest is the fact that at every step of this investigation the likelihood of being able to identify the suspect was very small.

Example Seven (Continued). Although the robbery victim knew the suspect and could describe him, the victim did not know the suspect's name. The patrol report did mention the presence of a juvenile witness but gave only the witness's address, without revealing the nature of any information she might have concerning the suspect. The detective visited the address listed on the patrol report, which turned out to be the address of the witness' grandmother. Although the witness had been living there at the time of the robbery, she had just moved back with her parents and family. The detective drove to the address provided by the grandmother and interviewed the witness in the company of her parents. The witness thought she recognized the suspect and provided what she thought was the suspect's name. She also stated she would recognize the suspect if she saw him again.

The detective returned to the police station and began checking for the suspect's name in department records. Several variations of the name were tried but the persons corresponding to the name were either of the wrong race, or currently in prison. The detective went to the juvenile section of the department and discussed the case with the officer on duty that evening. Although the youth officer could not provide any new leads he did suggest that a different variation on the original suspect name be tried. A recheck of department records provided a photo, description, name, address, and prior record of a suspect who matched the descriptions given by the victim and witness. Furthermore, and as important to the detective, the suspect had a prior record of assaultive behavior and drug offenses.

The detective then went to the robbery detective office and put together a photo line-up of five color photographs of similar-looking people plus the suspect's photo. When the detective returned to the witness's home she easily identified the photo of the suspect. Armed with this information, the detective drove by the suspect's home but did not stop. He then called the dispatcher and asked that a particular patrol officer meet him nearby. When the officer arrived the detective gave the information about the suspect to the officer and asked him to keep an eye out for the suspect. If the officer saw the suspect, the suspect was to be brought in for

an interview. Happy to have something interesting to look forward to on an otherwise boring evening, the patrol officer said he would try to bring the suspect in that evening. But by the end of the shift no arrest had been made. Several days later the suspect was arrested.

Related Crimes

Sometimes a series of similar crimes can be combined in one investigation that provides detectives with more leads than would be available if the cases were treated separately.

Example Ten. A series of burglaries in which swimming pool supplies had been stolen had occurred in a particular neighborhood. No witnesses had seen a suspect, but a pool cleaning service truck had been observed in the vicinity shortly after one such burglary. Further investigation revealed that all of the victims employed the same pool service firm. The owner of the firm suspected a person who had been employed at the time of the burglaries but who had been fired for other reasons. The suspect had no known prior record. The detective interviewed the suspect through the screen door of the suspect's apartment, but no new information was forthcoming. Later the detective stated that although he was sure that the suspect had committed the offense, there was insufficient evidence to proceed further with the investigation and no arrest would be made.

Informants

Because of the difficulty in identifying and locating suspects based on the testimony of victims, witnesses, and other persons such as employers and relatives, and because departmental records or other officers may not possess all or any of the information necessary to identify and arrest a suspect, informants are sometimes used. Researchers participating in this study were told by detectives that informants are crucial for successful investigations; however, many arrests observed during this study

occurred without the use of informants and most cases are worked without the involvement of informants (see following chapters). The relatively infrequent use of informants observed in this study, however, should not be allowed to diminish the fact that, as shown later, informants can provide important information, and some burglary and robbery detectives do put effort into establishing and maintaining relationships with informants. One detective interviewed went out of his way to have an informal discussion with an incarcerated offender. The detective had arrested the offender several years earlier. Although no information relating to a specific crime was obtained, general background information on several known active offenders was. More importantly, the detective was attempting to establish a working relationship with the offender so that when released in several years he might act as an informant. In another case, a bondsman acting as an informant called a detective to report on the whereabouts of a robbery suspect. The suspect was arrested at the location.

Although informants seem to be used to acquire specific bits of information on a particular crime, often the location of an already identified suspect, they are sometimes used in longer investigations of particular individuals. The following example illustrates one of these exceptional circumstances.

> **Example Eleven.** A conference between a detective, an assistant district attorney and a paid informant was observed by a researcher. The informant, who had done work for several law enforcement agencies in the past and had at least one other informant job with another agency at the time of this interview, was being used in an investigation of a known and long established criminal receiver. Equipped with a hidden body microphone, the informant had on two previous occasions sold items to the receiver. The receiver was told on both occasions that

> the items were stolen. The transactions were monitored by officers stationed nearby. The discussion with the assistant district attorney was to make sure the case was being properly prepared in anticipation of the arrest of the receiver after one more undercover stolen property sale. The receiver was arrested after the next sale and was later convicted, but was released on probation.

Suspects

The distinction between an informant and a suspect is often difficult to make. Suspects are interviewed not only in the hopes of obtaining a confession to a particular crime, but also in order to build stronger cases against other suspects. Two examples of this follow.

> **Example Twelve.** A burglary suspect was given the opportunity to provide a written statement about the involvement of a second suspect in exchange for having a burglary charge dropped. The suspect refused to comply and was returned to jail.

> **Example Thirteen.** A suspect arrested the previous day was taken out of jail for an interview. He was driven around the jurisdiction by two detectives and pointed out two houses that he helped burglarize. The detectives also attempted to obtain information about accomplices, receivers of stolen property and methods for conducting burglaries. Despite the fact that the suspect was willing to admit to committing other offenses, he would not implicate the others involved. The suspect claimed he was only the driver, did not know the others very well, and had a bad memory for names.

Conclusion

In the very early stages of this study, when contacts were first being made with the site agencies, at least one detective said that no

general conclusions can be drawn about how burglary and robbery cases are investigated because "each case is different." The observations of patrol officers and detectives during this study partially confirm this statement. Although the same activities can be observed being conducted in case after case, it would be extremely difficult to give a specific description applicable to most investigations.

Patrol officers do follow a set of routine procedures when beginning a preliminary investigation: victims are interviewed, the crime scene is checked, an evidence technician may be called, or a search for witnesses may be conducted. The same is true of detectives beginning a follow-up investigation: the patrol report is read and attempts are made to contact people mentioned in the report. What is missed by looking only at those actions which are frequently conducted is the fact that once these routine actions are completed any further investigation follows a course dictated solely by a set of unique facts. As some leads are found to be dead ends and others bear fruit, different types of activities will be applied to the case. In one case, a victim might provide a vague description of a suspect, but this vague description may be enough to ultimately lead to a positive identification; in another case a supposed "positive identification" may turn into a dead end.

This is not to say that the vast majority of burglary and robbery investigations are particularly complex or sophisticated: for each case there is a simple logic to the manner in which the investigation is conducted. Nor is it to say that the final outcome of investigations cannot be predicted from information obtained early in investigations. What it

does mean is that the actions that are taken to make initial leads pay off differs from one investigation to another. As an investigation progresses, it distinguishes itself more and more from other investigations, which, initially, were very similar. So although there is a simple logic to any particular investigation, there is no simple way to describe investigations in general, nor is there a simple way to describe the logic of the "average" investigation. This decrease in the routineness of investigations is explored further in the following chapters.

NOTES

1. Sanders (1977) extensively discusses this point.

CHAPTER 5

CASE PROCESSING

The investigative process is evolutionary. A call reporting that a crime has been committed and the subsequent dispatching of an officer to the scene, or the discovery of a crime by an officer marks the beginning of the process. From this point on investigators make a series of judgments based on the particular facts of the case. Should a witness canvass be conducted? Should a department record check be made? Should the investigation be terminated for want of adequate information? This process of making decisions, and, consequently, choosing to pursue various courses of action, constitutes the investigative process. Toward gaining an understanding of how investigations are conducted, the following facets of the process are examined:

- The average length of time spent by investigators while conducting both preliminary and follow-up investigations;
- The types of activities engaged in by investigators while conducting burglary and robbery investigations and the frequency with which they are undertaken.

Following the examination of these issues is an analysis of two hypotheses and the degree to which the data were found to support or refute them.

Previous research (see Chapter 2) has shown that little time is spent, on average, by patrol officers and detectives in their investigation of individual offenses. Research also suggests that the amount of time available for conducting investigations is related to investigative

results: Ward (1971) suggested that the effectiveness of investigators could be improved if more time were available for investigators to investigate crimes. One of the motivating forces behind the use of case screening models has been that by screening out cases that most probably will not result in arrests, more time will be available for detectives to work on cases that could result in arrests; thus, more of these cases will be solved (Eck, 1979). A discussion of the amount of time taken by investigators when conducting burglary or robbery investigations follows.

Investigative Time

Ward (1971) found that, on average, detectives handled one case every two working hours (the types of cases are not specified), although sometimes that rate increased to one case per hour. He determined the number of hours by dividing the number of manhours available to an investigative unit by the number of reported crimes for which the unit was responsible. Ward claimed, based on the above mentioned average and a series of interviews conducted with detectives, that there was an insufficient amount of time available for detectives to conduct thorough investigations. As will be shown, however, different measures of average times spent by investigators can often be misleading. The average time spent conducting investigations calculated by Ward does not account for the fact that many cases have so few leads that they do not warrant any investigative time being devoted to them (Greenwood, et al., 1975; Eck, 1979). By using averages as a measure of the amount of time taken by investigators, an appreciation of the wide variation in the amount of time that goes into investigations is

lost: some cases require only an hour's worth of work; others may require several days of effort. This fact notwithstanding, the amount of time that goes into the average investigation is important to investigative managers for the purpose of deciding the proportion of cases they will assign to detectives, setting limits on the amount of time they will have investigators work cases, and determining the caseload of investigators.

Three measures of the amount of time taken by investigations can be made: the number of days the case remains open, the number of days on which the case is worked, and the number of minutes spent actually investigating a case. The number of days a case remains open is the number of days between report of an offense and termination of the investigation (cessation of investigative activity). The problem with this measure is that cases are rarely worked continuously for the span of time they remain open. For example, if a case remains open for 30 days, work on the case may be done on only four of these days. Thirty days is a measure of the elapsed time of an investigation.

The second measure of the amount of time a case takes to be investigated is made by counting the number of days on which a case is worked. For example, if a patrol officer conducts a preliminary investigation on the first day and a detective who is assigned to follow-up the case, begins working on the second day, interviews a witness on the fourth day, and talks to a detective just prior to terminating the investigation on the 30th day, four days of investigative time would have been taken. This measure gives an idea of the actual number of days on which a case is worked but suffers from a problem similar to the first measure; namely, that

during a particular day during which a case is worked, the entire day will not necessarily be spent on that particular case.

The third approach to measuring investigative time is to count the number of minutes spent investigating a case on each day that the case is investigated. For example, if a patrol officer takes an hour to interview the victim and check the crime scene during the preliminary investigation, a detective spends fifteen minutes on the second day recontacting the victim and recording property numbers, on the third day the detective spends 30 minutes interviewing a witness, and on the thirtieth day ten minutes is spent talking to other detectives about the case, then one hour and 55 minutes of investigative time would have been taken. This measure of investigative time describes the actual level of effort put into investigating a specific case.

The problem with this measure is that although it accounts for the amount of time taken by an investigators, it does not speak to the number of days needed to conduct a proper investigation. In the aforementioned example, the third measure might lend one to believe that only an hour and 55 minutes of one day was required to conduct the entire investigation. It does not account for the fact that investigators work many cases during the same time period and cannot complete one investigation before beginning another. Moreover, it does not account for the fact that investigators must spend time waiting for things to occur: witnesses may delay before returning a phone call, detectives may have to wait for other police agencies to provide them with information about suspects, and victims may need time to enumerate what has been stolen.

Each of these three measures of investigative time underscores one aspect of the issue of investigative time and none is without its problems. Therefore, all three measures will be used in the analysis of investigative time that follows. For the sake of clarity this analysis will be divided into two parts: the first, a description of the time involved in preliminary investigations; and, the second, a description of the amount of time involved in follow-up investigations.

Preliminary Investigation Time

Burglary

Once a burglary is reported, a patrol officer is dispatched to the crime scene to conduct a preliminary investigation. At all three sites, one day elapsed between the report of the crime and the assignment of the case to detectives. It is during this first day that the preliminary investigation takes place. At all three sites there were no more than three cases documented where the preliminary investigation continued for more than a day.

The number of minutes spent by patrol officers in conducting burglary preliminary investigations at the three sites is shown in Table 5-1. Although over 50 minutes were spent, on average (mean),[1] by patrol officers at the three sites conducting burglary preliminary investigations, it is clear that major differences existed among departments: patrol officers in St. Petersburg and Wichita spent almost twice as much time conducting preliminary investigations of burglaries as did patrol officers

In DeKalb County. (This may be owing to the fact that in St. Petersburg and Wichita a much greater emphasis is placed on preliminary investigations by patrol officers than in DeKalb County.)

Table 5-1
Mean Number of Minutes Spent on Preliminary Investigation of Burglaries by Patrol

DeKalb County	33
St. Petersburg	61
Wichita	66
Mean	53

Robbery

The preliminary investigation of robberies usually begins immediately after they are reported. In St. Petersburg and in Wichita, conducting the preliminary investigation of robberies by patrol officers took a day. In DeKalb County, patrol officers also conducted preliminary investigations of robberies on the same day that they were reported, however, it was a policy in DeKalb County for patrol officers, once having ascertained that a robbery had been committed, to call in and have a detective dispatched immediately to the robbery scene. No such policy existed at either of the other sites, although on occasion detectives would respond immediately to robberies, especially if they involved serious injuries. As a consequence of this policy, detectives in DeKalb County usually became involved in robbery investigations much earlier than at either of the other sites. Table 5-2 shows the average (mean) number of minutes spent by

patrol officers conducting robbery preliminary investigations. A little over an hour was spent by patrol officers conducting preliminary investigations of robberies. Less time was spent conducting robbery preliminary investigations by patrol officers in St. Petersburg than at the other two sites. This may be attributable to the large proportion of personal street robberies in St. Petersburg relative to commercial robberies. Commercial robberies usually require a greater expenditure of investigative time because they are more likely to have been witnessed by many. Street robberies often involve people who have been attacked suddenly, often from behind, and who can provide but sketchy descriptions of their assailants. The greater amount of time spent by patrol officers in Wichita on robberies can be attributed to the emphasis on patrol preliminary investigations at that site. As noted earlier, detectives are dispatched to robbery scenes during the preliminary investigation of robberies in DeKalb County. Detectives in DeKalb County spend approximately 158 minutes conducting robbery preliminary investigations.

Table 5-2
Mean Number of Minutes Spent on Preliminary Investigation of Robberies by Patrol

DeKalb County	61
St. Petersburg	55
Wichita	81
Mean	66

Comparison of Burglary and Robbery

A major difference between burglary and robbery preliminary investigations is the amount of time patrol officers spend conducting preliminary investigations of the two crimes. In two of the sites, DeKalb County and Wichita, patrol officers spent a great deal more time conducting robbery preliminary investigations. In DeKalb County, patrol officers spent almost twice as much time conducting robbery preliminary investigations as they did burglary preliminary investigations. In Wichita, patrol officers spent one-fourth again as much time on robbery preliminary investigations as on burglary preliminary investigations. This is, in large part, owing to the fact that robberies are considered much more serious than burglaries and because robbery victims and witnesses frequently provide more information to investigators than do burglary victims. Therefore, investigators generally spend more time investigating robberies than burglaries. The difference in Dekalb County is particularly great because patrol officers spend less time on burglary preliminary investigations than do patrol officers at the other two sites. St. Petersburg was an exception to this general rule where it was found that the same amount of time was spent by patrol investigating burglaries and robberies. The large proportion of personal robberies in St. Petersburg may account for this exception; personal robbery victims are less able to provide useful information than is true of commercial robbery victims.

Follow-up Investigation Time

Once a preliminary investigation has been completed a decision is made as to whether a follow-up investigation by a detective will be

conducted. At all three sites, detective supervisors screen burglary cases to determine if a follow-up investigation is warranted. Table 5-3 shows the percent of burglary cases assigned to detectives at all sites. Cases for which a follow-up investigation is deemed necessary are then assigned to detectives. All robbery cases are assigned to detectives at all three sites for follow-up investigation. This section describes how much time is spent conducting follow-up investigations of burglaries and robberies.

Table 5-3
Percent of Burglary Cases Assigned

Dekalb County	45.4
St. Petersburg	35.3
Wichita	76.1
Mean	52.3

Burglary

In St. Petersburg and Wichita policies existed that prescribed how long follow-up investigations of burglaries could continue before a report had to be given to the investigative supervisor. In St. Petersburg, five days were allotted for follow-up investigations of burglaries before a supervisor had to receive a supplemental report on the case from the detective responsible for the investigation. In Wichita, ten days were allowed although, as an unofficial practice, another seven days were provided as a grace period, thereby allowing a total of 17 days before a supplemental report was required. Although submission of a report does not preclude

Figure 5-1
Mean Number of Days Between Burglary Case Assignment
and Investigation Suspension

additional investigative work on the case, the submission of a supplemental report is usually viewed by detectives as signifying termination of an investigation. There was no such policy in DeKalb County: cases remained open and on the desk of the investigating detective until such time as the detective decided that the case could be closed. However, at the end of each month the number of arrests and clearances of DeKalb County detectives were calculated. Often cases that remained open but were not being actively investigated were closed at the end of the month, on time to be recorded in the performance statistics.

Figure 5-1 shows the average number of days between the assignment of burglary cases to follow-up investigation detectives and the suspension of investigative activities. Burglary cases in DeKalb County, which had no policy on how long cases could remain open, remained open two to three times longer than in St. Petersburg and Wichita.

As explained above, cases are not investigated on every day that the investigation remains open. Table 5-4 shows the number of days on which assigned burglary cases are actively investigated by detectives. In all three departments, over 60 percent of the burglary cases assigned to detectives were investigated for no more than a day--with only 15 to 40 percent of the cases being investigated for two or more days. In St. Petersburg and Wichita, less than 10 percent of the burglary cases were investigated for three or more days; whereas in DeKalb County, 20 percent of burglary cases were investigated for three or more days. In DeKalb County, where a heavy emphasis was placed on follow-up investigations of

burglaries, more days were spent actively investigating burglaries than at the other two sites.

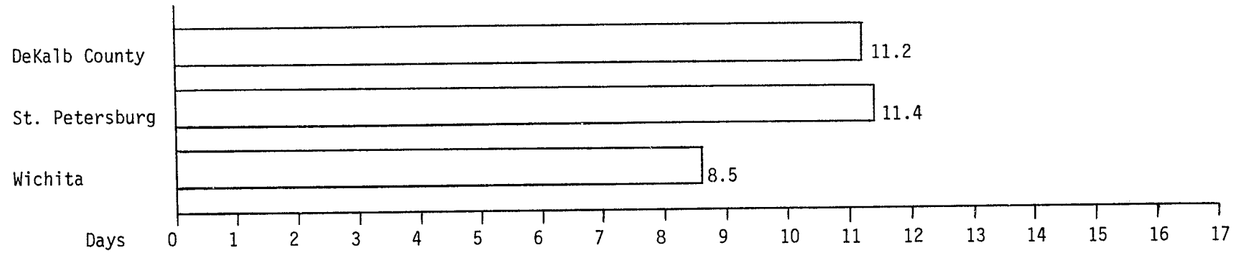
Table 5-4
Number of Days on Which Assigned Burglary Cases Were Actively Investigated by Detectives

	One Day or More	Two Days or More	Three or More Days
DeKalb County	100.0%	38.0%	20.3%
St. Petersburg	100.0%	24.3%	8.8%
Wichita	100.0%	14.8%	6.6%
Mean	100.0%	25.7%	11.9%

Table 5-5 shows the number of minutes spent by detectives on burglary follow-up investigation days. On the first investigation day, 50 to 60 minutes were spent on the follow-up investigation of burglaries, thirty to 80 minutes were spent on the second day and 20 to 100 minutes spent on the third. The variations in time spent among departments increased from the first through the third and subsequent follow-up investigation days. Due to the emphasis on follow-up investigations in DeKalb County, the amount of time spent by detectives there increased from the first through the third and subsequent follow-up investigation days, whereas in St. Petersburg and Wichita, the amount of time decreased from the first through the third and subsequent follow-up investigation days.

The fourth column of Table 5-5 shows the weighted total number of minutes spent by detectives on burglary follow-up investigations. This weighted total takes into account the frequency with which cases are

Figure 5-2
Mean Number of Days Between Robbery Report
and Investigation Suspension



investigated (see Table 5-4) for one or more days. On average, about an hour was spent on burglary follow-up investigation activities in St. Petersburg and Wichita, but almost two hours were spent on such activities by detectives in DeKalb County.

Table 5-5
Minutes Spent by Detectives on Burglary
Follow-up Investigation Days

	First	Second	Third and Subsequent	Weighted Total
DeKalb County	62	83	100	114
St. Petersburg	54	35	33	65
Wichita	47	31	23	53
Mean	54	50	52	77

Robbery

Figure 5-2 shows the mean number of days between report of a robbery to the police and suspension of investigative activities. At the three sites, this time period varied from nine to eleven days. If one accounts for the fact that the first day of an investigation in DeKalb County is spent conducting the preliminary investigations then eight to ten days were spent, on average, conducting robbery follow-up investigations.

The number of days in which robbery cases were actively investigated by detectives is shown in Table 5-6. At all three sites, only 25 percent of robbery follow-up investigations were still being investigated after the first day, and less than 12 percent after the first two days.

Again, the emphasis on follow-up investigations in DeKalb County is reflected in this table: not only were detectives assigned to robbery cases earlier than at the other two sites, but, robbery follow-up investigations were also more likely to be conducted on three or more days. Follow-up robbery investigations were conducted on the fewest number of days in St. Petersburg. Robberies in St. Petersburg were predominantly street robberies as opposed to commercial robberies; commercial robberies were most frequently reported in DeKalb County. Street robbery cases are less likely than commercial robberies to result in leads that detectives can follow-up. This fact may, in part, explain the reason robbery cases in St. Petersburg were actively investigated for fewer days than robbery cases at the other two sites.

Table 5-6
Number of Days on Which Robbery Cases Were
Actively Investigated by Detectives

	Preliminary Investigation by Detectives	Follow-up Investigation by Detectives		
	One Day	One Day or More	Two Days or More	Three or More Days
DeKalb County	100.0%	59.0%	27.4%	17.1%
St. Petersburg	-----	100.0%	26.3%	5.3%
Wichita	-----	100.0%	20.8%	12.5%
Mean	-----	-----	24.8%	11.6%

Table 5-7 shows the number of minutes spent by detectives conducting follow-up investigations of robberies. On the first follow-up

investigation day, 43 to 140 minutes were spent by detectives; on the second day thirty to 140 minutes were spent conducting follow-up investigations; on the third day and subsequent days 12 to 174 were spent. Although detectives at St. Petersburg and Wichita spent more time on the early follow-up investigations days than they did on latter follow-up investigation days, the opposite was true of detectives at DeKalb County. The total amount of time spent on robbery follow-up investigations varied dramatically among the three sites: approximately five hours of follow-up investigation time was spent by DeKalb County detectives on robbery cases, whereas only one hour was spent by robbery detectives on follow-up investigations at St. Petersburg. The total amount of time spent by detectives conducting robbery follow-up investigations at Wichita was over two hours, and, being such, fell between the times calculated at the other two sites.

Table 5-7
Minutes Spent by Detectives Investigating Robberies

	Preliminary	Follow-up Investigation Days			
		First	Second	Third and Subsequent	Weighted Total
DeKalb County	158	138	137	174	307
St. Petersburg	---	43	29	12	51
Wichita	---	120	97	17	142
Mean	---	100	88	68	167

Comparison of Burglary and Robbery

There are few consistent differences between burglaries and robberies regarding the amount of time spent on follow-up investigations. The mean number of days between case assignment and suspension of an investigation was found to be shorter for robbery cases than for burglary cases in DeKalb County; however, the converse relationship held true for St. Petersburg and Wichita where more days elapsed between case assignment and investigation suspension for robbery cases than for burglary cases. In DeKalb County and St. Petersburg a smaller percentage of robbery follow-up investigations lasted for three or more days than did burglary follow-up investigations. In Wichita, a greater percentage of robbery investigations were more likely to be actively investigated for more than two days than was true of burglary investigations. Finally, detectives in DeKalb County and Wichita spent more time conducting robbery investigations than burglary investigations. In St. Petersburg, more time was spent conducting follow-up investigations of burglaries than robberies.

Summary of Investigative Time

This section has been concerned with how much time it takes to conduct investigations of burglaries and robberies. It has been shown that on average 11 days elapsed between the initiation of a burglary or robbery preliminary investigation and the suspension of follow-up investigative activities. However, on average only two and a half hours were actually spent conducting preliminary and follow-up investigations of burglaries and only four hours on the investigation of robberies. The amount of time spent on follow-up investigations of burglaries and robberies at the three

sites studied is similar to time frames found by others who have conducted research in this area (Folk, 1971; Ward, 1971; Cottell, 1973). Policies restricting the amount of time detectives can keep cases open without a supervisor's review tends to reduce the amount of time cases remain open. Since only a small portion of the time that cases remain open is actually spent conducting follow-up investigations, policies such as those in St. Petersburg and Wichita, that restrict the amount of time cases can remain open, can increase management control of follow-up investigations without necessarily decreasing the effectiveness of follow-up investigations.

The amount of time spent on preliminary and follow-up investigations depends, in large part, on the types of activities conducted. The following section of this chapter deals with the actions taken by patrol officers and detectives when conducting preliminary and follow-up burglary and robbery investigations.

Investigative Actions

The amount of time taken by preliminary and follow-up investigations of burglary and robbery was discussed in the previous section of this chapter. In this section, the types of actions, and the frequency with which they are taken are examined within the context of preliminary and follow-up investigations. These two facets of the investigative process are important because they often affect the type of information gathered (see Chapter 6). The likelihood that an investigation will result in an

arrest (see Chapter 7) is also partially determined by the actions taken by patrol officers and detectives.

Preliminary Investigation

Burglary

Table 5-8 shows the frequency with which activities are performed by patrol officers when conducting preliminary investigations of burglaries. These activities are listed in decending order: those conducted most frequently precede those conducted least frequently. The list of activities in Table 5-8 is subdivided into three groups: routine activities--actions taken in over 50 percent of the burglary preliminary investigations; secondary activities--actions taken in not less than ten percent of investigations but not more than 50 percent; and tertiary activities--actions taken in less than ten percent of investigations.

There is a high degree of consistency across the three sites with respect to the frequency of the two activities labelled routine (interviews with victims and checks of crime scenes). Both of these activities were conducted very frequently at all three sites. No other preliminary investigation activities, all groups considered, were conducted even half as frequently as these. This suggests that, at minimum, victims are interviewed and burglary crime scenes checked, almost always, by the investigating patrol officer.

Table 5-8
Frequency of Patrol Officer Activities During
Preliminary Investigations of Burglaries

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	90.5	87.7	92.9	90.4
Check Crime Scenes	89.3	85.9	92.0	89.1
SECONDARY ACTIVITIES				
Canvass for Witnesses	5.6	33.0	16.8	18.5
Interview Others*	11.6	26.6	13.4	17.2
Interview Witnesses	10.5	22.6	17.7	16.9
Discussions with Supervisors	6.8	8.9	25.9	13.9
Physical Evidence Collection	6.7	15.8	15.4	12.6
Discussions with Others in Department**	2.5	15.0	13.5	10.3
TERTIARY ACTIVITIES				
Discussions with Patrol Officers	4.9	9.1	15.6	9.9
Interview Suspects	3.2	11.5	8.4	7.7
Discussions with Detectives	6.0	6.5	7.3	6.6
All Other Information Gathering Activities	1.7	2.7	5.5	3.3
Check Department Records	0.6	3.4	4.8	2.9
Checked Computer Files/NCIC	0.4	1.1	4.2	1.9
Checked Other Files or Records	0.1	0.3	1.3	0.6
Interview Informants	0.4	0.6	0.3	0.4
Stakeouts	0.1	0.7	0.3	0.4

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

There is much less consistency with respect to the frequency with which secondary and tertiary activities are conducted by patrol officers at the three sites. Patrol officers at both St. Petersburg and Wichita were much more likely to conduct any of the secondary and tertiary activities than were patrol officers in DeKalb County. This may be due to the emphasis placed on preliminary investigations at St. Petersburg and Wichita. Patrol officers at DeKalb County seem to serve more as report takers and do much less actual investigative work than the patrol officers at the other two sites.

Although there is an emphasis on preliminary investigations by patrol officers in St. Petersburg and Wichita, there are also some major differences between how preliminary investigations of burglaries are conducted at these two sites. For example, patrol officers at St. Petersburg were twice as likely to conduct canvasses for witnesses than were patrol officers at Wichita. Additionally, and possibly because of more frequent witness canvasses, patrol officers at St. Petersburg were more likely to interview witnesses, interview other citizens and interview suspects than were patrol officers in Wichita.

Robbery

Table 5-9 shows the frequency with which patrol officers conduct activities during preliminary investigations of robberies. There is a high degree of consistency across the three sites in terms of the routine activities conducted by patrol officers. At all three sites, interviewing victims was the most frequently conducted preliminary investigation activity,

Table 5-9
Frequency of Patrol Officer Activities During
Preliminary Investigations of Robberies

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	95.5	97.7	94.8	96.0
Check Crime Scenes	66.7	59.1	69.0	64.9
SECONDARY ACTIVITIES				
Interview Witnesses	49.5	43.2	41.4	44.7
Discussions with Supervisors	40.5	4.5	75.9	40.3
Discussions with Detectives	72.1	15.9	12.1	33.4
Canvass for Witnesses	19.8	34.1	12.1	22.0
Discussions with Patrol Officers	23.4	4.5	19.0	15.6
Interview Suspects	6.3	13.6	15.5	11.8
TERTIARY ACTIVITIES				
Physical Evidence Collection	4.5	9.1	14.0	9.2
Interview Others*	10.8	2.3	8.6	7.2
Check Department Records	0.0	11.4	6.9	6.1
All Other Information Gathering Activities	1.8	1.1	12.1	5.0
Discussions with Others in Department**	0.0	1.1	10.3	3.8
Checked Computer Files/NCIC	0.0	4.5	5.2	3.2
Checked Other Files or Records	0.0	1.1	5.2	2.1
Interview Informants	0.0	0.0	0.0	0.0
Stakeouts	0.0	0.0	0.0	0.0

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

such interviews being conducted in over 95 percent of robbery preliminary investigations. At all three sites, checking the crime scene occurred in 60 to 70 percent of the robbery preliminary investigations by patrol officers.

There were fewer similarities between secondary and tertiary robbery preliminary investigation activities, the major exception being witness interviews, which were conducted in 40 to 50 percent of all robbery preliminary investigations. DeKalb County patrol officers were more likely than patrol officers at the other two sites to discuss robbery investigations with detectives or with other patrol officers. The frequency with which patrol officers discussed robberies with detectives can be explained by the policy of dispatching detectives immediately to robbery crime scenes. Patrol officers in St. Petersburg were more likely than patrol officers at the other two sites to canvass for witnesses and to check department records. Patrol officers in Wichita were more likely to discuss the case with supervisors, interview suspects, and collect physical evidence than were patrol officers at the other two sites.

Finally, it was stated earlier that robbery detectives in DeKalb County are called to robbery crime scenes as soon as the responding patrol officer determines that a robbery took place. How do the activities of detectives conducting preliminary investigations differ from those conducted by patrol officers? Table 5-10 shows the frequency with which activities were taken by DeKalb County detectives during robbery preliminary investigations. Routine activities for detectives conducting robbery preliminary investigations include interviewing the victim, discussions with patrol

Table 5-10
Frequency of DeKalb County Detective Activities
During Robbery Preliminary Investigations

Activities Conducted	Frequency
ROUTINE ACTIVITIES	
Interview Victims	93.2
Discussions with Patrol Officers	64.1
Check Crime Scenes	61.5
SECONDARY ACTIVITIES	
Interview Witnesses	45.3
Discussions with Detectives	41.0
Canvass for Witnesses	38.5
Interview Others*	25.6
Discussion with Supervisors	24.8
Physical Evidence Collection	16.2
Checked Department Records	12.8
TERTIARY ACTIVITIES	
All Other Information Gathering Activities	9.4
Interview Suspects	8.5
Interview Informants	5.1
Discussions with Others in Department**	5.1
Checked Other Files or Records	5.1
Checked Computer Files/NCIC	2.6
Stakeouts	0.9

*Interviews are of persons not employed by the policy agency.
**Discussions with persons employed by the police agency.

officers, and checking the crime scene. When the frequency of detective robbery preliminary investigation routine activities are compared to the same activities conducted by patrol officers (Table 5-9, Column 1) during robbery preliminary investigations, it can be seen that the frequencies are similar. Witness interviews were about equally likely to be conducted by detectives as by patrol officers when conducting robbery preliminary investigations in DeKalb County. However, detectives were much more likely than patrol officers to canvass for robbery witnesses, collect physical evidence, and check department records; activities that in St. Petersburg and Wichita were conducted by patrol officers much more frequently than by DeKalb County patrol officers and almost as frequently as by DeKalb County detectives.

Comparison of Burglary and Robbery

Interviewing victims and checking crime scenes are routine actions engaged in during both burglary and robbery preliminary investigations. Although victim interviews were conducted in over 90 percent of both burglary and robbery preliminary investigations, checking the crime scene was conducted less frequently during robbery preliminary investigations. One explanation is that since the average robbery victim knows more about the crime than the average burglary victim, and since burglaries can be considered intrusions of structures and robberies as acts against persons, the crime scene plays a lesser role in robbery than in burglary investigations. Burglary victims are unlikely to be present when crimes take place, and, therefore, much of the information that patrol officers need to

conduct a preliminary investigation generally comes from the crime scene. Unlike most burglaries, a confrontation between offenders and victims takes place during robberies; thus, robbery victims are more likely to have information concerning the identity of suspects.

Patrol officers in DeKalb County and Wichita were much more likely to discuss robberies with other officers than they were to discuss burglaries with other officers. In DeKalb County, this is due in part, to the policy of sending detectives to robbery crime scenes. However, in both DeKalb County and Wichita, patrol officers were more likely to discuss robbery cases with other patrol officers and supervisors than they were during burglary preliminary investigations.

Canvassing for witnesses was also an activity engaged in much more frequently in DeKalb County and Wichita during robbery preliminary investigations than during burglary preliminary investigations. This stands in contrast to St. Petersburg, where patrol officers were just as likely to conduct witness canvasses for burglaries as they were for robberies. However, St. Petersburg patrol officers were more likely to conduct witness canvasses during the investigation of either crime than were patrol officers in DeKalb County or Wichita.

Finally, patrol officers at all three sites were more likely to interview witnesses during robbery preliminary investigations than they were during burglary preliminary investigations. This may be due in part to the greater likelihood that witnesses will be present during the commission of robberies than burglaries.

Overall, more effort is devoted to the preliminary investigation of robberies than burglaries. Robbery preliminary investigation secondary activities were conducted much more frequently than burglary preliminary investigation secondary activities. This may be due to the fact that robberies are considered more serious than burglaries as well as the fact that there exists a greater likelihood of obtaining information that may lead to the arrest of suspects.

Follow-up Investigations

Burglary

Tables 5-11 through 5-13 show the frequency of activities performed by detectives during the first and subsequent days of burglary follow-up investigations. Major changes can be seen in the frequency with which various activities are conducted during different days of burglary follow-up investigations. Victim interviews continued to be the most frequently performed activity, but the frequency with which this activity was performed declined throughout the investigative process. The frequency with which crime scene checks were conducted declined much more rapidly, falling from 89.1 percent of the burglary cases investigated during the preliminary investigation (see Table 5-8), to 27.8 percent of the burglary cases investigated the first detective day, and finally to 5.1 percent of the burglary cases still actively being investigated after two days. Suspect interviews increased in frequency as these other two actions declined. Although such interviews were conducted in only 7.7 percent of the burglary

Table 5-11
Frequency of Detective Activities During
First Burglary Follow-up Investigation Day

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	91.7	76.8	80.6	83.0
SECONDARY ACTIVITIES				
Check Crime Scenes	13.3	55.8	14.3	27.8
Interview Witnesses	12.7	27.6	9.2	16.5
Check Department Records	13.4	22.1	13.4	16.3
Interview Suspects	14.0	17.7	15.8	15.8
Discussions with Detectives	19.1	18.2	6.5	14.6
Interview Others*	9.5	20.4	10.5	13.5
Canvass for Witnesses	4.8	28.8	3.1	12.0
TERTIARY ACTIVITIES				
Discussions with Patrol Officers	7.8	8.3	6.3	7.5
Discussions with Supervisors	6.2	7.2	4.8	6.1
Checked Other Files or Records	2.1	4.4	7.5	4.7
Discussions with Others in Department**	3.0	4.4	5.8	4.4
Checked Computer Files/NCIC	2.7	3.9	4.9	3.8
All Other Information Gathering Activities	1.0	3.9	6.1	3.7
Physical Evidence Collection	3.9	4.4	1.9	3.4
Interview Informants	3.5	1.7	0.8	2.0
Stakeouts	1.3	0.6	0.2	0.7

*Interviews are of persons not employed by the policy agency.
**Discussions with persons employed by the police agency.

Table 5-12
Frequency of Detective Activities During
Second Burglary Follow-up Investigation Day

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	74.4	59.1	56.3	63.3
SECONDARY ACTIVITIES				
Interview Suspects	24.1	18.2	11.5	17.9
Check Department Records	22.9	22.7	8.0	17.9
Discussions with Detectives	23.3	20.5	5.7	16.5
Interview Witnesses	13.4	20.5	8.0	14.0
Interview Others*	12.3	22.7	5.7	13.6
Check Crime Scenes	7.5	20.5	5.7	11.2
TERTIARY ACTIVITIES				
Canvass for Witnesses	6.8	13.6	2.3	7.6
Discussions with Supervisors	9.6	4.5	3.4	5.8
Discussions with Others in Department**	4.5	6.8	5.7	5.7
All Other Information Gathering Activities	1.0	9.1	6.9	5.7
Checked Other Files or Records	2.4	4.5	8.0	5.0
Interview Informants	6.8	2.3	2.3	3.8
Checked Computer Files/NCIC	3.8	2.3	4.6	3.6
Physical Evidence Collection	5.1	2.3	2.3	3.2
Discussions with Patrol Officers	4.8	0.0	4.6	3.1
Stakeouts	3.8	0.0	0.0	1.3

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

Table 5-13
Frequency of Detective Activities During Third and Subsequent Burglary Follow-up Investigation Days

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
SECONDARY ACTIVITIES				
Interview Victims	51.3	37.5	33.3	40.7
Interview Suspects	34.0	31.3	23.1	29.5
Discussions with Detectives	28.8	12.5	10.3	17.2
Interview Others*	16.7	12.5	15.4	14.9
Check Department Records	19.2	18.8	2.6	13.5
Discussions with Supervisors	22.4	0.0	15.4	12.6
TERTIARY ACTIVITIES				
Checked Other Files or Records	3.8	12.5	10.3	8.9
Interview Witnesses	10.8	11.1	0.0	7.3
Check Crime Scenes	12.8	0.0	2.6	5.1
Checked Computer Files/NCIC	2.6	6.3	5.1	4.7
All Other Information Gathering Activities	1.3	12.5	0.0	4.6
Canvass for Witnesses	3.8	6.3	0.0	3.4
Physical Evidence Collection	7.6	0.0	2.6	3.4
Discussions with Patrol Officers	3.8	0.0	5.1	3.0
Discussions with Others in Department**	6.4	0.0	2.6	3.0
Interview Informants	7.1	0.0	0.0	2.4
Stakeouts	6.4	0.0	0.0	2.1

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

preliminary investigations, suspect interviews continually increased in frequency until 29.5 percent of those cases investigated for more than two days involved suspect interviews. Similarly, checking department records showed an increase in frequency of 2.9 percent during preliminary investigations, to 17.9 percent during the second active day of follow-up investigations by detectives.

Changes in the frequency of ten frequently conducted actions over the course of the investigation process are shown graphically in Figures 5-3 through 5-12 for each agency. All three agencies showed the same decrease in frequency for performing victim interviews (Figure 5-3) and crime scene checks (Figure 5-4), and the same increase in frequency for performing suspect interviews (Figure 5-5). St. Petersburg and Wichita exhibit declines in the frequency with which witness canvasses (Figure 5-7), physical evidence collection (Figure 5-8), and witness interviews (Figure 5-9) were conducted. Because patrol officers at DeKalb County perform these activities with less frequency than patrol officers at the other two sights, no such decline is evident in DeKalb County. Record checks (Figure 5-6) at all sites were done infrequently by patrol officers. Detectives use this activity more frequently in the early stages of the investigation, but this activity declines thereafter. There was little similarity across agencies for changes in the frequencies of interviews of others (Figure 5-10) and discussions with detectives and supervisors (Figures 5-11 and 5-12, respectively).

Figure 5-3

Frequency of Victim Interview--Burglary

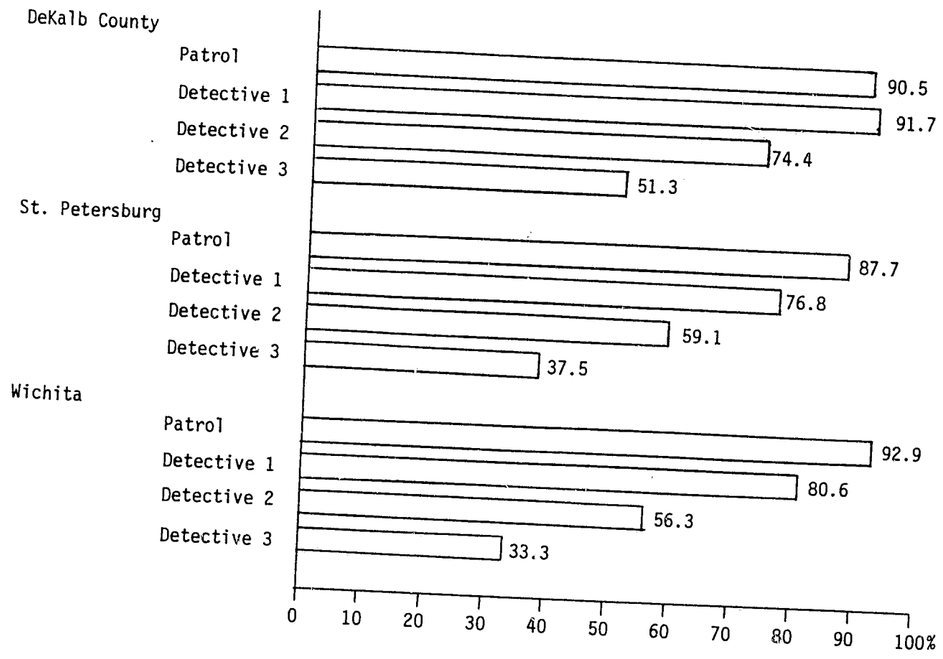


Figure 5-4

Frequency of Crime Scene Check--Burglary

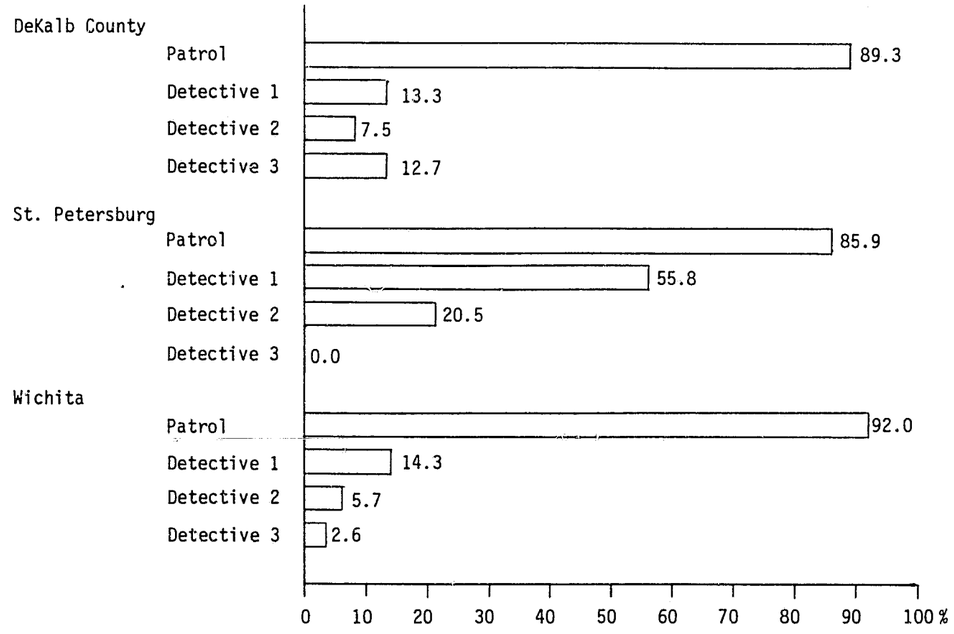


Figure 5-5

Frequency of Suspect Interview--Burglary

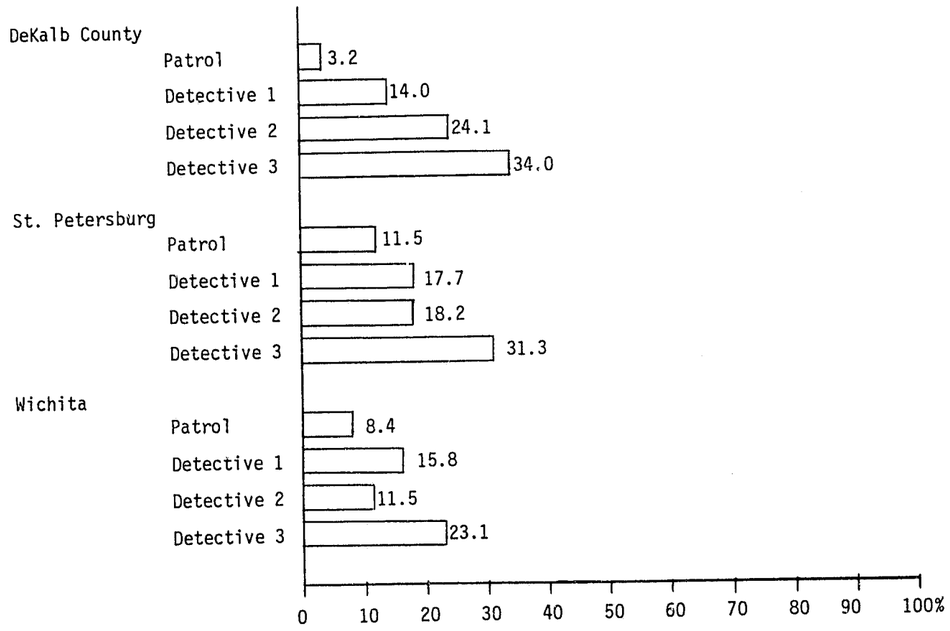


Figure 5-6

Frequency of Department Records Check--Burglary

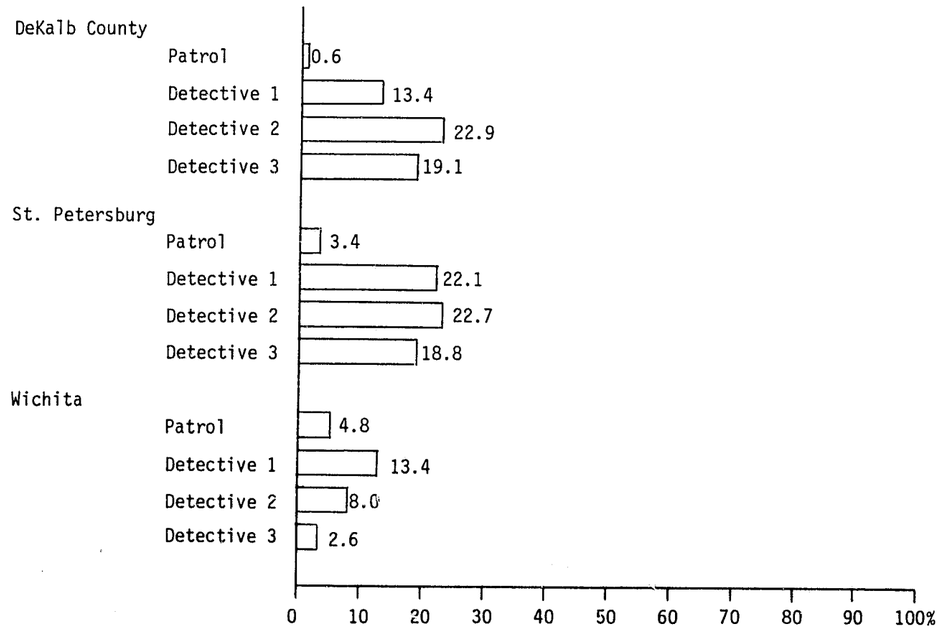


Figure 5-7

Frequency of Canvass for Witnesses--Burglary

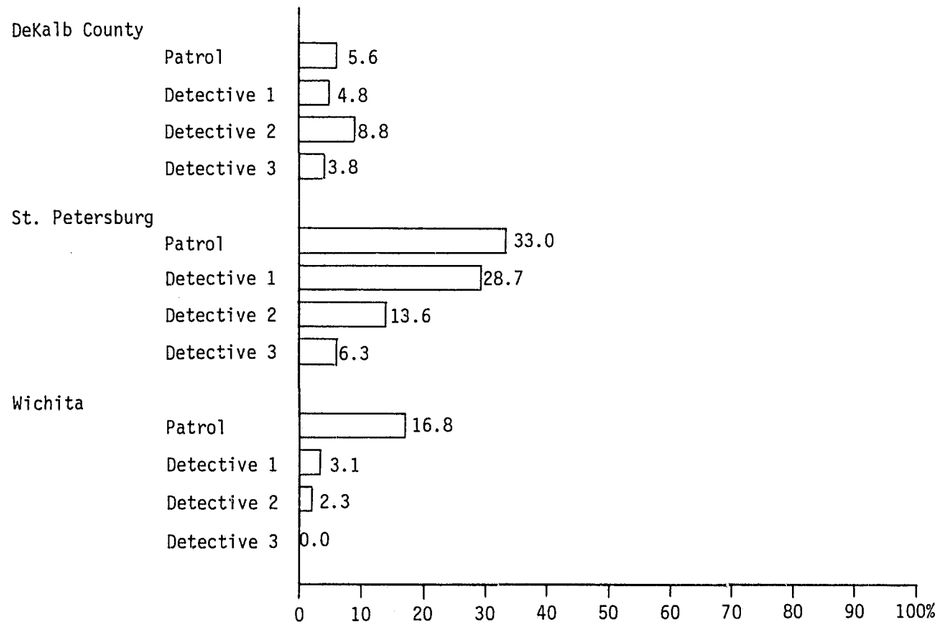
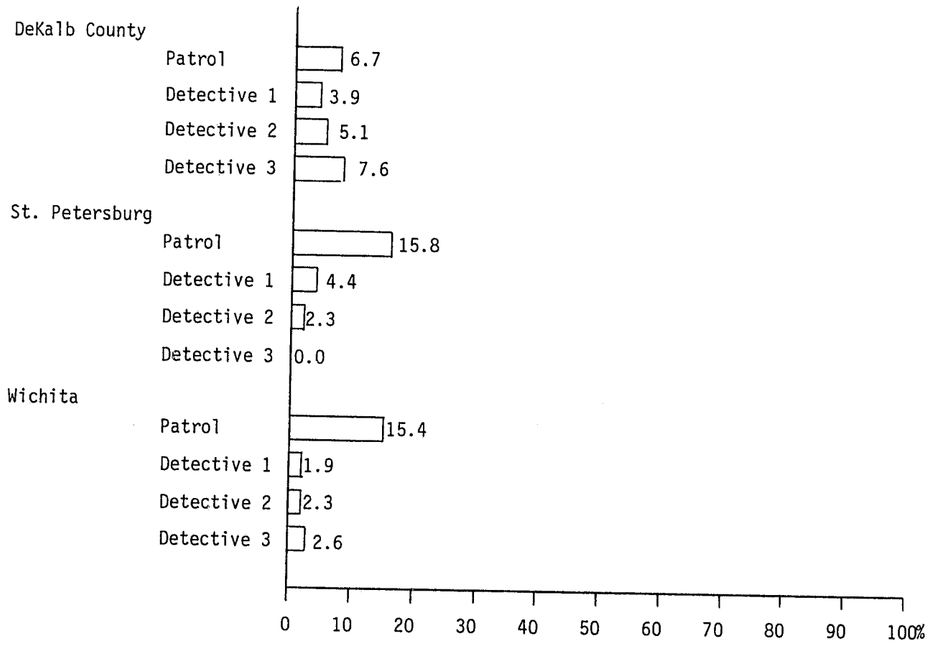


Figure 5-8

Frequency of Physical Evidence Collection--Burglary



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2 OF 5

Figure 5-9

Frequency of Witness Interviews--Burglary

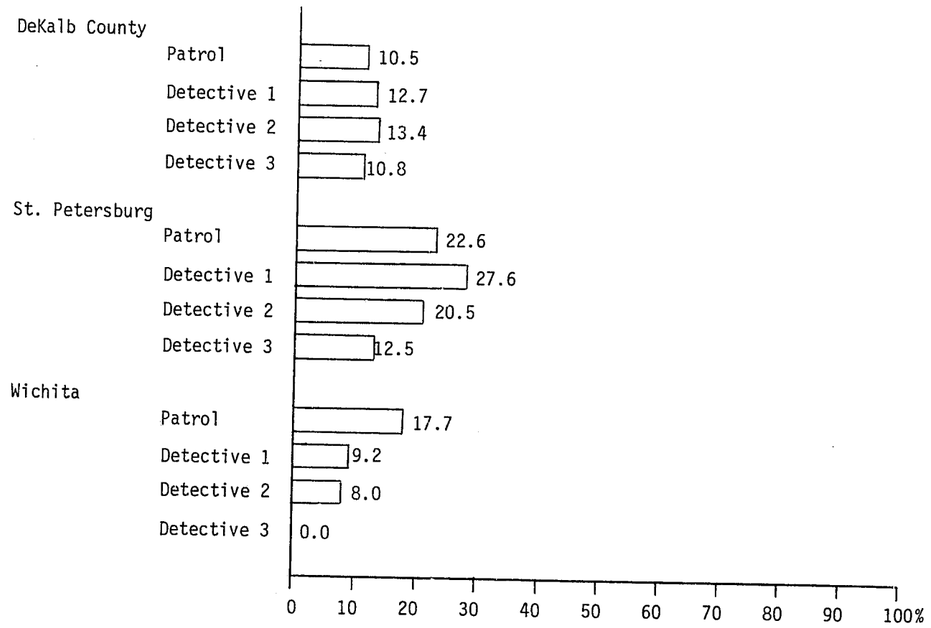


Figure 5-10

Frequency of Interviews of Others--Burglary

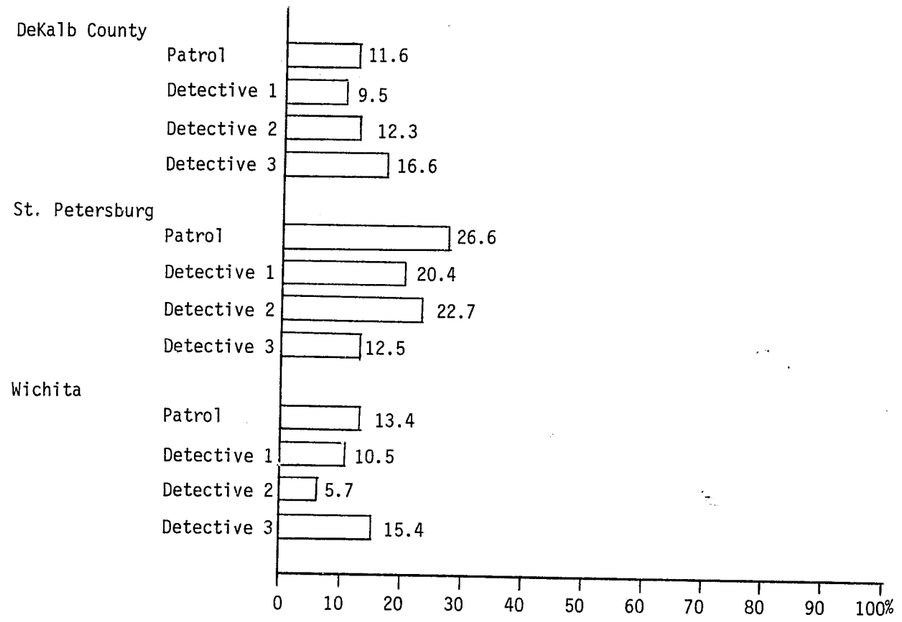


Figure 5-11

Frequency of Discussions with Detectives--Burglary

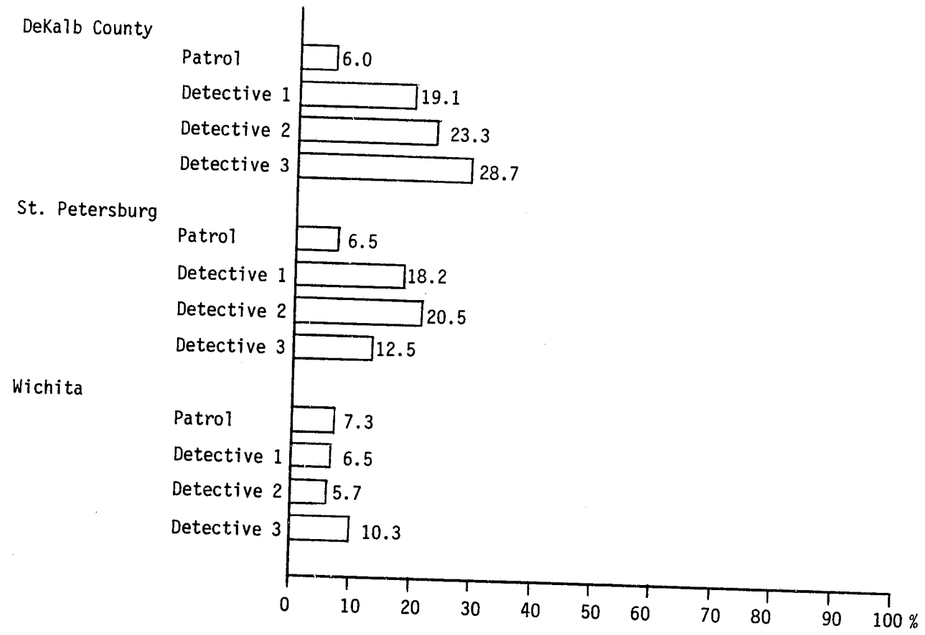
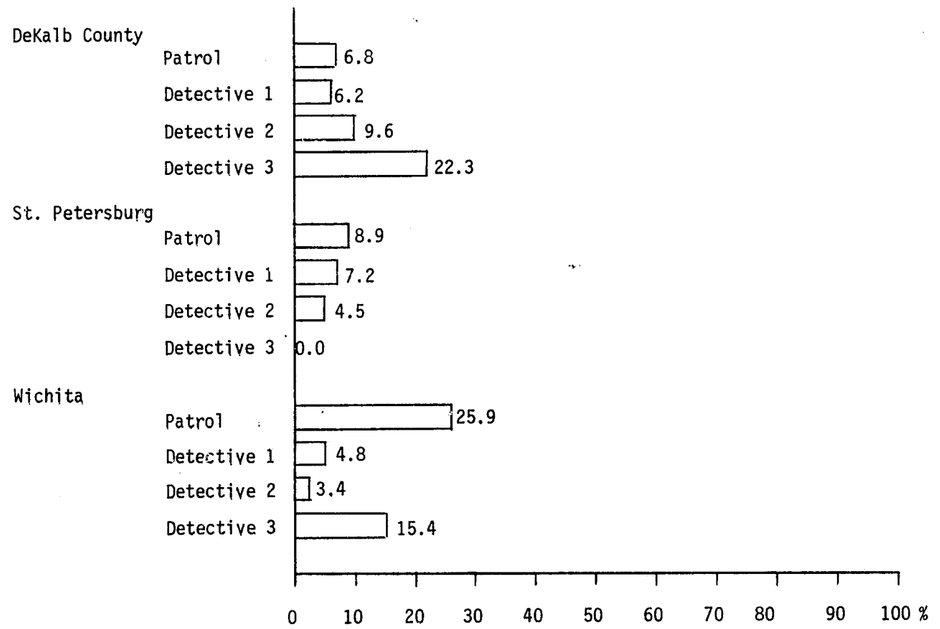


Figure 5-12

Frequency of Discussions with Supervisors--Burglary



The changes shown in the previous twelve figures indicate how the nature of the burglary investigative process changes. The investigative process changes in four ways:

- Investigations become less routine. During preliminary burglary investigations, victim interviews and crime scene checks are routinely conducted activities, but by third and subsequent follow-up investigation days, there are no routinely conducted activities.
- Activities designed to collect information from sources outside the control of the police agency (i.e., victims, witnesses, and crime scenes) decline in frequency from the preliminary investigation to third and subsequent follow-up investigation days.
- Activities directed at sources within the control of police agencies (i.e., department records and suspects) increase in frequency from the preliminary investigation through the latter follow-up investigation days.
- The investigator, in general, becomes less victim-oriented and increasingly suspect-oriented.

The reasons for these changes will be discussed later in this chapter (see p. 153).

Robbery

Tables 5-14 through 5-16 provide information on the frequency with which activities are conducted by detectives during the first and subsequent robbery follow-up investigation days. The frequency with which victims were interviewed declined throughout the investigative process from 96 percent during the preliminary investigation (see Table 5-9), to 76

Table 5-14
Frequency of Detective Activities During First Robbery Follow-up Investigation Day

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	68.1	89.5	69.4	75.7
SECONDARY ACTIVITIES				
Discussions with Detectives	50.7	8.8	36.1	31.9
Check Department Records	20.3	26.3	31.9	26.2
Interview Witnesses	24.6	15.8	25.0	21.8
Canvass for Witnesses	26.1	19.3	12.5	19.3
Discussions with Patrol Officers	17.4	7.0	29.2	17.9
Interview Others*	23.2	3.5	26.4	17.7
Discussions with Supervisors	40.6	0.0	8.3	16.3
Interview Suspects	7.2	19.3	18.1	14.9
Check Crime Scenes	18.8	7.0	13.9	13.2
TERTIARY ACTIVITIES				
All Other Information Gathering Activities	14.5	0.0	15.3	9.9
Checked Other Files or Records	15.9	3.5	6.9	8.8
Checked Computer Files/NCIC	4.3	10.5	8.3	7.7
Discussions with Others in Department**	5.8	7.0	4.2	5.7
Physical Evidence Collection	5.8	3.5	4.2	4.5
Interview Informants	7.2	1.8	2.8	3.9
Stakeouts	1.4	0.0	0.0	0.5

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

Table 5-15
Frequency of Detective Activities During Second
Robbery Follow-up Investigation Day

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	62.5	73.3	26.7	54.2
SECONDARY ACTIVITIES				
Discussions with Supervisors	56.3	6.7	13.3	25.4
Discussions with Detectives	53.1	0.0	13.3	22.1
Interview Suspects	25.0	26.7	13.3	21.7
Check Department Records	34.4	6.7	20.0	20.4
Interview Others*	25.0	6.7	20.0	17.2
Interview Witnesses	15.6	0.0	33.3	16.3
Checked Other Files or Records	21.9	0.0	20.0	14.0
Canvass for Witnesses	9.4	6.7	20.0	12.0
Discussions with Patrol Officers	9.4	0.0	26.7	12.0
Check Crime Scenes	6.3	0.0	20.0	8.8
TERTIARY ACTIVITIES				
Checked Computer Files/NCIC	15.6	6.7	0.0	7.4
Discussions with Others in Department**	3.1	0.0	13.3	5.5
All Other Information Gathering Activities	15.6	0.0	0.0	5.2
Interview Informants	6.3	0.0	0.0	2.1
Stakeouts	3.1	0.0	0.0	1.0
Physical Evidence Collection	0.0	0.0	0.0	0.0

*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

Table 5-16
Frequency of Detective Activities During Third
and Subsequent Robbery Follow-up Investigation Days

Activities Conducted	DeKalb County	St. Petersburg	Wichita	Mean
ROUTINE ACTIVITIES				
Interview Victims	35.0	100.0	22.2	52.4
SECONDARY ACTIVITIES				
Interview Others*	30.0	0.0	22.2	17.4
Interview Suspects	40.0	0.0	0.0	13.3
Discussions with Detectives	40.0	0.0	0.0	13.3
Discussions with Supervisors	40.0	0.0	0.0	13.3
TERTIARY ACTIVITIES				
Canvass for Witnesses	5.0	0.0	22.2	9.1
Interview Witnesses	20.0	0.0	0.0	6.7
Physical Evidence Collection	15.0	0.0	0.0	5.0
Check Department Records	10.0	0.0	0.0	3.3
All Other Information Gathering Activities	10.0	0.0	0.0	3.3
Interview Informants	5.0	0.0	0.8	1.7
Check Crime Scenes	5.0	0.0	0.0	1.7
Discussions with Patrol Officers	5.0	0.0	0.0	1.7
Discussions with Others in Department**	5.0	0.0	0.0	1.7
Checked Computer Files/NCIC	5.0	0.0	0.0	1.7
Stakeouts	0.0	0.0	0.0	0.0
Checked Other Files or Records	0.0	0.0	0.0	0.0

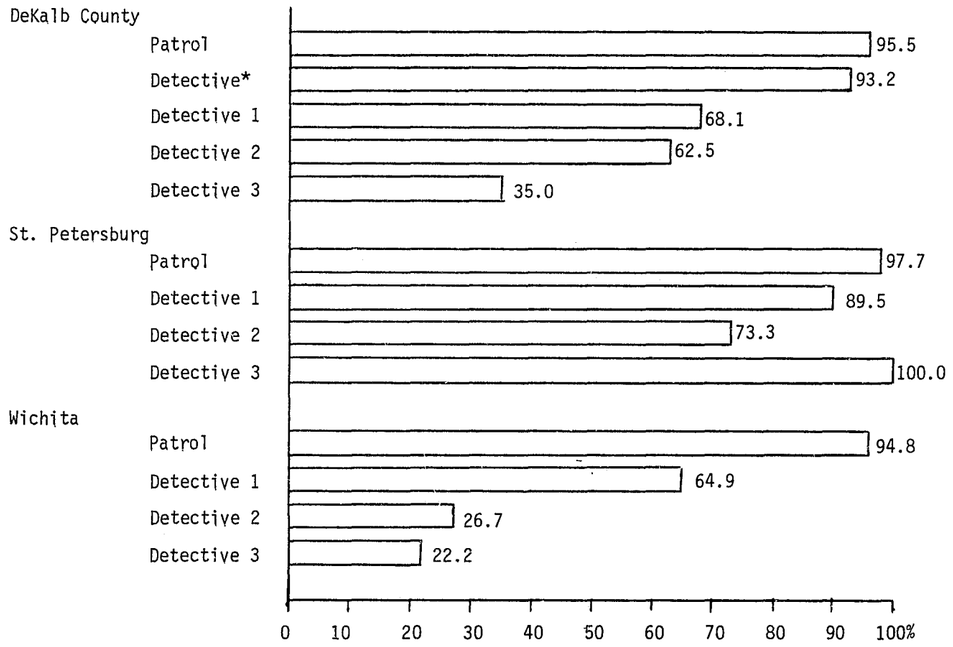
*Interviews are of persons not employed by the police agency.
**Discussions with persons employed by the police agency.

percent on the first follow-up investigation day, to slightly over 50 percent of those cases still being investigated after the second follow-up investigation day. Crime scene checks dropped in frequency from 65 percent during the preliminary investigation to under 9 percent after two days of follow-up investigation. Suspect interviews increased in frequency from approximately 12 percent during the preliminary investigation, to a high of 22 percent on the second follow-up investigation day.[2] Department record checks were more frequently conducted during preliminary investigations and did not show a steady upward trend throughout the robbery investigative process.

Figures 5-13 through 5-22 show, by way of bar charts, trends in the frequency with which officers from the three agencies perform various investigative activities during robbery preliminary and follow-up investigations. A general decrease was found in the frequency with which victim interviews (Figure 5-13), crime scene checks (Figure 5-14), witness interviews (Figure 5-16), and witness canvasses were conducted (Figure 5-18)--all actions designed to acquire information from sources outside the police agency. The frequency with which suspect interviews (Figure 5-15) were conducted increased from preliminary investigations to the first follow-up investigation day. A similar trend was found in the frequency of department record checks (Figure 5-22). The largest increase in the frequency of this activity occurred between the preliminary investigation and the first day of the follow-up investigation; however, in two departments, the frequency of record checks declined after the first follow-up investigation day. No substantial trend was discerned in the frequency with which other

Figure 5-13

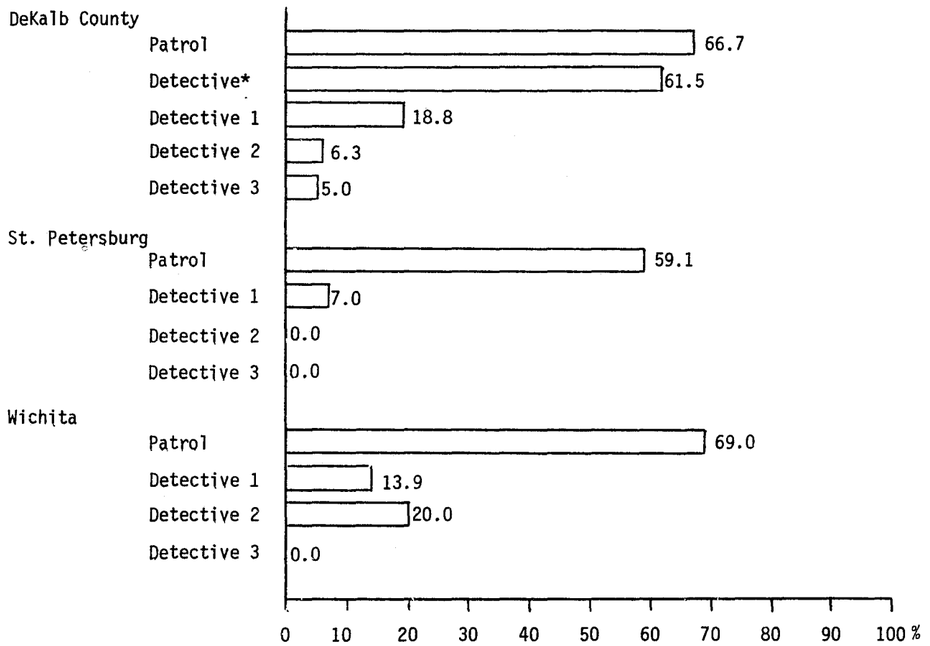
Frequency of Victim Interview--Robbery



*Detective Preliminary Investigation

Figure 5-14

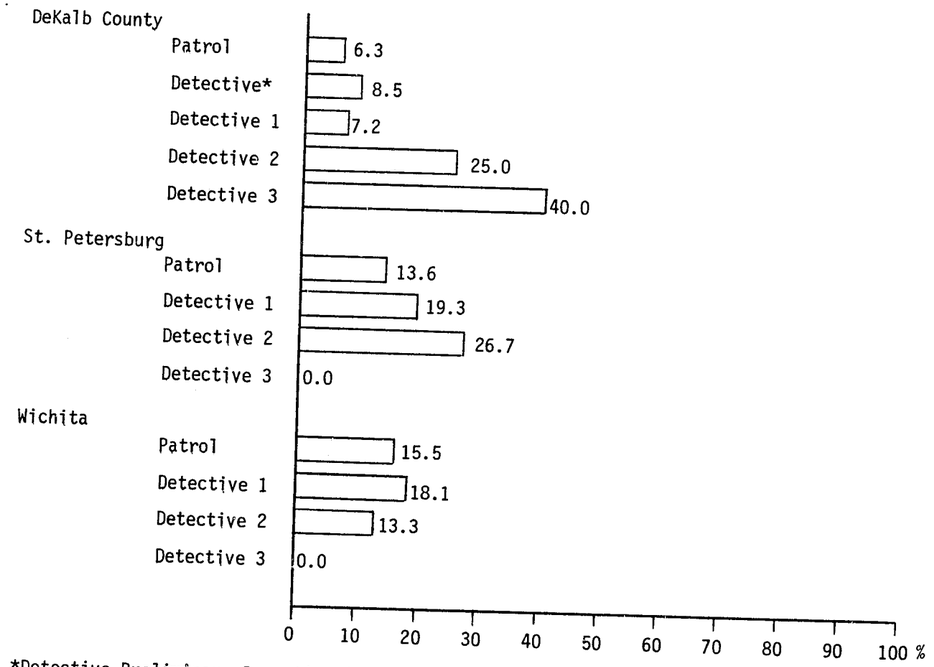
Frequency of Crime Scene Check--Robbery



*Detective Preliminary Investigation

Figure 5-15

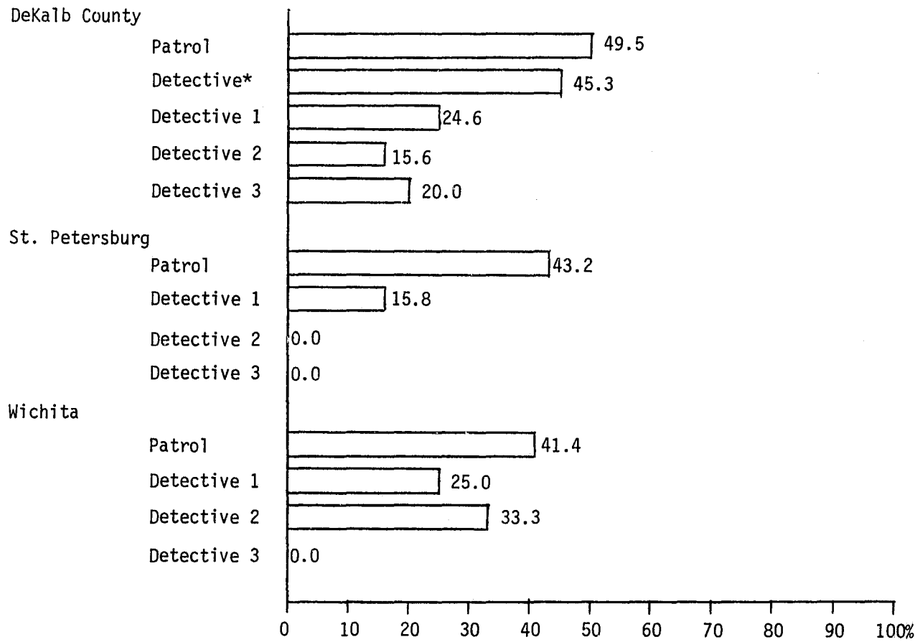
Frequency of Suspect Interview--Robbery



*Detective Preliminary Investigation

Figure 5-16

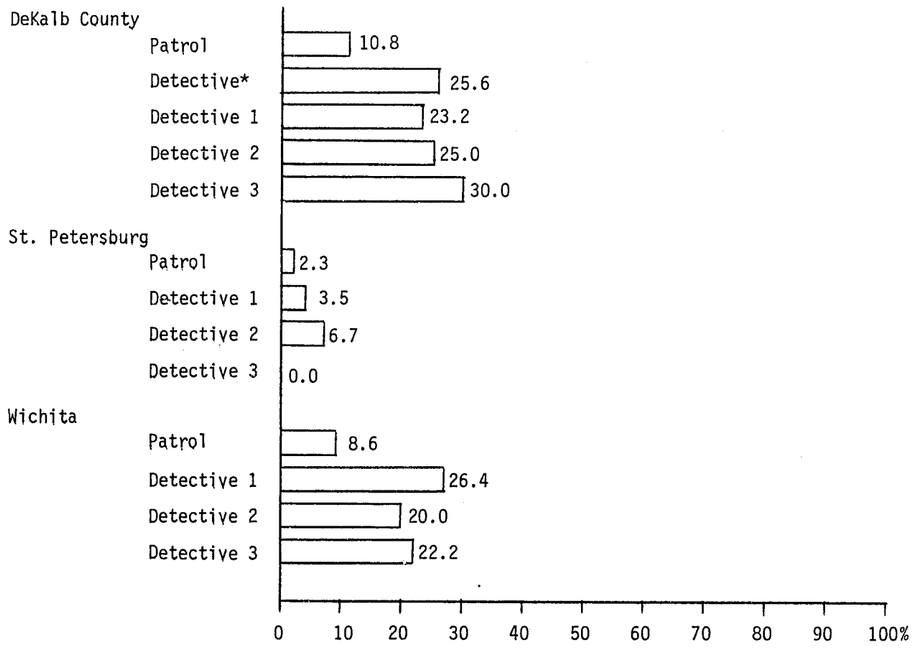
Frequency of Witness Interview--Robbery



*Detective Preliminary Investigation

Figure 5-17

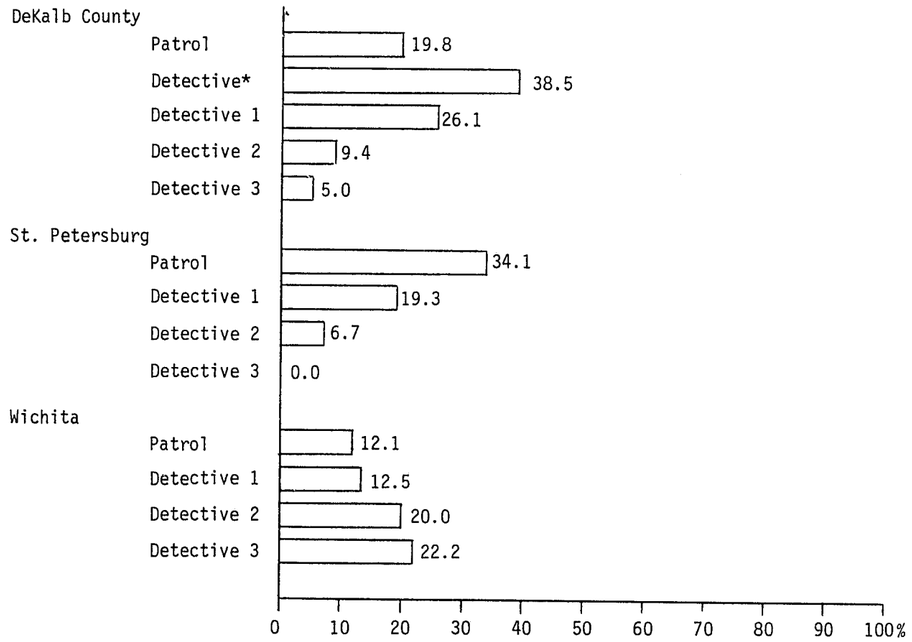
Frequency of Interviewing Others--Robbery



*Detective Preliminary Investigation

Figure 5-18

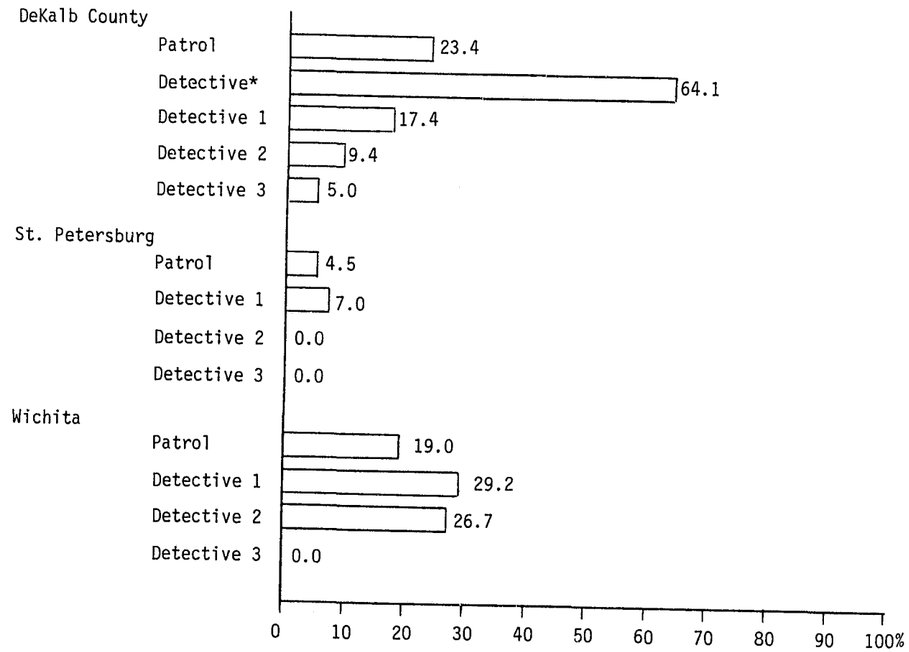
Frequency of Canvass for Witnesses--Robbery



*Detective Preliminary Investigation

Figure 5-19

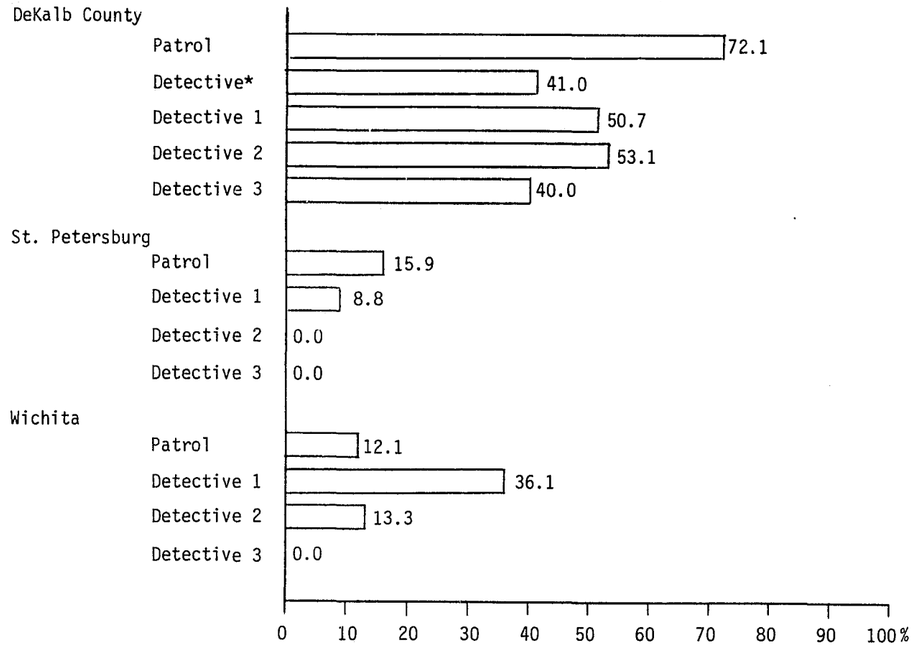
Frequency of Discussion with Patrol Officers--Robbery



*Detective Preliminary Investigation

Figure 5-20

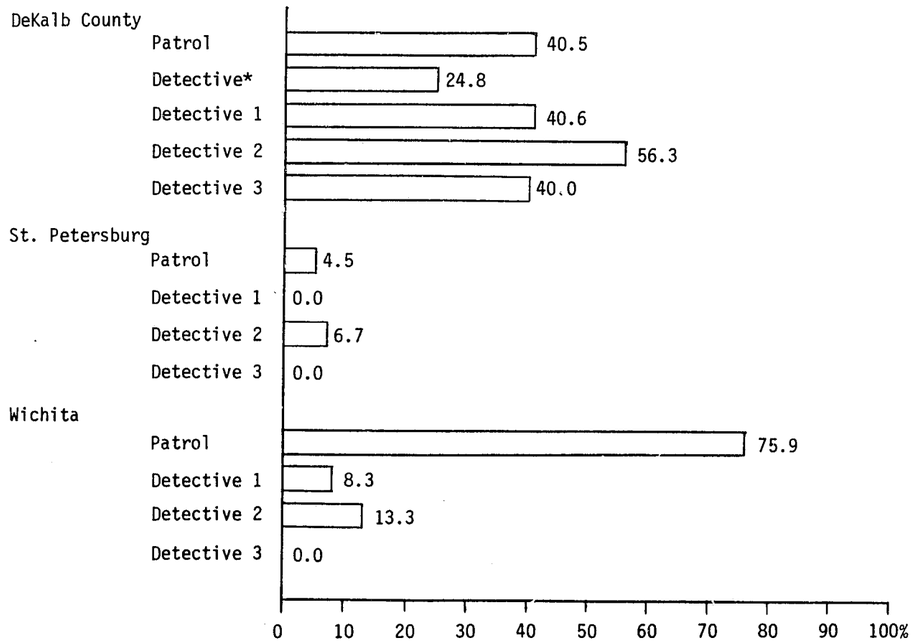
Frequency of Discussions with Detectives--Robbery



*Detective Preliminary Investigation

Figure 5-21

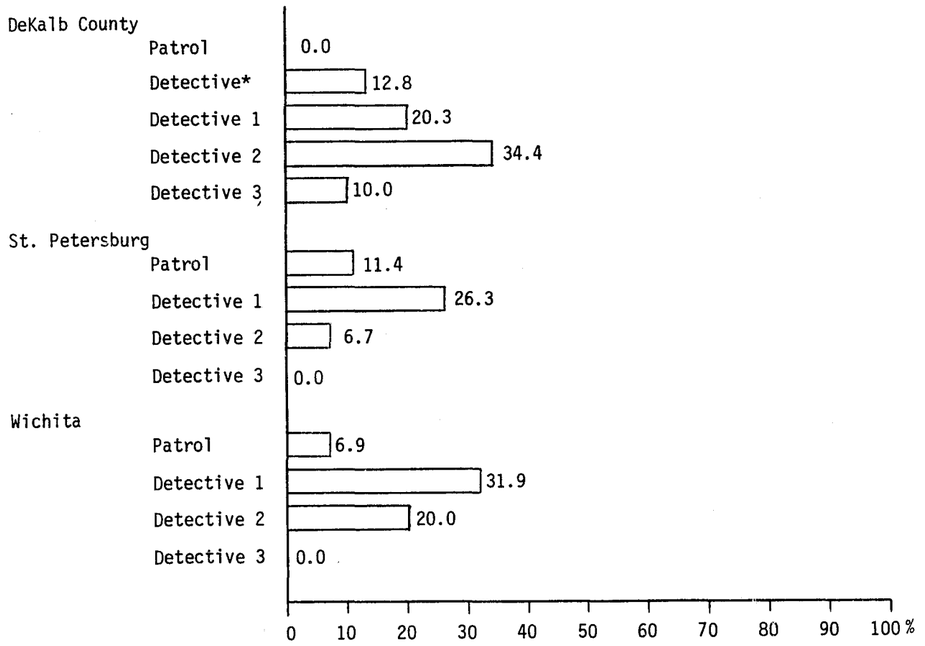
Frequency of Disucssion with Supervisor--Robbery



*Detective Preliminary Investigation

Figure 5-22

Frequency of Department Record Checks--Robbery



*Detective Preliminary Investigation

citizens were interviewed (Figure 5-17) except that interviews of other citizens seemed to be conducted more frequently during follow-up investigations than during preliminary investigations. Finally, with regard to discussions with patrol officers, detectives and supervisors (Figures 5-19, 5-20 and 5-21 respectively) no trends are evident.

From the aforementioned data the following four assertions may be made with respect to the changes that occur during the course of robbery investigations:

- There is a decrease in the routineness of investigations. Victim interviews which are routinely conducted in over 90 percent of preliminary robbery investigations are conducted in barely 50 percent of robbery follow-up investigations on third and subsequent investigative days. Crime scene checks, which are conducted in almost two-thirds of the robbery preliminary investigations, are seldom ever conducted on third and subsequent follow-up investigation days.

- Actions directed at gathering information outside the control of the department (i.e., interviewing witnesses, examining the crime scene, and canvassing for witnesses) decrease in frequency from the preliminary investigation through third and subsequent follow-up investigation days.

- Activities directed at gathering information within the control of the department (i.e., department records and suspects) increase in frequency from the preliminary investigation through follow-up investigation days.

- Robbery investigations become less victim-oriented and more suspect-oriented.

The explanation for these trends will be covered in the following section of this chapter.

Comparison of Burglary and Robbery

Despite the differences in the manner in which burglaries and robberies are committed, the way in which such crimes are investigated is similar. The data showed that for both burglaries and robberies there was a decrease in the routineness with which certain activities were engaged in throughout the investigative process. At the time preliminary investigations were conducted, cases were much more similar to each other with respect to the actions conducted than was true for cases investigated on third and subsequent follow-up investigation days. For both burglaries and robberies there was a decrease from the preliminary investigation onward in the frequency with which activities directed at sources of information outside the control of the department were utilized. Activities directed at sources of information within the control of the department were conducted with increasing frequency from the preliminary investigation through third and subsequent follow-up investigation days. Early in the investigation process investigations were victim-oriented, but became increasingly suspect-oriented as investigations progressed in time.

The changing nature of the investigative process has implications for explanations of how crimes are solved and how investigations should be

managed. The next section of this chapter deals with the issue of how crimes are solved.

Investigative Process

In the first section of the chapter an analysis was presented of the ways in which investigative times can be measured and the amount of time it took investigators at the three sites studied to complete investigations. The second section dealt with the types of actions investigators engaged in and the frequency with which they engaged in them. This section makes use of this data to evaluate two apparently opposing hypotheses regarding how crimes are investigated: an attempt is made to either support or refute various facets of the two hypthesis as the data warrant. Finally, a third hypothesis is described based on aspects of the first two.

Two Hypotheses

Circumstance-Result Hypothesis

Greenwood (1970) posited (based on analysis of New York City police data) that actions taken by detectives did not lead to the solving of crimes, but, rather, that "chance events" led to their solution.

> Some characteristics of a crime itself, or of events surrounding the crime that are beyond the control of investigators, determine whether it will be cleared in most cases.
>
> (Greenwood, et al., 1975)

This hypothesis will be referred to as the Circumstance-Result Hypothesis. Briefly stated, this hypothesis holds that cases assigned to detectives are either already solved as a result of the information found during the preliminary investigation, or cannot be solved because the necessary information is unavailable. Effort is expended processing the "solved" cases, but this is primarily administrative work. Furthermore, there is little patrol officers or detectives can do to improve investigative results because the availability of information is not within their control.

Effort-Result Hypothesis

The second hypothesis holds that the investigative efforts of patrol officers and detectives are primarily responsible for cases being solved and arrests being made. Circumstances outside the control of the police, such as the presence of witnesses, can help or hinder investigations, but ultimately it is the work of police investigators that leads to cases being solved. Investigators take actions based on earlier leads; these actions produce additional information and more actions are taken. Finally, the information available may be sufficient to identify and locate the suspect who, then, can be arrested. Folk's (1971) description of investigations is an illustration of this hypothesis. As a shorthand for referring to this hypothesis, it will be called the Effort-Result Hypothesis.

Evidence Supporting the Two Hypotheses

Circumstance-Result Hypothesis

The rapid attrition of cases tends to support the Circumstance-Result Hypothesis in that the cases dropped from active investigation at an early stage are those not able to be solved by devoting a reasonable amount of time to the investigation. The use of case screening implies tacit agreement on the part of police officials that the Circumstance-Result Hypothesis is, at least, partially correct. If the Circumstance-Result Hypothesis is correct, then cases that are unlikely to be solved would be dropped from active consideration, first by case screening (see Table 5-3) and then during follow-up investigations (see Tables 5-4 and 5-6). Cases that are actively worked for more than two days should overwhelmingly be characterized by suspect interviews since, according to the Circumstance-Result Hypothesis, these cases are those which are easy to solve, the more difficult cases having been dropped earlier.

If, as the Circumstance-Result Hypothesis sets forth, detectives conducting follow-up investigations are not attempting to solve cases but are, instead, only processing those cases for which suspects have been identified, then suspect interviews should become routine activities in those few cases still being investigated on the second and subsequent follow-up investigation days. In fact, we found that the frequency of suspect interviews did rise for those cases that continued to be investigated, but for neither burglary nor robbery did the proportion of cases having a suspect interview rise above 40 percent at any agency

studied. So, although suspect interviews became more common, they could not be considered routine: at least 60 percent of the cases remaining did not involve a suspect interview.

The Circumstance-Result Hypothesis, therefore, is supported by some data. Two findings in particular support this hypothesis: the rapid attrition of cases and the greater frequency with which suspect interviews are conducted by detectives.

Effort-Result Hypothesis

If the Effort-Result Hypothesis is correct, the actions taken on cases should become increasingly diverse (less routine). Initial investigative efforts (i.e., preliminary investigations) should produce leads that can then be followed up by further actions. Each case worked should have its own unique set of leads, and, as a corollary, a set of actions required to follow-up on these leads. Therefore, although a routine set of actions may be engaged in early in the investigation process, as efforts are concentrated on a decreasing number of cases with leads (and a reasonable chance of solution), the types of actions taken should become increasingly diverse. This is precisely the relationship found earlier in this chapter--investigations become less routine. Preliminary investigations are characterized by the taking of two basic actions: interviewing the victim and checking the crime scene. These two activities can be considered routine to any preliminary investigation. There seem to be few, if any, routine activities for cases actively investigated for more than one or two follow-up investigation days.

The nature of investigations also seems to change. As was shown in the first section of this chapter, cases are screened out and dropped from active investigation relatively quickly. As some cases are dropped while others continue being actively investigated, and, as the actions on the investigated cases become more diverse, there is a decrease in the frequency of those actions taken that involve sources of information outside the control of the police agency (victims, witnesses, the crime scene, etc.), and an increase in the frequency of actions taken that involve sources of information under the control of the police agency (discussions with other police officers, records checks, suspect interviews, etc.). Another way of characterizing this change is to say that, in aggregate, investigations become less victim-oriented and more suspect-oriented. When an investigation begins the primary source of information is the victim, and, sometimes, a few other external sources such as witnesses. As leads, if any, are followed-up, new sources of information are developed and the investigation begins to focus on a particular suspect. Agency records are then used to determine more about the suspect and other officers may be asked if the suspect is familiar to them. In this way, investigations of cases that are followed-up change in character: although they initially focus on the victim and external information sources, they soon begin to center on the suspect and internal information sources.

This fundamental change in the nature of investigations--from being victim-oriented to being suspect-oriented--further supports the Effort-Result Hypothesis. However, it should be noted that the interviewing of victims and witnesses alone seldom leads to the solving of cases. Other

information-gathering actions must be taken: records must be checked, fellow officers consulted, witnesses reinterviewed, and suspects interrogated. The mere knowing of a suspect's name, description, address, phone number, birth date, social security number, and other personal data by the victim or the witness does not solve a case. Although extremely helpful, this information must, at least, be verified. Furthermore, this information is commonly unavailable early in the investigative process.

As was shown by examples in the previous chapter, cases that have good strong leads and appear to be solved when assigned to a detective later can turn into cases that cannot be solved because none of the leads pan out. Other cases with apparently weak leads can, when diligently investigated by a detective, sometimes result in the identification of a suspect. Much of the pursuing of leads, therefore, will involve checking information sources under the control of the police agency. It should not be forgotten that all of this checking and following of leads requires the effort of investigators.

Data presented in this chapter support both hypotheses regarding how crimes are solved. Since one hypothesis cannot be rejected in favor of the other, the two must be joined. A third hypothesis, one that reconciles the preceding two, follows.

Triage Hypothesis

The Triage[3] Hypothesis asserts that the investigative process implicitly works to divide cases into three groups. The process is

implicit because no single person or group intentionally acts to make such distinctions, and except for case screening policies, no agency policy exists to promote such a division of cases. These three groups are:

1. those that cannot be solved with a reasonable amount of investigative effort;
2. those that have already been solved by circumstances, and only require the suspect to be picked-up, booked, and interrogated; and
3. those that, with a reasonable amount of effort, may be solved, but certainly will not be solved without such effort.

Cases in Group 1 are screened out during case assignment or their investigations are terminated very soon after assignment. Cases in the second group are processed, but require little investigative effort. It is the cases in the third group that receive the bulk of investigative effort.

The cases that belong to these three groups can be characterized by means of three hypothetical examples.

Example of a Group 1 Case. An elderly woman is approached from behind and her purse is taken but she is not injured. There are no witnesses and the victim has not seen her assailant. The purse is found in an alley several blocks away with only the cash missing. There are no leads for an investigator to pursue. When assigned to a detective to investigate, the detective recontacts the victim, confirms the lack of leads, and suspends all investigative activity. If the department were one that screened robbery cases, this case would not be assigned to a detective.

Example of a Group 2 Case. A person returns home and, while parking his car, sees two young men run from the rear of the house. He recognizes both of them as neighborhood youths who live on the next block. Upon entering his home, the victim finds that his stereo receiver has been moved to the back door and that some cash and jewelry are missing. The names and addresses of the suspects are given to the investigating patrol officer. The youths are not home and the parents do not know their whereabouts. The case is assigned to a detective the next day. The detective, as soon as his morning office paperwork has been completed, visits the house of one of the suspects. The suspect is home and is placed under arrest. A day-watch patrol officer arrests the second suspect later that morning. Both suspects confess to the offense.

Examples of a Group 3 Case. A patrol officer responds to a burglary crime scene. The victim states that she returned home after work to find that her apartment had been broken into that day. Some expensive jewelry is missing. The victim did not see the offender. The patrol officer canvasses the neighborhood near the crime scene. A resident of another apartment building overlooking that of the victim's states that she saw a stranger enter the victim's apartment building during the day of the burglary. The witness provides a partial description. The case is assigned to a detective. The detective is aware of several burglaries with the same modus operandi in the area of this particular burglary. The detective investigating this burglary discusses the case with other detectives.. One detective believes, based on an informant's statement, that the offender responsible for the other burglaries is Suspect A. The witness's

descriptions match the appearance of Suspect A. Department files reveal that Suspect A has a record of burglaries and is currently serving a sentence for one of these offenses. The detective visits the parole office and determines that Suspect A is on parole and also obtains Suspect A's address and place of employment. The employer states Suspect A was late returning from lunch on the day of the latest burglary. A photo of Suspect A, along with other photos looking like Suspect A, is shown to the witness. Suspect A is identified and later arrested at his place of work. A search of his apartment reveals several items stolen in this and prior burglaries.

The two hypotheses discussed above address themselves to two different types of cases. The Circumstance-Result Hypothesis states that only Group 2 cases are processed, whereas the Effort-Result Hypothesis states that only Group 3 cases are investigated. However, when the investigative process is viewed as a triage system, both hypotheses can be seen to describe different aspects of the investigative process. Furthermore, the investigative process of various police agencies may differ in the degree to which Group 2 cases are emphasized relative to Group 3 cases. A police agency that is overburdened with crimes to investigate, has untrained or unmotivated investigators, and suffers from poor investigative management, may emphasize Group 2 cases because it has neither the resources nor motivation to pursue Group 3 cases. Another agency, with more resources, better-trained, motivated investigators, and capable leadership might actively pursue Group 3 cases as well as Group 2 cases. Finally, it is a mistake to assume that the differences between cases in each group are hard and fast. To some extent the differences are due to the ability of

police agencies. For example, a department that actively searches for witnesses or cultivates informants will have fewer cases in Group 1 (unsolvable) and more cases in the other two groups.

Conclusions

Three major findings are presented in this chapter.

- Cases are actively investigated for a relatively short period of time, most only being investigated during the preliminary investigation and for one day of follow-up investigation. In short, many cases are dropped from the investigative process very quickly.

- The nature of the activities conducted during the investigative process changes from

  --routine to non-routine;

  --victim-oriented to suspect-oriented;

  --activities directed at sources not under the control of the agency to activities directed at sources under the control of the agency.

- The investigative process can be described as a triage system. Cases are implicitly divided into three groups:

  --those that cannot be solved;

  --those that have already been solved by circumstances;

  --those which will only be solved if investigative effort is devoted to them.

The following two chapters discuss how information is obtained and results produced. From the discussions in these next chapters, it should be clear that departments can do more to improve the effectiveness of the investigative function.

NOTES

1. The average time spent was calculated by multiplying the frequency of each activity by the activity's mean time to produce the expected time. The expected times were added to get the average total time. These calculations assume the activities and amount of time spent on them are independent of each other. If they are not independent, then these times may over- or under-estimate the actual time spent on an investigation. Because of the large number of activities and the complexity of the calculations it was felt that the costs of making estimates without an independence assumption outweighed any gain in knowledge that such calculations might provide. In addition, some of the activities were performed so infrequently that the validity of these revised estimates would be doubtful. It is our judgment that the conclusions based on these calculations would not change substantially even if revised estimates were made.

2. Although suspect interviews decline in frequency after the second follow-up investigation day, this is primarily because of the absence of suspect interviews in the very small sample of robbery cases lasting more than two days in St. Petersburg and Wichita. In DeKalb County with 20 cases investigated more than two days, the frequency of suspect interviews continues to increase.

3. Triage is defined by the American Heritage Dictionary of the English Language (1979) as:

   a. A system designed to produce the greatest benefit from limited treatment facilities for battlefield casualties by giving treatment to those who may survive with proper treatment and not to those who have no chance of survival and those who will survive without it.

   b. Any similar system used to allocate a scarce commodity, such as food, only to those capable of ordering the greatest benefit from it." (Emphasis added.)

CHAPTER 6

INFORMATION

Successfully investigating crimes is, in large part, reliant on the collection and interpretation of information that may identify a suspect. Identification of suspects, in turn, serves as the basis for arresting, indicting, and prosecuting such individuals. In Chapter 4, the uncertainty involved in gathering information was described; Chapter 5 documented how actions taken to collect information change as investigations progress. Chapter 6 focuses on the relationship between the conducting of information-gathering activities conducted by investigators and the information that results from engaging in such activities. The theme of uncertainty is again an important part of this chapter: as will be demonstrated, information about suspects may be gathered by conducting one or more of a variety of activities; however, few of these activities can be relied on to produce such information consistently.

To determine the types of information gathered during the investigation of each case, data were collected using Activity-Time Information Logs (ATILs) completed by officers each day a case was worked. Officers indicated which activities they had conducted during each case-day and recorded the amount of time spent on each activity (see Chapter 1 for an explanation of the term case-day). In addition to recording the time spent on each activity conducted, officers noted the types of information obtained as a result of conducting each activity. By so doing, a link was established between actions and information types.

Because officers recorded only information obtained as a result of activities they conducted, information already known to them by virtue of past experience or previously obtained written reports was not recorded on the ATILs. Information that was recorded included that which was new to the investigator (i.e., previously unknown), and that which confirmed information already known[1] (i.e., information obtained by earlier actions such as reading reports or past experience).

This chapter comprises three sections. The first section examines the frequency with which various types of information (e.g., suspect names, related crime information, property descriptions) are obtained by patrol officers and detectives. Comparisons of the frequency with which patrol officers and detectives collect information is useful for police managers when determining those aspects of the investigative process that can and should be strengthened. The frequency with which patrol officers collect each type of information is, therefore, compared to the frequency with which the same information is obtained by detectives (within the context of burglary and robbery case-days[2]).

The second section examines the various sources of information that patrol officers and detectives make use of. In this and the following section, discussions focus on suspect names, suspect descriptions, and information about related crimes--these being three crucial types of information needed to solve burglaries and robberies (see Chapter 7). The question posed in the second section is as follows:

> Given that a suspect description, suspect name or related crime information has been obtained, what is the likelihood that the information came from a particular source?

Sources of information considered here include interviews with victims, witnesses, other citizens; conversations with detectives, and departmental record checks.

The third section addresses a related question:

> Given that an activity is conducted, what is the likelihood a particular type of information will be obtained?

The second and third sections deal with the sources of information and the relative productivity of engaging in certain activities with respect to the likelihood that conducting the activities will result in the acquisition of information.

Note that there is a direct relationship between sources of information (section two), and the activities in which investigators engage (section three). For example, if a patrol officer conducts an interview with a victim that results in the acquiring of a suspect's name, the victim is considered the source and the interview the action.

Information Types

Investigating crimes involves the collection of information that describes offenses and identifies offenders. Previous research (Greenberg, et al., 1973; Greenberg, et al., 1975; Eck, 1979) has shown that information collected by patrol officers is an extremely important determinant of

whether an arrest will result from follow-up investigations. In the following chapter it will be shown that information gathered by detectives is also extremely important for securing the arrest of suspected offenders.

Again, this section examines the frequency with which various types of information are collected by patrol officers and detectives while investigating cases of burglary and robbery. For clarity, information types are grouped into three categories:

- o those that describe the offense and the property lost;
- o those that relate directly to identification of suspects and their confederates; and
- o those that may provide additional investigative leads.

The frequency with which types of information are collected during burglary investigations and robbery investigations are first described separately, then compared.

Burglary

Table 6-1 shows the frequency with which patrol officers and detectives investigating burglaries gather each of twelve types of information during a case-day. At all three sites, patrol officers were more likely than detectives to obtain information that describes the burglary and to identify the property stolen; they were only slightly less likely than detectives to obtain serial or ID numbers of stolen property. Overall, information describing a burglary was more likely to be obtained by

Table 6-1
Likelihood Information Will be Obtained by Patrol
Officers and Detectives on a Burglary Investigation Case-Day
(% of Case-Days)

	Patrol				Detective			
	DeKalb County	St. Petersburg	Wichita	Mean	DeKalb County	St. Petersburg	Wichita	Mean
Information Describing Offense								
Description of Crime	33.3	50.8	49.3	44.5	25.6	45.6	44.6	38.6
Property Description	51.1	61.4	57.5	56.7	47.8	44.0	33.0	41.6
Property Number	17.2	17.5	22.8	19.2	14.3	18.7	28.5	20.7
Information About Suspected Criminals								
Suspect Name	14.6	30.1	24.4	23.0	39.4	45.2	32.0	38.9
Suspect Description	14.4	31.0	21.0	22.1	28.3	34.9	22.2	28.5
Confession	0.2	1.6	0.3	0.7	8.0	6.6	2.7	5.8
Accomplice Name	0.8	1.1	1.2	1.0	6.8	5.0	4.5	5.4
Name of Fence	0.2	0.0	0.3	0.2	1.2	1.7	1.4	1.4
Information Providing Possible Leads								
Witness Name	7.1	19.5	17.1	14.6	7.4	17.4	6.6	10.5
Vehicle Description	5.4	9.3	10.0	8.2	9.4	11.6	5.4	8.8
License Number	1.6	3.4	3.6	2.9	2.1	2.9	1.0	2.0
Related Crimes	5.1	8.3	5.8	6.4	13.7	12.9	5.9	10.8

patrol officers while conducting their preliminary investigation than by detectives during a follow-up investigation case-day.[3]

Information about suspected criminals was more likely to be collected by detectives during a follow-up investigation day than by patrol officers during a preliminary investigation day. This held true for all such information types and for all agencies studied.

A much less discernable pattern was found with respect to whether patrol officers or detectives collected more information providing possible leads. Although there was some variation among the three agencies, patrol officers were generally more likely to obtain witness names than detectives, and were, in addition, about as likely as detectives to collect vehicle descriptions and license numbers. Detectives at all three sites were more likely to obtain information about related crimes.

Overall, a difference was noted in the types of information patrol officers and detectives were likely to collect during burglary investigation case-days. Patrol officers were more likely than detectives to obtain information describing the burglary and the names of witnesses; detectives, on the other hand, were more likely than patrol officers to collect information about suspected criminals and about related crimes.

Robbery

The frequency with which investigating officers collect various types of information during robbery investigation case-days is shown in Table 6-2. At all three sites patrol officers were more likely to collect

Table 6-2
Likelihood Information Will be Obtained by Patrol
Officers and Detectives on a Robbery Investigation Case-Day
(% of Case-Days)

	Patrol				Detective			
	DeKalb County	St. Petersburg	Wichita	Mean	DeKalb County	St. Petersburg	Wichita	Mean
Information Describing Offense								
Description of Crime	50.4	92.0	58.6	67.0	47.1	90.7	31.3	56.4
Property Description	44.3	62.5	51.7	52.8	24.8	42.7	26.0	31.2
Property Number	7.8	8.0	17.2	11.0	5.4	2.7	6.3	4.8
Information About Suspected Criminals								
Suspect Name	13.9	13.6	25.9	17.8	28.1	12.0	41.7	27.3
Suspect Description	85.2	80.7	89.7	85.2	71.9	44.0	43.8	53.2
Confession	1.7	8.0	1.7	3.8	8.7	9.3	7.3	8.4
Accomplice Name	0.9	0.0	3.4	1.4	3.3	1.3	6.3	3.6
Name of Fence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Information Providing Possible Leads								
Witness Name	40.9	4.5	37.9	27.8	15.3	4.0	18.8	12.7
Vehicle Description	30.4	2.3	31.0	21.2	31.8	2.7	17.7	17.4
License Number	7.0	2.3	13.8	7.7	9.1	2.7	5.2	5.7
Related Crimes	8.7	6.8	3.4	6.3	25.6	9.3	17.7	17.5

any of the types of information describing the offense during the preliminary investigation day than were detectives during a follow-up investigation day.

Less of a trend existed with respect to the types of information about suspected criminals. Overall, detectives were more likely to obtain suspect names, confessions, and names of accomplices than were patrol officers; however, patrol officers were more likely to obtain suspect descriptions.

Of the types of information providing possible leads, patrol officers were more likely than detectives to obtain witness names; detectives, on the other hand, were more likely, on a case-day, to obtain related crime information. No clear pattern was found with respect to vehicle information.

Comparison of Burglary and Robbery

The types of information patrol officers and detectives collected were found to be similar for burglary and robbery. For both burglary and robbery, patrol officers conducting preliminary investigations were more likely than detectives, on a case-day, to collect information describing the offense. With one exception, on a follow-up investigation day, detectives were more likely to collect information about suspected criminals. The one exception to this general rule related to information describing robbery suspects: Patrol officers were more likely than

detectives to gather this type of information during robbery investigations, but the opposite was true of burglary investigations. This exception is due to the contrasting nature of burglaries and robberies. Robbery victims are more likely to see their assailants than burglary victims are to see those who have burglarized their home. Consequently, patrol officers conducting preliminary investigations of burglaries are less likely to obtain suspect descriptions than are patrol officers conducting preliminary investigations of robberies. During robbery preliminary investigations, suspect descriptions are part of the information describing the offense.

The triage hypothesis, described in the previous chapter, explains why information about suspected criminals is more likely to be collected by detectives on a follow-up investigation day than by patrol officers during their preliminary investigation. First, cases that have no leads and cannot be investigated (group one cases) are dropped from the investigative process at case screening (burglary only) or after the first follow-up investigation day. Those cases remaining (group two and three cases) are those that are more likely to have suspect information. Therefore, detectives work primarily on cases wherein information about suspected criminals is available, whereas patrol officers conducting preliminary investigations work a much more diverse group of cases, many of which provide no clues as to the identity of the suspect.

Second, on those cases worked by detectives, detectives can sometimes uncover leads which provide information about suspected criminals.

So, even when such information is not available earlier in the investigation, detectives can obtain information about suspected criminals.

In the following section sources of key information are analyzed.

Information Sources

The previous section examined the types of information acquired by patrol officers and detectives. In this section, we describe the activities that produce three crucial types of information: suspect descriptions, suspect names, and links to related crimes. The focus is on suspect descriptions and names and information about related crimes because these have been shown in previous research (Greenberg, et al., 1973; Greenberg, et al., 1975; Greenwood, et al., 1975) and in Chapter 7 of this study to be extremely important in determining outcomes of investigations. The question asked is as follows: Given that a suspect description, suspect name, or related crime information has been obtained, what is the likelihood that a specific source provided this information?

Burglary

Table 6-3 shows the likelihood that a burglary suspect name, already obtained by a patrol officer conducting a preliminary investigation or by a detective conducting a follow-up investigation, came from each of eight sources. In this table, and those that follow, the most likely

Table 6-3
Frequency With Which a Burglary Suspect Name
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	70.0	62.6	59.4	64.0
Witness	12.8	19.7	15.5	16.0
Informant	0.9	0.5	0.0	0.5
Other Citizen	9.9	11.3	7.1	9.4
Detective	9.4	4.7	3.0	5.7
Patrol Officer	2.5	4.7	12.5	6.6
Supervisor	3.0	2.3	3.6	3.0
Department Records	1.0	4.2	4.7	3.3
Detectives From Sources:				
Victim	59.9	53.3	64.5	59.2
Witness	16.0	11.9	9.6	12.5
Informant	7.8	0.9	2.2	3.6
Other Citizen	8.8	13.7	11.3	11.3
Detective	12.1	16.6	5.3	11.3
Patrol Officer	7.7	7.3	6.5	7.2
Supervisor	1.5	0.9	5.7	2.7
Department Records	15.5	33.0	19.7	22.7

source of a particular information type is designated by a rectangle, the second most likely source by an oval, and the third by a triangle.

The data in Table 6-3 indicate that, for patrol officers conducting preliminary investigations of burglaries, the primary sources of suspect names were victims, witnesses, and other citizens; detectives, other patrol officers, supervisors, department records, and informants were less frequently the sources of suspect information. Detectives, on the other hand, made use of departmental record checks, as well as interviews with victims, witnesses, other citizens, and detectives as sources of suspect names. In general, detectives were more likely to use informants, patrol officers, and other detectives as sources of burglary suspect names than were patrol officers.

The frequency with which suspect descriptions are obtained from various sources by patrol officers and detectives is shown in Table 6-4. The most likely sources of burglary suspect descriptions for patrol officers were victims and witnesses. For detectives, the most likely sources of suspect descriptions, in addition to victims and witnesses, were department records. Although not nearly as frequent a source of suspect descriptions as the other three, informants were more likely to be sources of suspect descriptions for detectives than for patrol officers.

Table 6-5 shows the sources of related crime information for burglary cases. A ninth source, suspects, was added for this information type. Patrol officers tended to rely primarily on victims as sources of related crime information, although other citizens and witnesses provided

Table 6-4
Frequency With Which a Burglary Suspect Description
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	65.4	62.5	56.6	61.5
Witness	35.4	29.6	29.0	31.3
Informant	0.9	1.0	0.0	0.6
Other Citizen	9.1	6.9	6.3	7.4
Detective	6.0	3.6	2.8	4.1
Patrol Officer	1.5	2.3	8.3	4.0
Supervisor	4.5	1.4	6.3	4.1
Department Records	0.0	3.2	0.0	1.1
Detectives From Sources:				
Victim	56.6	54.7	74.1	61.8
Witness	24.7	30.9	15.7	23.8
Informant	7.3	3.7	0.0	3.7
Other Citizen	9.9	10.7	4.5	8.4
Detective	10.7	10.7	5.1	8.8
Patrol Officer	0.9	4.7	4.4	3.3
Supervisor	2.0	0.0	0.6	0.9
Department Records	11.4	22.6	5.7	13.2

Table 6-5
Frequency With Which Burglary Related Crime Information
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	76.3	49.7	54.5	60.2
Witness	8.4	15.2	4.9	9.5
Informant	1.3	1.8	0.0	1.0
Suspect	4.3	5.1	7.5	5.6
Other Citizen	14.3	15.4	9.9	13.2
Detective	8.5	5.1	2.5	5.4
Patrol Officer	4.2	10.3	5.1	6.5
Supervisor	8.5	1.7	4.9	5.0
Department Records	0.0	5.1	2.5	2.5
Detectives From Sources:				
Victim	36.0	35.2	30.5	33.9
Witness	1.2	12.9	7.1	7.1
Informant	5.4	9.9	2.4	5.9
Suspect	31.4	19.1	42.6	31.0
Other Citizen	9.6	12.9	2.4	8.3
Detective	20.2	29.1	4.8	18.0
Patrol Officer	4.8	3.2	0.0	2.7
Supervisor	1.8	19.2	5.5	8.8
Department Records	14.4	19.3	4.8	12.8

this information with moderate frequency. Patrol officers in DeKalb County and St. Petersburg were slightly more likely than detectives to acquire related crime information from witnesses. Detectives tended to rely on victims, suspects, and other detectives as sources of related crime information. Detectives relied on a greater variety of sources of information about related crimes than did patrol officers, and were much more likely to use suspects, departmental records, and informants as sources.

Burglary victims were found to be the most likely sources of suspect names, suspect descriptions, and information about related crimes. This was also true for patrol officers conducting preliminary investigations and for detectives conducting follow-up investigations. Witnesses were also frequently the source of these three types of information for both patrol officers and detectives. Despite these similarities, one major difference was found between the sources of these three types of information as used by patrol officers and detectives; detectives conducting follow-up investigations were much more likely to list department records and informants as sources of these three types of information than were patrol officers. This supports the finding in Chapter 5 with regard to detectives focussing, more than patrol officers, on information sources under the control of the police agency, whereas patrol officers depend more on sources outside the control of the department, especially victims.

Robbery

Likely sources of robbery suspect names are shown in Table 6-6. The primary sources of this type of information for patrol officers were

Table 6-6
Frequency With Which a Robbery Suspect Name
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	64.6	66.8	39.9	57.1
Witness	45.2	25.1	20.0	30.1
Informant	*	*	*	*
Other Citizen	13.0	0.0	6.6	6.5
Detective	32.7	8.3	13.4	18.1
Patrol Officer	13.0	25.0	27.7	21.9
Supervisor	25.9	8.3	13.2	15.8
Department Records	*	0.0	13.3	6.7
Detectives From Sources:				
Victim	22.0	78.6	29.9	43.5
Witness	13.3	33.9	17.5	21.6
Informant	10.3	11.7	0.5	7.5
Other Citizen	22.1	0.0	10.0	10.7
Detective	26.6	11.3	20.0	19.3
Patrol Officer	16.2	0.0	42.2	19.5
Supervisor	13.3	0.0	7.3	6.9
Department Records	13.3	22.5	27.5	21.1

*Source not used.

found to be victims and witnesses; other patrol officers were also likely sources of robbery suspect names for patrol officers, particularly in St. Petersburg and Wichita. In DeKalb County, where detectives responded to robbery crime scenes during the preliminary investigation, detectives were the third most likely source of suspect names for patrol officers. Patrol supervisors were also more likely to be sources of suspect names with respect to robberies in DeKalb County than at either of the other sites.

Although detectives also tended to rely on victims, witnesses, and sometimes patrol officers as sources of robbery suspect names, they also were more likely than patrol officers to gain suspect information from departmental record checks and informants.

Table 6-7 shows the likelihood that patrol officers and detectives will obtain robbery suspect descriptions from a variety of sources. For both patrol officers and detectives, victims were by far the most likely sources of robbery suspect descriptions at all three sites, with witnesses a distant, though important, second. Detectives were more likely to obtain robbery suspect descriptions from patrol officers (a major source), department records, and informants than were patrol officers.

Table 6-8 shows the sources of information on related crimes for both patrol officers and detectives investigating robberies. There does not seem to be a single source of related crime information that patrol officers use more than any other source that is consistent across all three sites. This is, in part, due to the small number of robbery cases and the fact that patrol officers are unlikely to obtain related crime information

Table 6-7
Frequency With Which a Robbery Suspect Description
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	92.0	95.8	90.4	92.7
Witness	38.1	25.4	38.4	34.0
Informant	*	*	*	*
Other Citizen	2.1	0.0	3.8	2.0
Detective	14.8	1.4	7.7	8.0
Patrol Officer	7.4	2.8	5.8	5.3
Supervisor	8.5	0.0	21.2	9.9
Department Records	*	1.4	3.8	2.6
Detectives From Sources:				
Victim	86.2	95.2	85.6	89.0
Witness	33.4	9.2	23.8	22.1
Informant	1.7	3.2	4.8	3.2
Other Citizen	8.0	0.0	4.7	4.2
Detective	12.1	0.0	9.5	7.2
Patrol Officer	23.6	3.1	28.5	18.4
Supervisor	5.2	0.0	4.7	3.3
Department Records	2.9	9.2	7.1	6.4

*Source not used.

Table 6-8
Frequency With Which Robbery Related Crime Information
Was Obtained From Sources
(% of Case-Days)

Obtained By	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers From Sources:				
Victim	30.7	17.2	0.0	16.0
Witness	31.3	0.0	0.0	10.4
Informant	*	*	*	*
Suspect	10.4	50.0	0.0	20.1
Other Citizen	0.0	0.0	0.0	0.0
Detective	52.2	0.0	50.9	34.4
Patrol Officer	20.7	16.5	0.0	12.4
Supervisor	20.5	16.5	0.0	12.3
Department Records	*	50.3	0.0	25.2
Detectives From Sources:				
Victim	16.0	0.0	23.4	13.1
Witness	8.1	0.0	11.8	6.6
Informant	6.5	15.1	5.9	9.2
Suspect	27.4	29.0	11.7	22.7
Other Citizen	16.2	0.0	11.7	9.3
Detective	58.1	0.0	29.5	29.2
Patrol Officer	19.4	0.0	17.6	12.3
Supervisor	29.0	0.0	0.0	9.7
Department Records	12.9	87.1	29.4	43.1

*Source not used.

(see Table 6-2). If one source of related crime information for patrol officers must be singled out, then it is detectives, although detectives were never listed as a source of that information type in St. Petersburg.

There also seems to be very little consistency across sites in terms of the sources from which detectives were likely to obtain related crime information for robberies. On average, department records, other detectives and suspects seem to be the most likely source of this information; however, there is great variation across the three sites. In general, and in each site specifically, detectives were more likely to use department records and suspects as sources of related crime information for robbery investigations than were patrol officers.

Although there are few consistent sources of related crime information for both patrol officers and detectives, some general conclusions can be drawn with respect to the sources of suspect names and descriptions: victims and witnesses are the primary sources of descriptions and names of suspects for both patrol officers and detectives; however, detectives are more likely than patrol officers to make use of department records, informants, and other detectives to acquire such information.

Comparison of Burglary and Robbery

This analysis of the sources of suspect names, suspect descriptions, and related crime information for patrol officers and detectives suggests similar findings for both burglary and robbery. For both crimes, detectives and patrol officers tended to rely heavily on victims and

witnesses as sources of these three types of information. However, for both burglary and robbery, department records and informants were more likely to be sources of information for detectives than for patrol officers. This confirms some of the conclusions from Chapter 5--namely, that detectives are more oriented toward information sources under the control of the department than are patrol officers; whereas patrol officers are more oriented toward information sources outside the control of the department--primarily, victims and witnesses.

Likelihood of Obtaining Information

The previous section focused on the sources of information investigators make use of; this section examines how "productive" various activities are with respect to leading to the acquisition of suspect names, suspect descriptions, and information about related crimes. The question we will be concerned with is as follows: Given that an activity is conducted, what is the likelihood that a particular type of information will be obtained?

The difference between this question and the question addressed in the previous section is important. In this section the analysis begins with an action and then looks at the likelihood that a type of information will be provided. In the previous section the analysis began with a type of information and looked for the most likely source of the information. Both sections describe the relationship between activities (sources) and

information, but they describe this relationship from two distinct perspectives.

Burglary

Table 6-9 shows the likelihood that a suspect name will be obtained after a specific action has been taken by a patrol officer or detective investigating a burglary. It was found that witness interviews, informant interviews and departmental record checks were the most productive activities for both patrol officers and detectives with respect to obtaining suspect names. When witnesses were available, they were more likely than victims to be able to provide names of suspects; in addition, record checks were more likely than victim interviews to produce suspect names. This relationship held true for patrol officers as well as detectives, despite the fact that in all three agencies patrol officers were less likely than detectives to conduct such record checks.

Informant interviews proved to be very important in producing suspect names, though such interviews were conducted infrequently by both patrol officers and detectives. For our purposes, the word "informant" connotes criminals who provide information about other criminals, people with criminal contacts (such as girlfriends and bondsmen), and citizens (such as neighbors or bartenders) who happen upon information about criminals. The term "informant" is not meant to be downgrading, despite the fact that it often has that connotation. The activity labeled "Other Interview" also encompasses interviews of persons who happen upon information about criminals. Detectives often remarked to the study's staff that

Table 6-9
Probability of Obtaining Suspect Name Given That Activities are Conducted by Investigators of Burglaries (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	11.3	21.5	15.6	16.1
Witness Interview	17.8	(26.3)	(21.3)	(21.8)
Informant Interview	[33.3]	△25.0△	0.0	△19.4△
Other Interview	12.5	12.8	13.0	12.8
Discussion with Detective	△22.9△	21.7	10.0	18.2
Discussion with Patrol Officer	7.4	15.6	△19.6△	14.2
Discussion with Supervisor	6.4	7.9	3.4	5.9
Check Department Records	(25.0)	[37.5]	[24.2]	[28.9]
Detectives Conduct:				
Victim Interview	28.7	33.9	27.5	30.0
Witness Interview	(49.4)	21.3	△36.1△	35.6
Informant Interview	[63.8]	25.0	[71.4]	[53.4]
Other Interview	31.1	30.6	35.6	32.4
Discussion with Detective	22.1	△40.9△	25.5	29.5
Discussion with Patrol Officer	△46.8△	(53.3)	34.9	△45.0△
Discussion with Supervisor	6.3	6.7	35.1	16.0
Check Department Records	36.8	[67.9]	(51.7)	(52.1)

informants were important; this despite the fact that the detectives observed in this study rarely interviewed informants. Greenwood et al., (1975), reported the same disparity between such assertions by detectives claiming the importance of informants and observations indicating the infrequency with which interviews with informants were conducted. It would appear that the answer to this apparent contradiction lies in the fact that informants, when interviewed, produce a great deal of valuable information.

Table 6-9 also shows that discussions between patrol officers and detectives are important in producing suspect names. In all three agencies, detectives were more likely to obtain burglary suspect names from patrol officers than from either victims or other detectives. Furthermore, with the exception of Wichita, patrol officers obtained suspect names more often from detectives than from other patrol officers. Supervisors, on the other hand, were not likely to provide suspect names, except in Wichita. Discussions with supervisors usually are conducted to inform them of the progress of investigations and to receive explanations of department rules and policies, not to obtain suspect information.

Some patterns are clearly discernable with respect to those activities, which, when conducted, are likely to lead to the acquisition of burglary suspect descriptions (see Table 6-10). At all sites, victim interviews were less likely to produce burglary suspect descriptions than were witness interviews. This was found to be true for both patrol and detective investigators. Informant interviews seemed to be very productive activities in DeKalb County and St. Petersburg. Department records checks, on the other hand, were not likely to provide suspect descriptions for

Table 6-10
Probability of Obtaining Suspect Description Given That Activities are Conducted by Investigators of Burglaries (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	10.4	22.1	12.8	15.1
Witness Interview	48.6	40.6	34.4	41.2
Informant Interview	33.3	50.0	0.0	27.8
Other Interview	11.3	8.0	9.8	9.7
Discussion with Detective	14.5	17.4	8.0	13.3
Discussion with Patrol Officer	4.4	7.8	11.2	7.8
Discussion with Supervisor	9.6	4.8	5.1	6.5
Check Department Records	0.0	29.2	0.0	9.7
Detectives Conduct:				
Victim Interview	19.5	26.9	21.9	22.8
Witness Interview	54.5	42.6	41.0	46.0
Informant Interview	43.1	75.0	0.0	39.4
Other Interview	25.2	18.4	9.6	17.7
Discussion with Detective	14.0	20.5	17.0	17.2
Discussion with Patrol Officer	39.2	26.7	16.3	27.4
Discussion with Supervisor	6.3	0.0	2.7	3.0
Check Department Records	19.4	35.8	10.3	21.8

either patrol officers or detectives except in St. Petersburg, where records checks were the third most productive activity in producing suspect descriptions for both patrol officers and detectives. Discussions between patrol officers and detectives were relatively important with respect to providing suspect descriptions, especially during follow-up investigations. Discussions with supervisors were not likely to produce suspect descriptions, although this was a moderately productive activity when it involved patrol supervisors in DeKalb County.

The relative productivity of engaging in certain activities with respect to the likelihood that the activity would lead to the acquisition of related crime information concerning burglaries is shown in Table 6-11. Informant interviews were consistently more likely to yield related crime information than other actions engaged in by patrol officers and detectives. Nevertheless, with the exception of informant interviews in DeKalb County and St. Petersburg and checking department records in St. Petersburg, there was less than a ten percent chance that any activity conducted by patrol officers would lead to the acquisition of related crime information. It was found that a large number of activities conducted by detectives were likely to result in the aquisition of related crime information. Suspect interviews in particular were productive of this information for detectives in all agencies. Discussions with other detectives were moderately useful in DeKalb County and St. Petersburg, but much less so in Wichita. The same held true for detectives' checking of department records.

Table 6-11
Probability of Obtaining Related Crime Information Given That Activities are Conducted by Investigators of Burglaries (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	4.3	4.7	3.4	4.1
Witness Interview	4.1	5.6	1.6	3.8
Informant Interview	16.7	25.0	0.0	13.9
Suspect Interview	6.8	3.7	5.2	5.2
Other Interview	6.3	4.8	4.3	5.1
Discussion with Detective	7.2	6.5	2.0	5.2
Discussion with Patrol Officer	4.4	9.4	1.9	5.2
Discussion with Supervisor	6.4	1.6	1.1	3.0
Check Department Records	0.0	12.5	3.0	5.2
Detectives Conduct:				
Victim Interview	6.0	6.4	2.4	4.9
Witness Interview	1.3	6.6	4.9	4.3
Informant Interview	15.5	75.0	14.3	35.0
Suspect Interview	22.4	13.3	16.1	17.3
Other Interview	11.9	8.2	1.4	7.2
Discussion with Detective	12.8	20.5	4.3	12.5
Discussion with Patrol Officer	10.1	6.7	0.0	5.6
Discussion with Supervisor	2.7	40.0	5.4	16.0
Check Department Records	11.9	11.3	2.3	8.5

In general, although burglary suspect information and related crime information, when obtained, most often came from victims, the proportion of victim interviews that resulted in the acquisition of this information was relatively small. Interviews of witnesses, informants, and checks of department records were consistently more likely to provide this type of information than are victim interviews. It would seem, then, that the importance of victims as sources of information, (as noted earlier in this chapter), rests primarily on the fact that victims are interviewed quite frequently. Patrol officers virtually always interview victims during preliminary investigations, and detectives routinely interview them during follow-up investigations, regardless of the likelihood of obtaining new information. The high productivity of many of the other activities for providing suspect and related crime information may be owing, in part, to these activities being selectively conducted. It may be that certain activities are not conducted unless officers have reasonable expectations that the desired information will be forthcoming. Still, differences among the agencies with regard to the frequencies with which particular activities were conducted (see Chapter 5, especially regarding record checks and informant interviews, but also regarding witness canvasses) suggest that it is unlikely that the selective conducting of these activities alone accounts for their high rates of productivity.

Robbery

Table 6-12 shows the likelihood that suspect names will be obtained after specific actions have been taken by patrol officers and

Table 6-12
Probability of Obtaining Suspect Name Given That Activities are Conducted by Investigators of Robberies (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	9.4	9.3	10.9	9.9
Witness Interview	12.7	7.9	12.5	11.0
Informant Interview	*	*	*	*
Other Interview	16.7	0.0	20.0	12.2
Discussion with Detective	6.3	7.1	28.6	14.0
Discussion with Patrol Officer	7.7	25.0	36.4	23.0
Discussion with Supervisor	8.9	25.0	4.5	12.8
Check Department Records	*	0.0	50.0	25.0
Detectives Conduct:				
Victim Interview	8.0	10.9	21.4	13.4
Witness Interview	11.3	33.3	30.4	25.0
Informant Interview	46.7	100.0	100.0	82.2
Other Interview	25.0	0.0	16.7	13.9
Discussion with Detective	16.4	20.0	28.6	21.7
Discussion with Patrol Officer	12.1	0.0	68.0	26.7
Discussion with Supervisor	10.5	0.0	37.5	16.0
Check Department Records	21.4	12.5	42.3	25.4

*Activity not conducted.

detectives investigating robbery cases. It is clear that the actions most likely to produce the names of robbery suspects vary between patrol officers and detectives, and from department to department. The only clearly consistent pattern across the three departments was found to be the fact that informant interviews conducted by detectives was the action most likely to produce suspect names.

Strong similarities were found across the three sites with respect to those actions most likely to result in the acquisition of suspect descriptions. Table 6-13 shows that the activity that was most likely to produce suspect descriptions for patrol officers was the victim interview; witness interviews were the second most likely activity to produce robbery suspect descriptions. Informant interviews and discussions with patrol officers and detectives were generally productive activities but their relative importance varied from department to department and by type of investigator.

The relative productivity of engaging in certain activities with respect to the likelihood that the activity would lead to the acquisition of related crime information concerning robberies is shown in Table 6-14. No definitive conclusions can be drawn regarding the productivity of patrol officers' activities. However, informant and suspect interviews and record checks were found to be very productive for detectives in all three agencies although their relative importance varied by agency.

The relative productivity of conducting certain activities designed to ferret out information about robberies depends on which type of

Table 6-13
Probability of Obtaining Suspect Description Given That Activities are Conducted by Investigators of Robberies (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	82.1	79.1	85.5	82.2
Witness Interview	65.5	47.4	83.3	65.4
Informant Interview	*	*	*	*
Other Interview	16.7	0.0	40.0	18.9
Discussion with Detective	17.5	7.1	57.1	27.2
Discussion with Patrol Officer	26.9	50.0	27.3	34.7
Discussion with Supervisor	17.8	0.0	25.0	14.3
Check Department Records	*	10.0	50.0	30.0
Detectives Conduct:				
Victim Interview	80.2	48.4	64.3	64.3
Witness Interview	72.5	33.3	43.5	49.8
Informant Interview	20.0	100.0	100.0	73.3
Other Interview	23.3	0.0	8.3	10.5
Discussion with Detective	19.1	0.0	14.3	11.1
Discussion with Patrol Officer	45.1	25.0	48.0	39.4
Discussion with Supervisor	10.5	0.0	25.0	11.8
Check Department Records	11.9	18.8	11.5	14.1

*Activity Not Conducted

Table 6-14
Probability of Obtaining Related Crime Information Given That Activities are Conducted by Investigators of Robberies (% of Case-Days)

Activity	DeKalb County	St. Petersburg	Wichita	Mean
Patrol Officers Conduct:				
Victim Interview	2.8	1.2	0.0	1.3
Witness Interview	5.5	0.0	0.0	1.8
Informant Interview	*	*	*	*
Suspect Interview	14.3	25.0	0.0	13.1
Other Interview	0.0	0.0	0.0	0.0
Discussion with Detective	6.3	0.0	14.3	6.9
Discussion with Patrol Officer	7.7	25.0	0.0	10.9
Discussion with Supervisor	4.4	25.0	0.0	9.8
Check Department Records	*	30.0	0.0	15.0
Detectives Conduct:				
Victim Interview	5.3	0.0	7.1	4.1
Witness Interview	6.3	0.0	8.7	5.0
Informant Interview	26.7	100.0	50.0	58.9
Suspect Interview	51.5	13.3	13.3	26.0
Other Interview	16.7	0.0	8.3	8.3
Discussion with Detective	32.7	0.0	17.9	16.9
Discussion with Patrol Officer	13.2	0.0	12.0	8.4
Discussion with Supervisor	20.9	0.0	0.0	7.0
Check Department Records	19.0	37.5	19.2	25.2

*Activity Not Conducted

information is being sought for both patrol officers and detectives. Informant interviews, checks of departmental records, and discussions with other members of the police agency--all activities directed at sources of information under the control of the police agency--resulted most often in the acquisition of names. Conducting victim and witness interviews were the most productive activities engaged in by patrol officers to obtain robbery suspect descriptions. Informant interviews by detectives were found to be highly productive of suspect descriptions. There did not seem to be a single activity conducted by patrol officers at all three sites that was highly productive of related crime information. However, for detectives, informant and suspect interviews and checks of departmental records were quite likely to produce this type of information.

Comparison of Burglary and Robbery

The primary difference between the relative productivity of investigative activities for burglary and robbery lies in understanding the role victim interviews play. During burglary investigations, victim interviews are not very likely to result in the acquisition of suspect names, suspect descriptions, or related crime information. During robbery investigations, victim interviews are unlikely to be productive of suspect names or related crime information. However, victim interviews are quite likely to be productive of robbery suspect descriptions. This is due to the fact that robbery victims are much more likely to see the offender than are burglary victims. As a consequence, robbery victims can often contribute more toward robbery investigations than burglary victims can toward

burglary investigations. With this important exception aside, the most productive activities that patrol officers and detectives can conduct are directed at witnesses and sources of information under the control of the department, that is, department records, other members of the department, and informants.

Conclusions

This chapter dealt with the frequency with which various types of information are obtained, the sources of suspect information and related crime information, and the relative productivity of engaging in certain activities with respect to the likelihood that the activities will result in the acquisition of information about related crimes and suspects.

It was found that the activity most frequently conducted was least productive of suspect names, suspect descriptions, and related crime information. With respect to both burglaries and robberies, victims were the most likely to be the sources of these three types of information, but only because they were virtually always interviewed. This fact notwithstanding, when the relative productivity of engaging in victim interviews was analyzed, it was found that, with one important exception, most interviews of victims were not productive of suspect names, suspect descriptions, or related crime information (See Skogan and Antunes [1979] for similar findings).

The explanation for this is relatively simple: Despite the fact that for any given burglary or robbery a victim may be unlikely to provide

important investigative information, the victim is almost always interviewed (see Chapter 5). However, as was shown in Chapter 5, patrol officers and detectives were much less likely to discuss burglary and robbery cases with other members of the department, check department records, or interview informants than they were to interview victims--this, despite the fact that these other activities were more likely to be productive of suspect names, suspect descriptions, and related crime information than victim interviews. Thus, it seems that both patrol officers and detectives are more likely to conduct activities that are not productive of suspect names, suspect descriptions, and related crime information than they are to conduct activities that are productive of these types of information.

This suggests that police investigative managers should encourage investigators to make greater use of the more highly productive information sources, including:

- Witnesses;
- Informants;
- Departmental records.

These sources were found to be very productive for both patrol officers and detectives. However, the frequency with which these sources were used varied greatly between detectives and patrol officers and among the three sites.

Despite the relatively high rates of productivity found for interviews of witnesses and informants and department record checks it may be difficult to increase the productive use of these activities: only a

limited number of burglaries are witnessed; informants are not always available, will not always know who committed a crime and are not always trustworthy; and department record checks are only useful if they are easy to access, contain relevant information and there are already sufficient leads to indicate to investigators where to look in the records.

Still, these problems are not totally insurmountable. Searching neighborhoods for more witnesses can result in more witnesses being found. Developing networks of informants and street contacts can produce additional information in many cases. Records systems can be made more accessible and automated, thus increasing their use and the amount of information stored, while decreasing the time needed to retrieve such information. The data collected for this study cannot show what would happen if more witnesses were sought, informant networks developed, or department record systems improved. Until more research is conducted, the possibility that these productive sources are currently being used to their utmost cannot be ignored. Still, the findings presented in this chapter do suggest that more extensive use of these highly productive information sources may be beneficial.

In the following chapter, we will further explore the importance of information and actions with regard to how they lead to arrests.

NOTES

1. See Glick and Riccio (1979) for a description of the collection of information that is new, repetitive or substantiates other information during the investigation of juvenile crime.

2. During an investigation of a single case a particular activity (for example a victim interview) may be conducted more than once. Repetition of this activity is most likely to occur on different days of the investigation. Therefore, in order to determine the link between performing an activity once and obtaining a type of information (for example a suspect name) the case-day is used as the unit of analysis.

3. When, however, the data are presented for cases instead of case-days, taking into account that detectives, unlike patrol officers, worked an average burglary or robbery case on more than one day, we find that detectives are slightly more likely than patrol officers to gather informaton describing crimes and property taken at some time during the investigation (see technical appendicies).

CHAPTER 7

INVESTIGATIVE RESULTS

Prior chapters have dealt with actions taken by patrol officers and detectives when conducting preliminary and follow-up investigations. What remains to be examined is whether such investigations affect the likelihood that follow-up investigative arrests will be made. This chapter addresses the aforementioned issue and demonstrates that the investigative efforts of both patrol officers and detectives significantly contribute to the making of follow-up arrests.

Investigative Results

For the purposes of this study, investigative results are defined as the arrest of at least one suspect during the follow-up investigation of a burglary or robbery case in which there has been no arrest made during the preliminary investigation. Arrest data were gleaned from official reports of police agencies.

Arrest of at Least One Suspect

Several reasons exist for choosing the number of arrests as a measure of investigative results. First, it is the most rigorous measure of investigative results available for this study. Although it has been argued that police performance should be measured on the basis of what happens to the case once it goes to court (see National Commission on

Productivity, 1973; and Forst, et al., 1977), data on whether an arrest passed the first judicial screening or resulted in a conviction were not routinely collected by the three participating agencies. Time and budget constraints prevented the collection of these data from prosecution and court records.

The use of data describing results that do not include the arrest of a suspect (e.g., clearance of offenses) is rejected because these appear to reflect administrative policy concerning investigations more than they reflect investigative performance.[1] The criteria for clearing a case varied from site to site; this was reflected in the proportion of cleared cases that involved an arrest. In one agency only 58 percent of cleared burglary cases resulted in an arrest, whereas at another site, 100 percent of cleared cases resulted in an arrest. Since clearance rates presented few grounds for comparing data among sites, or for that matter, among agencies not studied, clearance statistics were not used.

Focus on Follow-up Arrests

For the purposes of this study, only arrests made after preliminary investigations have been conducted are considered investigative results. This is because arrests made during preliminary investigations may not be due to investigative efforts, but may, instead, be due to a quick police response, citizen apprehension of the suspect, or some other factor unrelated to how investigations are conducted. Data relating to these factors were not collected for this study. Arrests made during preliminary investigations that were not the result of patrol investigative actions

could not be separated from those that were the result of investigative actions. In sections following this, all cases in which an arrest was made during the preliminary investigation were eliminated from the analysis. This was done by defining the preliminary investigation as ending once the incident report was completed; therefore, arrests recorded on preliminary investigation incident reports were not attributed to follow-up investigative activities.

This method of measuring investigative results is, admittedly, not without its problems; for instance, it does not speak to a number of important qualitative investigative outcomes. The satisfaction of victims and the return of stolen property are examples of important outcomes not addressed. Similarly, no attempt is made to measure the effectiveness of investigators whose work results not only in arrests but convictions as well. This does not mean that patrol officers and detectives are unconcerned with such results, nor does it mean that we consider them to be unimportant; satisfying the public and building good prosecutable cases are outcomes desired by all. This fact notwithstanding, resources required to analyze these results were not available.

Burglary

Table 7-1 shows the frequency with which arrests are made during preliminary and follow-up investigations of burglaries at the three sites. The total proportion of burglary cases that resulted in an arrest (either during preliminary or follow-up investigation) varied substantially, from 6.2 percent in DeKalb County to 10.9 percent in Wichita. The proportion of

Table 7-1
Burglary Cases Resulting in at Least One Arrest During the Preliminary and Follow-up Investigation at the Three Sites

	Totals		Preliminary	Follow-up
	Cases	Arrests		
DeKalb County				
% Cases	100.0	6.2	2.4	3.8
% Arrests	-----	100.0	38.7	61.3
Number	(1,501)	(93)	(36)	(57)
St. Petersburg				
% Cases	100.0	7.0	3.7	3.3
% Arrests	-----	100.0	53.1	46.9
Number	(702)	(49)	(26)	(23)
Wichita				
% Cases	100.0	10.9	6.6	4.4
% Arrests	-----	100.0	60.2	39.8
Number	(1,172)	(128)	(77)	(51)
Mean				
% Cases	100.0	8.0	4.2	3.8
% Arrests	-----	100.0	50.7	49.3

burglary cases that resulted in a preliminary investigation arrest being made also varied dramatically from just under two and one-half (2.4%) percent in DeKalb County to just over six and one-half (6.6%) percent in Wichita. The percent of burglary cases resulting in a follow-up arrest however, was found to be relatively constant across the three sites, varying from 3.3 to 4.4 percent.

If, instead of looking at the total percentage of cases resulting in arrest, a comparison is made of the relative proportions of arrests that are made during preliminary and follow-up investigations, substantial differences among the sites can be discerned. In DeKalb County, 60 percent of burglary related arrests were made during follow-up investigations, whereas, only 40 percent were made during preliminary investigations. In St. Petersburg, roughly half of all burglary related arrests were made during preliminary investigations and the other half during follow-up investigations. The pattern found in Wichita differed significantly from that found in DeKalb County where approximately 60 percent of all burglary related arrests were made during preliminary investigations and only 40 percent during follow-up investigations.

One important conclusion can be drawn from this analysis: the proportion of burglary cases resulting in follow-up investigation arrests is relatively low and does not vary much among the three sites; however, the proportion of burglary cases resulting in preliminary investigation arrests varies substantially among the three sites. This variation in the percent of cases resulting in a preliminary investigation arrest coincides with the observations noted earlier in this study, with respect to the fact

that some agencies emphasize the preliminary investigation function more than others. For example, in DeKalb County much less emphasis was placed on the preliminary investigation of burglaries by patrol officers than was the case in Wichita where the adoption of a team policing approach resulted in a heavy emphasis being placed on preliminary investigations conducted by patrol officers.

Robbery

Table 7-2 shows the frequency with which arrests are made during preliminary and follow-up investigations of robberies. The proportion of robbery cases that resulted in an arrest being made varied little among the three sites: overall, 18 to 19 percent of robberies investigated resulted in an arrest being made either during the preliminary or follow-up investigation. The proportion of robbery cases that resulted in an arrest being made during the preliminary investigation did, however, vary dramatically among the three sites: five percent of the robbery cases in DeKalb County and eleven percent of the robbery cases in Wichita resulted in an arrest being made during the preliminary investigation.

The proportion of robbery cases resulting in follow-up investigation arrests also varied dramatically. DeKalb County showed the highest proportion (14 percent) of cases resulting in robbery follow-up investigation arrests, and Wichita the lowest percentage (7.9 percent).

The percentages of robbery arrests attributable to preliminary investigations and to follow-up investigations also varied among the three

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Table 7-2
Robbery Cases Resulting in at Least One Arrest During the Preliminary and Follow-up Investigation at the Three Sites

	Totals		Preliminary	Follow-up
	Cases	Arrests		
DeKalb County				
% Cases	100.0	19.0	5.0	14.0
% Arrests	-----	100.0	26.1	73.9
Number	(121)	(23)	(6)	(17)
St. Petersburg				
% Cases	100.0	18.2	8.0	10.2
% Arrests	-----	100.0	43.8	56.3
Number	(88)	(16)	(7)	(9)
Wichita				
% Cases	100.0	19.3	11.4	7.9
% Arrests	-----	100.0	59.1	40.9
Number	(144)	(22)	(13)	(9)
Mean				
% Cases	100.0	18.8	8.1	10.7
% Arrests	-----	100.0	43.0	57.0

sites. In DeKalb County, with its heavy emphasis on follow-up investigations, almost 74 percent of robbery related arrests resulted from follow-up investigations, with only 26 percent of the robbery related arrests attributable to preliminary investigations. In St. Petersburg, the proportion of arrests was more evenly distributed between preliminary investigations (44 percent) and follow-up investigations (56 percent). A converse distribution was found in Wichita where almost 60 percent of robbery related arrests were made during preliminary investigations, as opposed to 40 percent during follow-up investigations.

These results suggest that a department's relative emphasis on preliminary as compared to follow-up investigations will have more of an influence on what stage of the investigative process (preliminary or follow-up) the arrests will be made, rather than on the proportion of robbery cases resulting in arrest.

Comparison of Burglary and Robbery

With this analysis of arrests in three sites, two tentative conclusions can be drawn. The first is that by emphasizing burglary preliminary investigations conducted by patrol officers, an increase may be achieved in the total proportion of all burglary cases resulting in an arrest. This projected increase in arrests will be due to more arrests taking place during preliminary investigations, and will have little effect on the number of follow-up investigation arrests.

The second conclusion is that for robberies, emphasizing either preliminary investigations over follow-up investigations (or vise versa) will have little overall influence on robbery arrest rates. The primary affect will be to shift the stage when arrests take place--either during preliminary investigations or during follow-up investigations.

The reasons for these differences are not clear, nevertheless, two explanations seem plausible. First, at all three sites, robberies are considered much more of a problem than burglaries and, being so considered, an emphasis is placed on robbery investigations during both the preliminary and follow-up stages. With burglaries, however, much greater variation on how preliminary investigations are conducted exists at the three sites. It may be that the heavy emphasis on robbery at the three sites leaves no real room for major improvements in robbery arrest rates; however, the varying degrees of emphasis placed on the conducting of burglary investigations at the three sites may indicate that improvements can be made, primarily by strengthening the role of preliminary investigations.

A second explanation is also possible. It may be that geographic or demographic characteristics of the sites (rather than characteristics of departmental operations) have a significant impact on the proportion of robbery and burglary cases resulting in preliminary and follow-up investigation arrests. For example, DeKalb County covers the largest land area of the three sites; burglary targets are therefore more scattered than at the other two sites. This may lower the proportion of burglary cases that result in preliminary investigation arrests. Wichita, unlike the other two sites, is relatively isolated. Burglars and robbers in Wichita find it

much more difficult to go to another urban setting than is the case in St. Petersburg and DeKalb County. This may make patrol operations much more productive in making burglary and robbery arrests.

Predicting the Likelihood that a Follow-up Arrest Will be Made Using Preliminary Investigation Information

Two of the first modern studies of criminal investigations demonstrated that information contained in the patrol officer's preliminary investigation report could be used to predict, with greater than 80 percent accuracy, whether or not an arrest would result from a follow-up investigation (Greenberg, et al., 1973; Greenberg, et at., 1975). Based on these findings, burglary and robbery screening decision models were constructed. The burglary model was tested nationally in 26 law enforcement agencies by the Police Executive Research Forum and was found to predict follow-up investigation results with 80 to 90 percent accuracy (Eck, 1979). Another study in four Minnesota jurisdictions showed both models to be over 90 percent accurate (Johnson and Healy, 1978). Many agencies have either used these models for case screening or developed their own screening procedures based, in part, on these early studies (Cawley, et al., 1977; Williams, 1979).

The SRI studies presented evidence that information gathered by patrol officers was the single greatest predictor of whether a burglary or robbery case would culminate in an arrest. This conclusion implies that follow-up investigations are of much less importance and primarily involve picking up and interrogating suspects who have already been identified.

Unfortunately the SRI studies did not account for the actions taken by detectives, information collected by detectives, or even whether the cases used in the analysis were actually investigated. Therefore, a reanalysis--one that takes into account these previously unconsidered variables--is called for.

In the following section an attempt is made to predict which cases will resuit in an arrest being made based on an analysis of preliminary report information collected by patrol officers. This analysis is a replication of the statistical analysis conducted by Greenberg, et al. (1973). The section that follows shows how these results change when the actions of detectives and information collected during follow-up investigations are taken into account. (The technical appendices contain a description of the analysis procedures used in this chapter, and provide additional tables pertaining to the analysis results. The small number of robbery cases was combined with the burglary cases for each site to arrive at meaningful conclusions.)

This replication is begun by attempting to predict the probability that a follow-up arrest will be made in cases of burglary and robbery. Six information variables are used to predict the probability that investigating a case will result in a follow-up arrest being made:

- **Witnesses**--at least one witness to the offense was mentioned in the preliminary investigation report.
- **Suspect Information**--a suspect name, or a full or partial description was contained in the preliminary investigation report.

- **Vehicle Description**--a full or partial description of a suspicious vehicle was mentioned in the preliminary investigation report.
- **Latent Prints**--latent prints were recovered at the crime scene as reported in evidence technician records.
- **Related Offenses**--the preliminary investigation report explicitly stated that the offense may be linked to other offenses.
- **Range of Time of Occurrence**--the amount of time between the earliest and latest possible time the offense could have been committed (as recorded in the preliminary investigation report).

With the exception of Related Offenses, these information variables are identical to those used in the earlier SRI study (Greenberg, et al., 1973).

Throughout this and the following sections three terms will be used to assess the results of the statistical analysis:

- **Probability of Arrest**--This term is used to describe the likelihood that a follow-up investigation arrest will be made given the presence of a single piece of information (e.g., vehicle description, suspect name) or investigative action (e.g., victim interview, checking department records). This is used to judge the importance of a particular piece of information or action in producing arrests.
- **Predictive Accuracy**--This term is used to judge the ability of a set of variables to correctly identify cases that will culminate in an arrest being made. Predictive accuracy is used to compare the findings of this study to those of other studies.
- **Percent of Variance Explained**--This term refers to the strength of the relationship between a set of variables and the likelihood

a follow-up arrest will be made. This measure permits one to compare two sets of variables, or two sets of data.

Table 7-3 shows the probability that a follow-up arrest will be made if a particular piece of information, and no other piece of information is present in the preliminary investigation report.[2] (The numbers in the first row show the probabilities that follow-up arrests will be made if none of the information types is present in the preliminary investigation report.) All probabilities were found to be low, indicating that there was a less than one in ten chance of an arrest being made on the basis of any single piece of information. Although no single information variable was a significant predictor of arrest for every agency, each information variable was significant in at least one agency.

Finally, the predictive accuracy for all three agencies indicated that the model correctly predicted investigation results in no less than 80 of 100 cases. This level of predictive accuracy is comparable to the predictive accuracy of similar types of statistical analysis found in earlier studies of this issue (Greenberg, et al., 1973; Eck, 1979).

Although the analysis results shown in Table 7-3 confirm earlier studies of investigations, these earlier studies and the above analysis combine all cases in the sample studied, including those that are thoroughly worked during a follow-up investigation and those that have no follow-up investigation.

Case screening is used in many police agencies, and, even in those agencies that have no formal screening policy, informal screening is

Table 7-3
Probability of a Follow-up Arrest Given Presence of Information in Preliminary Investigation Report for Significant Variables*--All Cases

	DeKalb County	St. Petersburg	Wichita
No Information Present	.037	.026	.018
Witness	.064	.088	
Suspect Information	.072		.072
Vehicle Description		.067	.042
Latent Prints	.073	.049	.056
Related Offenses**	.076	----	.071
Range of Time of Occurrence (1/2 Hour)		.028	
Predictive Accuracy	80.8%	85.5%	82.9%

*Coefficient significantly different from zero at the .1 level of significance using a one-tailed t-test.

**Insufficient data to test this variable in St. Petersburg.

often applied. The relationship of case screening to this discussion lies in the fact that cases screened out are not likely to be solved since they are not investigated. These screened out cases are also those for which little or no preliminary investigation information has been recorded. Therefore, predicting case solution on the basis of preliminary investigation information without distinguishing between worked and unworked cases results in distorted outcomes. The above analysis and earlier studies did not just predict which cases would result in arrest, but, in addition, predicted whether the case would or would not be investigated. To test the influence of preliminary investigation information on case solution without the confounding effects of case screening the same analysis must be performed on only those cases screened-in and worked by detectives.

The results of the analysis, performed only on cases assigned to detectives for follow-up investigations, are shown in Table 7-4. The relationship between preliminary investigation report information and follow-up arrests is weaker in this analysis than was true when all cases were analyzed. This is shown by two measures of this relationship. The predictive accuracy of the information decreased in two sites (compare Table 7-4 to Table 7-3) as did the percent of variance explained (see Table 7-5). Wichita is an exception.

Table 7-4
Probability of a Follow-up Arrest Given Presence of Information in Preliminary Investigation Report for Significant Variables*--Assigned Cases Only

	DeKalb County	St. Petersburg	Wichita
No Information Present	.082	.101	.023
Witness	.141		
Suspect Information			.090
Vehicle Description			.082
Latent Prints	.121		.053
Related Offenses**	.173	----	.072
Range of Time of Occurrence (1/2 Hour)	.084	.086	
Predictive Accuracy	72.6%	72.1%	80.7%

*Coefficient significantly different from zero at the .1 level of significance using a one-tailed t-test. Significance test for constant used a two-tailed t-test at .1 level of significance.

**Insufficient data to test this variable in St. Petersburg.

Table 7-5
Percent of Variance Explained by Preliminary Investigation Report Information Variables

	DeKalb County	St. Petersburg	Wichita
Assigned Cased Only*	2.9	2.3	13.3
All Cases	4.2	5.7	8.2
Difference	- 1.3	- 3.4	5.1

*Assigned burglaries plus all robberies.

This difference in findings between Wichita and the other two sites is owing to a difference in policy regarding case screening.[3] As mentioned previously, investigative supervisors at Wichita screen out relatively few cases, whereas investigative supervisors at DeKalb County and St. Petersburg screen out much larger percentages of burglary cases. When few cases are screened out and most cases assigned to detectives, the detective screens out the cases unofficially by calling the victim and then suspending the investigation. Thus, in Wichita the group of assigned cases is more like the group of cases that existed prior to screening than is true for the other sites; this assigned group includes many cases with no or few leads along with those cases having leads. No real investigative work is performed on these cases despite their being assigned to a detective for follow-up work. In DeKalb County and St. Petersburg, fewer cases without leads were assigned to detectives and, therefore, less unofficial screening took place than at Wichita. As a consequence, the analysis of assigned cases in Wichita still suffers from the confounding effects of

(unofficial) case screening, whereas the analyses of assigned cases in the other two sites do not.

In addition to the weaker relationship between preliminary investigation report information and follow-up arrests, some of the information variables were found to be no longer significant. At St. Petersburg, the agency that screened out the most cases, only the range of time of occurrence still significantly related to the arrest of a suspect. At the other two sites, most preliminary investigation information variables remained significant in terms of their capacity to predict arrests. One explanation for these differences is that at St. Petersburg, substantially more cases are screened out than at the other two sites. The few remaining cases to be investigated posess the same kinds of preliminary information but due to differences in follow-up work and other factors, some result in arrests and some do not.

These two sets of analyses show that preliminary report information is related to the making of follow-up investigation arrests. However, this relationship is due to the fact that cases with few or no leads listed in the preliminary investigation report are not worked by detectives, and, therefore, have no chance of being solved. In those cases where a follow-up investigation is conducted, preliminary report information, as a whole, is a much less accurate predictor of whether follow-up arrests will be made. The next issue to be addressed deals with the degree to which follow-up investigation activities and information can be used to predict investigative outcomes.

Predicting Follow-up Arrests Using Follow-up Actions and Information

In the previous section, the ability of one to predict follow-up investigative outcomes based on the presence of certain information in patrol preliminary investigation reports was examined. It was shown that ones ability to so predict varied by department and depended, in large part, on the proportion of cases screened out. In this section, the ability of one to predict follow-up investigative outcomes based on actions taken by detectives and the information they obtain is examined with respect to those cases assigned to detectives. To do so, the effects of patrol preliminary investigation report information on the likelihood of follow-up arrests being made must be kept separate from the effects of detective follow-up activities and information on the likelihood of follow-up arrests. The statistical procedures used (see technical appendicies) meet these demands and also permit additional tests to be conducted regarding the two hypotheses described earlier.

In Chapter 5, two hypotheses concerning the role investigations play in the solving of crimes were contrasted. The Effort-Result Hypothesis set forth the proposition that the efforts or actions put into investigations produced leads or information that, in turn, helped to solve cases. The Circumstance-Result Hypothesis, on the other hand, states that arrests are the result of circumstances beyond the control of police investigators and that those cases solved by detectives were already solved by information collected by patrol officers during preliminary investigations (i.e., detectives only processed the paper). Further tests of these two

hypotheses, contrasting them as if they are irreconcilable opposites, are useful in that they provide additional details about the investigative process.

Again, two approaches are used to contrast the two hypotheses. The first approach involves determining the degree to which actions taken by detectives during follow-up investigations relate to the likelihood that follow-up arrests will be made. If detective actions are related to the making of follow-up arrests (even when statistically accounting for the effects of preliminary report information), then this is further support for the Effort-Result Hypothesis.

The second approach involves determining the degree to which information obtained by detectives during follow-up investigations relates to the making of follow-up arrests. Finding such a relationship (even when accounting for the relationship of preliminary report information on follow-up arrests) would also support the Effort-Result Hypothesis.

Although the two aforementioned approaches to predicting investigation outcomes (one focusing on actions taken; the other on information obtained) are similar in that they test whether follow-up investigation effort contributes to arrests, they differ with respect to the conclusions that can be drawn. The first approach tests the hypothesis that certain actions are productive of information that in turn leads to the making of arrests. (Witness interviews, for example, might produce suspect names that lead to arrests; interviews conducted with informants might produce names of possible suspects and locations where suspects can be found and captured.) If certain detective actions are found to be related to the

making of follow-up investigation arrests this would indicate that the routine performance of these particular actions is related to the making of arrests; therefore, increasing the use of these actions for all assigned cases should increase the number of arrests made. Implicit in this hypothesis is that, although follow-up investigations by detectives are important and productive, they are, in essence, routine endeavors requiring only the execution of a predetermined set of tasks. This variant of the Effort-Result Hypothesis is termed the Routine Action Condition.

If, instead, detectives choose actions to fit the individual attributes of each case, then it is unlikely that any particular action will be found to be related to the making of follow-up arrests. This would be because each action may be important for certain individual cases but not for cases in general.

The second approach analyzes the relationship between follow-up investigation information and arrests. This approach tests the hypothesis that certain pieces of information lead to the making of arrests. According to this hypothesis it is not the routine performance of particular actions that leads to the solution of crimes but the collection of crucial bits of information, regardless of what actions produce them. A predetermined set of actions cannot be established because each case is different. However, the information required to solve cases is similar across all cases. Therefore, a detective must pick a set of actions for a particular case that provides this information. In another case, a different set of actions must be selected to aquire the same information. This condition,

in essence, describes detective work as a craft.[4] This variant of the Effort-Result Hypothesis is called the Investigative Craft Condition.

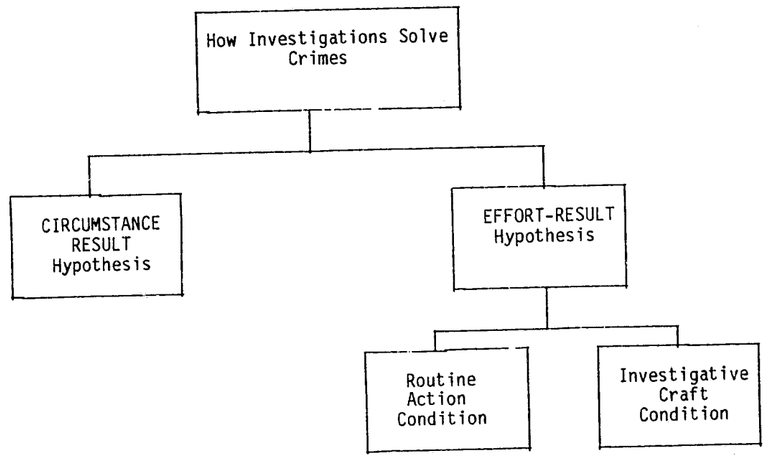
Figure 7-1 illustrates the relationships between the two hypotheses (Circumstance-Result and Effort-Result) and the two conditions (Routine Action and Investigative Craft). If either of these two conditions holds true, then this is support for the Effort-Result Hypothesis. The Circumstance-Result Hypothesis is supported only when neither of the two conditions is found to prevail.

To statistically control for the contribution of the preliminary investigation, preliminary investigation report information variables are included in the analysis. If the condition being tested is not supported, these variables should be statistically significant but none of the follow-up activities or information should be. The strongest support for either condition will be shown if none of the preliminary investigation report information variables are significant, but some of the follow-up action or information variables are significant. If both preliminary investigation report information and follow-up actions or follow-up information are significant, then this shows support for both the Effort-Result Hypothesis and the Circumstance-Result Hypothesis. Again, only burglary and robbery cases that were actually worked by detectives are included in this analysis.[5]

Analysis of the Routine Action Condition

The results of this analysis are explained in two parts. The first part describes the results of the analysis regarding the Routine

Figure 7-1
Relationships Between Hypotheses and
Conditions Analyzed



Action Condition and provides explanations of these results. The second part describes the analysis results regarding individual follow-up investigative activities and provides an interpretation of these findings.

Findings Regarding the Routine Action Condition

Table 7-6 shows the results of the analysis linking detective follow-up activities to arrests. The table is divided into two portions: the upper portion shows the probability that a follow-up arrest will be made given the presence of preliminary report information; the lower portion of the table shows the probability that an arrest will be made given the performance of a follow-up activity.

Despite differences, at all three agencies actions taken by detectives during the follow-up investigations contributed significantly to the making of follow-up arrests. This supports the Routine Action Condition and, therefore, supports the validity of the Effort-Result Hypothesis. Support for the Routine Action Condition varied in degree depending on the agency studied: in DeKalb County, where follow-up investigations were emphasized, the routine action hypothesis was supported most strongly; data from St. Petersburg also supported the Routine Action Condition, but not to the degree found in DeKalb County. Finally, weak support was found for the Routine Action Condition in Wichita, where preliminary investigations were emphasized as a consequence of a team policing policy. Again, support for the Circumstance-Result Hypothesis was found to be strong in Wichita, weak in DeKalb County, and moderate in St. Petersburg.

Table 7-6
Probability of a Follow-up Arrest Given Presence of Preliminary Investigation Report Information and Detective Follow-up Investigation Actions for Significant Variables*--Assigned Cases

	DeKalb County	St. Petersburg	Wichita
No Preliminary Report Information or Detective Follow-up Activities	.038	.115	.013
PRELIMINARY REPORT INFORMATION			
Witness		.341	
Suspect Information			.044
Vehicle Description			.051
Latent Prints			.030
Range of Time of Occurrence (1/2 hour)		.121	
Related Offenses**	.094	----	.048
DETECTIVE FOLLOW-UP ACTIVITIES			
Victim Interview			
Witness Interview	.101		.030
Informant Interview**	.136	----	----
Other Interview	.088		
Discussion with Department Members	.105	.265	
Checking of Records or Files	.082	.308	.024
Percent of Variance in Probability of Arrest Explained	19.8	8.9	13.5

*Coefficients significantly different from zero at the .1 level of significance using a one tailed t-test.
**Insufficient data to test this variable in all departments.

These departmental differences may be owing to variations in investigative policy. For example, in DeKalb County a great deal of emphasis was placed on conducting follow-up investigations; less on preliminary investigations. In Chapter 5 it was shown that patrol officers conducting preliminary investigations in DeKalb County were less likely to engage in information-gathering actions than patrol officers at the other two sites. At the same time, a larger proportion of both burglaries and robberies in DeKalb County received follow-up investigations lasting more than two days. This emphasis on follow-up investigations may help to explain why, in DeKalb County, all but one (victim interview) of a range of actions detectives could take were found to be significantly related to the making of arrests, but only one preliminary investigation information variable (related offenses) is related to arrest. To some extent, detective actions are more important in DeKalb County than elsewhere because conducting follow-up investigations is emphasized relative to preliminary investigations.

The converse relationship held true in Wichita. Although two detective actions (Witness Interviews and Checking Records and Files) were found to be significantly related to the making of arrests, four preliminary investigation information variables were also so related. Patrol information appeared to contribute more toward the making of arrests in Wichita than at the other two sites. This could be due to the emphasis placed on patrol work as part of team policing, and a lack of emphasis on follow-up investigative efforts.

Data concerning the St. Petersburg Police Department fall between these two extremes. At this site both preliminary and follow-up investigative work was equaliy stressed. This was show in Chapter 5 where it was pointed out that patrol officers in St. Petersburg conducted more information-gathering activities at burglary and robbery crime scenes than did patrol officers at either DeKalb County or Wichita. Patrol officers in St. Petersburg were also more likely to conduct witness canvasses. In addition to St. Petersburg patrol officers conducting more information-gathering activities, detectives at St. Petersburg actively investigated cases for more days than did detectives at Wichita. Thus, preliminary and follow-up investigations were weighted equally by the St. Petersburg Police Department. Table 7-6 shows that because both phases of the investigative process are weighted equally, no clear difference in the relative importance of preliminary versus follow-up investigations can be made in St. Petersburg.

What this analysis shows is that although both the contributions of patrol officers conducting preliminary investigations and detectives conducting follow-up investigations are important, the emphasis a department puts on one or the other investigative stage will affect which has the most influence on case outcomes. Care must be taken in generalizing from only three agencies, but the evidence shown here indicates that the investigative policies of agencies influences the manner in which investigations are conducted.

Findings Regarding Actions Taken

One important finding is that, at all three agencies, interviews of victims by detectives are not significantly related to the making of follow-up arrests of suspects. The lack of such a relationship occurs because, when there are no leads in an assigned case, the detective calls the victim; since the victim seldom can provide any additional information, the detective closes out the investigation. If, however, leads are available, the detective generally seeks out the sources of information that can best verify the leads. As was shown in the previous chapter, victim interviews (except with respect to robbery suspect descriptions) are unlikely to produce suspect information.

Further analysis of detective interviews of victims provides additional evidence supporting this conclusion. Table 7-7 shows that victim interviews by detectives are generally either negatively correlated with other detective actions or have no significant relationship with these actions. On average, victim interviews during follow-up investigations are unrelated to the arrest of suspects and unrelated to actions that could result in the arrest of suspects.

Generally, victims do not contribute much by way of information to follow-up investigators unless they have witnessed the crime or have evidence that can corroborate or contradict other information (e.g., identify property recovered from the dwelling of a suspect). In burglaries, victims are not usually witnesses, so their role in an investigation is limited to providing evidence that a crime occurred. This explains why, in

Table 7-7
Correlations Between Victim Interview
and Other Detective Activities

Detective Activities	DeKalb County	St. Petersburg	Wichita
Witness Interview	-0.03	-0.15*	-0.03
Suspect Interview	-0.02	-0.09	-0.14*
Informant Interview	0.02	----	----
Other Interview	-0.04	-0.03	-0.17*
Discussions with Department Members	-0.03	0.14*	-0.07*
Checking Records or Files	0.09*	0.07	-0.06

*Significant at .1 level using a two-tailed t test.

Chapter 5, it was found that as an investigation progresses, it becomes less victim-oriented and more suspect-oriented. Routinely interviewing victims during follow-up investigations is not productive of arrests and should be discouraged. Assuming a good preliminary investigation, victims should only be interviewed during follow-up investigations when information from the preliminary investigation suggests that they are likely to have additional information important to the investigation.

Witnesses, if available, are more valuable sources of information than are victims. Witness interviews by detectives or witness information from the preliminary investigation reports are significantly related to the making of follow-up arrests at all three sites. Moreover, the usefulness of witnesses did not seem to be fully appreciated by patrol officers at two of the sites. As was shown in Chapter 5, detectives at DeKalb County and Wichita conducted witness canvasses infrequently for burglary cases. In St. Petersburg, these witness searches were conducted during one-third of both burglary and robbery investigations. Given the importance of witnesses, such canvasses should be encouraged.

The importance of interviewing informants could only be tested in DeKalb County[6], and interviews with others were significant only at this site. However, both strongly related to follow-up arrests being made. Interviews with informants were the single most important follow-up activity conducted by detectives in DeKalb County. As shown in the previous chapter, when interviewed, informants were very likely to supply suspect information. This suggests that working informants in property crime investigations is extremely useful. Interviews of others includes

individuals who can be classified as informants (Ericson, 1981), such as employers, landlords, friends and relatives of the suspect, and so on. Interviewing such individuals can also be important in contributing to follow-up arrests.

In DeKalb County and St. Petersburg, discussions with members of the department (i.e., other detectives, patrol officers, supervisors, evidence technicians, and others) were also found to significantly relate to the making of arrests. Although this was not the case in Wichita, it appears that the exchange of information between police officials contributes to making follow-up arrests, and, like working informants, is something that should be encouraged.

Finally, checking records and files was found to be related to the arresting of suspects at all three agencies. The relationship was strongest in St. Petersburg. This finding suggests that providing detectives easy access to well organized files can contribute significantly to positive investigative outcomes.

With the exception of witness interviews, all significant follow-up activities involve using sources of information not directly related to the offense. These were the activities conducted by detectives that contributed most to the solving of crimes. Successful follow-up investigations, although reliant on leads provided by patrol officers, must go beyond the information provided in the original preliminary investigation report.

This section has demonstrated that there is evidence supporting the Routine Action Condition, and, therefore, there is evidence supporting the Effort-Result Hypothesis at all three sites. Detectives' actions definitely affect investigative outcomes. However, the significance of preliminary investigation report information in all three departments shows that it is not a simple matter of which hypothesis is true-- both are true to a degree. The following section presents a test of the Investigative Craft Condition to determine if it explains how detectives' efforts contribute to achieving positive investigative outcomes.

Analysis of the Investigative Craft Condition

The results of the analysis of the investigative craft condition are divided into two parts. The first part describes the results of the analysis regarding the validity of the Investigative Craft Condition and provides explanations of these results. The second part describes the analysis results regarding individual types of information obtained during follow-up investigations and provides an interpretation of these findings.

Findings Regarding the Investigative Craft Condition

The Investigative Craft Condition states that there are certain pieces of information crucial to the success of investigations and that the collection of these crucial bits of information by detectives significantly influences whether a case will or will not be solved. Table 7-8 shows the types of information produced during follow-up investigations that are

Table 7-8
Probability of a Follow-up Arrest Given Presence of Preliminary Investigation Report Information and Detective Follow-up Investigation Information for Significant Variables*--Assigned Cases

	DeKalb County	St. Petersburg	Wichita
No Preliminary Report Information or Detective Follow-up Information	.007	.025	.011
PRELIMINARY REPORT INFORMATION			
Witness	.017		
Suspect Information			.025
Vehicle Description			.053
Latent Prints			.021
Range of Time of Occurrence (1/2 hour)		.128	
Related Offenses**	.014	----	.056
DETECTIVE FOLLOW-UP INFORMATION			
Suspect Name	.101	.193	.050
Suspect Description	.015		
Vehicle Information			
Related Crimes	.015	.184	.037
Percent of Variance in Probability of Arrest Explained	26.9	27.7	22.5

*Coefficients significantly different from zero at the .1 level of significance using a one tailed t-test.
**Insufficient data to test this variable in all departments.

significantly related to the arrest of suspects. Although the three sites vary with respect to which types of preliminary report information are significant,[7] at all three agencies obtaining suspect names and linking offenses to related crimes by detectives was found to significantly relate to the making of follow-up arrests. This supports the Investigative Craft Condition. However, despite this support of the Effort-Result Hypothesis, the Circumstance-Result Hypothesis cannot be totally rejected because for all three agencies at least one type of preliminary report information was significantly related to the probability that follow-up arrests would be made. Thus, the efforts of investigators does contribute to the solution of crimes, despite the influences circumstances of offenses have on making arrests.

This analysis shows that there is evidence supporting the Investigative Craft Condition. However, previous analysis has shown evidence supporting the Routine Action Condition. Although both conditions describe aspects of investigative work, the relative importance of the two conditions can be measured. Comparing the percentage of variance in the probability of arrest explained (last line of Table 7-8 and Table 7-6) shows that there is a stronger relationship for the analysis of the Investigative Craft Condition (Table 7-8) than there is for the analysis of the Routine Action Condition (Table 7-6). As mentioned above, the percent of variance explained is a measure of the relationship between the set of variables and the probability follow-up arrests will be made. The fact that in all three sites the relationship was 6 to 16 percent greater when detective follow-up information was used rather than detective follow-up activities indicates

that the Investigative Craft Condition provides a somewhat better description of the investigative process than does the Routine Action Condition.

Findings Regarding Information

Two types of detective follow-up information stand out as being particularly important in leading to follow-up arrests at all three site agencies: related crime information and suspect names. Further discussion of each is provided.

It is unclear whether the probability of arrest is influenced by information about related crimes or whether related crime information is produced by arresting suspects. At all three sites, detectives interrogated arrested suspects to determine what other offenses they committed; this produced related crime information. It is also true that detectives, at all three sites, attempted to link offenses to similar crimes prior to arresting suspects. Data in Chapter 6 shows that related crime information came from a variety of sources (e.g., victims, other officers, departmental records, etc.) other than suspects. From these findings it can be inferred that both methods of establishing links between similar crimes are used.

The preceding analysis demonstrated that the actions taken and information developed by detectives during follow-up investigations were important predictors of whether follow-up arrests would be made. One of the most important types of information detectives can develop is, not surprisingly, the names of suspects. Although the development of suspect

names by detectives is crucial to the success of investigations (even when suspect information provided by the patrol officer is taken into account) more direct evidence can be shown to support this conclusion.

Table 7-9 shows that follow-up arrests were made for cases in which no suspect information was included in the preliminary investigation report. In DeKalb County and St. Petersburg, over nine percent of those cases in which preliminary investigation reports contained no suspect names resulted in the making of follow-up arrests; in Wichita only half as many of such cases resulted in the making of arrests. This suggests that for those cases followed up by detectives in Wichita, not as much new information leading to suspect identifications and arrests is being developed as is true in the other locations.

Sometimes suspects are identified but are not arrested because of insufficient evidence or any unwillingness on the part of victims to press complaints. Table 7-10 shows that suspect interviews were conducted for cases in which no suspect information was mentioned in the preliminary investigation report. In DeKalb County and St. Petersburg, almost 17 percent of those cases without a suspect name in the preliminary investigation report resulted in detectives being able to identify and interview a suspect. Thus, even when no suspect name is provided initially, detectives can sometimes determine who the offender is. This fact notwithstanding, in Wichita, fewer than ten percent of the cases that contained no suspect name in the preliminary investigation report resulted in a suspect being identified and interviewed. This department, as explained above, screens out many fewer burglary cases and assigns more burglary cases with few or no

Table 7-9
Percent of Assigned Cases with Suspect Information in Preliminary Investigation Report Resulting in a Follow-up Arrest*

	Named		Described		Named or Described	
	NO	YES	NO	YES	NO	YES
DeKalb County	9.2	14.4	7.7	14.6	7.4	14.2
St. Petersburg	9.5	17.6	8.3	14.4	8.7	13.5
Wichita	4.5	19.3	5.3	12.2	3.2	13.8

*Rectangles enclosed percents that are indistinguishable using a X^2 test with one degree of freedom at the .1 level of significance.

Table 7-10
Percent of Assigned Cases with Suspect Information in Preliminary Investigation Report Resulting in a Suspect Interview by a Detective*

	Named		Described		Named or Described	
	NO	YES	NO	YES	NO	YES
DeKalb County	16.5	30.8	15.6	25.2	14.9	25.1
St. Petersburg	16.9	26.5	17.3	20.0	16.5	20.8
Wichita	9.6	34.1	12.8	14.6	9.2	21.5

*Rectangles enclosed percents that are indistinguishable using a X^2 test with one degree of freedom at the .1 level of significance.

leads than at the other two sites. Without leads, most of these cases are not investigated, but are instead dropped by the detectives after a routine call to the victim. The larger the proportion of such cases included in a detective's workload means that a smaller percent of all cases assigned to detectives will result in an arrest or suspect interview.

Routine and Craft

The preceding discussion show that both the Routine Action Condition and the Investigative Craft Condition are supported by the data. Although the Investigative Craft Condition is more strongly supported by the data analysis than the Routine Action Condition, both conditions offer valid descriptions of aspects of the investigative process. In addition, each requires a different management style. A comparison of the management styles suggested by these two conditions is therefore important.

The Routine Action Condition states that the routine performance of particular actions is related to the making of arrests; therefore, increasing the use of such actions for all assigned cases shall increase the number of arrests made. This condition implies that follow-up investigations by detectives are, in essence, routine endeavors requiring only the execution of a predetermined set of tasks. The management implications of the Routine Action Condition are that investigative managers can closely supervise investigators because there is a set of important actions that must be performed for every case. Engaging in these actions is tantamount to conducting a good investigation. Managers can, therefore, closely monitor investigators and investigations to determine whether each of these

important activities is engaged in. Although this method of management may not be easy, it is, nevertheless, far less complex than the style of management indicated by the Investigative Craft Condition.

The Investigative Craft Condition states that a predetermined set of actions cannot be established for every case because each case is unique. There are, however, crucial bits of information necessary for the successful resolution of an investigation. Detectives must pick suitable actions for each investigation that will provide these crucial bits of information. For each case the appropriate actions required to obtain these crucial bits of information will differ; but, the crucial bits of information will remain constant in almost every case. The management style implied by the Investigative Craft Condition requires that managers provide a great deal of autonomy to detectives because actions detectives should take cannot be precisely determined. Therefore, the management style must be flexible to allow detectives the required autonomy to select and take the actions necessary to obtain these crucial bits of information.

The autonomy allowed detectives not only permits them to select appropriate actions for solving cases, but, unfortunately, also provides them with a large number of opportunities to take actions that are in their own interest as opposed to the interest of the department. Under the Investigative Craft Condition, management control of detectives is difficult, and is, perhaps, best described as an "art".

Since both conditions are consistent with the data used in this study, it follows that elements of both conditions are true: investigations are sometimes routine and sometimes not. This also implies that the management style of investigative supervisors must take the dual nature of the investigative process into account. On one hand, routine procedures can be and should be established for investigative work: all available witnesses should be interviewed, discussions regarding cases should be held between patrol officers and detectives, and records and files should be checked for information pertaining to cases. On the other hand, enough flexibility should be afforded detectives so that they can take non-routine actions to collect important pieces of information. This means that first-line investigative supervisors must know a great deal about the officers they command and the cases these officers are investigating. Without such knowledge, investigative supervisors cannot know whether detectives are responsibly exercising the autonomy they have been given.

Conclusions

In this chapter, the relationship between the making of follow-up arrests and information obtained during preliminary investigations, actions taken by detectives, and information obtained during follow-up investigations was examined. Preliminary investigation information was found to be a good predictor of whether follow-up arrests would be made--a finding consistent with the findings of previous studies. Further analysis revealed that this was owing, in large part, to the effect of preliminary investigation information on the decision to conduct follow-up investigations. When

only assigned cases were used in the analysis, the relationship between the making of an arrest and preliminary report information became weaker in the two departments that heavily screened cases. For cases that were investigated, detective actions and information were found to be related to the making of follow-up arrests. Again, these relationships were stronger for the two agencies that heavily screened cases.

A major conclusion that can be drawn is that the work of both patrol officers and detectives is extremely important with respect to the subsequent making of follow-up arrests. Information obtained by patrol officers during preliminary investigations provides the initial leads necessary to conduct follow-up investigations (beyond mere telephone calls to victims). The actions taken by detectives during follow-up investigations provide additional information that leads to the arrest of suspects. Emphasizing the role of either detectives or patrol officers to the detriment of the other will not be as useful as weighing both functions equally. Preliminary and follow-up investigations complement each other.

A second conclusion is that investigative emphasis on victims is inappropriate. Detective interviews of victims during follow-up investigations were shown to be unrelated to the likelihood that a suspect would be arrested. Victim interviews were not significantly related to the conducting of any of the other activities that were shown to be related to the likelihood that a suspect would be arrested. Additionally, data in Chapter 6 showed that, except for providing descriptions of robbery suspects, victims were unlikely to provide suspect names or related crime information--two pieces of information shown to be strongly related to the

arrest of suspects. Finally, observations of investigative work suggest that many victim interviews were conducted by detectives when there were few or no leads on which to base an investigation. Once these interviews were conducted, investigation of the case was frequently suspended. Detectives often justified conducting such interviews in terms of improving public relations, but seldom in terms of providing additional leads. As was shown in Chapter 4, the public relations justification rests on dubious grounds.

Finally, it was shown that the arrest of suspects was related to detectives both conducting routine actions and collecting crucial pieces of information. This implies that policies establishing routine investigative procedures may improve investigative performance but detectives must still be allowed some flexibility in investigating cases.

An explanation as to why the findings of this report seem to contradict several earlier studies of the investigation process is required. Two explanations seem plausible: that differences exist in the data collected, and that there have been changes over time with respect to how investigations are conducted and managed. These two explanations are analyzed briefly below.

Differences in Data and Methods

One major difference between this study and previous studies on investigations is the documentation of the types of information detectives gathered, the actions they took, and the control of whether the case was

actually worked. Unlike this study, Greenberg, et al., (1973) and Greenberg, et al., (1975) did not collect data on what detectives did after the preliminary investigation had been conducted. This was also true, but to a lesser degree of the study by Greenwood, et al., (1975). This made it impossible for the earlier researchers to compare the relative contributions of patrol and detective effort.

Another major difference is the type of outcome measure used. In his chapter dealing with how cases are solved, Greenwood et al., (1975) used only cleared cases; this made it impossible to cite differences between cases resulting in arrests and cases not resulting in arrests, as was done here.

The study by Greenwood (1970) relied primarily on data aggregated at the precinct level, as opposed to the individual case data used in this study; characteristics of cases and the amount of effort put into them was not available. Conclusions about how individual cases were solved had to be inferred by examining the relationships between aggregated data (primarily between caseload and arrest rates.)

These differences in the data and methods used to analyze the data may account for some of the differences. However, another explanation is possible.

Changes in Investigative Management

The studies cited have all had a profound influence on how investigations are managed today. However, five years had elapsed between

the publication of the latest of these studies and the beginning of the collection of data for this study. During that time police executives and police investigation managers have made many changes in how investigations are managed, partially as a result of these studies. More emphasis has been put on patrol officers' contributions to investigations and case screening. These studies made recommendations that had an impact on Federal programs designed to improve local law enforcement practices.

As mentioned in Chapter 3, the management of investigations in these three agencies may be better than the average agency of comparable size. Furthermore, in all three agencies studied there was at least a general knowledge of many of these investigations studies, from the police chief executive down through the ranks. These earlier studies may have (directly or indirectly) influenced the field of policing to the extent that, within five to ten years after having been published, some of their recommendations have been adopted by many police agencies. As a consequence, some of the findings of these early investigations studies may only apply to law enforcement agencies that did not use these studies' recommendations to improve investigations management.

NOTES

1. See Greenwood (1970) for a good explanation as to why clearance data are not particularly useful measures.

2. These probabilities cannot be added to obtain the probability of an arrest if two or more types of information are present. See the technical appendices for the equations that should be used.

3. See the technical appendices for a description of those factors predicting screening decisions.

4. See Reppetto (1978) for an interesting discussion of three perspectives on detective work. In addition to the detective as a "craftsman" Reppetto also describes the "scientific" and "artistic" perspectives.

5. Data from Activity Time Information Logs is used in both sets of analyses. The technical appendices describes how the data were coded for this analysis.

6. Informants were interviewed so infrequently in the other two sites that no meaningful conclusions could be drawn from the data on informants, and therefore no attempts were made to include this variable in the St. Petersburg and Wichita analysis.

7. The probabilities corresponding to the Preliminary Report Information variables in Table 7-4 are different from those in Table 7-6 and Table 7-8. The use of different variables in different parts of the analysis accounts for these changes. The analysis procedures used control for relationships between the information and action variables. When variables are added or deleted from the analysis these relationships change, thus changes in the probabilities.

Section III

IMPLICATIONS

"They consider only their own ideas of ingenuity; and, in searching for anything hidden, advert only to the modes in which they would have hidden it. They are right in this much - that their own ingenuity is a faithful representative of that of the mass; but when the cunning of the individual felon is diverse in character from their own, the felon foils them, of course. This always happens when it is above their own, and very usually when it is below. They have no variation of principle in their investigations, at best, when urged by some unusual emergency - by some extraordinary reward - they extend or exaggerate their old modes of practice, without touching their principles.

Dupin in "The Purloined Letter."
By Edgar Allan Poe. The Gift.
1845.

CHAPTER 8

FUTURE RESEARCH

When compared to the amount of research conducted on uniform patrol operations, relatively little research has been conducted on investigative operations. This study has produced findings that, in part, contradict the findings of earlier studies. This makes further research in this area highly desirable. This section describes several areas where additional research can produce results that will be useful for investigative managers and police executives.

Productivity of Detectives

In one of the earliest modern studies of detectives, it was concluded that detective caseloads bore no relationship to investigative productivity because cases essentially solved themselves (Greenwood, 1970). This was based on an examination of arrest rates and caseload data from the New York City Police Department. The average caseload per detective for the month studied varied between 60 and 120. This implies that each detective was assigned more than 3 cases each working day, in addition to any cases the detective may have been carrying from previous days. Greenwood found no relationship between caseloads and the making of arrests. Although he attributed this to the methods by which crimes were solved, other research suggests another interpretation.

Isaacs' study for the President's Commission on Law Enforcement and the Administration of Justice (1967), the Rand investigations study

(Greenwood, et al., 1975), Sanders (1977), and Waegal (1979) all found that a large proportion of those offenses that had no leads were not worked by detectives. Since not all cases were worked, it should not be surprising that little relationship was found between the detective caseloads and detective arrest rates.

The relationship between detective productivity and caseload is more complex than has been previously suggested. To appreciate how this relationship might operate, detective caseload must be broken down into its component parts. Three measures of caseload are defined as follows:

- Nominal Caseload--The total number of cases reported to the police divided by the total number of detectives who could work these cases.
- Workable Caseload--The number of cases that have sufficient leads and therefore are worth attempting to solve, divided by the total number of detectives who could work these cases.
- Actual Caseload--The number of cases that are actually worked by detectives divided by the total number of detectives who could work these cases.

A set of relationships among these three types of caseload can be hypothesized. With a fixed number of detectives, as the total number of reported cases increases, the nominal workload increases. As the nominal workload increases, the number of workable cases increases at a constant rate (assuming that, for any given nominal caseload, a fixed percentage of cases are workable). The actual caseload is the same as the workable caseload until all the time available for detectives to work cases is completely filled. After that, the actual caseload levels off, even though the workable caseload increases, because it is impossible for all workable cases to actually be worked.[1] In fact, the actual caseload may decrease

slightly if detectives spend time processing cases that are not being actively investigated (e.g., filling out reports on these cases or recontacting victims who can provide no additional information).

The difference between the workable caseload and the actual caseload represents the caseload that could be effectively worked if more detective-hours were available. A proportion of this "unworked caseload" would result in arrests if worked. If this relationship holds, then adding more detectives should increase the number of arrests.

This is currently only a hypothesis suggested by data from a variety of studies. A series of experiments in a number of police agencies is needed to determine what the actual caseload per detective should be and how many detectives a police agency needs to handle nominal caseloads of various sizes. With public concern currently being what it is with respect to violent crime and the necessity for making sure public agencies use their resources efficiently, such a series of experiments would provide city managers, police executives, and investigative unit managers with information they need to allocate resources more effectively. The paucity of data in this area represents the greatest void currently existing in investigative research.

Investigative Tactics

Among the factors that determine whether a case is workable are the standard operating procedures of the police agencies. Departments with inadequately maintained records systems, poor communication among investigators, a lack of effective use of informants, or poor relations with the

general public will probably have a smaller proportion of workable cases; information that might have resulted in leads will not be turned into leads by an agency suffering from such problems.

More research should be devoted to the study of various investigative activities such as interviewing victims, interviewing and identifying witnesses, using informants, interrogating suspects, conducting records checks, gathering intelligence, communicating within and outside the agency, and using physical evidence. Research in these areas is needed to determine how such tactics are being used, how they can be used more effectively, and how they can be used without infringing on citizens' constitutional rights.

Organization of Investigations

Several studies of investigations (Bloch and Bell, 1976; Elliot and Sardino, 1971; and Schwartz and Clarren, 1977) indicate that the way the investigation function is organized between specialist detectives and generalist patrol officers makes a difference in terms of investigator productivity. Greenwood and Petersilia (1975) claim that the manner in which investigations are organized makes little difference in investigative productivity. Our study found little difference in arrest rates between the two agencies with traditionally organized investigative functions (DeKalb County and St. Petersburg) and the agency using a team policing approach (Wichita). Additionally, no difference in robbery arrest rates was found between the two agencies that assigned initial investigative responsibility to patrol officers (St. Petersburg and Wichita), and the agency that

dispatched detectives to robbery crime scenes to conduct preliminary investigations (DeKalb County).

This evidence is far from conclusive. Research needs to be conducted concerning the relationship between various forms of police and investigative organization and the way in which information is gathered, the type of information gathered, the way in which it is used, and how this influences investigative outcomes. Experiments to evaluate the effectiveness of alternative modes of delivering investigative services should be conducted.

Managing Investigations

One of the most difficult roles to define when studying criminal investigations is the role of first-line supervisors. Evidence presented in Chapter 7 shows that detectives need to exercise discretion in carrying out investigations. The degree to which this discretion should be exercised by detectives instead of supervisors is unclear. Much of the discretion available to detectives may be due to supervisors not fully managing investigations. It is clear from speaking to police officers and supervisors that first-line supervisors can have a tremendous impact on how investigations are conducted. In fact, first-line supervisors appear to have little impact on the investigations process. This pivotal role in policing needs to be far better understood and examined. For example:

- What qualities or characteristics make for a good investigative supervisor?
- What type of training is needed, if any, for these individuals?

- What is the effect of rotating first-line supervisors in and out of investigative units?
- How can first-line supervisors be made more effective?

There is a great deal still to be learned about how investigations are conducted and how they can be improved. Nevertheless, the investigation of criminal activity is a job that the police have a public mandate to carry out; as long as crime and law enforcement agencies exist, investigations will be conducted. If the investigative function is to be made more effective, additional research is required.

Despite the need for additional research on investigations, a great deal is known that can aid investigative managers. The following chapter describes how investigative units should be managed, based on this and previous research.

NOTES

1. Chaiken (1975) presents data from entire police agencies (not just investigative units) that suggest that this may be so.

CHAPTER 9

INVESTIGATIVE MANAGEMENT POLICY

The findings of research seldom clearly illuminate a single unambiguous policy prescription. More often policies suggested by the findings are indirectly linked to the research through assumptions, logical argument, and findings from other research. The term "policy implication" underscores these indirect and tentative linkages. Although policy makers would feel more secure if the findings of research were directly translatable into unambiguous policy prescriptions, policy makers will seldom have this luxury. Instead, they must judge policy implications in terms of the available evidence and logic supporting the policy recommendations as well as the available evidence and logic supporting alternatives to the recommendations.

This is no less true of the policy implications of this research. The findings of the research description in earlier chapters are suggestive of many management policies. Similarly, much previous research provides implications as to possible methods for better managing criminal investigation units. This chapter describes criminal investigation unit management policies based on the results of this study and findings from other studies. Additionally, the experience of investigators and other police officials from the three site departments and other law enforcement agencies has been used to span voids in research acquired knowledge regarding investigations.

This chapter serves two functions. The first is to summarize the policy implications of this and other studies of investigations in a

manner that can be directly applied in law enforcement agencies. The second function is to provide a guide for managing investigations. Although the focus is on property crime investigations, especially on burglary and robbery, the recommendations may also be profitably applied to other types of investigations.

Many police executives hesitate to become involved in managing criminal investigations. Despite the proclaimed dissolution of the detective mystique (Anderson, 1978), policymakers in general are more likely to equivocate during the formulation of investigative unit management policies than is true when police policies such as those relating to communications and patrol are being designed.

A different approach is followed in this chapter. Specific recommendations are made regarding information gathering by patrol officers and detectives, regulation of case flow, supervision of investigative activities, and measuring performance. Additionally, an alternative approach to the traditional reactive investigation is proposed. The research that has been conducted does not allow recommendations that are less specific.

This chapter is divided into three sections. In the first section it is recommended that there be increased use of information-gathering activities that have been found to be productive for patrol officers and detectives. The second section contains a description of how follow-up investigation units should be managed. Recommendations regarding case flow regulation, supervisory monitoring of investigative activities, and productivity measures to be used are specifically discussed. In the third section, an alternative investigation process is described, i.e., targeted

investigations. The issues that must be addressed when conducting targeted investigations, as well as the benefits and problems, are discussed.

Improving Information Collection

Information is to an investigation what water is to life. Without information that can lead to the identification of a suspect or serve as the basis for convicting a suspect, no investigation can be conducted. It is vitally important that police managers look for methods by which officers can obtain useful information more often. Many officers and managers talk about the importance of investigative activities in terms of how productive they are in providing suspect information. Unfortunately, this talk is not always translated into action.

Two examples are illustrative. First, though witnesses are known to be of value in solving cases, searches for witnesses are seldom conducted by patrol officers because, most police officials explain, officers do not have the time to conduct such searches; officers must instead return to radio service as soon as possible. Seldom do managers ask whether responding to citizen calls for service and randomly patrolling the streets bring greater benefits than locating a witness who can solve a crime. The second example involves the use of informants; historically an important method for discovering the identity of offenders, a method this research has shown to be productive, and a method to which most police officers subscribe. Unfortunately, the use of informants in property crime investigations is almost non-existent in many police agencies.

The two information-gathering activities referred to in the preceeding examples and other information-gathering activities are detailed below. In detailing these activities, initial emphasis is on preliminary investigations by patrol officers; then emphasis shifts to recommendations regarding follow-up investigations.

Preliminary Investigations

Patrol officers are usually the first police officials to arrive at the scene of a crime. Patrol officers should carry out three functions at a crime scene. The first function is to aid victims. Depending on the circumstances, aid to victims may include providing security if victims are still in danger, attending to physical injuries or psychological trauma, documenting the crime for purposes of insurance or victim compensation, and demonstrating that the police are concerned about the crime and will follow-up useful leads.

The second function that the patrol officer must peform is to initiate the investigation process, i.e., conduct a preliminary investigation.

The third function is to educate victims. A responding patrol officer should inform a victim about how to prevent a reoccurrence of the crime and should tell the victim how the police will probably handle the investigation. At the end of the preliminary investigation, if the patrol officer has uncovered few or no leads toward identifying the suspects, the victim should be told that the chances of an arrest being made are quite

small and that further investigation of the crime will not likely occur unless new information is forthcoming.

The recommendations described here are concerned with the second function: initiating the investigative process, commonly referred to as the preliminary investigation. Because suspects are seldom at or near crime scenes, most preliminary investigations routinely involve only three activities. The first activity is interviewing victims and any other parties immediately available at a crime scene. The second activity is checking the crime scene itself. The results of these two activities are then used in engaging in the third activity, which is documenting in a preliminary investigation report what occurred, what was taken, and what information was retrieved that might lead to identifying suspects. The sources of this information (usually victims, and, occasionally, witnesses) are also documented. Unfortunately, most preliminary investigations involve only the routine activities listed above. There are, however, several activities that are not routinely conducted that may improve the capability of the police to identify and apprehend criminal suspects.

Physical Evidence Collection

The first of these activities is collecting physical evidence. Many police agencies currently have the capability of dispatching evidence technicians to crime scenes when it is felt that dispatching them will be useful. In other agencies, patrol officers are trained to collect physical evidence. Greater emphasis should be placed on the collecting of physical evidence when physical evidence can be put to use.

There are two major problems associated with using physical evidence in investigations. The first is in determining whether or not physical evidence exists. Patrol officers often overlook important pieces of physical evidence (Peterson, 1974). It is, therefore, important that patrol officers be trained in what constitutes physical evidence so they know for what it is they should be looking. The second problem is in determining whether or not physical evidence can be used after it has been collected properly. Many police agencies end up collecting more physical evidence than is ever used in investigations (Greenwood, et al., 1977).

Physical evidence by itself seldom contributes to identification of an offender (Ratkovic, 1980). Usually the offender is identified by other means (e.g., a witness description) and physical evidence is then used to corroborate the identification. Although physical evidence by itself is not useful in identifying suspects, it does improve the chances of convicting a suspect once the suspect has been identified and arrested (Forst et al. 1977; Institute for Law and Social Research, 1981).

For police agencies that have sufficient resources to have all crime scenes processed, the collection of more physical evidence than can be used may not present a problem. Unfortuntately, many police agencies have insufficient resources to process all crime scenes for physical evidence. For these agencies priorities must be made. Usually incidents involving death or serious injury, substantial losses, or are otherwise considered particularly serious receive first priority. However, for such routine crimes as burglaries and non-injury robberies, few policies exist to rationally allocate scarce physical evidence collection resources.

Since physical evidence is seldom put to use unless an offender is identified independently of the analysis of the physical evidence, the deployment to routine offenses of specialist evidence technicians (in agencies without sufficient technicians to process all offenses) might better be done on the basis of whether the suspect is likely to be identified later in the investigation. Overuse of evidence technicians has caused a decrease in the quality of their work (Petersilia, 1978). If a patrol officer at a crime scene determines that physical evidence exists, an assessment should also be made regarding whether or not the physical evidence will ever be put to use. For example, often fingerprints are collected and photographs taken, but because suspects are never identified, these pieces of physical evidence are never used. Just as cases should be screened to make sure that investigative effort is not wasted on cases that will fail to result in arrests, so, too, crime scenes should be screened in order to insure that processing crime scenes will not amount to a waste of time. Criteria for screening crime scenes include:

- **Arresting a suspect at the scene**--if a suspect is arrested at or near the scene, physical evidence from the crime scene will be useful in prosecuting the suspect;
- **Obtaining the name of a suspect**--if a suspect has been identified but not arrested, physical evidence can be used to corroborate the original identification;
- **Other leads**--if leads exist that are strong enough to make identifying a suspect possible (i.e., solvability factors), then physical evidence should be collected to corroborate any future identification;
- **Extraordinary circumstances**--peculiar circumstances of a crime may indicate that it is part of a pattern or series of offenses so that physical evidence collected in the particular offense may be useful in corroborating the identification of a suspect identified as a result of investigation of other offenses in the series.

Strict policies should be established concerning those circumstances under which evidence technicians will be called to crime scenes. These policies should take into account case-screening criteria (solvability factors) so that evidence technicians are not called to crime scenes for which no follow-up investigations are conducted. Patrol officers should resist requesting evidence technicians for the sole purpose of satisfying the video-enhanced delusions of the public. Patrol officers should take the time to explain to victims the limited usefulness of physical evidence and why it is inappropriate to collect physical evidence under certain circumstances.

Canvassing for Witnesses

A second action that patrol officers should take during preliminary investigations is searching for witnesses who are not immediately available at crime scenes. Witnesses are extremely important in identifying suspects and in convicting suspects after they are arrested, but witnesses are often not readily available. It is crucial that patrol officers conducting preliminary investigations try to locate potential witnesses. Studies conducted by the Institute for Law and Social Research demonstrate that those officers who search for witnesses have more of their arrests result in convictions than officers who do not conduct such searches (Forst et al., 1977; Institute for Law and Social Research, 1981).

When checking the crime scene, patrol officers should note all locations from which witnesses may have had a view of the crime scene, or approaches to and from the crime scene. Such locations may include neighboring residences or places of business. Patrol officers should try to find out if there is anyone who routinely passes the crime scene at the time the crime is believed to have occurred (e.g., letter carriers and delivery people). Patrol officers should also try to find out who, near the crime scene, is known to be particularly inquisitive. Such persons may have noticed unusual circumstances at about the time the offense was committed.

People can witness a crime without realizing that what they are seeing is actually a crime taking place (Spelman and Brown, 1981). If informed later by a police officer that a crime did indeed take place, these witnesses can contribute important information. Other people may have suspected a criminal event but do not want to become involved, and will not come forward unless directly asked by the police officer.

Preliminary investigations of many burglaries do not begin until several hours after the crimes have taken place. It may be worthwhile to canvass crime locales again the following day at the approximate times the crimes were committed to locate witnesses who, according to their regular schedule, would have been in the vicinity of crime scenes at the times the offenses occurred; though they were unavailable the day before when the police arrived. Because looking for witnesses can be time consuming, it is important that patrol officers conducting searches for witnesses accurately

document the locations searched and what was found. Locations that should be searched but have not been and locations that should be canvassed again should be documented, too, so that other police investigators taking up these investigations at later dates will know where to focus their efforts.

Checking Records

A third activity patrol officers should more often perform while conducting preliminary investigations is checking department records. This is an activity that has been shown to be particularly productive for both patrol officers and detectives. Unfortunately, patrol officers seldom perform this activity. Records are located at police headquarters and patrol officers are typically tied to patrolling only certain sectors of their jurisdictions. This makes it difficult for them to use department records in checking on identification and criminal histories of suspects, in reviewing mugshots, and in pursuing other leads during their normal tours of duty. Therefore, police managers should pay careful attention to designing records systems that can be accessed by patrol officers using their radios or telephones. This has been accomplished for selective types of information, particularly with regard to automobile licenses and warrants. This should be expanded to include other types of information as well. Having a sufficient number of records clerks on duty to search department files quickly at the request of patrol officers should also help.

Informants

Informants have been found to be particularly useful in identifying suspects and bringing about their arrest. As is the case with checking

department records, interviewing informants is an activity that is very seldom performed by patrol officers. This may be because patrol officers are particularly conspicuous and threaten the anonymity of informants; patrol officers may also have less to trade to informants in exchange for information. There is evidence, however, that one of the major reasons why patrol officers seldom use informants is that they do not know how.[1] If patrol officers are untrained in the use of informants, this deficiency should be rectified.

The biggest barriers to patrol officers' taking the time to conduct thorough preliminary investigations are the radio and the first-line patrol supervisor. Because most citizen calls for service do not require immediate emergency responses by the police (Spelman and Brown, 1981), demands made via radio can be reduced (Tien et al., 1978; Cahn and Tien, 1980). That is why it is extremely important that call-screening and priority assignment policies be introduced to provide street officers with the time to do their jobs effectively (Farmer, 1980). Police managers should focus their attention on the quality of investigations, not the number conducted.

Follow-up Investigations

Follow-up investigations begin with the leads produced by preliminary investigations. Unlike preliminary investigation, there are no activities that are at once valuable and routinely conducted during follow-up investigations. Interviewing victims is routine but contributes little to investigations at the follow-up stage unless victims recall information not given to patrol officers. Interviews of witnesses are valuable but cannot

be conducted unless witnesses were first located by the patrol officer conducting the preliminary investigations or unless witnesses are located by detectives during follow-up investigations. Checking records and interviewing informants are two activities that are important and can be performed more frequently.

Checking Records

Checking department records has been shown to be effective for both patrol officers and detectives (see Chapters 6 and 7) in securing the arrest of suspects. Although many police agencies have put considerable effort into systems that allow investigators, in reasonably short periods of time, to check license numbers or names of people, access to other records maintained in these departments is limited. Three examples--fingerprint, mugshot, and stolen property files--are illustrative. Making better use of these records can increase the effectiveness of leads provided by physical evidence, witnesses, and stolen property information.

Fingerprint Files. Fingerprint files are currently only marginally useful despite, and possibly because of, the large number of fingerprints maintained on file by most law enforcement agencies. Searching these prints to identify a suspect can become an impossible task unless the suspect has already been identified (Petersilia, 1978; Ratkovic, 1980). One reason for this problem is that agencies seldom organize fingerprint files in a manner that allows for rapid search of a large number of documents. Some success has been reported regarding the use of single print files for identifying suspects (Gunn and Newcomb, 1978). Until reasonably

priced, automated fingerprint search systems become readily available, law enforcement agencies should experiment with the use of non-automated or semi-automated single print files.

Mugshot Files. All police agencies maintain files of photographs of suspects who have been arrested and charged. These mugshot files often serve as bases for identifying suspects in crimes under investigation. Unfortunately, as is the case with fingerprint files, mugshot files are seldom organized in a manner that affords investigators easy access to the photographs they need (Poggio, 1975). Typically, mugshots are filed by race and sex of offenders, though sometimes by crime types.

When an investigator shows mugshots to a witness, several photographs of similar-looking suspects are shown. This is done to minimize the chances of witnesses mistaking innocent people for offenders and to avoid biasing witnesses' recollections. Putting together packages of photographs of similar looking suspects is difficult when photographic files are not organized by facial characteristics. Investigators often maintain unofficial personal files in their desks or pockets. When an investigator wants to put together a package of photographs, he or she will ask other investigators whether or not they have photographs of offenders who are similar in appearance to the suspect in question. This process is haphazard and inefficient. Content of photographic packages is influenced more by mere availability of certain investigators and the photographs they happen to have than by systematic application of rational criteria for selecting similar looking offenders. By indexing department mugshot files according to facial characteristics, selecting of mugshots for photographic

packages can become more systematic and result in better suspect identification.

Stolen Property Files. Many states require that dealers in used goods, especially pawn shop operators, record information about goods sold to them and information about the persons selling these goods. Routine collection and analysis of this information by police investigators is effective in producing leads to identify property crime suspects (Greenberg, et al., 1973b; Poggio, 1975). Full advantage is often not made of state statutes prescribing that police will have access to such information. Police agencies should increase their efforts in this area. Automated used property systems can be developed to identify persons who frequently engage in sales of used goods. Moreover, such systems can be used to match descriptions of stolen goods with descriptions recorded by used goods merchants (Poggio, 1975).

Another approach to using property records in investigations is joint use of stolen property serial number records and warranty and repair records. The state of California and the Battelle Law and Justice Study Center have conducted extensive research into this method of developing investigative leads which was found to be quite successful (Walsh, 1979). Simply stated, the procedure involves matching stolen property serial numbers currently in state or federal (NCIC) stolen property computer files with automated repair and warranty records maintained by many firms. Because so many items of office equipment and an increasing number of household appliances can be repaired only by manufacturers' authorized agents, and these agents keep computerized records of repairs, it is possible to

match these repair records with stolen property records. This can lead to recovery of stolen property, detection of criminal receivers, and arrest of offenders (McGuire and Walsh, 1981).

Interviewing Informants

The use of informants by detectives has a long history. In the early Twentieth Century, use of informants in reactive investigations was quite common. A prominent detective, writing about how crimes during this period were solved by detectives, asserted that success had to be attributed almost solely to informants (Fiaschetti, 1930). Currently, informants play a lesser role in reactive investigations. In two of the agencies studied, the frequency of informant interviews was so low that little analysis could be performed.[2] Nevertheless, it has been shown (Chapters 6 and 7) that interviewing informants is one of the best sources of suspect information and strongly influences whether or not arrests of suspects will take place. Thus, encouraging detectives to develop informants will increase investigative effectiveness.

Having detectives' time totally devoted to investigating assigned cases may not be the most productive use of their time. Investigators should have sufficient "slack time" to "groom" informants and to make other community contacts. A management decision to cultivate and use informants on a routine basis must be accompanied by a detailed set of policies regarding how informants are to be handled:

- **Paying Informants**--Informants seldom provide information to the police for free; money for paying informants must be made available, and policies regarding how this money can be disbursed must be made.

- **Bargains**--Strict guidelines must be set describing the terms under which police officers may strike bargains with informants when such bargaining entails the reduction of charges pending against informants or other special considerations.
- **Files**--Confidential informant files should be maintained by the investigative unit supervisor, and all interactions between informants and investigators should be recorded in these files.
- **Control**--Control over informants is the direct responsibility of investigative unit supervisors despite the fact that informants may feel more comfortable dealing with only the one or two investigators with whom they maintain contact.
- **Criminal Activities**--Policies should be established regarding procedures that investigators must follow when an informant is found to be engaging in criminal activities.
- **Protecting Identity**--Methods to be used to protect the identity of informants must be established in department policy.

The importance of informants in solving crimes cannot be overly stressed. The importance of tight management control over these informants is also immensely important. Informants are important because they have criminal contacts and, therefore, information about criminal activities. Informants generally have this information because they engage in criminal activities. The criminal activities of informants generate information of value to police officials but, simultaneously, constitute a problem for law enforcement officers. Unless investigative supervisors directly confront this dilemma by establishing sound and strict policies for the control of informants, informants should not be used.

Establishing procedures for actively encouraging patrol officers and detectives to perform currently atypical activities for collecting information will result in additional leads and greater investigative effectiveness, if investigations are well managed. Producing additional leads will do little good if investigators are haphazardly assigned cases, are poorly supervised, and are not evaluated on performance. The following section deals with these issues.

Improving Follow-up Investigation Management

Patrol officers must, of necessity, engage in many activities other that the investigation of crimes; therefore, any discussion relating to the management of patrol preliminary investigations must be set within the context defined by the functions that patrol officers serve. Because various other patrol functions draw on patrol resources, police executives must assign priorities to these functions based on perceived community needs and available resources. In contrast, investigative managers do not have to set priorities with respect to the conducting of various functions because investigators have essentially one function--conducting follow-up investigations. Thus, resources can be devoted almost exclusively to the investigative function.

For the aformentioned reason, this section deals primarily with the management of follow-up investigations, although management issues concerning preliminary investigations by patrol officers are mentioned when appropriate. The points discussed in this section are directed at police agencies that assign the vast majority of serious cases, already

investigated by patrol officers, to the criminal investigations division for consideration. Despite this fact, many of the points discussed apply equally well to departments that have patrol officers conduct the follow-up investigations of many types of serious offenses.

The management[3] of follow-up investigations can be divided into three major functions:

- regulating case flow;
- monitoring investigative activities; and,
- assessing performance.

These three functions will be discussed separately; however, it is obvious that the issues involved in performing any one of these functions directly influence how other functions are performed.

Regulating Case Flow

Without effectively regulating the flow of cases to an investigative unit, no supervisor can manage the investigative process. If case flow is not regulated, cases that cannot be solved and cases that might result in an arrest will be given equal investigative attention. Cases will remain in the hands of investigators indefinitely, even if no progress toward their solution is made. The investigative manager will be unable to determine the workload of the unit's investigators and whether more or fewer resources are needed. In short, lack of supervisory control over the number of cases detectives work results in investigative inefficiency: Regulating case flow insures that investigative resources are applied to

those cases and investigations that can most benefit from the expenditure of those resources.

There are three mechanisms for regulating the flow of cases through an investigative unit:

- case screening and assignment;
- deadlines for reporting investigative progress; and,
- investigator caseloads.

Management policies directed toward any one of these three mechanisms will necessarily affect policies regarding the other two.

Case Screening and Assignment

A great deal of research, perhaps more than on any other single investigative issue, has been conducted on the use of case screening in investigative units. Case screening involves simply making a decision to assign or not to assign investigative resources to cases by applying a fixed set of criteria to information contained in preliminary investigation reports. Criteria for making such decisions often include the seriousness of the offense (amount of loss, extent of injury, type of crime, etc.), information that might lead to the identification and arrest of suspects (i.e., solvability factors), or other special characteristics of the offense. Although all investigators engage in informal case screening, an investigative unit cannot be considered to be employing formal case screening unless department policy establishes criteria on the basis of which case screening decisions are to be made and fixes the responsibility

of making such decisions with an individual or groups of individuals. This discussion will focus on screening based on criteria related to case solutions.

There are two major reasons for screening cases on the basis of "solvability". The first is that it minimizes the wasting of effort: by identifying cases that are extremely unlikely to be solved, investigative resources can be diverted to investigating cases likely to culminate in arrest. The second reason is that case screening can help managers supervise investigations by providing them with realistic expectations of investigative results, and permitting them to compare expected results to actual results.

Despite the many research studies conducted on case screening (all of which support the assertion that case screening is a valuable tool for increasing the efficiency of investigative units), many investigative supervisors continue to have reservations about its use. It is worth reviewing these reservations to show the faulty premises on which they are based and because such a discussion illustrates the usefulness of case screening. There are four major objections to the use of case screening.

Investigator Intuition. One argument against case screening rests on the assumption that individual investigators are in a better position to judge whether a case will culminate in an arrest than are investigative supervisors and that, in many instances, investigators can successfully pursue cases that originally had no leads. This objection is groundless because both investigators and investigative supervisors base their judgments on the same set of information (i.e., the preliminary

investigation report), and the investigative supervisor usually has had as much or more experience than the individual investigator. Therefore, supervisors are generally in a better position to make such judgments. Furthermore, there is a great deal of scientific evidence demonstrating that a small set of established criteria effectively screen cases better than do investigators or supervisors who base their decisions on intuitive judgments (Greenberg, 1973; Eck, 1979); in addition, one must again be made aware of the fact that there exists no scientific evidence to the contrary.

The assertion that investigators often solve cases that originally had no leads is only true if the preliminary investigation has been poorly conducted or if the preliminary investigation report is incomplete. If patrol officers are not performing good preliminary investigations, the issue is not whether case screening should be used, but how preliminary investigations can be improved. With a thorough preliminary investigation, an investigative supervisor equipped with a set of screening criteria should have all the information required to make a sound judgment regarding whether further investigative resources should be devoted to the case.

New Evidence. It is sometimes asserted that case screening makes it impossible to solve cases when new information is brought to the attention of investigators. The problem here is not with case screening; rather, it is more likely that the department has no policies for reopening cases when new information is uncovered. There is no reason a case that has been originally screened out must remain screened out if, for example, a victim calls to report that a neighbor saw and can identify the person

who broke into the victim's home. When new information is received, the case should be pulled from the files and assigned to an investigator.

Crime Patterns. A third objection to case screening involves the issue of crime patterns. This objection is based on the assumption that once a case is screened out, it is impossible to use the information in the preliminary investigation report to link the particular case with other cases that may be similar. Therefore, information from several cases that have been screened out, but are related, cannot be used to establish patterns and, thereby, contribute to the solution of other crimes. As with the previous objection, this assumption is false. Since supervisors review all preliminary investigation reports before making screening decisions, they are in an excellent position to discern crime patterns. Furthermore, sending route preliminary investigation reports (for assigned and unassigned cases) to a crime analysis unit to look for patterns may provide a more systematic and thorough method of finding patterns than relying on each individual detective who may be unaware of cases handled by colleagues. If a particular unassigned case is found to be part of a larger series of offenses, and this discovery provides sufficient new information that an investigation is likely to result in the arrest of a suspect, then the set of cases (including the previously unassigned cases) can be assigned to an investigator.

Public Relations. Of all the objections to the use of case screening, the most widespread objection is based on the assumption that the public expects an investigation of every offense, and, therefore, a

detective must be assigned to investigate every case for no better reason than to placate the victim. This approach to handling cases is like a confidence game in which the detective "cools the mark," who, in this case, is the victim. A victim is justified in expecting that the police will conduct an investigation, and the patrol officer should fulfill this expectation during the preliminary investigation. The patrol officer should set the victim's further expectations by a candid assessment of whether continued investigation is likely to result in the arrest of a suspect and whether it is fruitful to devote more investigative resources to the case. A frank discussion with the victim by the patrol officer at the end of the preliminary investigation will do more for public relations than having a detective call the victim on the phone and ask the same questions that the patrol officer has already asked. Letters or post cards should be sent to all victims, after case screening, explaining whether or not the case is being investigated and why. This letter or postcard should also tell the victim who to contact if additional leads come to the victim's attention.

Case screening is one of the few police policies supported by a preponderance of research demonstrating its effectiveness in a wide variety of settings. It has been shown that case screening can reduce the amount of investigative effort wasted on cases that will not result in an arrest (Eck, 1979; Johnson and Healey, 1978; Greenberg, et al., 1975; Greenberg, et al., 1973c). Research has also shown that the use of case screening improves the performance of investigative units (Block and Bell, 1976; Graves, 1971; Williams, 1979). Finally, the use of case screening models,

assigning points to cases based on the types of leads available, is helpful for determining investigative priority of cases that are assigned to detectives (Brand and Koroloff, 1976).

Investigative units should establish strict criteria for assigning cases to detectives for follow-up investigation. The Commission on Accreditation for Law Enforcement Agencies approved a standard on case screening which states:

> The criteria used to assign cases for follow-up investigation is based on the following:
>
> - Documented experiences of the agency;
> - Documented experiences of other law enforcement agencies;
> - Research conducted within the agency; and
> - Research conducted in other law enforcement agencies.
>
> (Commission on Accreditation for Law Enforcement Agencies, 1982)

The large number of research studies of case screening have provided police managers with a great deal of information they can use in developing case screening criteria. Furthermore, this research can easily be used as a model for agencies desiring to conduct their own research, (Eck, 1979).

The case screening model that has been most widely tested was developed by the Stanford Research Institute (SRI) in 1973, for the purpose of screening burglary cases (Greenberg, et al., 1973c). Nationwide tests of this model (Eck, 1979), have shown that it performs extremely well in a

wide variety of department settings and can be easily adjusted to fit individual agency requirements. Figure 9-1 shows the SRI model. Because it has been so widely tested, if an agency cannot develop and test an agency-specific screening model, then the SRI model should be used.[4] In addition to having been extensively tested, the SRI model has the advantage of allowing the use of improved productivity measures that take into account the difficulty of cases assigned individual investigators. (This is described in great detail later in this chapter [see page 303].)

Length of Investigation

A second mechanism for regulating the flow of cases to investigative units is the establishment of policies governing the length of time investigations can be conducted before the investigator must provide a written report of investigative progress to his/her supervisor (Pogrebin, 1976). Allowing cases to remain in the hands of investigators indefinitely without requiring a report means that the investigative supervisors will be in the dark as to what progress, if any, has been made on cases. Even if reports are required, investigative supervisors remain ignorant of investigative progress if the amount of time between case assignment and submission of a report is too long. The National Advisory Commission on Criminal Justice Standards and Goals (1973) recommended:

> ...A follow-up report of each open investigation every 10 days and command approval of every continuance of an investigation past 30 days...

Figure 9-1
SRI Burglary Case Screening Model

Information Elements	Weights
Estimated Range of Time of Occurrence	
Less than one hour	5
One to twelve hours	1
Twelve to twenty-four hours	0.3
More than twenty-four hours	0
Witness's report of offense	7
On-view report of offense	1
Usable fingerprints	7
Suspect information developed description or name	9
Vehicle description	0.1
Other	0
Total Score	

Instructions
(1) Circle the weights for each information element that is present in the incident report.
(2) Add the circled weights.
(3) If the sum is less than or equal to 10, suspend the case; otherwise, assign the case for follow-up investigation.

SOURCE: Greenberg, et al. (1973c).

The vast majority of cases are not investigated on more than three days even when a department does not have a policy requiring a written report to be filed within a fixed period of time. Requiring a progress report within a five to ten day period should have no detrimental effect on the quality of the investigations because cases are seldom investigated for this long; detectives with cases that need more work can request additional time. This type of policy meets four needs:

- It focuses attention on those cases that require attention and removes from the investigative process those cases in which all leads have been exhausted.
- It encourages supervisory involvement in longer investigations by forcing these cases to be brought to the supervisor's attention.
- It forces information out of the private files of individual detectives and into police files where all detectives can benefit from it.
- It provides supervisors with a more realistic method of determining caseloads, since detectives should have assigned to them only those cases being actively investigated.

Policies regarding the filing of reports to investigative supervisors within prescribed time spans make case screening continual insofar as investigations that have reached dead ends are continually weeded out; resources are only devoted to investigations that are likely to result in positive outcomes.

Caseload

The caseload of investigators is extremely important. If there are too few cases per investigator then there is a waste of department

resources and officers assigned to investigative duties should be assigned to other police functions that are understaffed. If there are too many cases per investigator, investigations will not be properly conducted; this will result in fewer arrests and prosecutions. Traditionally, detective workloads have been calculated by dividing the number of cases brought into the investigative unit by the number of detectives available. Unless a department has policies that effectively serve to screen out cases and set deadlines for completing investigations, these caseload statistics will overestimate detective workloads: case screening and investigation deadline policies assure that detectives only work those cases for which an investigation is deemed useful. Caseload statistics based on these cases will give a more realistic estimate of detective workload.

Investigative managers should attempt to determine what a realistic load of <u>active</u> cases actually is, and the consequences of having this caseload become too great or small. There is, unfortunately, little research on which to base policies regarding realistic caseloads. However, based on observations, an average active caseload of ten cases per detective at any given time seems to be realistic. This is an obvious area for further research, but caseload decisions will have to be made prior to the outcome of any further research. Until that time, judgment will have to be used. Investigative managers must determine how many active cases a single detective can realistically handle before investigative quality suffers.

Appropriate caseloads will vary with the difficulty of the cases investigators must handle. An investigator with ten difficult cases, each

with many leads, has a larger workload than another investigator with ten easy cases, each having a likely suspect already identified. Consistently assigning certain investigators more difficult cases than are assigned others can cause problems with respect to measures of performance of individuals and supervising the investigative unit as a whole. This problem can be avoided by randomly assigning cases to investigators or by rotating the investigators to whom new cases are assigned in a manner that insures that, over time, all investigators have the same caseload and the same workload.

The use of these three mechanisms for regulating case flow will insure that investigative resources are only applied to those cases that warrant an expenditure. Mechanisms for regulating case flow such as those mentioned also make it easier for supervisors to directly monitor the progress of investigations being conducted.

Monitoring Investigations

Regulating case assignments, requiring the periodic submission of investigative progress reports, and setting caseloads are all important aspects of effective investigative management, but, standing alone, are nevertheless inadequate. In addition to regulating case flow, supervisors must closely monitor the investigative activities of the detectives they supervise. Monitoring each investigation assures that the resources allocated are expended effectively. It has been shown (Chapter 7) that investigations are comprised of a craft component (which requires that detectives be allowed a fair amount of discretion in conducting investigations),

and a routine component (which provides for tight management control of investigators' actions). This dual nature of investigations makes it difficult to precisely prescribe how supervision of investigators should be conducted, and highlights why close supervision of investigations is difficult. In what follows, two methods of monitoring investigations are described: Investigator Assignment and Unit Assignment. Finally, a third method that combines aspects of the first two, called Triage Assignment, is presented.

Investigator Assignment Monitoring

Assigning the responsibility for investigating cases to individual investigators is the traditional manner in which investigative units are managed. Once detectives are assigned cases, they are responsible for carrying out all actions necessary to follow-up leads, secure an arrest, and provide sufficient evidence to the prosecutor to obtain a conviction. Supervisory monitoring of investigations is conducted at the beginning of investigations, when cases are assigned to detectives, and at the end, when investigative reports are reviewed. Unfortunately, during the course of investigations supervisory monitoring is often informal and haphazard (e.g., when an investigator needs advice regarding department policy).

Investigator Assignment Monitoring has three advantages.

- Supervisors do not need to spend a great deal of time monitoring each individual case. Between assignment of the case to an investigator and the submission of an investigative report, the supervisor relies on the detective to keep him or her informed as to

investigative actions and progress. At the time of case assignment, the supervisor reviews the case to determine what actions should be taken and what types of information should be gathered to successfully complete the investigation. When investigative reports are submitted, supervisors can determine what actions were taken, what information was obtained, and what progress (i.e., arrest, prosecution, and conviction), if any, has been achieved.

- The performance of individual investigators is relatively easy to assess. Responsibility for each case is assigned to a particular detective and, therefore, each detective can be held accountable for those cases that have been assigned to him or her.

- Since this is the traditional method for monitoring investigations, no changes in investigative and supervisory behavior are required.

These advantages notwithstanding, the Investigator Assignment method for monitoring investigations also has several problems:

- Each case is assigned to a particular detective, and therefore, when the detective is not on duty, no progress is made on the investigation. During shifts when the detective is not on duty, during days off, and during vacation periods, cases being handled by a particular detective are not worked.

- Assigning individual cases to particular detectives places emphasis on detectives working independently rather than cooperatively.

- The individual skills of investigators are not used effectively. Each detective is presumed to have the same ability with respect to investigative tasks; however, some detectives have better skills in certain aspects of investigations than others. For example, a detective who is not particularly skilled at conducting interrogations of suspects may be very good at drawing up legal documents such as search warrants, or be very good at eliciting

information from traumatized victims. Cases may require that a variety of skills be brought to bear, but the assigned detective may have only one or two of the required skills.

- Investigator assignment of cases produces problems with respect to directing the appropriate level of resources to each case. If a particular case requires more effort than a single detective can devote to it, assigning additional detectives disrupts the work pattern of the unit. Furthermore, the detective responsible for conducting the investigation must go to the supervisor to request additional help, which the investigator may see as admitting to a personal inadequacy.

- Supervisors are on the outside looking in. Except when assigning cases and reviewing reports of completed investigations supervisors are at the mercy of detectives and have little control over investigators or the conducting of investigations.

All of these problems can be minimized by having supervisors provide investigative plans to detectives at the time cases are assigned and requiring detectives to document in their reports how these plans were carried out during the course of the investigation. Encouraging more informal interaction between supervisors and detectives during investigations will also minimize many of these problems.

Unit Assignment Monitoring

Another investigative monitoring approach is to assign cases to units, or supervisors, instead of to individual detectives. Under such a system, supervisors review incoming cases, determine whether they should be investigated, and then require that detectives perform specific

investigative activities rather than assigning entire cases to single investigators. When a particular task has been completed, the supervisor reviews the case in light of any new information obtained and determines if more work is required (Bloch and Bell, 1976). On a very complex case, several investigators may be simultaneously conducting different activities at the direction of a supervisor; but for very simple investigations, the assignment of a particular task may be tantamount to assigment of the entire case. Regardless of the complexity of an investigation, the supervisor has direct control over the case and is integrally involved in its investigation.

There are several advantages to using the Unit Assignment method for monitoring investigations.

- Direct supervisory involvement in the investigation of all cases puts the investigative supervisor in a position to directly control how investigations are conducted and monitor how investigators perform their assigned activities.

- Unit Assignment provides for the efficient use of investigative specialists and investigators with particular skills. Since the supervisor assigns particular activities to investigators instead of cases, investigators who are skilled at conducting particular activities (e.g., interrogating suspects, searching records and files, drawing up legal documents, handling victims, etc.), are assigned those activities.

- Cases do not sit inactive when a detective is not on duty. Activities begun by detectives on one shift, but incomplete at the end of the shift, can be assigned to other detectives on the next shift. Because the supervisor assigns tasks, investigations could be actively conducted over a 24-hour period, seven days a week, as long as there are detectives on duty to be assigned particular activities.

- It encourages the exchange of information among detectives. This occurs for two reasons. First, the supervisor collates all information regarding a particular case and makes sure that information regarding particular cases is disseminated. Second, since investigators only have the responsibility for carrying out particular tasks and not the entire investigation, they have an incentive to share information gained while conducting their assigned tasks.

- Unit assignment allows supervisors to direct as many investigators as required to a particular investigation. On a few cases, the efforts of almost all investigators may be required; on some cases, only a few investigators may be involved; and, on a large number of cases, only one investigator may be needed to carry out the activities dictated by the supervisor. In short, the Unit Assignment method for monitoring investigations overcomes all of the objections to the Investigator Assignment method.

This does not mean the Unit Assignment method is without disadvantages. Three problems can be identified:

- This method may require a great deal of supervisory effort on many more cases than is currently required. This means that for any given number of supervisors, fewer cases can be handled; and, to handle the same active caseload as the Investigator Assignment method, more supervisors may be needed.

- Evaluation of the performance of individual investigators becomes difficult. Supervisors cannot count the number of cases resulting in arrest or prosecution as a measure of individual performance, since the success of an investigation is not due to the efforts of any single investigator. Instead, the supervisor must judge how well each investigator performs the activities assigned. In many circumstances, this will be a subjective appraisal.

- Difficulty will be encountered in implementing this method because this is a nontraditional

method of assigning responsibility for investigating cases.

Therefore, a third approach, combining aspects of both the Investigator Assignment and the Unit Assignment method, is worth consideration.

Triage Assignment Monitoring

The investigative process can be described as a triage system (Chapter 5): cases are implicity divided into three groups--those for which no reasonable amount of investigative resources will result in the making of an arrest, those for which a minimal amount of investigative resources will result in the making of an arrest, and those for which the making of an arrest is uncertain, but possible if a reasonable amount of investigative resources are devoted to the case.

The Triage Assignment method for monitoring investigations makes explicit what is done implicitly. During case screening, cases are divided into three groups. The first group contains those cases for which no reasonable amount of investigative effort will produce an arrest. These cases are screened out and not assigned to a detective for follow-up investigation. The second group of cases are termed Simple Cases: solution is imminent and/or the actions necessary to complete the investigation are few and obvious. A third group of cases, called Complex Cases, require more investigative effort: these cases have many leads and a large number of investigative actions must be taken. Simple Cases are assigned to individual detectives or patrol officers who are required to report any progress within five to ten days. (This is the procedure followed in the

Investigator Assignment method.) Complex Cases are assigned to the unit with tasks being allocated to individual detectives and are handled using the Unit Assignment method.

As investigations of both Simple and Complex Cases progress, their characteristics may change. A Simple Case may turn into a Complex Case; when this happens a supervisor takes over complete control of the investigation and assigns tasks. A case that was initially complex may become extremely simple, in which instance a single detective should be given responsibility to complete the investigation. The investigation of Simple or Complex Cases may exhaust all leads without resulting in the identification or the arrest of a suspect. Once all leads are exhausted, the investigation should be suspended.

To monitor investigations using this approach, explicit policies regarding the definition of Simple and Complex Cases must be developed. Without firm policies, the system will revert to the traditional approach in which most cases are assigned to individual detectives, with team efforts only being used on an ad hoc basis. If this happens, certain cases requiring a team effort will not receive it, and other cases not requiring a team effort may have several investigators involved. This would negate any of the advantages of the triage approach.

The Triage Assignment approach to monitoring investigations combines the advantages of the Investigator Assignment method with those of the Unit Assignment method.

- It focuses supervisory attention on those cases that most require it--Complex Cases.

At the same time, supervisors need not spend a great deal of time overseeing the details of the investigation of Simple Case Investigations.

- Individual performance is easy to assess for Simple Cases.
- Individual skills of investigators are better utilized by virtue of the treatment given them.
- Investigative resources are more efficiently directed: Simple Cases receive the attention of one investigator to carry out the actions required to successfully complete the investigation; Complex Cases receive the attention of several investigators and use the skills of these investigators more effectively than if only a single investigator were assigned to the case.

Nevertheless, there are still several disadvantages to this approach.

- Policies regarding criteria for defining Simple and Complex Cases may be difficult to draft. In some circumstances a Complex Case may not be identifiable until certain investigative tasks are completed. Inevitably, such policies will have to leave much discretion in the hands of investigative supervisors.
- It is still difficult to assess individual officer's performance when they work Complex Cases. A particular investigator may have a higher than average arrest rate for Simple Cases but be unable to perform well on Complex investigations. Another investigator may be particularly skillful at conducting certain assigned tasks but may not be very productive when required to handle an entire investigation of a Simple Case. Ultimately, the subjective judgment of the investigative supervisor must be used.
- Some resistance will be met when trying to implement such an approach because the Triage

Assignment method runs counter to traditional methods of assigning cases.

The Triage Assignment to monitoring investigations codifies the informal procedures by which some investigative units are currently managed. This is true of most innovations in policing. For example, case screening has been conducted for years, informally, by individual detectives (Cawley, et al., 1977a). Despite this, when formalized, case screening has been shown to present distinct advantages over the old, informal approach. The same is true of the triage approach to monitoring investigations. Developing department policies that formalize what is done informally not only insures that similar cases are treated in a like fashion (i.e., all compl x cases are assigned to supervisors and all simple cases are assigned to individual detectives), but also allows the investigative units to use their resources more efficiently.

Closely monitoring how investigations are conducted is a management technique that helps to insure that investigations are performed correctly and that investigative resources are expended in an efficient manner. Combined with controls over the case flow, close monitoring of investigative performance should improve the productivity of many investigation units.

Measuring Productivity of Investigative Units

Regulating case flow insures that investigative resources are applied only where they will be most useful; monitoring investigative activities insures that these resources will be put to good use and that

investigations will be carried out properly. If these two management functions are carried out, then it is reasonable to expect an increase in investigative unit productivity. In this section, the issue of how to measure the productivity of investigative units is examined. Productivity measures provide investigative supervisors with methods by which they can determine how well investigative units are meeting their objectives.

Productivity can only be measured in terms of goals and objectives. The primary goal of criminal investigations is to control crime. There are only three mechanisms available within the criminal justice system to control crime: deterrence, incapacitation, and rehabilitation. Each of these mechanisms can only operate if suspects are convicted; convictions can only be obtained if suspects are identified, arrested, and prosecuted. Few people would be deterred from comitting crimes or rehabilitated, and no one incapacitated, if the police only made arrests and did not provide prosecutors with evidence sufficient to result in convictions. Therefore, all performance measures used to continuously evaluate investigative unit performance must be ultimately linked to the conviction of suspects. Measures that are not in one way or another related to producing convictions are of little use. A set of performance measures described in this section provides investigative managers with a means of ascertaining how well their investigative unit is performing with respect to controlling crime. These measures are based on how well the objectives of suspect identification, arrest, prosecution and conviction are met. Furthermore, the proposed measures are to be used as diagnostic tools for determining what problems exist and how they can be solved.

Productivity can be measured at both the individual and unit level. The first level is that of the individual investigator. This is probably the most difficult level on which to measure productivity, because much of what investigators do is not easily quantified and, as a result, cannot be translated into performance measures that accurately reflect the investigator's contribution to crime control. Often, accurate, but hard-to-measure, indicators of productivity are replaced by measures that are easy to calculate but are less telling of true productivity levels. Measures such as clearance, arrest, and conviction rates are useful in determining individual officer productivity, but only if one assumes that a single officer was the only investigator who contributed substantially to the outcome of the investigation. These types of measures place a premium on acting independently and not sharing information with other officers. Often, investigators who make substantial contributions to investigations being conducted by others, but do not themselves make many arrests, clear many cases, or have cases they work on result in convictions, receive low individual performance ratings despite the fact that they have contributed substantially to increasing the productivity of the investigative unit. The greater the number of cases assigned to units where the supervisors assign particular tasks to investigators, the more difficult it will be for such supervisors to evaluate individual performances accurately; as a consequence more reliance will have to be placed on the discretion of investigative supervisors to accurately assess individual productivity. If investigative supervisors closely monitor how investigations are conducted, then they will be in a good position to accurately evaluate individual officers' performances.

Because the first line investigative supervisor should have direct personal knowledge as to how well each individual investigator is performing, the measures detailed below will be of less importance to the first line supervisor than they are to higher level managers. Managers above the first line supervisor will have less direct knowledge of individual performance and will be primarily concerned with unit performance. Therefore, these measures will be of greatest value to middle and high level managers.

The productivity of investigative units is easier to assess using objective performance measures. Unlike individual investigators, investigative units do not have particular "skills." If an investigative unit is comprised of highly skilled officers who are well managed, objective productivity measures should show the unit to be highly productive. It is for this reason that the productivity measures described here are meant to directly apply to investigative units. Furthermore, these measures show how well a unit is performing on average. Success or failure on individual cases is not the concern of these measures. Instead, these measures show how units are performing over long periods of time while handling many cases. Performance on individual cases can best be handled by the first line supervisor who should know more about the particulars of a case than can be shown in aggregate performance measures.

Investigations initially focus on incidents (or cases), and, if successful, end up focusing on people (or suspects). For this reason, an examination of two types of performance measures follows: case measures and suspect measures. Case measures are used to judge how well

investigative units process cases. For example, an investigation of a case that results in the arrest of one suspect is rated the same as an investigation of another case that results in the arrest of five suspects, when this type of performance measure is used. Case measures answer the question: How many cases are "solved?" Suspect measures focus on the disposition of suspects. Suspect measures answer the question: What happens to the suspects? This type of measure is required because each case may involve several suspects. Using the above example, a total of six arrests were made as a result of the investigation of two cases: one in the first case and five in the second. Using a suspect-based performance measure, if three of the suspects are convicted of the offense as charged, and the other three are released, a conviction rate of 50 percent would be calculated. Although each of these performance measures is in itself incomplete, the combination of the two can give an accurate assessment of the productivity of the investigative unit. Throughout, it is assumed that a Triage Assignment Monitoring process is being used.

Case Measures

There are six elements that must be considered when evaluating investigative unit productivity using the case measures approach. Each of these productivity elements relates to a different stage in the investigative process:

- the case screening decision;
- the suspension of cases;
- the identification of suspects;

- the making of arrests and obtaining of warrants;
- the decision to prosecute;
- the conviction of suspects involved in cases.

Each of these elements is discussed separately. Figure 9-2 presents an example of an Investigative Unit Productivity Report for case measures. In addition to showing how each element is calculated, it shows the relationships among the elements.

Case Screening. The decision to assign investigative resources to a case is particularly important. Three indicators of performance at this stage should be collected:

- the percentage of all cases screened out;
- the percentage of screened-in cases assigned to an investigator;
- the percentage of screened-in cases assigned to the unit supervisor.

Case measures taken at the screening decision stage provide both a method of judging what has happened earlier (i.e., the preliminary investigation), and serve as a baseline by which results at latter stages of the investigative process can be judged.

The percentage of all cases screened out can serve as a measure of the ability of patrol officers to gather important information during the preliminary investigation. Assuming there are no changes in the screening criteria, an increase in the number of cases screened out may indicate that the quality of preliminary investigations has deteriorated and

Figure 9-2
Investigative Unit Productivity Report--Case Measures

UNIT _____ FROM __/__/__ TO __/__/__

CRIME _____ DATE COMPLETED __/__/__

			Assigned to	
		Total	Detective	Unit
A. TOTAL CASES	**NUMBER**			
SCREENED OUT	Number			
	% of Total Cases			
SCREENED IN	Number			
	% of Total Cases			
B. SUSPENDED	Number			
	% of Screened In			
LEADS EXHAUSTED	Number			
	% of Suspended			
UNCOOPERATIVE PARTIES	Number			
	% of Suspended			
UNFOUNDED	Number			
	% of Suspended			
OTHER	Number			
	% of Suspended			
C. SUSPECT IDENTIFIED	Number			
	% of Screened In			
VICTIM/WITNESS	Number			
	% of Identified			
CONFESSION OF SUSPECT	Number			
	% of Identified			
PHYSICAL EVIDENCE	Number			
	% of Identified			
INFORMANT	Number			
	% of Identified			
PATTERN	Number			
	% of Identified			
OTHER	Number			
	% of Identified			

Figure 9-2 (Continued)

			Total	Assigned to Detective Unit
D.	EXPECTED ARRESTS	Number		
		% of Screened In		
E.	ARREST OR WARRANT	Number		
		% of Identified		
	E. MINUS D.	Number		
		% of Arrest/Warrant		
	ARREST	Number		
		% of Arrest/Warrant		
	WARRANT, NO ARREST	Number		
		% of Arrest/Warrant		
F.	ACCEPTED BY PROSECUTOR	Number		
		% of Arrest		
G.	CONVICTION	Number		
		% of Accepted		
H.	CASES ACTIVE AS OF THIS REPORT*	Number		
		% of Screened In		

*These cases are not included in any other category below A (Screened In).

that more effort should be devoted to preliminary investigations conducted by patrol officers; conversely, a decrease in the number of cases screened out may indicate that the quality of preliminary investigations has improved.

The percentage of cases screened-in that are assigned to individual investigators and the percent that are assigned to the investigative unit as a whole provide measures of the complexity of investigations. An increase in the number of cases assigned to the unit may indicate that the number of leads it is necessary to follow up has increased for the average case. Knowledge about the average complexity of cases handled by an investigative unit is useful for interpreting other performance measures. For example, an increase in investigations suspended due to all leads being exhausted simultaneous with an increase in the average complexity of cases may indicate that the nature of crimes has changed. Improvements and changes in the investigative unit may then be required (e.g., additional training, closer supervision, etc.).

The Suspension of Investigations. Many investigations are initiated that result in no positive outcomes: no suspects are identified; no one is arrested; no offenders are prosecuted or convicted. The reason for the lack of positive results is crucial to investigative managers if they are to keep abreast of the changing nature of crime and to improve decreasing levels of productivity. Therefore, investigative supervisors should calculate the percentage of all cases assigned that are suspended without positive results in the following categories:

- **All leads have been exhausted**--the investigation has run out of information upon which to continue.
- **Uncooperative parties** (victims/witnesses)--the investigation must be suspended because parties indespensible to the success of the investigation (such as victims and witnesses) refuse to, or are unable to, cooperate with investigators.
- **Unfounded**--investigation of the case reveals that no crime has taken place.
- **Other reasons**.

Each of these indicators reveals different explanations for productivity changes. For example, a decrease in the number of investigations suspended for lack of leads may indicate that investigators are conducting better investigations, *whereas an increase in suspended investigations due* to uncooperative parties may indicate that patrol officers and detectives should improve their methods for dealing with the public. Applying this same type of rationale, an increase in the rate at which cases are unfounded may be due to poor preliminary investigations.

Suspects Identified. The positive identification, by name, of at least one suspect is an important measure of investigative productivity. Even if identified suspects cannot be arrested and prosecuted, the identification of suspects may be helpful in the solving of other crimes. Therefore, investigative supervisors should calculate the percentage of all screened-in cases that result in the positive identification of at least one suspect. Furthermore, the method by which positive identifications are achieved should be noted. The percent of screened-in cases resulting in at least one positive identification due to information provided by the

sources is important for determining the reasons for successful investigations:

- victim or witness identification of a suspect;
- confession of a suspect;
- physical evidence;
- informant identification of a suspect;
- crime pattern or modus operandi;
- other sources of positive identification.

Expected Arrests. Case screening models that attempt to predict whether or not an arrest will be made if a case is assigned to a detective provide a means for measuring arrest productivity of investigative units.[5] Since the SRI model is the most widely tested case screening model, this model is used as an example, but any numerically weighted and tested screening model that predicts arrests will serve the same purpose.

The SRI model (see Figure 9-1), is used to assign numerical scores to burglary cases based on information contained in preliminary investigation reports. Cases scoring higher than a predetermined threshold (cutpoint) are assigned to detectives (screened-in) and those scoring less are not assigned (screened-out). By determining, based on department experience, the percentage of assigned cases with each SRI score (between 0 and 29 inclusive), that result in the arrest of at least one suspect, an investigation manager can predict the arrest rate the investigative unit should maintain in the future for any given screening level (cutpoint).

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Deviations from this expected arrest rate indicate that the unit is doing better or worse than expected.

The expected number of arrests is based on the probability that a case with a particular score will result in an arrest. This requires that investigative supervisors know the percent of cases with each screening model score (0-29) that are solved. These probabilities can be either calculated by the department or can be based on previous research. Table 9-1 shows the probability of arrest for each SRI score based on previous research. This can be used to develop an expectation of the future arrest rate for the unit. Table 9-2 gives an example: A unit has 10 new cases that have the screening scores and probabilities of arrest shown. The number of assigned cases with each case score is multiplied by the probability of arrest for each case score to obtain the expected number of arrests for each case score. These are added to produce the total expected number of arrests (1.854 in Table 9-2). Figure 9-3 provides an example of an expected arrest productivity measurement form that can be used in conjunction with the form in Figure 9-2.

Suspects Arrested or Warrants Issued. The percent of cases screened-in that result in either an arrest being made or warrant being issued for the arrest of at least one suspect is another measure of investigative unit productivity in Figure 9-2. This measure of productivity is more stringent than the proportion of screened-in cases that result in at least one suspect being identified. The percentage of all warrants issued not resulting in an arrest should also be calculated by the investigative supervisor to determine how well the investigative unit is performing with

Table 9-1

Probability a Case with a Given Score will Result in an Arrest

Case Score	Probability of Arrest
0	.057
1	.064
2	.071
3	.079
4	.088
5	.097
6	.108
7	.119
8	.132
9	.145
10	.160
11	.176
12	.193
13	.212
14	.231
15	.252
16	.274
17	.298
18	.322
19	.347
20	.374
21	.401
22	.428
23	.456
24	.485
25	.513
26	.542
27	.570
28	.597
29	.625

SOURCE: Eck (1979)

Table 9-2

Example of Expected Arrest Performance

Case Score	Number of Assigned Cases	X	Probability of Arrest	=	Expected Number of Arrests*
7	2		.119		.238
8	1		.132		.132
9	1		.145		.145
10	0		.160		.000
11	0		.176		.000
12	3		.193		.579
13	1		.212		.212
14	0		.231		.000
15	0		.252		.000
16	2		.274		.548
17	0		.298		.000
TOTAL	10				1.854

Total Expected Number of Arrests = 1.9.

Total Expected Arrest Rate = 1.854/10 x 100 = 18.54%.

*Expected Number of Arrests = Number of Assigned Cases x Probability of Arrest.

Figure 9-3

Example of an Arrest Performance Log Using
Expected Arrest Measures for Investigative Units

Score	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Expected Arrests																														
Actual Arrests																														

TOTALS	
Expected Arrests	
Actual Arrests	

respect to capturing suspects that could be arrested. This measure can be used to determine if more effort is required in the serving of arrest warrants.

Deviations from expectations show the manager how well the unit is performing, taking into account the difficulty of the caseload. When the unit has an easy caseload it does not get an artificially high rating and when it gets a difficult set of cases it does not get penalized. Because this arrest productivity measure takes into account case difficulty, fluctuations in arrest productivity are more likely to be due to changes in unit performance and not due to other circumstances.

Acceptance by the Prosecutor. To be of real value, arrests must culminate with the prosecution and conviction of suspects; therefore, it is important that investigative supervisors be concerned with the percentage of cases with at least one arrest accepted by the prosecutor (National Advisory Group on Productivity in Law Enforcement, 1973). Since changes in prosecutorial policy outside police control can affect this measure, investigative managers should use it with care. This does not mean they should ignore it.

Conviction. Research has shown that the police can have major impact on whether or not suspects are convicted (Institute for Law and Social Research, 1981; Forst, et al., 1977). Again, the responsibility of the investigative unit does not end with the arresting of suspects. Investigative supervisors should maintain records on the percentage of those

cases resulting in at least one arrest that also results in one conviction. A decrease in case conviction rates is one indicator that investigators are not collecting sufficient evidence to enable the prosecutor to obtain a conviction. The argument that convictions are not totally under the control of the police is valid. Therefore, changes in this measure are only an indicator of possible changes in investigative performance. However, this is no different than any other aspect of investigations; one can also claim that arrests are not in the hands of police but in the hands of victims, witnesses, informants, and others.

Cases Active. Measures of productivity are calculated for specific periods of time (weeks, months, years). Investigations are not always completed at the end of a particular time period. Therefore, all cases that are still being actively investigated are accounted for separately from those that have been completed.

These five measures of case processing are used to determine how cases that come to the attention of investigative units are disposed of. Although cases are assigned to investigative units for the purposes of investigation, positive results also can be described in terms of individual suspects. The percent of screened-in cases resulting in at least one suspect being identified disguises the fact that some cases result in several suspects being identified, while other cases result in only one suspect being identified. It is, therefore, important that an additional set of performance measures be used to account for the fact that there may be multiple suspects in any given case.

Suspect Measures

Although investigative units are assigned cases, investigative results involve suspects. Case measures show how cases are solved, but do not account for multiple suspects. Suspect measures take multiple suspects into account and describe their dispositions. It is, therefore, useful to have investigative unit performance measures that can be expressed in terms of suspects identified, arrested, prosecuted, and convicted. Although this type of performance measure does not express the productivity of the investigative unit in terms of solving cases (as is true of case measures), suspect measures are useful for determining investigative unit performance regarding criminal proceedings. Five suspect measures are discussed; they are as follows:

- identifying suspects;
- arresting suspects;
- deciding to prosecute suspects;
- filing charges against suspects; and,
- convicting of suspects.

Some of these elements are similar to those that are part of determining case measures. In many instances the measurement categories are the same for both measures. However, instead of counting cases, suspect measures are based on counts of suspects. Each element comprising suspect productivity is discussed separately. Figure 9-4 presents an example of an Investigative Unit Productivity Report for suspect measures. A comparison

Figure 9-4
Investigative Unit Productivity Report--Suspect Measures

UNIT _____ FROM __/__/__ TO __/__/__

CRIME _____ DATE COMPLETED __/__/__

			Total	Assigned to Detective	Assigned to Unit
A. TOTAL SUSPECTS IDENTIFIED	**NUMBER**				
VICTIM/WITNESS	Number				
	% of Total Suspects				
OTHER SUSPECTS	Number				
	% of Total Suspects				
PHYSICAL EVIDENCE	Number				
	% of Total Suspects				
INFORMANTS	Number				
	% of Total Suspects				
PATTERN	Number				
	% of Total Suspects				
OTHER	Number				
	% of Total Suspects				
B. ARREST OR WARRANT	Number				
	% of Total Suspects				
ARREST	Number				
	% of Arrest/Warrant				
WARRANT, NO ARREST	Number				
	% of Arrest/Warrant				
C. NOT ACCEPTED BY PROSECUTOR	Number				
	% of Arrest				
INSUFFICIENT EVIDENCE OF CRIME	Number				
	% of Not Accepted				
INSUFFICIENT EVIDENCE AGAINST SUSPECT	Number				
	% of Not Accepted				
VICTIM/WITNESS PROBLEM	Number				
	% of Not Accepted				
SUSPECT UNAVAILABLE	Number				
	% of Not Accepted				
VIOLATION OF RIGHTS	Number				
	% of Not Accepted				
PROSECUTOR DISCRETION	Number				
	% of Not Accepted				
OTHER	Number				
	% of Not Accepted				

Figure 9-4 (Continued)

		Total	Assigned to Detective	Unit
D. ACCEPTED BY PROSECUTOR	Number			
	% of Arrest			
CHARGE _____	Number			
	% of Accepted			
CHARGE _____	Number			
	% of Accepted			
CHARGE _____	Number			
	% of Accepted			
CHARGE _____	Number			
	% of Accepted			
OTHER FELONY CHARGES	Number			
	% of Accepted			
NON-FELONY CHARGES	Number			
	% of Accepted			
OTHER	Number			
	% of Accepted			
E. CONVICTIONS	Number			
	% of Accepted			
CHARGE _____	Number			
	% of Convictions			
CHARGE _____	Number			
	% of Convictions			
CHARGE _____	Number			
	% of Convictions			
CHARGE _____	Number			
	% of Convictions			
OTHER FELONY CHARGES	Number			
	% of Convictions			
NON-FELONY CHARGES	Number			
	% of Convictions			
F. DISPOSITION OF SUSPECT PENDING	Number			
	% of Identifications			

with Figure 9-2 illustrates how the elements comprising suspect measures differ from those comprising case measures.

Suspects Identified. The first element to be considered when applying the suspect measure is the total number of suspects for which a positive identification can be made. Prior to the identification of suspects, it is only possible to count cases. Therefore, the number of suspects identified is the first element for which a value can be calculated and, as a consequence, must serve as the baseline against which all other suspect measures are compared. In addition, categorization of suspect identifications by source of identification provides information as to how investigations produce results. The means by which suspects are identified that investigative supervisors should account for include the following:

- victims and witnesses;
- other suspects;
- physical evidence;
- informants;
- crime series or modus operandi;
- other means.

These means by which suspects are identified are the same as those used for determining case measures, but, instead of counting the number of cases for which at least one suspect was identified by each of these means, the total number of suspects identified by each of these means is counted.

Suspects Arrested. The percentage of suspects identified who have been arrested or for whom arrest warrants have been issued is a more

stringent measure of investigative productivity. Additionally, the percentage of suspects identified for whom warrants have been issued but no arrest secured provides an indicator of the productivity of the investigative unit with respect to serving arrest warrants, and will tell police managers if there is a problem with serving warrants.

Arrests Not Accepted by the Prosecutor. The percent of arrests for which the prosecutor refuses to press charges is an indicator of the ability of the investigative unit to collect sufficient evidence to support prosecutions. Although the decision to prosecute is under the influence of prosecutorial discretion (New York City Police Department, 1981), the sufficiency of the evidence to support a prosecution is, in part, controlled by the police (Institute for Law and Social Research, 1981; Forst, et al., 1977). Investigative supervisors should also keep records of the reasons prosecutors decline to prosecute cases. These reasons[6] should include:

- insufficient evidence of a crime;
- insufficient evidence against suspect;
- victim/witness problems;
- suspect unavailable;
- violation of rights;
- discretion of prosecutor (unrelated to police work);
- other reasons.

Routinely collected data detailing why cases are not accepted by the prosecutor can help investigative supervisors improve investigative work. For example, an increase in the percentage of cases not accepted by the prosecutor due to victim/witness problems may indicate that more attention should be paid to the treatment of victims and witnesses. Collection of data providing this information requires the active cooperation of the prosecutor. Unfortunately, the relationship between prosecutors' offices and police agencies is not always good. This may make it difficult to obtain such information.

Arrests Accepted by the Prosecutor. The percentage of all arrests accepted by the prosecutor, broken down by most serious charge filed by the prosecutor, also provides a measure of the productivity of investigative units. The more serious the charges against suspects, the greater the likelihood that suspects will be incarcerated. An investigative unit that consistently has cases accepted by the prosecutor, but for trivial charges (e.g., burglary suspects are consistently charged with vandalism), is not as productive as an investigative unit that has the same percentage of arrests resulting in prosecution for higher average charges (e.g., burglary suspects are consistently charged with burglary). Changes in the seriousness of charges against suspects show whether investigators are collecting sufficient evidence to support serious charges.

Convictions. For crime control purposes it is desirable that the vast majority of suspects arrested be convicted of the crimes for which they were arrested. The percentage of suspects arrested who are convicted,

broken down by highest charge of conviction, is another indicator of investigative unit productivity. Again, changes in the seriousness of the charge for which suspects are convicted may be an indicator of increasing or decreasing investigative unit productivity and, therefore, should be of concern to investigative supervisors. Furthermore, comparing cases accepted by the prosecutor, by charge, can provide useful information in determining whether or not the police are providing sufficient information to the prosecutor to obtain convictions for serious charges.

Disposition of Suspect Pending. At the end of a measurement period not all suspects who have been identified, arrested or prosecuted will have been brought to trial. Those suspects whose disposition is pending as of the end of the period are accounted for separately.

The use of both case measures and suspect measures to assess investigative unit productivity will provide detailed information to investigative supervisors regarding investigative unit productivity and will, furthermore, provide indicators of how productivity levels can be increased. As is the case with all statistical measures, these measures only provide an indication of changes in productivity and should not be acted on without careful judgment. For example, a decrease in the percentage of arrested suspects accepted by the prosecutor could be due to a change in prosecutorial policy as well as changes in the productivity of investigators. A decline in the proportion of cases that are screened in may signify a decline in the productivity of patrol officers conducting preliminary investigations, but may also signify a change in the characteristics

of the crimes patrol officers are called on to investigate. An increase in the percentage of screened-in cases that result in at least one suspect being identified may be due to increased investigative productivity, but could also indicate that crimes have become easier to solve. Although these productivity measures will provide detailed information to investigative supervisors, they must also be tempered with good judgment and not taken solely on their face value.

In this section, three investigative management functions have been described:

- o regulating case flow;
- o monitoring investigative activities; and
- o measuring investigative unit productivity.

Although discussed separately, it is clear that these three functions are, in reality, inseparable. Strict control over case flow makes monitoring investigative activities easier. The combination of regulating case flow and close monitoring of investigative activities should increase investigative productivity. Careful measurement and assessment of investigative unit productivity will help to make decisions regarding how case flow should be regulated and how investigative activities should be monitored easier and more precise.

The foregoing proposals for improving management of the criminal investigation function should improve investigative efficiency and effectiveness. Expanding the role of patrol officers in preliminary investigations, improving the use of information sources, and better management of

follow-up investigations should result in the acquisition of more and better information about suspects, a more rational approach to allocating investigative resources, and more arrests being made. As a consequence, prosecutors should be able to prosecute more cases, and more of these prosecuted cases should result in convictions. Although these changes will result in improvements in the functioning of the investigative process, the investigative process will, nevertheless, continue to remain reactive; that is, investigative resources will only be applied once a crime has been reported to the police. In the following section, an alternative approach to managing investigations, not based on responding reactively, is described.

The Management of Targeted Investigations

Follow-up investigations, like most other aspects of police work, are dominated by the incoming case flow created by citizens' reports of offenses. Improvements in preliminary investigations, case management, and the use of various information sources may increase the effectiveness of this process, but will not diminish the underlying weakness of this approach: investigations take place after the fact and, therefore, force investigators to respond to events outside their control. This makes any kind of investigative planning extremely difficult and prevents managers from focusing on the sources of problems. Instead, there is a constant battle to find the resources to investigate a seemingly endless and increasing number of cases.

Instead of simply investigating incoming cases, another approach is to have investigative units attempt to clearly identify the problems with which they are dealing. Goldstein (1979), describes how many police officials lose track of the original goals of their organization and, instead, concentrate on the means by which agency operations should be conducted. Goldstein proposes a problem-solving approach to conducting police operations. He defines problems as, "the incredibly broad range of troublesome situations that prompt citizens to turn to the police, such as street robberies, residential burglaries, battered wives, vandalism, speeding cars, runaway children, accidents, acts of terrorism, even fear" (1979).

An example of such a problem-solving approach to investigations was conducted by Goldstein and the Madison (Wisconsin) Police Department (Goldstein and Susmilch, 1982). One of the problems identified by police officials was that of repeat sexual offenders. This problem was narrowed and refined to that of repeat sexual offenders who are particularly violent and attack strangers. Analysis of information showed that the rape cases that had caused the greatest public concern all involved offenders with "extensive criminal record that include a variety of offenses," who were under parole supervision when they committed their offenses, and had been released shortly before committing them. Furthermore, it was discovered that a small group of paroled sexual offenders is responsible for a large number of sexual offenses, and that the majority of sexual offenders under parole supervision in Madison were unknown to the Madison police because these offenders were from other communities.

Based on these findings, and discussions with police, corrections and other officials, several new policies were designed. In the investigations area, information exchange between corrections officials and the police were improved. This included notifying the police of sexual offenders paroled to the community, the designation of an officer to collect, collate and disseminate intelligence information on sexual offenders, and improved informal information exchange between police and corrections for on-going investigations. Additionally, several non-investigative approaches were developed. These include registration of new parolees with the police and interviews of new parolees by police officials at the time of registration; disseminating information regarding sexual offenders and their behavior patterns to patrol officers so officers are aware of potential problems in their areas; and the development of policies regarding police-corrections responsibilities when a paroled sexual offender is arrested for any offense.

Targeted investigations include career criminal programs but are not limited to such programs. Investigations deal with many problems that have little to do with career criminals (a rash of juvenile burglaries, for example). As the example above illustrates, the analysis of the problem may even lead to approaches that go far beyond the traditional boundaries of investigations or the police agency. The underlying principle behind such investigations is a clear definition of the problem and careful analysis of the problems scope. From this, careful strategies can be developed to deal with the problem. Strategies designed to attack the problem may not fit the traditional approaches used in investigations by

the agency because most problems effect more than one part of the police agency, and more criminal justice and community agencies than just the police.

Such a problem-solving approach is particularly useful for managing criminal investigations. Investigators and investigative managers, as a matter of routine, learn a great deal about the sources of crime in a community (Ward, 1978). The first stage in the process is the identification and accurate description of what the problem is. Are the majority of burglaries being committed by juveniles? Are there loose networks of active criminals responsible for much of the crime investigative units deal with? Are crimes often drug related? Are criminal receivers involved in planning burglaries and disposing of stolen property? Is a motorcycle gang responsible for many of the offenses being handled? Can major offenders and career criminals, who are responsible for a large number of offenses, be identified? The identification of clearly-defined problems can serve as a starting point for targeted investigation strategies designed to reduce or eliminate crime problems.

Targeted investigations can be divided into four stages:

- defining problems and selecting targets;
- planning the strategy;
- conducting investigations; and,
- evaluating performances.

Each of these will be discussed in turn.

Problem Definition and Target Selection

Without a precise definition of the problem it is near impossible to plan an investigation, conduct an investigation, or determine whether or not an investigation is a success. The idea that a particular concern is serious enough to warrant a targeted investigation can come from a variety of sources: the frustration investigators feel from dealing with a recurring issue; a hunch based on experience; formal meetings and discussions with investigators; analyses of productivity measures; experiences of other agencies; or research. Whatever the source of the idea that a particular issue is a serious investigative problem, careful analysis must be made to determine the nature of the problem and what can be done about it. Among the questions that should be asked are:

- Why is this particular issue a serious problem?
- What are the characteristics of events that comprise this problem?
- When and where do these events occur?
- Do victims have identifiable characteristics?
- Do offenders have identifiable characteristics?
- How do the offenders operate?
- Do these offenders act independently of each other or do they coordinate their actions?
- With what frequency, and under what conditions, do these offenders strike?
- Is it possible to create name lists of suspect targets for investigations (e.g., persons arrested for robbery, known burglars, etc.), or are targets only identifiable by means of general characteristics (e.g., juvenile truants, door-to-door salesmen, antique dealers, etc)?
- What are the sources of the information used to answer the above questions and how reliable are they?

Planning the Strategy

Once a problem has been clearly defined, careful planning must take place before commencing an investigation. Unless such planning takes place, scarce police resources may be wasted on activities made fruitless by the lack of coordination with other police units, the absence of necessary equipment, unanticipated problems, and ill-defined policies. Among the issues that should be addressed during planning stages are:

- The overall strategy of the target investigation;
- the anticipated duration of proposed investigation;
- the characteristics and selection procedures for the officers who will be involved in investigations;
- investigative tactics that will be used;
- special equipment that will be required;
- involvement of other police units;
- involvement of the prosecutor's office and other criminal justice agencies;
- involvement of non-police organizations and citizens' groups;
- the necessity for special policy guidelines;
- a precise definition of what will constitute investigative success or failure; and

- methods for evaluating investigative success or failure.

Conducting Targeted Investigations

The precise method by which targeted investigations should be conducted is dictated by the problem being addressed, the target selected, and the plan devised. When conducting targeted investigations it is important that investigative managers not only pay close attention to the daily operational considerations necessitated by the investigative plan, but, also, consider whether the problem targeted is the actual problem and that the targets being investigated are, in fact, the targets originally selected. If the true problem is not actually being addressed and inappropriate targets are being investigated, then plans must be adjusted to take these new factors into account. Care must be taken when making such changes in plans that the original objective of the investigation is not changed. Moreover, targeted investigations should only be conducted for a prescribed period of time: constant modification of a targeted investigation can result in an investigation continuing that should be curtailed. Furthermore, successive changes in investigations make it difficult to evaluate whether or not investigations have accomplished the goals they were originally designed to achieve. An investigation requiring many changes may indicate that the problem was ill-defined and/or that an inappropriate target was selected. Under these circumstances it may be worth suspending the investigation and starting over.

Evaluation and Documentation

Evaluating targeted investigations is crucial if knowledge is to be gained concerning how such investigations can be improved in the future. All targeted investigations should be evaluated to determine whether they were successful, partially successful, or failed to meet their stated objectives. The criteria to be used in determining success, partial success, or outright failure, must be defined prior to the onset of the investigation. This will insure that everybody will, in large part, agree with respect to whether investigations have succeeded or failed. Moreover, such criteria tend to minimize the temptation to change objectives if failure appears imminent.

Complete documentation of the evaluation results and the reasons these results were arrived at should be maintained in investigative unit files. Investigations deemed successful can be used to plan future investigations if there is a reemergence of the same patterns or a similar problem. Evaluations of investigations deemed failures can be used to avoid repeating the same errors. Evaluations of investigations that were partial successes can provide information that is useful for repeating successful aspects of investigations and avoiding unsuccessful aspects. Furthermore, documentation of targeted investigations with evaluation results can be used for training new investigators and investigative supervisors.

Targeted investigation approaches have several distinct advantages, among which are the following:

- They direct police resources to high priority problems instead of waiting for the problems to

dictate the use of police resources. By removing targeted individuals or groups responsible for large numbers of crimes, it should be possible to reduce the number of offenses reported, thereby reducing caseloads.

- Investigations are currently restricted by the availability of witnesses and the knowledge of victims. With a targeted investigation strategy, evidence and leads from several cases can be combined and information from informants, surveillance, and records can be used to combat the problem.

- Investigators have an opportunity to develop new skills and use skills they did not have a chance to use previously.

- Innovative investigations may lead to the arrest of criminals that are not typically arrested by traditional reactive investigations.

- Finally, this approach uses existing resources on an as-needed basis. If no problems are identified, no targeted investigations are launched. This avoids the problem of specialized units that exist regardless of the existence of the problem they were created to address.

These facts notwithstanding, this approach has several drawbacks that can reduce the effectiveness of targeted investigations if special care is not taken to avoid them.

- Defining a problem precisely is not easy. Unfortunately, it is easy to identify a target in a nebulous way and to define success as being whatever is needed to look good in the eyes of one's supervisors or critics.

- Lack of initial success may create pressure to extend the period of time allotted for conducting targeted activities. Such extensions can be granted indefinitely if one is not judicious in their allocation.

- The opposite may occur when the original plan is overly ambitious for the time allowed for the investigation. Lack of initial success might cause the investigation to be called off when an extended investigation might be successful.

- Targeting individuals and groups for investigations gives rise to the potential for violations of citizens' constitutional rights.

- In addition to the civil rights issue, such investigations also open up avenues of police corruption.

Although these drawbacks must be carefully considered, they can be minimized or eliminated by careful management of the investigators conducting targeted investigations. In fact, they are not problems with the approach but rather problems that arise from a failure to implement the approach properly. Indeed, such problems pervade almost all facets of policing and, consequently, methods for avoiding these pitfalls have been developed. Overall, the threat of such problems does not seem to outweigh the potential benefits of such an approach to investigations.

NOTES

1. This information comes from a study currently underway by Barry Glick of the Police Foundation.

2. Interviews with officials in one of these agencies further confirmed the data: Use of informants by detectives is almost nonexistent, although informants had been used more extensively in the past.

3. The management of investigations is only one concern of investigative managers. Other concerns, not described in this chapter, include selection and training of investigators, personnel scheduling, and other administrative tasks.

4. A detailed description of the means for adjusting the SRI model to meet the needs of any particular agency can be found in Managing Case Assignments (Eck, 1979).

5. It is possible to construct models similar to the SRI model that predict acceptance by the prosecutor or conviction. Unfortunately, this type of research has yet to be performed. Once such research has been conducted, expected prosecution and expected conviction rates can be calculated. It is because of the lack of research in these areas that these potentially valuable performance measures are not mentioned.

6. These measures are based on categories developed by Greenwood, et al., 1973.

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