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NATIONAL Evaluation Program

Series A Number 10



Criminal justice policymakers at all levels of government are hampered by a lack of sound information on the effectiveness of various programs and approaches. To help remedy the problem, the National Institute sponsors a National Evaluation Program to provide practical information on the costs, benefits and limitations of selected criminal justice programs now in use throughout the country.

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Although Phase I studies are generally short-term (approximately six to eight months), they examine many projects and collect and analyze a great deal of information. To make this information available to state and local decision-makers and others, the National Institute publishes a summary of the findings of each Phase I study. Microfiche or loan copies of the full report are made available through the National Criminal Justice Reference Service, Evaluation Clearinghouse, P.O. Box 24036, S.W. Post Office, Washington, D.C. 20024.

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Operation Identification Projects Citizen Crime Reporting Projects Specialized Police Patrol Operations Neighborhood Team Policing Pre-Trial Screening Pre-Trial Release Treatment Alternatives to Street Crime (TASC) Early Warning Robbery Reduction Projects Delinquency Prevention Alternatives to Incarceration of Juveniles Juvenile Diversion Citizen Patrol Traditional Patrol Security Survey Projects Halfway Houses

ABSTRACT

This report is based on both judgmental and empirical assessments of data related to specialized patrols. It covers a review of relevant literature, evaluation reports, and survey information collected from about 400 law enforcement agencies.

Contained in this report are selected portions of other documents submitted to the National Institute of Law Enforcement and Criminal Justice under the major heading of "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program."

This report describes general uses and effects of specialized patrols and common assumptions underlying their existence. It is focused on the findings from a sample of projects selected as being representative of the state of knowledge on specialized patrols. The assessment of this sample includes information on success and failure as related to performance and effectiveness.

More research is needed before a definitive, final word can be written on the use of specialized patrols. The exact methods and uses of specialized patrols varied from location to location and the existing research and evaluation information on performance is of questionable accuracy and reliability. The various sources of formal and informal information that were collected have been systematically analyzed and displayed for each project under study. This permits the reader to examine both evaluation information and the present weight of informed police opinion on important issues such as arrest performance, deterrence in terms of increases and decreases in crime, the amount of change in arrests and deterrence effected by a unit, and the impact of a specialized patrol on the community it serves. Indicators are also developed and displayed about the collective performance and effectiveness of three general types of specialized patrols: Low Visibility, High Visibility, and Combined High/Low Visibility projects.

NATIONAL EVALUATION PROGRAM Phase I summary report

SPECIALIZED PATROL PROJECTS

Ry

Kenneth W. Webb, Project Director Barbara J. Sowder, Associate Project Director Arthur J. Andrews Marvin R. Burt Edward F. Davis

This project was supported by Grant Numbers 75 NI-99-0067 and 75 NI-99-0067-5-1, awarded to the Institute for Human Resources Research, Bethesda, Md., by the National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U. S. Department of Justice, under the Omnibus Crime Control and Safe Streets Act of 1968, as amended. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the U. S. Department of Justice.

January 1977

National Institute of Law Enforcement and Criminal Justice Law Enforcement Assistance Administration U.S. Department of Justice

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FOREWORD

Specialized crime patrols are commonplace in police departments throughout the country, yet little is known about their impact on crime. Drawing from studies of 22 specialized patrol programs throughout the country, this study examined three different approaches to specialized patrol: "low visibility" programs, which use plain-clothes officers and mechanical devices to increase arrests and thereby reduce crime; "high visibility" units, which assume that the presence of uniformed officers is in itself an effective deterrent; and "high/low visibility" patrols, which use a combination of these tactics both to deter crime and to increase apprehension rates.

The findings of this study are limited, but they do suggest that certain types of specialized patrol offer a promising alternative to conventional undirected patrol.

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

PREFACE

What is known about specialized patrols in the United States? What types of specialized patrols are relied on most by law enforcement agencies? Which type of specialized patrol is most effective in combatting a given type of crime?

These are some of the many questions which the Institute for Human Resources Research (IHRR) attempted to answer for the National Institute of Law Enforcement and Criminal Justice (NILECJ), Law Enforcement Assistance Administration (LEAA).

This report summarizes what was both a judgmental and an empirical assessment of information on specialized patrols. It is a condensation of four separate reports bearing the major heading of "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program." The separate documents upon which this report is based can be obtained from the NILECJ. They are listed below, together with a brief description of each:

Product 1: Literature Search--This entailed a review of thousands of grant applications submitted to LEAA and other Federal agencies, many books and journal articles of both domestic and foreign origin and various evaluations of specialized patrol operations. The final product represents about 600 literature items relevant to specialization, the impact of specialized patrols on the community, and evaluation of specialized patrols.¹

Product 2: The Universe and Selected Project Descriptions--This report presents estimates of the universe of specialized patrols by type of law enforcement agency as determined by mail and telephone survey. Most of the report is devoted to a systematic, descriptive analysis of 21 patrol projects which were purposively selected as being representative of what is known about the most widely used forms of specialized patrol; that is, civilian dress, uniformed tactical, and mechanical device tactics.²

Product 3: Project Families, Synthesis Framework and Measurement--This report synthesizes the selected patrols and combined High/Low Visibility patrols. An analytic model is presented, as is a detailed discussion of variables that have been and should be measured in evaluating specialized patrol operations. Various measures are recommended for future evaluations.³

Product 4: Assessment of the Knowledge of Specialized Patrol--This report is designed to determine data reliability, assess success and failure, amass a knowledge base, and identify major gaps in the knowledge on specialized patrols.⁴

Each of these tasks was undertaken by a team of persons experienced in both law enforcement and evaluation research. An ultimate purpose of the project was to determine the state of knowledge on specialized patrols and to identify gaps that should be targeted for future research. The bulk of this report (Chapters II through IV) primarily reflects the work presented in Product 4. However, in order to understand how Product 4 was developed, it seems useful to summarize some of the information presented in the first three reports. These summaries are the focal point of Chapter I.

Before presenting this summary information, the authors would like to acknowledge the assistance of Dr. Richard Barnes, Mr. David Farmer, and Ms. Kay Monte of the National Institute of Law Enforcement and Criminal Justice. We wish to thank also the following members of the project Advisory Board:

- . Sheriff Michael Canlis
- . Mr. Joseph Lewis
- Dr. Elinor Ostrom
- . Chief James Parsons
- . Chief Rocky Pomerance
- . Mr. John Stead
- . Dr. Victor Strecher
- . Mr. Eugene Zoglic

Finally, thanks are extended to the numerous law enforcement personnel across the nation who furnished information and materials on specialized patrols. These include many members of police departments, sheriff departments, county police, state police, and personnel in State Planning Agencies. Without their assistance, this study could not have been completed.

SUMMARY

This report on specialized patrols is based on a review of relevant literature; a field survey designed to collect information from about 400 law enforcement agencies; and a judgmental and empirical assessment of a sample of projects selected as being representative of the knowledge on civilian dress, uniformed tactical, and mechanical device specialized patrol tactics.

This report covers selected portions from a series of studies bearing the major title of "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Under the National Evaluation Program." It represents an effort by the Institute for Human Resources Research to assist the National Institute of Law Enforcement and Criminal Justice in its coordinated informationgathering on law enforcement in the United States.

This study found that some form of specialized patrol is used by three fourths of the police departments serving cities with populations of 50,000 or more persons. A small percentage of departmental units in smaller cities, sheriffs, state police, and county police also rely on specialized tactics.

The tactics most frequenty used--civilian dress, uniformed tactical, and mechanical devices--were found to fall into three different types of families, largely because of certain assumptions regarding the efficacy of low versus high police visibility. The Low Visibility family is based partly on the assumption that invisible police presence, achieved through civilian dress and/or mechanical device tactics, will increase arrests and, therefore, reduce crime. High Visibility patrols are based, in part, on the assumption that increased uniformed police presence, achieved through a uniformed tactic, will deter crime and also increase the likelihood of arrest. High/Low Visibility patrols represent a multifaceted approach, one which combines high and low visibility strategies and utilizes uniformed tactical and civilian dress and/or mechanical device tactics. These patrols are expected to deter crime and increase arrests. Other objectives common to all families are to increase convictions, clearances, and citizen support and involvement and to maintain citizen safety and respect.

In the field, short-term evaluations based on inadequate study designs have left basic assumptions untested and have yielded noncomparable results gleaned from a diverse variety of measures. Nevertheless, available information has been assessed and systematically arranged so that the reader can examine the weight of present evidence, including informed opinion of law enforcement personnel.

Gross ratings on success and failure related to performance and effectiveness yielded a set of tentative conclusions:

- High Visibility patrols are more successful at deterrence than apprehension
- High/Low Visibility patrols are slightly more successful at apprehension than deterrence
- Although no conclusive statement can be made about the Low Visibility family, due to inadequate information, existing data

suggest the projects in this family were slightly more successful in deterring crime than in increasing arrests

These tentative conclusions do not provide answers to several questions critical to administrators:

- Is specialized patrol more cost-effective than traditional patrol in a given crime situation?
- . Which specialized tactic is most effective for combatting a given type of crime?

Standard procedures need to be devised and used for amassing information at the local and national levels. Such information could provide answers to these crucial questions. The results should be disseminated to regional, state, and local law enforcement personnel. Rising crime and decreasing financial resources make it even more imperative that cost-effectiveness information be available for planning, allocating, and monitoring law enforcement resources.

I. TYPES, USES, AND EFFECTS OF SPECIALIZATION

Over the years, police departments have relied increasingly on specialized patrols to help combat crime. Specialization, therefore, has become a topic of interest to many law enforcement personnel. They wish to know the advantages and disadvantages of specialization, the extent to which it is relied upon, the effects of different tactics, and so on.

In studying these issues, information was gathered from the literature and from law enforcement personnel via mail, telephone and personal interviews, and questionnaires. An analytic model was then developed to assist in classifying projects into families and in identifying variables that have been and should be measured in evaluating specialized patrol operations. These tasks which provided much of the background information required for the assessment of the state of knowledge on specialized patrols are the subject of this chapter.

A. Literature Review: Excerpts on the Advantages and Disadvantages of Specialization

A major conclusion stemming from the literature review was that there have been too few evaluations of specialized patrols and that those which have been done are often of a quality unacceptable to the research community. Part of the problem lies in the questionable reliability of the most commonly used data base, that is, crime statistics. Since the problems with crime statistics are discussed in a later chapter and a good deal of evaluative data is presented elsewhere, we will limit the summary of the literature here to some advantages and disadvantages which experts in the field have attributed to specialization of police functions.

Whether specialization proves useful or not appears to depend upon the circumstances and needs in a local jurisdiction.

Where specialization is needed, it appears to offer at least five advantages. One is that it leads to specific placement of responsibility for the performance of tasks. Because specialization leads to a clear designation of duties, responsibilities, and objectives, unit commanders can be held accountable for the unit's level of efficiency. Second, specialization also seems to bring about improvements in training, especially since it provides an opportunity for more intensive training than is feasible for the generalist. Third, when a small group is made responsible for a specific task, the group tends to form a cohesive unit which, under proper conditions, can generate further advantages -- job satisfaction and good morale. Fourth, because of their definite responsibility and pride in their unit, specialized personnel may develop a proprietary interest in departmental operations that relate to their field; thus, specialization may stimulate interest and participation in the unit's work. Finally, specialized patrols may arouse public interest. Where this interest is positive in nature, it aids in securing necessary support for the department and in enhancing policecommunity relations.⁵

However, specialization may be implemented unnecessarily or in excess so that it becomes detrimental to the department. It then creates problems of coordination between the specialists and nonspecialists in the department,⁶ adversely affects morale and job satisfaction⁷ complicates tasks of command,⁸ hampers executive development,⁹ and arouses negative public reactions.¹⁰ It may also lead to "empire building" and to unsuccessful imitation by small departments.¹¹

The relationship between good community relations and effective police work is also a factor that must be considered in weighing the advantages and disadvantages of specialization. 12

Several specialized patrol practices may have adverse effects on policecommunity relations. One is the practice of deploying specialized officers to high crime areas for short periods of time. This provides them little chance to become well acquainted with residents and may lead them to develop a detached attitude toward the community.¹³ This detachment may enhance citizen distrust of the police. Another factor that may contribute to this distrust was noted in this survey. This was the practice of locating specialized patrol units at a central headquarters and removing them from areas of frequent patrol.

Much of the negative impact of specialized patrols apparently results from police insensitivity to minority groups. Even with the recent increased emphasis on race relations, surveys indicate that black citizens hold less favorable attitudes toward police than do white citizens.¹⁴

Of course, any police contact with the public can have positive as well as negative aspects. A tactical unit on saturation patrol may simultaneously reduce street crime and transmit the impression of an occupying force. Or, it may increase a community's sense of well-being without a reduction in crime. The deciding factor seems to be how the police are perceived by the community.¹⁵, 16 The literature does suggest that police review boards, with or without citizen participation, can be useful in assessing the impact of specialized patrols on the community.¹⁷

B. Types and Usage of Specialized Patrols

The literature review, as well as the survey, indicates that three types of specialized patrol tactics are relied upon most frequently by law enforcement personnel: civilian clothes, uniformed tactical, and mechanical devices. Civilian clothes units decrease the visibility of the police and enhance their ability to combat certain forms of crime. This tactic appears to be the most frequently used form of specialized patrol. (See Table I-1.) Uniformed tactical units are also heavily relied upon and concentrate on complementing the work of traditional patrol;¹⁸ they are designed to cope with critical situations and to permit a saturation of police power at a given time or place.¹⁹ In less frequent usage are mechanical devices, such as alarm systems, night vision scopes, and other electronic equipment, which bring sophisticated technology to bear on the problem of crime. These three tactics are the subjects of this report.

As Table I-1 shows, specialized patrol tactics are most likely to be employed by departments serving cities with a population of 50,000 or more persons. In fact, this survey indicates that three fourths of the departments serving these larger communities rely upon one or more types of specialized patrol.

TABLE I-1 THE UNIVERSE OF JSAGE OF TACTICS*

		National Usage of Tactic**					
Population	Total	otal Civilian		Uniformed		Mechanical	
	Cities	Dres		Tactic		Devices	
		Number	Percent	Number	Percent	Number	Percent
dition Over 50 000							
Cities Over 50,000 Population	362	171	47%	150	41%	73	20%
		a The second					
Cities Under 50,000 Population	20,000+	2,870	14%	2,494	12%	1,834	9%
Sheriffs	3,120	338	11%	338	11%	184	6%
State Police	50	5	10%	13	26%	7	14%
County Police	66	8	12%	8	12%	5	8%

The figures are based on statistical estimates derived from nearly 400 jurisdictions. The method was as follows: a randomly selected sample of 647 law enforcement agencies were sent a questionnaire via mail regarding their usage of specialized patrol; 284 responded. A random telephone survey was made of 98 nonrespondents to determine the differences between respondents and nonrespondents. (The latter did report less frequent use of specialized patrols than respondents.) The formulas used to derive the estimates appear in "Product 2 -- The Universe and Selected Project Descriptions."

Not presented here is a small percentage of other tactics (e.g., canine, bicycle, and horse patrols) which were excluded from this study because of their infrequent usage.

Each of the three tactical types tended to employ certain operational modes: crime-oriented, suspect-oriented, and location-oriented. The crime-oriented mode can be briefly described as special patrol activities designed to impact on specific crimes. The suspect-oriented mode is aimed at apprehension and may involve specific known individuals or groups of likely offenders. This mode often depends upon computerized or manual intelligence data systems to provide information on the habits and locations of suspected or known offenders. The location-oriented mode includes activities targeting upon specific locations or general areas which are considered likely to become centers of criminal activity.

These specialized operations are cited in the literature as effecting increases in arrests and decreases in crimes while also being cost-effective. There are few research findings, however, to substantiate these claims of effectiveness.

C. Selection of a Study Sample

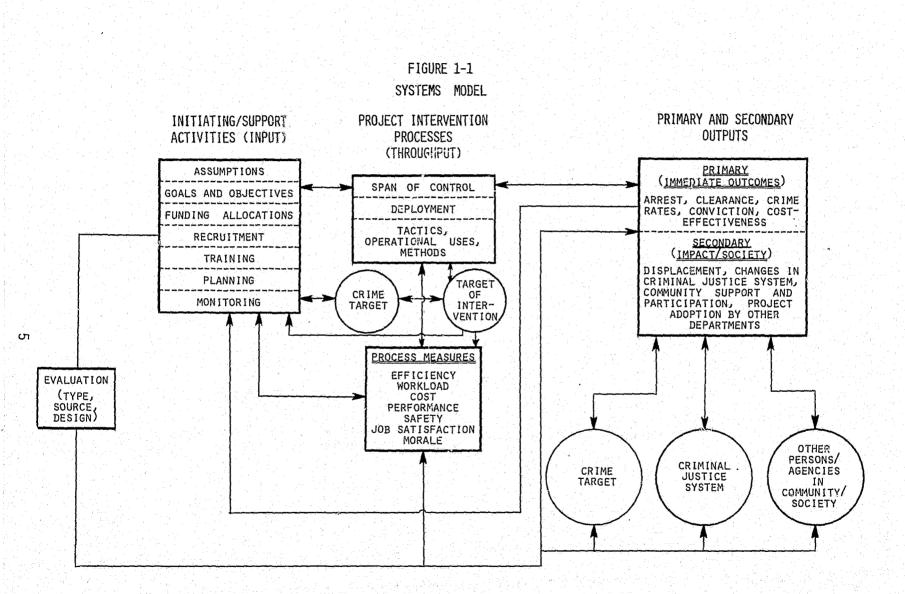
From a survey of evaluation reports, questionnaires, and information gathered from on-site visits to 22 departments with specialized patrols, 21 specialized patrol projects were selected for in-depth study and analysis. This sample was purposively selected because it was believed to be representative of the three types of tactics under study and because it seemed to represent about as much as is known on specialized patrols. Because so little is published and on-site evaluations could not be performed, it seemed necessary to pick many of the sample candidates from among those represented in evaluation reports. Otherwise, there would be little data to assess. The amount of bias introduced into the sample by this selection process cannot be ascertained; however, it is possible that the better planned, better organized, and more successful patrols are those which tend toward an evaluation of their activities. This possibility should be kept in mind by the readers of this report.

A general systems model was used to analyze each of the 21 projects. This model, shown in Figure I-1, is composed of the following parts:

- Input. Those initiating and/or ancillary activities or resources deemed useful or necessary to actual project interventions
- Throughput. Those activities that comprise project interventions (i.e., tactics, operational modes and methods such as surveillance) and the consequences of those interventions on the project and department (process measures)
- <u>Output</u>. Those results of project interventions expressed in terms of primary outputs (immediate outcomes) such as arrests, clearances and crime reductions, and secondary outputs (impact) such as displacement, arousal of public support, and other effects on the community or broader society
- D. Project Families and Measurement

:4

Using the model shown in Figure I-1, three types of specialized patrol families were identified among the sample: Low Visibility patrols, High



1997) 1997) Visibility patrols, and combined High/Low Visibility patrols. Table I-2 shows the types of input and throughput variables used to discriminate the three families. (The output variables did not prove useful in the classification because of view variety of measures used to determine output.)

From Table I-2, one can note that the projects differed essentially only in the assumptions upon which they were based and the tactics they used. On other variables, differences seemed randomly distributed across project types. This lead to the following definitions of project families:

- Low Visibility patrols. These patrols are based partly on the assumption that less visible police presence, achieved through civilian dress and/or mechanical device tactics, will lead to increases in apprehension and, therefore, to reductions in target crimes.
- . <u>High Visibility patrols</u>. These patrols are based partly on the assumption that increased uniformed police presence, attained through the use of a uniformed tactical tactic, will deter crime and, in turn, increase the chances of apprehending criminals.
- Combined High/Low Visibility patrols. These patrols are based partly on the assumption that increased uniformed police presence, attained through the use of a uniformed tactical tactic, combined with a low visibility strategy using a civilian dress and/or mechanical unit, will deter crime and increase apprehension rates.

Each family then is expected to increase arrests and deter crimes.

The priority given to these two objectives, however, varies by family type. Among both the High Visibility and High/Low Visibility families, Geterrence is the primary objective, increases in arrests is the secondary objective. The opposite ranking of priorities exists among the Low Visibility family; that is, an increase in arrests is the major mission and the achievement of this objective. is expected, in turn, to deter crime.

In addition to increasing arrests and decreasing crime, it is also assumed that each family type will:

Increase clearances and/or convictions

Decrease public fear of crime

. Maintain public safety

Maintain public respect

Increase public support of and participation in police activities

As will be noted in later chapters, the variables most often measured are arrests, clearances and/or convictions, and crime reduction. Few studies have addressed the impact of specialized patrols on the community they serve.

PROJECT FAMILIES: SIMILARITIES AND DIFFERENCES

CRITERION	LOW VISIBILITY PATROLS $(n = 8)$	HIGH VISIBILITY PATROLS $(n = 5)$	HIGH/LOW VISIBILITY PATROLS (n = 8)
BASIC ASSUMPTIONS	INVISIBLE POLICE OMNIPRESENCE WILL LEAD TO APPREHENSION & THUS REDUCE CRIME MOST EFFECTIVELY	VISIBLE POLICE PRESENCE WILL DETER CRIME & MAY LEAD TO INCREASED APPREHENSION	VISIBLE POLICE PRESENCE AND INVISIBLE CMNIPRESENCE WILL MORE EFFECTIVELY DETER CRIME AND INCREASE APPREHENSION
OBJECTIVES	REDUCE CRIME: INCREASE ARRESTS, CLEARANCE, CONVICTION RATES	SAME	SAME
SELECTIONS	"BEST" MAN FROM PD (SOME SUP- PLEMENTAL USE OF VGLUNTEERS, OVERTIME REGULARS)	SAME	SAME
TRAINING	SOME SPECIALIZED TRAINING RELEVANT TO TASKS	SAME	SAME
PLANNING	LARGELY BASED ON CRIME ANALYSIS	SAME	SAME
ORGANIZATION	PLACED IN SPECIAL O.P., FIELD O.P. OR PATROL DIVISION	SAME	SAME
MONITORING	MAINLY BY UNIT	SAME	SAME
SPAN OF CONTROL	MAINLY 1 - 10 OR LESS	SAME	SAME
DEPLOYMENT	LARGELY BASED ON CRIME ANALYSIS	SAME	SAME
TACTIC	CIVILIAN DRESS &/OR MECHANICAL DEVICES	UNIFORMED TACTICAL	UNIFORMED TACTICAL WITH CIVILIAN DRESS &/OR MECHANICAL DEVICES
OPERATIONAL MODES	CRIME & LOCATION ORIENTED (FEW SUSPECT ORIENTED)	SAME	SAME
METHODS	BASICALLY PATROL, STAKEOUT, SURVEILLANCE, DECOY, TARGET HARDENING	SAME EXCEPT DECOY	ALL
CRIME TARGET	ROBBERY, BURGLARY, OTHER MAJOR CRIMES	SAME	SAME
TARGET OF INTERVENTION	BUSINESS & CITIZENS	SAME	SAME

II. METHODOLOGIES FOR ASSESSING DATA RELIABILITY, PROJECT EFFECTIVENESS AND THE STATE OF KNOWLEDGE ON SPECIALIZED PATROL

The analytic model presented in Chapter I proved useful for analyzing individual projects and for classifying them into families. It was necessary, movever, to develop additional methodologies, consistent with the analytic wedel, which would permit assessment of the reliability of informational sources and to interrelate these with techniques designed to assess project effectiveness and the state of knowledge on specialized patrol. This chapter provides summary descriptions of these various assessment methods; more detailed descriptions of the methodologies appear in the Product 4 report.

A. Assessment of Information Sources

To determine the accuracy and reliability of available data, it was necessary to assess three major sources of information: evaluation reports, unevaluated crime figures, and expert opinion (i.e., judgments of police personnel). In each case, three reliability ratings were applied: low, medium, and high.

1. Evaluations. Evaluations were rated on several dimensions: the use of multiple measures; the relevancy of the measures; the testing of hypotheses (assumptions); the accuracy of the data base; the adequacy of the statistical tests; controls for variables considered in research as crucial to internal validity (history, maturation, testing, instrumentation, statistical regression, selection biases, experimental mortality, selection-maturation interaction); and controls for experimental external validity criteria (reactive or interactive effects of testing, interaction effects of selection biases, and the experimental variable, the reactive effects of experimental arrangements, and multiple-treatment interferences). Table II-1 presents the criteria for assigning a particular rating to each type of evaluative dimension.

However, it should be noted that the evaluation reports seldom provide a detailed description of the methodologies employed. This deficiency greatly hampered a systematic evaluation of the projects. Further, the projects were seldom based on any rigorous experimental design so that criteria related to experimental internal and external validity were used mainly as standards by which we could assess evaluations.

2. <u>Crime figures and other raw data</u>. Unevaluated crime statistics were available for a number of projects. These pertained mostly to arrest, clearance, conviction, and crime increase/decrease data. Unfortunately, these data were in many different forms, such as rates, percentages, raw numbers, and averages; seldom was there any accompanying information to convert these figures into a standard form. All forms of crime figures were considered suspect in terms of reliability. The problems inherent in crime statistics are discussed more fully in the Product 1 report.

The literature can be summarized here by saying that the crime rate is almost certain to be an underestimate of crime since it is based on reported rather than actual crimes; it may also be affected by many societal factors unrelated to police activity (e.g., economic factors such as high unemployment rates, increased or decreased willingness of victims to report crime in any given time period).²⁰ Arrest rates are also beset with problems regardless of

CRITERIA FOR SCALING EVALUATION DATA

Dimension Rated	Scaling Criteria			
Number of Measures	Low: one measure			
	Medium: one or two measures based on crime, arrest, conviction and/or clearance rates and one measure of community impact (e.g., community attitudes, data from courts) or process impact (e.g., morale)			
	High: multiple measures of primary outputs (e.g., arrest, clearance, conviction, or crime rates) and two or more measures of impact on community and/or patrol or department			
Relevancy of Measures	Low: not related to hypotheses and objectives			
	Medium: incompletely related to hypotheses and objectives			
	High: adequate to test hypotheses and objectives			
Adequacy of Design in Terms of Internal/	Low: violates all or 1/4 of internal/external validity criteria relevant to project			
External Validity (Experimental Criteria Only)	Medium: controls for 1/4 - 1/2 of any internal/external validity criteria related to project			
	High: controls for over 1/2 of any internal/external validity factors relevant to project			
Accuracy of Data Base	Low: cannot be ascertained or is based on analysis or records of police department only			
	Medium: based on department crime figures and one or two outside sources; or evaluator's statement that the depart- ment's figures are of better-than-average quality			
	High: police figures checked against three or more outside data sources			
Appropriateness of Statistical Tests	Low: tests either too simple or too sophisticated (or inadequate) for data base			
	Medium: tests are adequate but incomplete in scope			
	High: tests are both adequate and comprehensive			
Tests Hypotheses	Low: fails to test or inadequately tests hypotheses (assumptions)			
	Medium: fails to test all hypotheses or tests part of the hypotheses inadequately			
	High: tests all hypotheses adequately			
Tests Objectives	Low: fails to test objectives or tests 1/4 of the objectives inadequately			
	Medium: tests from 1/4 - 1/2 of objectives adequately			
	High: tests 1/2 or more of the objectives adequately			

the method used to derive an arrest rate.²¹ For example, the most frequently used arrest rate (the ratio of arrests to reported offenses) is subject to manipulation by police when they feel compelled to react to political pressures. It also is subject to possible unreliable reporting. Clearance rates (i.e., the ratio of crimes solved by type to the total number of reported crimes) are subject to the same problems as arrest rates and, in addition, are influenced by parts of the criminal justice system outside the police department, such as plea bargaining and other procedures.^{22,23} Similar problems arise with the use of conviction rates as performance or effectiveness measures. In short, the reliability of crime figures is questionable. The extent to which the figures are inaccurate or unreliable seems undetermined. Since the bulk of available information (including evaluations), rests on these types of data, the assessment of the knowledge on specialized patrol rests on a shaky foundation.

For the reasons stated above, a low reliability rating was.given to police department crime figures. The rating rose to medium when a evaluator rated the department's data base as being of better-than-average quality. Where a department's figures were consistent with those of an outside source (e.g., victimization surveys), these data received a high reliability rating. Unevaluated data on citizen support, complaints, and participation were also considered. These data were simply reviewed in relation to any positive or negative impact they might have had on the patrols and were not included in any rating system.

3. Expert opinion. The data base included many statements from police personnel at various departmental levels regarding the effectiveness of their specialized patrol units. These judgments encompassed many types of information, such as crime statistics, observations of patrol personnel, informal conversations with citizens, and interrelationships between the department and other parts of the criminal justice system.

In assessing this information, a low reliability rating was given if the expert merely expressed an opinion without citing evidence or if the opinion was based only on one or two crime statistics. As departmental personnel cited more and more evidence (e.g., records of morale, safety of patrolmen, citizen complaints), the rating rose, according to specified criteria, to one of medium or high reliability. As in the case of evaluation data, reliability ratings rose whenever a statement was supported by two or more independent types of evidence.²⁴

However, because there was no way of verifying expert opinion and because it represented information reported by persons with a stake in the subject matter, it was considered less reliable than other informational sources. Where police personnel provided raw data, such as crime statistics, these data were selected as a basis for rating project success or failure on a given dimension and the information was placed in the category of crime figures.

B. Assessment of Project Success and Failure

The reliability ratings of the informational sources were used to assist in devising a scale of success and failure which could be used to rate projects on specified dimensions and in gross, overall terms.

1. <u>Variables of interest</u>. In assessing success and failure, three types of variables were of interest:

- Independent variables--Those activities of specialized patrol that are allowed to vary while other factors are held constant. Examples of independent variables are the tactics, operational modes, and such methods as decoy and stakeout.
- <u>Dependent variables</u>-- Those factors that are expected to change as a result of the independent variables. Dependent variables under consideration included the primary and secondary outputs shown in Figure I-1 (e.g., arrest rates, crime reduction, job satisfaction, citizen support).
 - Intervening variables -- Processes that intervene between the independent and dependent variables. The major intervening variables under consideration appear in Table II-2.

2. Variables measured and rated. Not all variables of interest have been measured by evaluators. This limited the number and types of variables that could be rated in this study. The variables most often considered by evaluators were four primary outputs--arrests, convictions, clearances, and crime feduction. Less attention has been given by evaluators to displacement of crime; citizen attitudes (secondary outputs); and to process measures such as performance, efficiency, cost-effectiveness, safety, and morale.

3. <u>Assessing performance and effectiveness</u>. One assigned task was to determine the range of performance and effectiveness among and across specialized patrol families. This proved impossible for the following reasons:

The data were not comparable across projects due to the lack of standardized measures

- . Serious flaws in the evaluation designs hindered any definitive conclusions. The most serious flaws were:
 - . Failure to use an adequate comparison group
 - . Failure to control for historical changes in project operations
 - Failure to account for the effects of units other than the specialized patrol on target crimes
 Inadequate study of displacement

Given these problems, the question arose as to how tentative conclusions could be drawn regarding the performance and effectiveness of the patrols under study. The solution to this dilemma was tied to the criteria and ratings for success and failure.

4. <u>Assessing success and failure</u>. A success scale was devised which was composed of three ratings: Success, Probable Success, and Qualified Success. The first rating represents the highest level of success; it indicates a rather high level of performance and/or effectiveness as confirmed by an informational source rated rather high in reliability. The Probable Success and Qualified Success ratings, respectively, represent decreasing levels of

INTERVENING VARIABLES AFFECTING SPECIALIZED PATROLS

Under Department Control	Not Under Department Control			
Funding Level (in part)	Funding Level (in part)			
Planning . Goal Setting	Community Input into Planning Societal Changes			
 Crime Analysis Organization of Patrol Deployment Practices Manpower Allocations Recruitment/Selections Criteria 	. Unemployment . Criminal Organization Changes Procedures of Courts, Prosecutors, Etc.			
Training	Relations of Police to Other Parts of Criminal Justice System			
Coordination	Citizen Reporting of Crimes			
Monitoring	Community Attitudes Toward Patrol, PD			
Span of Control Police-Community Relations Efforts	SES, Size & Other Characteristics of Target Areas/Persons			
Police Relations with Other Parts of Criminal Justice System	Characteristics of Criminals Strategies Used by "Target" Criminals			
Presence of Non-Patrol in Target Area	Media Coverage			
"Behavior" of Patrol				
Cooperation with Patrol Team				
Cooperation Between Patrol & Other PD Units				
Evaluation				

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performance and/or effectiveness and/or decreasing levels of informational reliability. The failure scale was devised in the same manner and consists of three ratings: Failure, Probable Failure, and Qualified Failure. An Unknown category was applied whenever there were no data or where data were uninterpretable because of insufficient information.

Attempts to base the rating procedures on established standards (e.g., quantitative rates) were considered but proved inappropriate and invalid, especially in light of the poor quality of the data base. Nor could one consider for rating only those projects whose evaluations were rated medium to high on experimental internal and external validity factors since this criterion would have left few projects to rate. Further, there were systems considerations which fit poorly with stringent evaluation criteria. For example, the Houston S.W.A.T. team did not have a particularly outstanding arrest rate and its budget was extremely high. Using evaluation criteria alone, this unit would probably be rated a failure on some dimensions. Yet a site visit and other data indicated that this unit was considered important to the department. It was established to handle a very specific and difficult task--barricade and hostage cases. Since these cases occurred infrequently, the unit spent much of its time supplementing the work of other units--work that could have been done by less specialized personnel. Hence, its arrest performance was not outstanding. The needs of the department and the objectives of the unit tempered the ratings so that a Qualified Success rather than a Failure rating on a specific activity was generally applied.

The Houston case illustrates how evaluation conclusions could be at odds with the realities and, perhaps, political considerations faced by police departments. Police departments are answerable to the public and under the scrutiny of public officials. Citizen demands are part of the considerations departments must face. Thus, it was felt that success or failure could not be defined solely in terms of an evaluators' determination of some aspect of performance and effectiveness. It was felt, however, that critical resource allocations should rest on sound evaluations as well as considerations relating to public welfare and political issues. All these issues were taken into account in the ratings.

Several methods were used to judge success and failure. These are described briefly below.

a. Assessment of expert opinion. Success/Failure ratings using expert opinion data were highly related to the reliability ratings given to this informational source. A Success rating was given whenever expert opinion was rated high on reliability criteria. Probable Success applied whenever this source received a medium reliability rating. A low rating on reliability led to a Qualified Success rating. The criteria for Failure ratings were the same as those for Success ratings.

b. Attainment of objectives. This measure was considered a questionable indicator of success or failure despite the fact that evaluators encourage projects to set specific objectives that can be cast in quantifiable and measurable terms. While it is true that objectives framed in quantifiable terms can simplify measurement and the interpretation of findings, the practice can also load the results. For example, the attainment of a 5 percent reduction in the target crime would meet the objective of a 5 percent reduction in the crime. The attainment of a 4.9 percent reduction in the target crime would not meet the objective. To call such a project a failure, obviously, would be ludicrous. Further, some objectives may be unrealistic (e.g., a 60 percent increase in convictions) if the resources allocated to the project are insufficient for attaining a stated objective or the objective attainment is not completely under the control of the project. Or, consider still another case. A project's target area shows an increase in a target crime when the objective has been to reduce the target crime. By the criterion of objectives attainment, this project is clearly a failure. Yet, how does one judge it when its target area shows only a slight crime increase and adjoining areas show a high increase and there is no evidence that the specialized patrol has displaced crime to these areas? To rate this last case a total failure seems unjust and unrealistic.

Such examples should suffice to illustrate the stated objections to using objectives attainment as a sole criterion for judging the success or failure of a project. However, ratings of objectives attainment were made. A Success rating applied whenever these data were based on a comparatively adequate evaluation and/or were supported by field data. A Probable Success rating applied if the evaluation was considered only fairly adequate and/or the raw data were unsupported by field data or an evaluation. A Qualified Success rating was given if the data were contradictory (e.g., if different results were obtained from different evaluators). Failure ratings were based on the same criteria.

c. <u>Amount of change</u>. The amount of change effected by a patrol on a specific activity was considered a more relevant measure of success or failure. Using this measure, one does not simply ask: Did the project reduce crime and attain its stated objective? Rather, one asks: To what extent was crime reduced? The criteria for these success ratings appear in Table II-3; those for failure ratings appear in Table II-4.

d. <u>Performance and effectiveness indicator ratings</u>. Ratings were also given to individual activities. These included process measures (efficiency, cost-effectiveness) and primary outputs (arrests, clearance, conviction, crime reduction). Table II-5 presents the criteria for rating these individual activities in terms of success or failure.

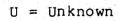
e. <u>Overall ratings</u>. The above indicators of success and failure were applied to each project within a family. The ratings also were used in an additive fashion to provide some overall ratings of each family type. That is, all Success and Failure ratings for a given activity were added together in order to show the percentage of Success, Failure, and Unknown ratings among and between families. In addition, another overall rating was used which permitted a gross assessment of each type as Success, Probable Success, or Qualified Success. These overall ratings (like all the ratings) should be viewed with caution because of the questionable data base and the limited comprehensiveness of some evaluation measures.

C. Amassing a Tentative Knowledge Base and Identifying Gaps

From the various tasks undertaken in this study, it was apparent that available information would not yield a definitive, final statement on specialized patrols. The data were not only too sparse but also of questionable reliability, problems that will be elaborated upon more fully in Chapter IV. Two possibilities

SUCCESS RATINGS: AMOUNT OF CHANGE

Criteria Rating S = Success1. Amount of change is statistically significant in the desired direction PS = Probable Success 1. Amount of change appears high; no statistical tests have been performed Amount of change is high 2. and statistically significant but data include combined output of specialized patrol and nonspecialized patrol Amount of change is QS = Qualified Success 1. fairly low; no statistical tests have been performed Two or more evaluations 2. draw different conclusions from same data/project (e.g., one shows positive change, one negative or no change); rating is based on most adequate evaluation(s) 3. Change not in the desired direction, but performance/ outcome higher than that



 No data; data uninterpretable because of inadequate comparison criteria

for nontarget area and/or nonspecialized patrol

FAILURE RATINGS: AMOUNT OF CHANGE

F = Failure

PF = Probable Failure

QF = Qualified Failure

 Amount of change is not statistically significant in the desired direction; adequate test
 Amount of change not in desired direction and performance/outcome poorer than nontarget areas/nontarget specialized patrol; no statistical tests performed

 Amount of change is not statistically significant; not very adequate test

1. Project performance/ outcome appears to remain almost constant (i.e., only slight change in either direction); no statistical tests performed; rating based on most adequate evaluation(s) where results conflict

U = Unknown

No data; data uninterpretable because of inadequate comparison criteria

1.

SUCCESS/FAILURE RATINGS: INDIVIDUAL ACTIVITIES--PERFORMANCE AND EFFECTIVENESS

Rating

- S = Success F = Failure
- PS = Probable Success PF = Probable Failure
- QS = Qualified Success QF = Qualified Failure

U = Unknown

Criterion

- 1. Based on comparatively adequate evaluation
- Based on adequate raw data supported by IHRR interview data and/or evaluation
- Based on only fairly adequate evaluation
- Based on adequate raw data; unsupported by IHRR interviews and/or evaluation
- Project performance/ outcome on one dimension not consistent across information sources, rating is based on most reliable information; or measures contradicted by other data (e.g., project shows crime reduction but probable displacement)
- No data; data uninterpretable because of inadequate comparison criteria

existed: (1) to bypass any conclusionary statements and concentrate only on delineating important deficiencies in the knowledge base or (2) to establish some criteria for inclusion and exclusion of material from a tentative set of conclusions. The latter course was chosen in the belief that a tentative knowledge base could be useful to law enforcement personnel.

The criteria for including and excluding descriptive and analytic data from a tentative knowledge base were: consistency (i.e., characteristics that appeared frequently in the data); crucial differences between project families; and important relationships between different success and failure indicators. To identify crucial gaps in the knowledge base, data related to each variable in the systems model (Figure I-1) were scrutinized, together with important intervening variables (Table II-2) that might affect specialized patrol operations. In judging the relative importance of all gaps, each gap was viewed in terms of its relevance to the testing of the assumptions underlying the existence of each patrol family. Crucial study design problems and other factors were identified also in order to pinpoint the reasons for major gaps in knowledge.

III. ASSESSMENT OF PROJECT FAMILIES

The methodologies described in Chapter II were used to assess and compare the three project families. This assessment is summarized in this chapter in four different sections:

- . Part 1--Low Visibility Patrols
- . Part 2--High Visibility Patrols
- . Part 3--Combined High/Low Visibility Patrols
- . Part 4--Comparison of Project Families

The projects under study are listed by name and location in the first three sections and identified in the accompanying tabular data by their location.

Part 1

Low Visibility Patrois

The eight patrols selected for study in the Low Visibility family are:

- . Street Crime Unit, New York, New York
- . City-Wide Anti-Crime Unit, Boston, Massachusetts
- . Tactical Operations Unit, Nashville, Tennessee
- . Old Clothes Unit, Memphis, Tennessee
- . Vehicle Theft Crime Specific Abatement Project, San Francisco, California
- High Incidence Target (HIT) Project, Henrico County, Virginia
- . Strategic Target Oriented Project, Miami, Florida
- . Tact II Alarm System Program, Birmingham, Alabama

Seven of these patrols rely heavily on a civilian dress tactic (one also uses mechanical devices) and one is basically a mechanical devices unit backed by traditional patrol.

A. The Knowledge Base: Accuracy and Reliability

Of the eight Low Visibility patrols, only those in New York, San Francisco, and Henrico County had been formally evaluated. Crime figures were provided by three other departments (Boston, Miami, and Birmingham) and expert opinion data by all but the Henrico County project. This combined knowledge base cannot be considered highly accurate or reliable, as indicated by the reliability ratings presented in Table III-1.

LOW VISIBILITY PATROLS: RELIABILITY RATINGS OF INFORMATIONAL SOURCES

CRITERION	RELIABILITY RATING	NUMBER OF PROJECTS
EVALUATIONS		
Number of Measures	Medium	3
Relevancy of Measures	Medium	3
Adequacy of Design: Internal Validity (experimental criteria)	Low	3
Adequacy of Design: External Validity (experimental criteria)	Low	3
Accuracy of Data Base	Low Medium	2
Appropriateness of Statistical Tests	Low Medium	2 1
Tests Hypotheses (assumptions)	Low	3
Measures Objectives	High Low	2 1
CRIME FIGURES	Low	3
EXPERT OPINION	Low Medium High	1 2 4

Further, only 43 percent of the objectives set for these projects had ber even roughly assessed, despite the fact that most objectives were cast in measureable form (see Table III-1). Nor was there any real test of the assumptions upon which the Low Visibility Patrols are based.

B. Ratings of Success and Failure

The following subsections summarize the tentative assessment of the success and failure of the Low Visibility projects on selected measures. Numerical and descriptive data, as well as the ratings of these data, are included.

1. Attainment of objectives. Table III-2 shows the types of objectives set by the Low Visibility projects and the number of objectives attained. Considering only the ratings of evaluations/crime figures, these patrols failed to attain 14 percent of their objectives and succeeded in attaining one third; however, over half of the success ratings fell within the Probable

LOW VISIBILITY PATROLS: ATTAINMENT OF OBJECTIVES

PROJECT	OBJECTIVE	MET	UNMET	UNKNOWN	RATING
NEW YORK	QUALITY ARREST PUBLIC SAFETY PUBLIC RESPECT	EVAL. CF		X	S U QS
BOSTON	QUALITY ARREST CRIME REDUCTION 60% CONVICTION RATE CITIZEN SAFETY CITIZEN SUPPORT	CF EO CF EO EO			PS (S) PS (S) (S)
NASHVILLE	REDUCE RESIDENTIAL BURGLARY			X	U
MEMPHIS	REDUCE CRIME	EO			(PS)
SAN FRANCISCO	REDUCE VEHICLE THEFT 5% INCREASE RECOVERIES 5% DIVERT JUVENILES FROM CJS	EVAL.* EVAL.	EVAL.		PS F S
HENRICO CO.	STABILIZED COMMERCIAL ROBBERIES REDUCE COMMERCIAL BURGLARIES 10%		EVAL. EVAL.		F
MIAMI	REDUCE ROBBERIES 1.5% INCREASE ARRESTS 2.5% INCREASE CONVICTIONS 5.0%	EO EO EO			(S) (S) (S)
BIRMINGHAM	INCREASE ROBBERY ARRESTS INCREASE CONVICTION RATE PUBLIC SAFETY	CF EO EO			S (S) (S)

KEY:

EVAL. = Evaluation data EO = Expert opinion CF = Crime figures (and other raw data) "Expert Opinion" ratings appear in parentheses. *

Data of questionable validity.

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Success (PS) and Qualified Success (QS) range. Looking only at expert opinion ratings, these patrols achieved 43 percent of their stated objectives with no reported failures. (One half or more of all types of ratings fell into the Unknown category.)

2. <u>Amount of change</u>. A more stringent criterion of effectiveness is the amount of change effected by the Low Visibility projects. The ratings and the change data upon which they are based appear in Table III-3.

Looking only at evaluation/crime figure ratings, two projects were somewhat successful in reducing crime while one was not. Two were successful also in increasing arrests, and one was a failure. The addition of expert opinion accounts for 50 percent of the ratings shown in Table III-3. All experts cite positive results although three ratings fall into the Probable Success category because of a medium reliability rating of the expert opinion data.

Given so few hard data, no conclusive statements can be made about the ability of the Low Visibility projects to effect change. It is worth noting, however, that police personnel appear convinced that their patrols are effective change agents.

3. Efficiency, cost-effectiveness, and safety. The available data on the efficiency, cost-effectiveness, and safety of the Low Visibility projects appear in Table III-4. These data are rather incomplete and many of the measures are not very comprehensive. The best data come from the New York City project which appears to be efficient, safe, and probably cost-effective. The data also suggest that the San Francisco project may be cost-effective. The Henrico County project, on the other hand, appears rather costly; its mechanical device tactic appears especially nonproductive and costly. The two expert opinion ratings suggest that the Low Visibility tactics of Birmingham and Boston contributed to the safety of the projects' personnel.

4. <u>Performance and effectiveness</u>. The data in this subsection can often be classified as both process and primary output measures, in keeping with the systems model (Figure I-1). The data have not been so separated (i.e., into process vs primary output) in order to avoid repeating the same information in different sections. Again, numerical and descriptive material are presented with the ratings.

a. <u>Arrest performance and effectiveness</u>. The available data on arrest performance and effectiveness shown in Table III-5 suggest that two projects (Henrico County and San Francisco) were failures in this area. All other projects received at least a Probable Success rating though two ratings rest on expert opinion. The New York and Birmingham projects appear especially successful in effecting arrests of target criminals.

b. Clearance and conviction performance and effectiveness. Information on clearances and convictions is quite sparse. As shown in Table III-6, the majority of ratings on each of these measures falls into the Unknown category. However, only one Failure rating appears (for Henrico County). The New York City project, and the Boston project modeled after it, appear especially successful in effecting a high conviction rate.

LOW VISIBILITY PATROLS: SUCCESS AND FAILURE RATINGS ON AMOUNT OF CHANGE

PROJECT	TYPE/SOURCE	LOW VISIBILITY PATROL	COMPARISON/ CRITERIA	RATING
NEW YORK CITY	ARRESTS: EVAL	52% INCREASE	YR. PRIOR TO PROJECT	PS
	CRIME RED.: EVAL	PROBABLE RED. IN 27 OF 44 PRECINCTS	OVER 12 MO.	QS
BOSTON	CRIME RED.: EO	REDUCED		(S)
NASHVILLE	ARRESTS: EO	INCREASED		(PS)
MEMPHIS	ARRESTS: EO CRIME RED.: EO	INCREASED REDUCED		(PS) (PS)
SAN FRANCISCO	ARRESTS: EVAL CRIME RED.: EVAL	"VERY SLIGHT" INCREASE 12.3% RED., TARGET CRIME	YR. PRIOR TO PROJECT YR. PRIOR TO PROJECT	PF PS
HENRICO CO.	CRIME INCREASE: EVAL	34.0% INCREASE ROB., 28.0% INCREASE BURG. (TARGET AREAS)	7 MO PRIOR TO PROJECT (INC. HIGHER IN NON- TARGET AREAS: PROBABLE DISPLACEMENT)	PF
MIAMI	CRIME RED.: EO	REDUCED		(S)
BIRMINGHAM (ALARMSYSTEM)	ARRESTS: CF	8 IN 2 MO.	NONE IN NON- TARGET AREAS	PS
	CRIME RED.: EO	REDUCED		(S)

KEY: EVAL = Evaluation CF = Crime Figures EO = Expert Opinion Ratings of expert opinion appear in parentheses.

LOW VISIBILITY PATROLS: EFFICIENCY, COST-EFFECTIVENESS, SAFETY

PROJECT	TYPE/SOURCE	• TAB	COMPARISON/CRITERIA	RATING
New York City	Efficiency Man days per arrest: Evaluation	8.2 man days per felony arrest	Entire department average 162 man days per arrest	S
All Others	Unknown			U (n=7)
New York City	<u>Cost</u> Cost per conviction: Evaluation	\$100 per conviction	Based only on equipment cost	PS
San Francisco	Cost per vehicle theft arrest: Evaluation Cost per felony arrest: Evaluation Costper auto recovered: Evaluation			PS
Henrico Co.	Overall cost: Evaluation	"High costs, low resultsno arrests from use of \$25,000 alarm system"		F
All Others	Unknown			U (n=5)
New York City	Safety To unit: Evaluation	.02% injury rate, some rise due to use of decoy method		 S
Boston	To unit: Expert Opinion	Greatly reduced injuries to police		(S)
Birmingham	To unit: Expert Opinion	Alarm system contributes to officers' safety		(PS)
All Others	Unknown			U (n=5)

NOTE: Ratings of expert opinion appear in parentheses.

LOW VISIBILITY PATROLS: ARREST PERFORMANCE AND EFFECTIVENESS

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATING
New York City	Increases: Evaluation	Overall arrests up 52%; grand larceny arrests up 1600%; robbery arrests up 11%	Compared to crime figures the year before LVP	S
Boston	Average number per month: Crime Figures (largely robbery & larceny).	Average 142 per month		PS
Nashville	Increase: Expert Opinion	LVP personnel make more arrests than traditional patrolmen		(PS)
Memphis	Increase: Expert Opinion	Arrests have increased with use of LVP		(PS)
San Francisco	Increase: Evaluation	"Very slight increase"	Compared to year before LVP	PF
Henrico Co.	Average felony arrests per officer: Evaluation	3.6 felony arrests per man over a 7-month period		F
Miami	Rate: Crime Figures	22% arrest rate (arrests/ offenses)		PS
Birmingham 1	Number: Crime Figures	8 "in progress" robbery arrests in two months	No "in progress" arrests in nontarget areas	S

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NOTE: Ratings of expert opinion appear in parentheses.

LOW VISIBILITY PATROLS: CLEARANCE AND CONVICTION PERFORMANCE/EFFECTIVENESS

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATING
San Francisco	<u>Clearances</u> Increase: Evaluation	A "probable" increase	Compared to year before LVP	PS
Henrico Co.	Rate: Evaluation	5.0% robbery clearance rate; 11.0% burglary clearance rate	Over 7-month period	F
Miami	Rate: Crime Figures (robberies)	30.4% clearance rate for 3-month period	Over 3-month period	PS
All Others	Unknown			U (n=5)
New York City	<u>Convictions</u> Rate: Evaluation	Overall rate: 88.0% Robbery rate: 76.0% Grand larceny rate: 95.0%	Entire PD, 56% None None	s
Boston	Rate: Crime Figures	Overall rate: 89.0%		S
Nashville	Increase: Expert Opinion	"Usually attain objective of 5% increase"		(PS)
All Others	Unknown			U (n=5)

NOTE: Ratings of expert opinion appear in parentheses.

c. <u>Crime reduction and other activities</u>. Table III-7 presents crime increase/decrease figures for seven Low Visibility patrols; four ratings rest solely on expert opinion. Among these seven projects, only one (Henrico County) appeared to be unsuccessful in reducing target crimes, if one considers the very general statements reported by the experts. Table III-7 also suggests that the San Francisco project was generally successful in other activities such as investigations, saturation sweeps, and diversion of juveniles from the criminal justice system.

5. <u>Comparison of success/failure criteria</u>. Figure III-1 graphically depicts the percentage of combined success, combined failure, and Unknown ratings for the different criteria discussed in the previous sections. The crosshatched portions in various bars represent the percentage of ratings attributable to expert opinion; these are also roughly equivalent to the Unknown ratings for the combined evaluation/crime figures informational sources. What these portions of the graphs actually show, then, is the extent to which the ratings are based or descriptive, unvalidated information.

The evaluation/crime figure data do suggest that one or two Low Visibility projects could be considered failures on all criteria except efficiency and convictions. These are two measures, however, where most ratings fall into the Unknown category.

If one looks at the most complete evaluation/crime figure ratings, the Low Visibility projects appear most successful in arrest effectiveness; about one half received success ratings, and the remaining ratings were equally divided between the Failure and Unknown categories. However, if one includes expert opinion, these projects appear most successful on two other criteria: amount of change and crime reduction.

How successful is another question. Table III-8 shows that the highest percentage of ratings fell into the Probable Success category regardless of the informational source considered. Since these ratings are related to the reliability ratings of the informational sources, it seems possible to conclude that these projects, in general, could be considered Probable Successes. The Henrico County project appeared to be an exception and accounts for a majority of the failure ratings. Our conclusions about the Low Visibility projects, of course, are quite tentative because of the paucity of good evaluative data.

TABLE III-8

LOW VISIBILITY PATROLS: PERCENTAGE OF DIFFERENT RATINGS ON SELECTED MEASURES

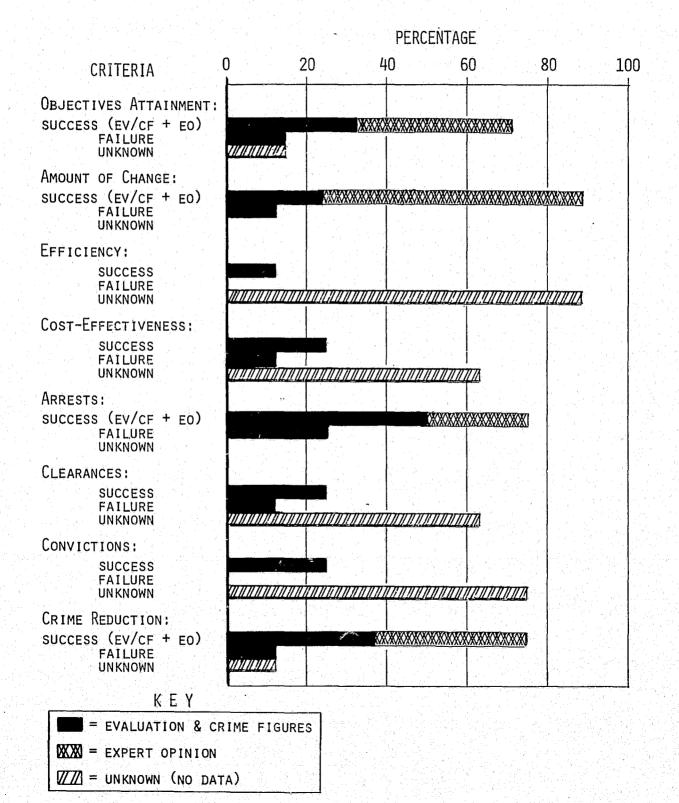
RATING	EVALUATIONS/ CRIME FIGURES	EXPERT OPINION
Success	24%	46%
Probable Success	44%	54%
Qualified Success	4%	— <u> </u>
Failure	12%	
Probable Failure	16%	

LOW VISIBILITY PATROLS: CRIME REDUCTIONS AND OTHER PERFORMANCE MEASURES

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATIN
	Crime Reduction			
New York City	In target precincts: Evaluation	Reduction occurred in 27 out of 44 precincts (low confidence level statistically)	Measured over 12-month period	PS
Boston	General: Expert Opinion	"Reduced"	Service and the	(5)
Nashville	Unknown			U
Memphis	General: Expert Opinion	"Reduced"		(PS)
San Francisco	Percent reduction: Evaluation	Target crime reduced 12.3%	One year before/after LVP	S
Henrico Co	Level of increase: Evaluation	Robbery up 34% in target areas; burglary up 28% in target areas	Increases were higher in nontarget and control areas	PF
Miami	General: Expert Opinion	"Usually met objective of reducing crime"		(S)
Birmingham	In target area: Expert Opinion	"Robbery dropped sharply in target areas"	Increased in non-target areas	(S)
	Other			
San Francisco	Investigations: Evaluation Saturation sweeps: Evaluation Inspection of businesses: Evaluation Recovery of stolen autos:	"Successful" "Successful" "Unsuccessful"		PS
	Evaluation Diversion of Juveniles: Evaluation	"Poor recovery rate" 81 of 94 diversions successful	Before/after project 94 diversions of 531 contacts	

NOTE: Ratings of expert opinion appear in parentheses.

FIGURE III-1 SUCCESS AND FAILURE RATINGS: LOW VISIBILITY PATROLS



6. <u>Community/department impact</u>. Table III-9 shows the data on displacement and community attitudes (secondary outputs).

As can be seen, statistical tests suggested some displacement in two sites, none in another. These, however, were not very adequate tests. For example, displacement in the New York City projects was probably attributable to the presence of a uniformed unit rather than a civilian dress unit under study; the tests did not control for this possibility.

The other available data suggest that the Low Visibility patrols were favorably perceived by their community, that morale was good within the units, and the Low Visibility patrols had no adverse effects upon the morale of the departments.

7. Insights into success and failure. The field data, as well as evaluation reports, suggest that there are several explanations for part of the successes of the Low Visibility patrols. These were: (1) good planning and cooperation with other units (especially in Boston and New York), (2) building strong cases that lead to convictions (Boston, Birmingham, New York), (3) use of exceptional personnel (seven projects), (4) above-average job satisfaction and morale (four projects), (5) significant financial support for the unit (four projects), (6) intensive training (three projects), (7) good use of equipment (Birmingham and New York). Failures, on the other hand, appeared related to low productivity, especially when productivity was compared to costs and/or man hours expended.

Part 2

High Visibility Patrols

The five High Visibility patrols selected for the study were:

. High Incidence Target (HIT) Project, Alexandria, Virginia

Uniformed Anti-Crime Tactical Unit, Dallas, Texas

Concentrated Crime Patrol, Cleveland, Ohio

Mobile Emergency Response Group, San Jose, California

Transit Authority Police Department Patrol Division, New York, New York

A. The Knowledge Base: Accuracy and Reliability

Of these five projects, three were formally evaluated by private firms. Two (those in Dallas and San Jose) were evaluated by their department, though complete documentation of these studies could not be obtained. Although the documentation for these High Visibility projects is more complete than that for the Low Visibility projects, the existing data were not very comprehensive nor were they rated very high in reliability (see Table III-10). However, 64 percent of the objectives set for the High Visibility patrols received some assessment, though the assumptions upon which these projects were based remained essentially untested.

LOW VISIBILITY PATROLS: SECONDARY OUTPUTS--IMPACT ON COMMUNITY

PROJECT	TYPE/SOURCE	IMPACT
	DISPLACEMENT	
NEW YORK	DISPLACEMENT: CF	PROBABLE DISPLACEMENT
SAN FRANCISCO	DISPLACEMENT: EVAL (STATISTICAL TEST)	PROBABLE DISPLACEMENT
HENRICO CO.	NO DISPLACEMENT: EVAL (STATISTICAL TEST)	NO PROOF OF DISPLACEMENT
	CITIZEN ATTITUDES	
NEW YORK	CIVILIAN COMPLAINTS, REQUESTS FOR SERVICE; PROJECT ADOPTION: EVAL; EO	FAVORABLE: 9 COMPLAINTS IN FIRS 6 MONTHS; CITIZENS REQUEST LVP SERVICES; PROJECT ADOPTED ELSEWHERE
BOSTON	COMMUNITY SUPPORT: EO	FAVORABLE: BUSINESSES, CITIZENS MEDIA SUPPORTIVE
NASHVILLE	CITIZEN PERCEPTIONS & COMPLAINTS: EO	FAVORABLE: DECREASE IN CITIZEN COMPLAINTS, GOOD POLICE- COMMUNITY RELATIONS
HENRICO CO.	CITIZEN ATTITUDES: EVAL	POSITIVE CITIZEN ATTITUDES
MIAMI	ATTITUDES OF CRIMINALS: EO	CRIMINALS FEARFUL OF LVP
BIRMINGHAM	BUSINESS ATTITUDES: EO	BUSINESS HAS MORE CONFIDENCE IN POLICE, FEEL SAFER BECAUSE OF ALARM SYSTEM

KEY: EVAL = Evaluation EO = Expert Opinion CF = Crime Figures

HIGH VISIBILITY PATROLS: RELIABILITY RATINGS OF INFORMATIONAL SOURCES

CRITERION	RELIABILITY RATING	NUMBER OF PROJECTS
EVALUATIONS	NATING	FRODECIS
Number of Measures	Low Medium	2 2
Relevancy of Measures	Low Medium	2 2
Adequacy of Design: Internal Validity (experimental criteria)	Low Medium	3 1
Adequacy of Design: External Validity (experimental criteria)	Low Medium	3 1
Accuracy of Data Base	Low Medium	3 1
Appropriateness of Statistical Tests	Low High	3 1
Tests Hypotheses (assumptions)	Low	5
Measures Objectives	Low Medium	3
CRIME FIGURES	Low	2
EXPERT OPINION	Low	2

1. <u>Attainment of objectives</u>. Table III-11 shows the 22 objectives of the High Visibility patrols and the number that were and were not met. Obviously, if one judged these projects by this criterion alone, they would generally be judged as failures. Only about 18 percent of the objectives were met while 64 percent were not met (if one includes expert opinion). However, many of the failure ratings applied to one project (Alexandria) which has subsequently undergone changes and reportedly now enjoys a much greater level of success. This apparent picture of failure may be somewhat misleading. Except for the Alexandria project (at the time of the survey), all departments and city officials seemed pleased with these projects.

2. <u>Amount of change</u>. The existing data suggest that three High Visibility patrols effected some positive change over time. As Table III-12 shows, these changes were not always as great as those specified in a project's objectives, nor were the success ratings particularly high. They do suggest, however, some positive changes in crime reduction, arrests, and clearances.

HIGH VISIBILITY PATROLS: ATTAINMENT OF OBJECTIVES

PROJECT	OBJECTIVE	MET	UNMET	UNKNOWN	RATING
ALEXANDRIA	25% REDUCTION IN BURGLARY 10% REDUCTION IN ROBBERY ONE AREA; 25% ANOTHER INCREASE ARRESTS INCREASE CLEARANCES INCREASE CITIZEN PARTICIPATION (ALL OBJECTIVES)		EVAL EVAL EVAL EVAL EO	X	F F U F (QF)
DALLAS	DEVELOP & IMPLEMENT INNOVATIVE TACTICAL METHODS REDUCE IMPACT CRIMES IN 5% IN 2 YRS., 15% IN 5 YRS. 40% REDUCTION IN OFFENSES IN 10 DAYS 20% REDUCTION IN OFFENSES FOR 30 DAYS 500 IMPACT ARRESTS 300 CLEARANCES RECOVER \$100,000 IN STOLEN PROPERTY		EO* EO* EO* EO*	X N/A X	(U) U (QF) (QF) (QF) (QF) (QF) (U)
CLEVELAND	REDUCE CRIME 5% IN 2 YRS., 20% IN 5 YRS. INCREASE APPREHENSIONS INCREASE CLEARANCES DECREASE RESPONSE TIME	EVAL** EVAL		N/A X	U PS S U
SAN JOSE***	REDUCE PART 1 OFFENSES APPREHEND FELONS PROVIDE RESERVE FOR EMERGENCIES	CF		X	PS U
NEW YORK TAPD	REDUCE (NIGHT) ROBBERIES, TOLL BOOTHES & PASSENGERS	EVAL			S

- EVAL = Evaluation; EO = Expert Opinion; CF = Crime Figures; N/A = not applicable since insufficient time for evaluation. "Expert Opinion" ratings are shown in parentheses. KEY:
 - * Supposedly based on an evaluation ** Questionable data
- *** Excludes some subobjectives

HIGH VISIBILITY PATROLS: SUCCESS AND FAILURE RATINGS ON AMOUNT OF CHANGE

PROJECT	TYPE/SOURCE	HIGH VISIBILITY PATROL	COMPARISON/ CRITERIA	RATING
DALLAS	RED. IN PROBLEM AREAS:** EVAL, CF	22 PROBLEMS, 10 DAYS	SAT. PATROL: -11.5%, 26 PROBLEMS, 10 DAYS -18.4%, 30 DAYS	QS QS
CLEVELAND	CLEARANCES : EVAL	+16.0%	OVER PREVIOUS YEAR	PS
NEW YORK TAPD	ARRESTS: EVAL (TOLL BOOTH ROBBERIES) (PASSENGER ROBBERIES)	+0.1% -8.6%*	HVP: 2 DIFFERENT YEARS	QS QS*
	RED. IN FELONY RATE: EVAL	-2/3 DURING HOURS OF SAT. PATROL	INCREASED DURING HOURS OF NORMAL PATROL ONLY	PS

KEY: EVAL = Evaluation CF = Crime Figures

*Although project performance decreased one year, a "Qualified Success" rating is given because these arrests have increased since . the specialized patrol was implemented.

** Problems undefined--data reportedly based on an internal evaluation; IHRR has only some crime figures from this study.

3. Efficiency and cost-effectiveness. Table III-13 presents the few available data on the efficiency and cost-effectiveness of High Visibility patrols; all fall within the Probable Success and Qualified Success categories. The only cost measure available shows a rather high cost per felony deterred (\$35,000); this project received a Qualified Success rather than a Failure rating on this measure only because the Department and City appeared to feel this operation was important for public safety and should be funded.

4. Performance and effectiveness. Again, primary output and process measures are presented together, based on the ratings of available data.

a. Arrest performance and effectiveness. Table III-14 shows the available data on the arrest activity among four High Visibility patrols. The Alexandria project appears again as a Failure; another three as a Probable Success or Qualified Success. The incompatable form in which the data are presented defy any general conclusions regarding performance level.

b. <u>Clearances</u>. Only two projects have any information on clearances: one presents the data in terms of numbers, the other by percentages. Again, we can only give a Probable Success and Qualified Success rating (see Table III-15).

c. <u>Crime reduction and other activity</u>. Some evaluative data are reported for four High Visibility patrols, as shown in Table III-16. The ratings for four projects indicate Qualified Success in crime reduction.

The Other category shown in Table III-16 lists two activities undertaken by the Alexandria project: recovery of stolen property and security checks. The first is rated as a Qualified Success, the latter as a Failure.

5. <u>Comparison of success/failure criteria</u>. Figure III-2 graphically depicts the combined success, combined failure, and Unknown ratings on the various measures under study.

The large percentage of Unknown ratings for amount of change, efficiency, cost-effectiveness, and clearances makes difficult any assessment of these measures. The available data more clearly point to success at deterrence--the prime mission of these patrols--and to a reasonable degree of success at apprehension.

Again, the question: How successful were these projects overall? According to the percentage of ratings for each success and failure category, as shown in Table III-17, the projects appear to be at least a Qualified Success.

TABLE III-17

HIGH VISIBILITY PATROLS: PERCENTAGES OF DIFFERENT RATINGS ON SELECTED MEASURES--EVALUATIONS/CRIME FIGURES

RATING	PERCENT
SUCCESS	<u></u>
PROBABLE SUCCESS	32
QUALIFIED SUCCESS	63
FAILURE	5
PROBABLE FAILURE	
QUALIFIED FAILURE	

HIGH VISIBILITY PATROLS: EFFICIENCY AND COST-EFFECTIVENESS

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
Cleveland	<u>Efficiency</u> Arrests: Evaluation (many arrests are for non-target crimes)	HVP accounted for 19% of arrests while representing only 8% of the "arresting" force	HVP was twice as effective as tactical unit in arrest production	PS
San Jose	Arrests per man hour: Evaluation Percent of total felony arrests: Evaluation	4.3 felony arrests per 200 man hours HVP accounted for 35% of all PD felony arrests	None	PS
New York TAPD	<u>Cost-Effectiveness</u> Felonies deterred: Evaluation	It cost \$35,000 per felony deterred	None	QS
All Others	Unknown			U (n=3)

HIGH VISIBILITY PATROLS: ARREST PERFORMANCE AND EFFECTIVENESS

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
Alexandria	Number of arrests: Evaluation	9 burglary arrests in 6 months in target areas where patrol time was 28% greater	54 burglary arrests in 6 months in nontarget areas	F
Dallas	Not presented			U
Cleveland	Percent of IMPACT arrests by HVP: Evaluation	HVP made 19% of all IMPACT arrests, while representing 8% of the "arresting force" and 15% of patrol man hours	HVP appeared twice as effective in IMPACT arrest productionwhen compared to the tactical unit	PS
San Jose	Percent: Evaluation	HVP accounted for 34.9% of all felony arrests	Compared to rest of PD over 3-month period	QS
New York Transit Authority	Patrol arrest rate: Evaluation Toll booth robberies Passenger robberies	1970 = 3.2%* 1971 = 3.3%* 1970 = 21.1%* 1971 = 12.5%*	Compares favorably with city police & national averages	

*Includes all patrols, but HVP represented about two thirds of patrol manpower.

HIGH VISIBILITY PATROLS: CLEARANCE PERFORMANCE AND EFFECTIVENESS

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
Alexandria	Percent: Evaluation			
	Burglary Robbery	15.0% in target areas 16.5% in target areas	9.3% in remainder of city 19.5% in remainder of city	QS
Cleveland	Number of IMPACT crimes cleared: Evaluation	l6.0% increase over a similar period in pre- vious year	Compared to the number cleared in 1972	PS
All others	Unknown			U

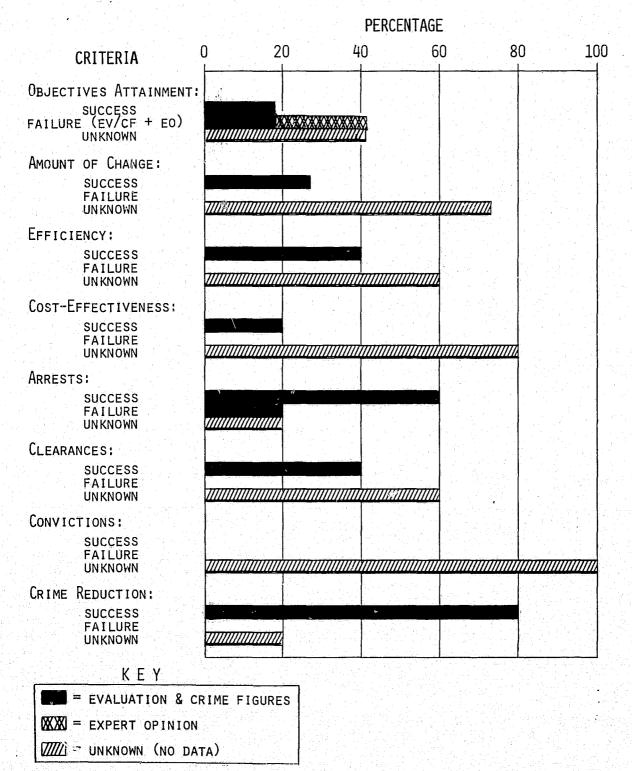
HIGH VISIBILITY PATROLS: CRIME REDUCTION AND OTHER ACTIVITIES

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
Alexandria	<u>Crime Reduction</u> Percent increase: Evaluation			QS
	Burglaries: Robberies:		23% increase in rest of city in 7 months 38% increase in rest of city in 7 months	
Dallas	Percent reduction in "problems":* Crime Figures	<pre>18.4% reduction on 22 "problems" for 10 days and 22.1% for 30 days</pre>	Saturation patrol showed 11.5% reduction on 26 "problems" for 10 days and 18.4% for 30 days	QS
Cleveland	Percent reduction: Crime Figures	12% reduction in IMPACT crimes, effects of HVP not separated from numerous other programs		QS
San Jose	Unknown			U
New York Transit Authority	Average number of felonies: Evaluation	Felony rate decreased by 2/3 during hours of HVP saturation	Felonies increased during hours of normal patrol only	QS
Alexandria	<u>Other</u> Recovered property: Evaluation Number of security surveys: Evaluation	Generally "high" recovery rate Only 17 residences and 20 businesses surveyed in 7 months		ΩS F

*"Problems" are undefined; data reportedly based on an internal evaluation.

FIGURE III-2

SUCCESS AND FAILURE RATINGS: HIGH VISIBILITY PATROLS



6. <u>Community/department impact</u>. Table III-18 shows the few data available on secondary outputs. Some negative impact is suggested by the displacement phenomenon reported in two sites. Citizen attitudes, on the other hand, appear quite favorable. Not shown are a few findings regarding morale. An evaluation of the Alexandria project (prior to program changes) found that morale was only low to average among the specialized personnel and that coordination was poor between this unit and other units of the Department. The departments in Dallas, New York City, and San Jose were reportedly pleased with their specialized patrols and high-ranking city officials publicly praised the New York and Cleveland projects.

7. Insights into success and failure. The reasons for the success of this group of patrols were partly the same as those cited for the Low Visibility projects: sufficient funding (four projects); selection of high performers (two projects); and reasonably good planning (all projects). Failures, on the other hand, seemed related to the use of volunteer overtime personnel (Alexandria) and, perhaps, the lack of specialized training in most projects.

Part 3

Combined High/Low Visibility Patrols

The eight High/Low Visibility projects selected for study were:

- Tactical Operations Unit, Greensboro, North Carolina; uniformed tactical (civilian dress)
- . High Incidence Target (HIT) Project, Portsmouth, Virginia; uniformed tactical, mechanical devices
- . Criminal Impact Program, Indianapolis, Indiana; uniformed tactical, (mechanical devices and civilian dress)
- . High Incidence Target (HIT) Project, Virginia Beach, Virginia; uniformed tactical, mechanical devices (civilian dress)
- . Special Weapons and Tactics (SWAT), Houston, Texas; civilian dress, uniformed tactical, mechanical devices
- Special Crime Attack Team (SCAT), Denver, Colorado; uniformed tactical (civilian dress and mechanical devices)
- . Burglary Abatement Program, San Francisco, California; civilian dress, uniformed tactical
- Strike Force Operations, Portland, Oregon; civilian dress, uniformed tactical, mechanical devices

Of the projects listed, five rely on all three tactics under study: uniformed tactical, civilian dress, and mechanical devices. Two utilize a uniformed tactical and civilian dress tactic. One relies on a uniformed tactical and a mechanical devices tactic. However, in three cases, the major emphasis is on a uniformed tactical tactic.

HIGH VISIBILITY PATROLS · IMPACT ON COMMUNITY

PROJECT	TYPE/SOURCE	IMPACT
	DISPLACEMENT	
ALEXANDRIA	DISPLACEMENT: EVALUATION	STATISTICS STRONGLY SUGGEST DISPLACEMENT
NEW YORK TAPD	DISPLACEMENT: EVALUATION	PROBABLY TEMPORARILY TO BUSES; SOME DAY HOURS ON SUBWAY
ALEXANDRIA	COMMUNITY ATTITUDES PUBLIC EDUCATION: EVALUATION	"MODALITY SUCCESSFUL" BUT PERHAPS REFLECTIVE OF LONG TERM POLICE- COMMUNITY RELATIONS
CLEVELAND	ATTITUDES OF PUBLIC OFFICIALS: EVALUATION	FAVORABLY IMPRESSED BY HVP
SAN JOSE	COOPERATIVE EFFORTS: EVALUATION	INTERFACE WITH FEDERAL, STATE & LOCAL PERSONNEL ON BOMBINGS
NEW YORK TAPD	ATTITUDES OF PUBLIC OFFICIALS: EVALUATION	CITY OFFICIALS CONSIDER HVP SUCCESSFUL

A. The Knowledge Base: Accuracy and Reliability

Of the eight High/Low Visibility projects selected for study, only two (Greensboro and Houston) have not been formally evaluated. Among the other six, there have been eight external and two internal evaluations. The Denver project was evaluated by two private firms and by the Department. The San Francisco project also was evaluated both internally and externally. The Portland project provides the only data from a victimization survey; it was evaluated also by the Oregon Law Enforcement Council. Both the Indianapolis and Virginia Beach projects were evaluated by private firms.

Complete documentation of all these studies could not be obtained. Nor did all final reports provide complete details on the methodologies used to evaluate these patrols. These factors compounded the difficulties of assessing the accuracy and reliability of the data.

Nevertheless, the reliability ratings for this group of evaluations was somewhat higher than ratings given to evaluations of other project families, though these evaluations, like most others, did not receive high ratings on the internal and external validity criteria. The other informational sources, as shown in Table III-19, received mostly low reliability ratings.

As in the case of the other patrol families, no real test was made of the assumptions underlying the existence of the High/Low Visibility patrols. However, some assessment was made of three fourths of the objectives set for this group of projects.

B. Ratings of Success and Failure

1. Attainment of objectives. Table III-20 shows the objectives set for the High/Low Visibility projects and the ratings of objectives attainment. Of the 16 objectives, 59 percent were attained, 16 percent were not attained. (An Unknown rating was given in one fourth of the cases.) This is the most successful record of objectives attainment among the project families under study.

2. <u>Amount of change</u>. There were 33 possible measures relevant to the amount of change indicator for the High/Low Visibility projects. These are shown in Table III-21. If one combines the different success and failure ratings (including the one rating of expert opinion), these patrols effected positive change in 18.5 (56 percent) of the areas and failed in only 3.5 (1 percent) of these areas. This group seemed particularly effective in increasing arrests and decreasing crime; the success level for these two areas was 78 percent.

3. Efficiency and cost-effectiveness. Table III-22 presents the available information on efficiency and cost-effectiveness measures for six High/Low Visibility patrols. Some data represent only the conclusions of evaluators; pertinent figures were not supplied.

A majority of the ratings applies to use of personnel, a tactic or a special method (e.g., informant's fund); and all these were rated in one of the success categories. The four failure ratings apply to the use of mechanical devices or costly equipment such as helicopters.

HIGH/LOW VISIBILITY PATROLS: RATINGS OF EVALUATIONS*

CRITERION	RELIABILITY RATING	NUMBER OF PROJECTS
EVALUATIONS		
Number of Measures	Low	5
	Medium	3
	High	2
Relevancy of Measures	Low	1
	Medium	4
	High	4
Adequacy of Design: Internal Validity (experimental criteria)	Low	10 .
Adequacy of Design: External		
Validity (experimental criteria)	Low	9
	Medium	1
Accuracy of Data Base	LOW	8
	Medium	2
Appropriateness of Statistical Tests	Low	1
	Medium	4
	High	2
Tests Hypotheses (assumptions)	Low	10
Measures Objectives	Medium	2
	High	8
CRIME FIGURES	Low	6
	Medium	2
EXPERT OPINION	Low	4

*The number of evaluations exceeds the number of projects.

HIGH/LOW VISIBILITY PATROLS: ATTAINMENT OF OBJECTIVES

PROJECT	OBJECTIVE	MET ·	UNMET	UNKNOWN	SUCCESS/ FAILURE RATING
GREENSBORO	REDUCE CRIME IN GENERAL, ESPECIALLY BURGLARY	EO			(QS)
PORTSMOUTH	SIGNIFICANT REDUCTION (MINI- MUM OF 10%) IN SPECIFIC TARGET CRIMES IN SHORT PERIOD	EVAL			PS
INDIANAPOLIS	REDUCE BURGLARY 20% INCREASE ARRESTS INCREASE CONVICTIONS	EVAL	EVAL EVAL		PF PS F
VIRGINIA BEACH	REDUCE BURGLARY 5% IN SHORT PERIOD	EVAL			S
HOUSTON	HANDLE HOSTAGE & BARRICADE CASES	CF			S
DENVER		CF,EVAL* CF,EVAL* EVAL			PS PS S
SAN FRANCISCO	REDUCE BURGLARY	EVAL**	EVAL**		S/F
PORTLAND	INCREASE ARRESTS 3%, 1 YR. REDUCE BURGLARY 60% PROVIDE CRIME ANALYSIS IN 24 HRS		EVAL***	X X	U PS U
	IMPROVE FORENSIC INVESTIGATIONS PROVIDE MANPOWER TO REDUCE			x	U
	TARGET CRIMES IN 30 DAYS	e di angana periodo ang fito a Periodo ang tanggan periodo ang tanggan Periodo ang tanggan periodo ang tanggan periodo ang tanggan periodo ang		X	Ŭ

KEY: EVAL = Evaluation; CF = Crime Figures; EO = Expert Opinion (EO rating appears in parentheses)

*Conflicting data and interpretations from evaluations.

**Met in first 6 months, not last 6 months.

***Crime increase shown by PD data, decrease shown by victimization survey.

HIGH/LOW VISIBILITY PATROLS: SUCCESS/FAILURE RATINGS ON AMOUNT OF CHANGE

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATI
Greensboro	Crime reduction: Expert Opinion	Reduced		(QS
Portsmouth	Crime reduction: Evaluation	28.1% decrease	Statistically significant compared to nontarget areas	s
Indianapolis	Arrests: Evaluation (residential burglary)	60.4% increase, target areas	Crime figures previous year	PS
	(business burglary)	59% increase, target areas	Crime figures previous year	PS
	Crime reduction: Evaluation (residential burglary)	Decreased 3%, target areas	Crime figures previous year (30% increase nontarget areas)	PS
	(business burglary)	Increased 6%, target areas	Crime figures previous year (20% increase nontarget areas)	QS
	Arrest/conviction rates: Evaluation	No statistically significant change (high conviction rate)		PF
/irginia Beach	Burglary arrests: Evaluation	290% increase	Crime figures previous year	PS
	Crime reduction: Evaluation	17.1% decrease	Crime figures previous year	PS
	Dispositions: Evaluation (cases offender found guilty of offense charged)	47.9% decrease	Crime figures previous year	Ď1
	(cases offender guilty of lesser charge)	145% increase	Crime figures previous year	Q
	Clearances	73.5% increase (98.8% made by H/LVP)	Crime figures previous year	5'
Denver	Crime reduction: Evaluation (burglary) (robbery)	38% decrease 21% decrease	Crime figures prev. yr., targ. area Crime figures prev. yr., targ. area	PS PS
	Technical crime searches: Evaluation	198% increase	Crime figures prev. yr., targ. area	PS
	Percent of burglary cases filed/ accepted prosecution	9.4% increase (high rate both years)	Crime figures previous year	P
	Clearances: Evaluation (burglary) (robbery)	38% increase, target area 11% increase, target area	First quarter City wide increase 31%, one year	Q: Q
San Francisco	Crime reduction: Evaluation	Burglary decline first 6 months; increase last 6 months		Q: Q1
Portland	Crime reduction: Evaluation Value property stolen: Evaluation	Declined (victimization survey) Increased (eval. reported crime) Increased 44-48.8%	Crime figures previous year	Q Q

7

NOTE: Ratings of expert opinion appear in parentheses.

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* = Exceptional rating; statistical significance not made, seems unrequired.

HIGH/LOW VISIBILITY PATROLS: EFFICIENCY AND COST-EFFECTIVENESS

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/ CRITERIA	RATING
Greensboro	Unknown			U
Portsmouth	Surveillance equipment: Eval. Helicopter patrol: Eval.	Costly, underutilized Costly85 calls, 13 arrests		PF PF
	Stakeouts: Eval. Fingerprint specialist: Eval.	Costly1 arrest per 76.5 man hours Costlyused on only 48 cases, 16.7% success ratio		QS QS
	Remote burglar alarms: Eval.	Unsatisfactory: returned to manufac- turer for repairs, changes. Costly.		F
Virginia Beach	Stakeouts: Eval. Surveillance equipment: Eval.	One arrest per 32.4 man hours Unproductive, overutilized at first, used rarely later		S PF
	Informant's fund: Eval.	34 target arrests (\$14.14 per arrest), 84 clearances (\$5.98 per clearance)	\$490 expended	S
Houston	Unknown			Ū
Denver	Detective/patrol coordination: Eval. Use of most qualified personnel: Eval. Concentration on limited precincts: Eval.	Efficient Efficient Efficient		PS PS PS
San Francisco	Stakeouts: Eval. Civilian clothes tactic: Eval.	Inefficient unless based on solid intelligence Efficient only in daytime		QS PS
	Field interrogations: Eval.	Efficient		PS
Portland	Fencing operation: Eval.	Successful in interdicting operations (terms of efficiency)		₽S
	Specialized surveillance team: Eval.	Efficient		PS
	Large missions: Expert Opinion	Very costly		(<u>Q</u> S).
	Small missions: Expert Opinion Use of overtime funds to support specialized personnel: Expert Opinion	Not uniformly cost-effective Cost-effective; provides more crucial target response		(PS) (FS)
	2-man foot patrol: Eval.	Cost-effective for suppressing street crimes		PS

NOTE: Ratings of expert opinion appear in parentheses.

4. Performance and effectiveness.

a. <u>Arrest performance and effectiveness</u>. Table III-23 presents the available data on the arrest performance and effectiveness of seven High/Low Visibility projects. The assessment yielded no Failure ratings and a high number of Probable Success ratings.

b. <u>Clearance performance and effectiveness</u>. Information on clearances was available on only four projects. As shown in Table III-24, all ratings fell into a success category with the exception of the Portland project which could not be rated because of insufficient data.

c. <u>Convictions and related data</u>. Table III-25 shows information on convictions and related data (e.g., court dispositions) for four of the High/Low Visibility patrols. Here, one Failure rating appears for the Indianapolis project because no statistically significant change occurred in the arrest/conviction ratio after the implementation of the specialized patrol. Two Success ratings appear for the Portland project; statistically significant increases in the number of robbery and burglary cases considered. All other ratings represent a Probable Success.

d. <u>Crime reduction</u>. Table III-26 presents information on crime increases and decreases in seven of eight High/Low Visibility target areas. It shows 12 Success ratings, one Qualified Success rating (representing expert opinion), and one Probable Failure rating. An impressive record by the criteria used in this study.

However, as will be noted in a later section, displacement may have occurred in four areas: Portsmouth, Denver, San Francisco, and Portland. The data are far from conclusive on displacement so that we have not considered them in the ratings shown in Table III-26. However, this possibility of displacement raises a question about the high level of success shown for these projects.

e. Other performance/effectiveness measures. Table III-27 shows several other activities engaged in by four High/Low Visibility projects. Most of these activities revolve around stolen property. Two of these project activities appeared successful, one was rated a Probable Failure, and one could not be rated on the basis of existing evidence since the data pertained to the entire city rather than the project's target area.

5. <u>Comparison of success/failure criteria</u>. Figure III-3 graphically depicts the combined success, combined failure, and Unknown ratings for the High/Low Visibility patrols on the various measures under study. The few expert opinion ratings are not always shown separately since their inclusion in the overall ratings does not bias the figures shown.

The combined success ratings shown in Figure III-3 are quite impressive. Failure ratings are quite low. The highest failure level appears for costeffectiveness; this is largely based on evaluator's reports of the costliness and ineffectiveness of mechanical devices.

HIGH/LOW VISIBILITY PATROLS: ARREST PERFORMANCE AND EFFECTIVENESS

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Greensboro	Unknown			U
Portsmouth	Percent of total burglary arrests: Evaluation	H/LVP accounted for 43.5% of all burglary arrests	Over a 9-month period	QS
Indianapolis	Increase in 1st degree burglary arrests: Evaluation	Up 79% in target area	Compared to year before H/LVP; compared to 15% increase in nontarget areas	PS
	Percent of total 1st degree burglary arrests: Evaluation	18.5% of all 1st degree burglary arrests in the target areas were by H/LVP	Compared to other (unspecified) units in the target areas	PS
	Increase in business burglary arrests: Evaluation	59% increase in target areas	Compared to year before H/LVP; compared to 24% increase in nontarget areas	PS
	Percent of all business burglary arrests: Evaluation	17.5% of all business burglary arrests in the target areas were by H/LVP	Compared to other (unspecified) units in the target areas	PS
	Increase in residential burglary arrests: Evaluation	Up 60.4% in target areas	Compared to year before H/LVP; compared to 5.9% increase in `nontarget areas	PS
	Other arrests: Evaluation	H/LVP accounted for 332 other felony arrests, 325 misdemeanor arrests, and served 211 arrest warrants	(Not compared)	PS
	Arrest rates in target areas: Evaluation	10.76% in target areas	30.05% increase in target areas from year before H/LVP compared to a 1.96% increase in nontarget areas	PS

Table continued on next page.

TABLE III-23 (Continued)

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Virginia Beach	Percent of all burglary arrests: Evaluation	96.6% of all burglary arrests	Compared to rest of arresting force (unspecialized)	PS
	Increase in number of burglary arrests: Evaluation	Burglary arrests increased 290%	Compared to year before H/LVP	S
Houston	Number of arrests: Crime Figures	23 felony arrests; 69 crime arrests (unspecified) 8 mis- demeanor arrests	Accomplished in 251 man days	QS
	Hostage/barricade apprehensions: Crime Figures	5 such cases handled in 5 months	Over 5-month period	S
enver	Percent of arrest for target crimes: Evaluation	22% of random selection of SCAT arrests were for target crimes	Over l-year period	PS
an Francisco	Number of burglary arrests: Evaluation	331 arrests (most for burglary and related offenses)	Over 12-month period	PS
ortland	Number of arrests: Evaluation	Effected 432 arrests	Over 9-month period	PS
	Arrests resulting from alarm: Evaluation	96 burglary arrests	Over 9-month period	S

HIGH/LOW VISIBILITY PATROLS: CLEARANCE PERFORMANCE AND EFFECTIVENESS

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Portsmouth	Clearance rate for burglary: Evaluation	Clearance rate in target area 45.5%	26.6% in remainder of city	S
Virginia Beach	Percent increase & proportion attributed to H/LVP for burglary: Evaluation	Clearances rose 73.5%; 98.8% were by H/LVP personnel	Compared to previous year (highest of 7 HIT projects)	S
Denver	Increase in robbery and burglary clearance rates: Evaluation	35% of 1,080 burglaries in target areas cleared by arrest during 1973	City-wide rate for 1972 = 25.3% National average for 1973 = 18%	
		Burglary clearance rate up 38% in target areas	During 1st quarter of 1973	S
		Robbery clearance rate up 11.1% in target areas	1973, city-wide increase of 31% (entire department began heavy focus on robbery during this period)	
Portland	Number of crimes cleared: Evaluation	437 crimes (unspecified) cleared	In 9 months	υ
All others	Unknown			U (n=4

HIGH/LOW VISIBILITY PATROLS: CONVICTIONS AND RELATED DATA

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Indianapolis	Conviction rates for burglary in target areas: Evaluation Ratio of arrests to convictions for burglary in target areas: Evaluation	lst degree burglary 67% 2nd degree burglary 86% No statically significant change	<pre>12-month period 12-month period Over previous year in target areas or in non-target areas</pre>	PS F
Virginia Beach	Dispositions: Evaluation	47.9% decrease in cases where offender found guilty of offense charged 145% increase in cases where offender found guilty of lesser offense	Compared year before/after H/LVP Compared year before/after H/LVP	PS* PS*
Denver	Percent of burglary cases filed acceptable for prosecution: _Evaluation	98.4% of all burglary cases filed were acceptable for prosecution	Compared to 89.0% the year before H/LVP	PS
Portland	Ratio of cases accepted to cases considered: Evaluation Percent increase in cases considered: Evaluation	Robbery: 55:90 Burglary: 93:164 Robbery increased 120% Burglary increased 37%	Year prior to H/LVP: 24:41 Year prior to H/LVP: 85:120 Statistically significant compared to previous year Statistically significant compared to previous year	PS PS S S
All Others	Unknown			U (n=4)

*Probably due to plea bargaining.

HIGH/LOW VISIBILITY PATROLS: CRIME REDUCTION

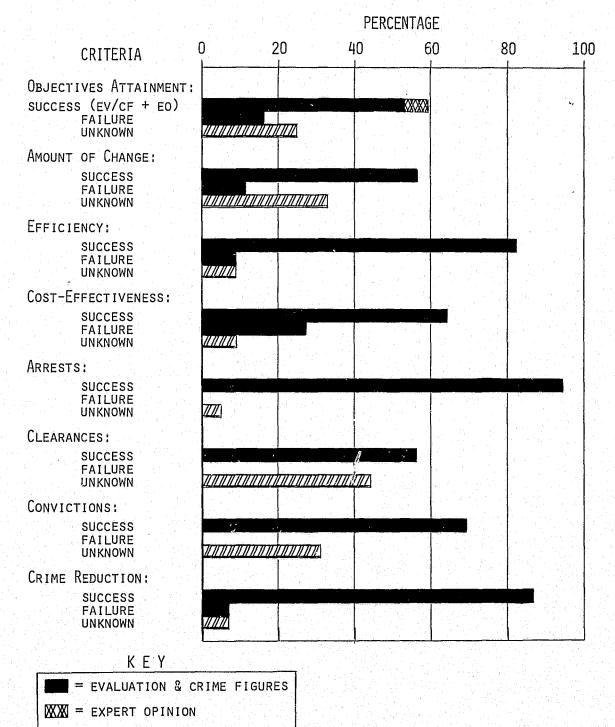
PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Greensboro	Residential burglaries: Expert Opinion	Reduced		(QS)
Portsmouth	Percent decrease in burglaries in target area: Evaluation	Burglaries decreased 28.1% in target areas	Statistically significant compared to increase in non-target areas	s
Indianapolis	Percent change in burglaries: Evaluation	Residential burglaries decreased 3% in target areas Business burglaries increased 6% in target areas	<pre>30% increase in non-target areas compared to one year before/after H/LVP 20% increase in non-target areas compared to one year before/after H/LVP</pre>	SS
Virginia Beach	Percent decrease in burglary: Evaluation	Overall burglary down 17.1% Residential burglary down 18.3% Commercial burglary down 14.8%	One year before/after H/LVP One year before/after H/LVP One year before/after H/LVP	S S S
Houston	Unknown			U
Denver	Percent decrease in serious crime: Evaluation	Burglary in target areas down 38% Robbery in target areas down 21% Murder & aggravated assaultalso declined (unspec.) in target area	6.2% increase in remainder of city compared to previous year Compared to previous year Compared to previous year	S S S
Sàn Francisco	Decrease in burglaries: Evaluation	Burglaries declined 1st6 months; no reduction the last 6 months	First project year	S
Portland	Percentage change in serious crime: Evaluation (crime figures) and victimization survey	Evaluation: Robbery up 16.6% Burglary up 25.7% Assault up 19.5% (reported crime) Victim:: Robbery down 38% Burglary down 16% Assault up 2%		S S PF

 $\overset{\text{tr}}{\omega}$ NOTE: Ratings of expert opinion appear in parentheses.

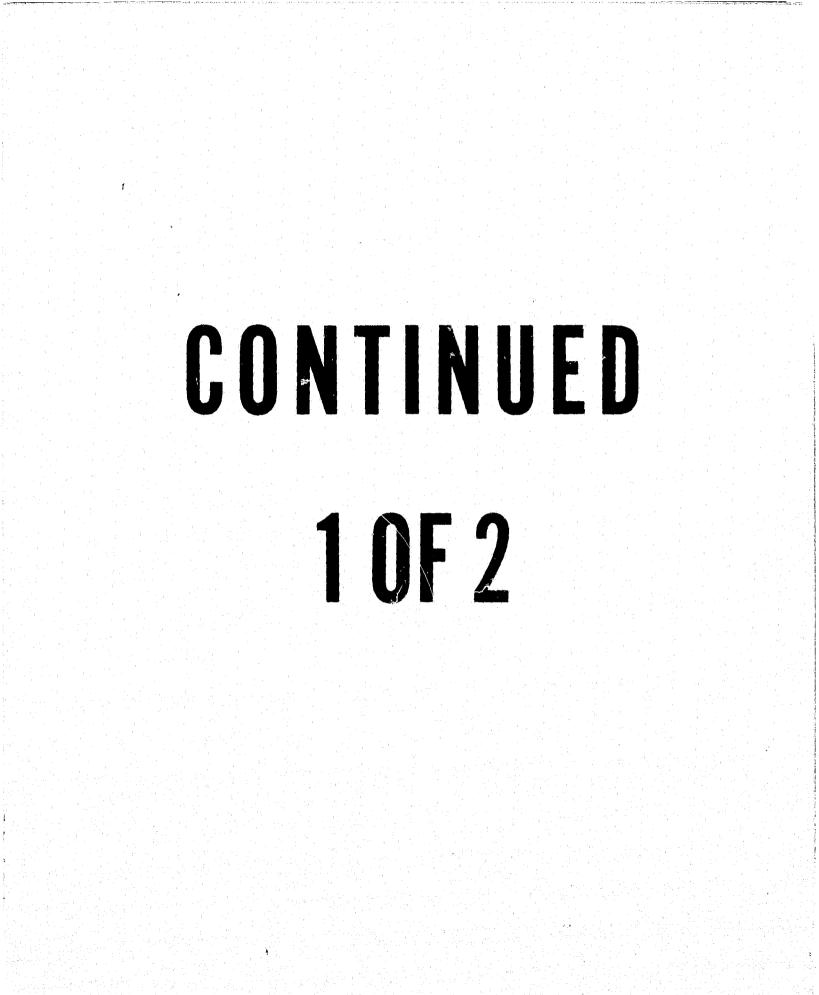
HIGH/LOW VISIBILITY PATROLS: OTHER PERFORMANCE AND EFFECTIVENESS MEASURES

PROJECT	TYPE/SOURCE	HIGH/LOW VISIBILITY PATROLS	COMPARISON/CRITERIA	RATING
Indianapolis	Value of stolen property recovered: Evaluation	Overall value of stolen property recovered citywide decreased 1.72%	Compared to previous year	Ü
Virginia Beach	Percentage of property recovered: Evaluation	82.9% of all stolen property recovered	During first year of High/ Low Visibility Patrol	PS
Denver	Increase in technical crime searches: Evaluation	Technical crime searches in target area up 198%	Compared to year before/ after High/Low Visibility Patrol	S
Portland	Value of property taken in burglaries & robberies: Evaluation	Burglariesvalue up 48.8% Robberiesvalue up 44.2%	Compared to year before/ afterHigh/Low Visibility Patrol	PF

FIGURE III-3 SUCCESS AND FAILURE RATINGS: HIGH/LOW VISIBILITY



 \mathbb{Z} = UNKNOWN (NO DATA)



The overall success of the projects is indicated in Table III-28.

TABLE III-28

HIGH/LOW VISIBILITY PATROLS: PERCENTAGE OF DIFFERENT RATINGS ON SELECTED MEASURES

RATING	PERCENT
SUCCESS	17
PROBABLE SUCCESS	57
QUALIFIED SUCCESS	1.5
FAILURE	2
PROBABLE FAILURE	6
QUALIFIED FAILURE	3

From these data, it appears that one could consider the High/Low Visibility projects as at least a Probable Success. This conclusion, of course, is tentative, due to the questionable reliability of much of the data.

6. <u>Community/department impact</u>. Table III-29 lists various effects which the High/Low Visibility patrols may have had on their community and the broader society.

These data suggest that some displacement of crime may have occurred in three sites; that six of the projects made some impact on the court system; and that citizens appeared to perceive the patrols favorably.

Information from evaluations of five projects indicate that morale was good to very high among the specialized units in Portsmouth, Virginia Beach, Denver, San Francisco, and Portland. Two projects (Portsmouth and San Francisco) were a cause of some initial dissension within their departments. The patrols in Indianapolis and Virginia Beach reportedly enjoyed good relationships with other departmental units whereas little cooperation reportedly existed between the Denver patrol and other units within the department. There was no indication that the more negative cases cited affected the performance or effectiveness of the specialized patrols.

7. Insight into success and failure. Good planning, recruitment of high performers, and specialized training appeared to be partially responsible for the success of the High/Low Visibility family just as they did for the Low Visibility and High Visibility families. Another probable reason for the success of the High/ Low Visibility patrols was the flexibility built into their operations, that is, their ability to vary their approach to specific crime problems. The management tool of peer review also appeared noteworthy in accounting for the success of the Virginia Beach project. Failures appeared to center around means of using costly equipment (e.g., helicopters, surveillance vans, remote alarms) and the use of volunteer overtime personnel.

TABLE III-29

HIGH/LOW VISIBILITY PATROLS: IMPACT ON COMMUNITY

PROJECT	TYPE/SOURCE	IMPACT		
	DISPLACEMENT			
PORTSMOUTH	DISPLACEMENT: EVAL	PROBABLY: INCREASE IN PERIPHERAL AREAS		
VIRGINIA BEACH	NO DISPLACEMENT: EVAL	NONE OBSERVED		
DENVER	DISPLACEMENT: EVAL	PROBABLY		
SAN FRANCISCO	DISPLACEMENT: EVAL	VIEWED POSITIVELY: INCREASES CHANCES OF APPREHENSION IN AREAS IN WHICH DISPLACEMENT OCCURS		
PORTLAND	DISPLACEMENT: PD ANALYSIS	SOME		
	IMPACT ON COURTS			
PORTSMOUTH	USE OF ATTORNEY: EVAL	USE OF INEXPERIENCED ATTORNEY BY PATROL UNSUCCESSFUL		
INDIANAPOLIS	INCREASED COURT WORKLOAD: EVAL	COURTS HIRE 2 DEPUTY PROSECUTORS TO HANDLE INCREASES IN BURGLARY CASES; BECOME OVERBURDENED AS HANDLE ALL PD CASES		
VIRGINIA BEACH	USE OF ATTORNEY: EVAL	COMMONWEALTH ATTORNEY'S OFFICE EXPERIENCES INCREASED WORKLOAD AS RESULT OF PATROL'S ACTIVITIES; HIRE ADDITIONAL PERSONNEL. IMPACT NOT GREAT ON ADULT COURT, HIGH ON JUVENILE COURT		
DENVER	CASES ACCEPTED BY DISTRICT ATTORNEY: EVAL	HIGHER RATE OF CASES ACCEPTED BY DISTRICT ATTORNEY; PROBABLY DUE TO MORE THOROUGH PREPARATION OF EVIDENCE BY H/LVP & TRAINING OF OFFICERS IN CRIME SEARCH TECHNIQUES		
SAN FRANCISCO	PROSECUTION: EVAL	INCREASE IN CONTACT BETWEEN UNIT AND COURTS; SUCCESS AT LEVEL OF PROSECUTION DISAPPOINTING, COURTS RELUCTANT TO PROSECUTE		
PORTLAND CASES ACCEPTED FOR PROSECUTION: EVAL		INCREASE IN NUMBER OF CASES ACCEPTED FOR PROSECUTION; DIFFI- CULT TO INTERPRET BECAUSE OF CHANGES IN PLEA BARGAINING PROCESS		

Table continued next page.

TABLE III-29 (Continued)

PROJECT	TYPE/SOURCE	IMPACT	
INDIANAPOLIS	CITIZEN ATTITUDES/ INVOLVEMENT CITIZEN SURVEY: EVAL	MAJORITY OF RESPONDENTS FELT	
		POLICE DOING GOOD JOB	
VIRGINIA BEACH	COMMUNITY AWARENESS PROGRAM: EVAL	WELL RECEIVED; OVER 25,000 PER- SONS ATTENDED 204 PRESENTATIONS IN 9 MONTHS	
HOUSTON	CITIZEN COMPLAINTS, COMPLIMENTS, ETC.: EO	PATROL IS SUCCESSFUL IN COMMUNITY: ONLY 1 CITIZEN COMPLAINT, 5 COMPLIMENTING LETTERS. NO CITIZEN INQUIRIES OR DEATHS DUE TO PATROL	
DENVER	CITIZEN ATTITUDES: PD SURVEY	RESIDENTS, BUSINESSES MOSTLY PLEASED WITH PATROL (SAMPLE n = 63)	
	TARGET HARDENING, PUBLIC EDUCATION: EVAL	OVER 1,600 CONTACTS WITH INDIVID- UALS, 79 WITH GROUPS, 1,046 SECURITY CHECKS, & DISTRIBUTION OF 2,657 PREVENTION BOOKLETS. TARGET HARDENING SUCCESS LIMITED BY LOW INCOME OF RESIDENTS	
SAN FRÀNCISCO	CITIZEN ATTITUDES: EO	FAVORABLE IN TARGET AREA; CITIZENS REQUEST PUBLIC EDUCATION. COMPLAINTS FROM NONTARGET AREA AS CRIME RISES	
PORTLAND	CITIZEN ATTITUDES: EVAL (COMMENTS)	CITIZENS PERCEIVE PATROL FAVORABLY	

KEY: EVAL = Evaluation
PD = Police Department
EO = Expert Opinion

Part 4

Comparisons of Project Families

In the Product 4 report, comparisons were made of the different families on each criterion related to success and failure. In this summary report, these data have been vastly condensed because of the large number of Unknown ratings obtained for the Low Visibility and High Visibility patrols on various measures. The comparisons here center around three criteria--amount of change, arrest performance and effectiveness, and crime reduction--and around a comparison of the levels of success and failure. The comparison includes all criteria of success and failure included in this study.

A. Success and Failure: Selected Criteria

Figure III-4 graphically depicts the percentage of combined success, combined failure, and Unknown ratings for the three patrol families on the amount of change, arrest, and crime reduction measures. Expert opinion ratings appear in the crosshatched part of the bars and correspond, generally, to the percentage of Unknown ratings for the combined evaluation/crime figures data.

If one considers expert opinion, the Low Visibility patrols exceeded the other patrol families in effecting positive change. Using only evaluation/crime figure data, the High/Low Visibility family exceeded in amount of change.

The High/Low Visibility family clearly exceeded other families in arrest and crime reduction performance and effectiveness and showed fewer failures in these areas than the other patrol families. The High Visibility family exceeded the Low Visibility family in crime reduction, even if one includes the expert opinion in the Low Visibility group. The Low Visibility group did show a higher level of success in arrests than the High Visibility projects if one includes expert opinion; however, the level of failure on the arrest measure was also higher for the Low Visibility than for the High Visibility group.

Such data as exist on other measures do point to more success than failure for each of the patrol families.

B. Level of Success and Failure

Using all available ratings, IHRR calculated the overall percent of success and failure for each point on the success and failure scales. These data appear in Table III-30.

Given the fact that Success/Failure ratings are highly dependent upon the level of reliability of the data, the figures shown in Table III-30 are as accurate a portrayal as can be made on the level of success or failure attained by each patrol family. With considerable reservations as to whether specialized patrols should be judged on such questionable data, the Low Visibility patrols and the High/Low Visibility patrols are rated as a Probable Success and the High Visibility patrols as a Qualified Success. The Failure ratings shown in Table III-30 can be attributed largely to two factors:

. The general lack of success of two projects (the HIT programs in Henrico County and Alexandria, Virginia)

FIGURE III-4 COMPARISON OF PATROL FAMILIES ON: AMOUNT OF CHANGE; ARRESTS; CRIME REDUCTION

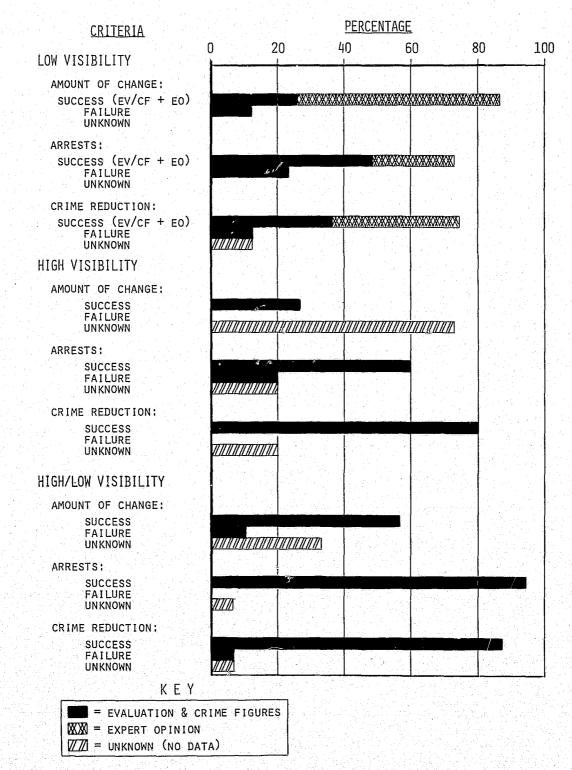


TABLE III-30

COMPARISON OF FAMILIES: PERCENTAGE OF DIFFERENT RATINGS OF SELECTED MEASURES

And the second se			and the second	the second s
RATING	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		HIGH VISIBILITY PATROLS	HIGH/LOW VISIBILITY PATROLS
	(1)	(2)		
SUCCESS	24%	46%		17%
PROBABLE SUCCESS	448	54%	32%	57%
QUALIFIED SUCCESS	48		63%	158
FAILURE	12%	• • • • • • • • • • • • • • • • • • •	58	2%
PROBABLE FAILURE	16%			68
QUALIFIED FAILURE				38

(1) Represents evaluations and/or crime figures only.(2) Represents expert opinion only.

The high cost, noneffectiveness and partial nonuse of mechanical devices in four sites (Henrico County, Portsmouth, Indianapolis, and Virginia Beach). These devices included alarm systems, surveillance equipment, and a helicopter patrol.

This latter finding should not be misconstructed as an indictment against mechanical devices. The study sample is small and the evaluations were not centered on these devices. In fact, many evaluators had nothing to say about the use of mechanical devices, even when they were part of the department's specialized patrol. What IHRR field personnel did observe, however, was a tendency in some sites (including sites not covered in this report) toward nonuse--rather than misuse--of highly specialized equipment. The reasons for this disuse were never made totally clear to IHRR observers; however, it is possible that some departments may need technical assistance from LEAA on ways of maximizing the benefits of technological equipment. More careful examinations of mechanical devices, such as the MITRE study of early-warning robbery reduction devices,²⁵ are recommended in order to understand better the uses and benefits of sophisticated, technological equipment.

IV. A TENTATIVE KNOWLEDGE BASE AND KNOWLEDGE GAPS

From the literature search, the field survey and the various analyses of the data, a tentative knowledge base was amassed and major gaps in knowledge were identified. Both are summarized in this chapter.

A. A Tentative Knowledge Base

According to survey estimates, police departments serving cities with populations of 50,000 persons or more tend to rely heavily on specialized patrol tactics. The tactics most frequently used are (in order of frequency):

Civilian dress

. Uniformed tactical

Mechanical devices

The choice of a particular tactic, or tactics, appears to rest, in part, on certain basic assumptions regarding the efficacy of different levels of police visibility.

A belief in the efficacy of increased visible police presence seems related to the choice of a uniformed tactical tactic. The uniformed tactical unit is expected, first and foremost, to deter crime and only secondarily to increase apprehension of target criminals.

A belief in the efficacy of invisible police presence, on the other hand, appears to be related to the choice of a civilian dress unit and occasionally to the use of mechanical devices such as night vision scopes, alarm systems, and other sophisticated technological equipment. These tactics are expected, first and foremost, to increase apprehension of target criminals and only secondarily to deter target crimes.

These assumptions regarding the efficacy of different visibility levels were used to identify two basic types of specialized patrols: a High Visibility family and a Low Visibility family. The former relies only on uniformed tactical tactics while the latter relies on civilian dress and/or mechanical devices.

But there was still a third assumption, one that combined the visibility levels and the tactics. This was called a Combined High/Low Visibility family. All projects of this type rely on a uniformed tactical tactic as well as civilian dress and/or mechanical device tactics. These multitactic units are expected to both deter crime and increase apprehension of target criminals.

A sound knowledge base will provide answers to several questions. Which of the above assumptions is correct? Is one or more correct only under given circumstances? Which tactic is most effective? Are some more effective only under given circumstances?

A sound, comprehensive knowledge base will also answer one basic, implicit question: Is a specialized patrol more effective and efficient than a traditional patrol for combatting certain forms of crime? After searching through numerous reports, it was concluded that definitive answers to these questions have not been forthcoming from evaluative research. However, an intensive analysis of a selected sample of projects did yield a tentative set of conclusions which are based on descriptive material of the settings in which specialized patrols operate and simple, quantitative analyses related to performance and effectiveness. These tentative conclusions are summarized in the following subsections.

1. <u>A common setting</u>. In reviewing the evaluations of specialized patrols, it was found that evaluators have given almost no attention to the setting in which these patrols operate. A simple analysis of existing descriptive material indicates that all three families of specialized patrols tended to operate in a similar setting. There were differences, of course, but the deviations to the patterns described below were proportionately similar across project families.

- <u>Recruitment and selections criteria</u>-The majority (60 percent or more) chose the best men from the department and about one fourth of each family type used volunteers and/or overtime regulars at least in supplementary capacities.
- Training--The majority offered at least some specialized training relevant to the patrol family.
 - <u>Planning</u>--From 60 to 100 percent of all family types relied heavily on crime analysis in planning; High Visibility patrols did show a slightly higher tendency to rely more on other sources (e.g., investigative information) than other family types.
 - Monitoring--For the majority of each family type, monitoring was largely a function of the specialized patrol unit.
 - Internal data comparisons--At least one half of all family types performed internal comparisons and/or evaluations of specialized patrol activities.

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- External evaluations--About one half or more of all project types have been evaluated by outside personnel (though often in cooperation with the department, State Planning Agency, or a related agency).
- Experimentally initiated--From available data, it appears that each family has a fairly equal proportion of experimental projects (50-60 percent).
- <u>Span of control</u>--The majority of all family types operated with one sergeant to ten or less men (usually eight officers).
- Deployment--From 75 to 100 percent of each family type relied largely on crime analysis to deploy personnel.
- . <u>Operational modes</u>--The majority of all family types (75 to 100 percent) relied on crime and location-oriented operational modes. High Visibility patrols were more prone to rely on a suspect orientation than other family types: 40 percent of the High Visibility

patrols utilized a suspect orientation as compared to 12-25 percent of the other patrol types. However, the data strongly suggest that all family types relied on a suspect-oriented mode, at least on occasion, and that mention is simply not made of the use of this operational mode.

- Methods--All family types, of course, utilized patrol methods (e.g., roving patrol, saturation patrol). Surveillance and stakeout were methods common to all families as well. Decoy methods obviously were not part of the High Visibility patrols' activities. Nor was air patrol which was part of the methods of a few Low and High/ Low Visibility patrols.
- <u>Crime targets</u>--Each family type was represented by some projects (25-63 percent) that were concerned with combattingall or most types of serious crimes (e.g., homicide, assault, rape, burglary, robbery, larceny). All were represented by some projects mainly focused on burglary or robbery. A higher proportion of Low and High Visibility patrols did tend to focus more on robbery than burglary while the opposite was true for the High/Low patrols.
- Targets of Intervention--All family types were concerned with protecting commercial as well as noncommercial establishments and, consequently, businessmen as well as other citizens.

The data on how specialized patrols fit into the organization of their departments, how they are funded, and the amount of yearly appropriations are not complete. However, such data as exist show that the specialized patrols tend to be within the special operations division or patrol division, regardless of family type, and that one type is no more likely than another to be the recipient of a Federal grant ranging from about \$250,000 to around \$1 million. (One High Visibility patrol did receive a \$7 million grant.)

Finally, despite the setting of many specific subobjectives by some patrol projects, all tended to focus on the same major objectives: crime reduction; increased arrests; and, to some extent, increased conviction and/or clearance rates, maintenance of public safety and respect, and the enhancement of citizen involvement in patrol activities.

From descriptive data, one also can describe a composite or typical patrolman in his working setting. He tends to be young, chosen from among the highest performers in traditional patrol, and satisfied with his work in specialized patrol. He is one of eight to ten officers who often work in small teams under the direct supervision of one sergeant. The specialized patrolman's activities and deployment are planned on the basis of crime analyses and his work tends to be monitored by his own unit. To accomplish his major tasks better--apprekension and crime deterrence--he receives special training in the tactics and methods he will use to accomplish his objectives. His work tends to be perceived favorably by his department and by the community which he serves.

2. <u>Success and failure</u>. The analytic data related to the performance and effectiveness of specialized patrols rests upon a data base of questionable accuracy and reliability. From the rather gross ratings on this questionable

data base, each of the project families appears rather successful in meeting its primary objectives of crime deterrence and apprehension. The ratings show the High Visibility patrols as more successful at deterrence (their major mission) than at apprehension. The reverse trend appeared for the High/Low Visibility patrols; that is, they were slightly more successful at apprehension than deterrence. The Low Visibility patrols were most difficult to assess since there were so few evaluations on this group; however, the combined data from evaluations, crime figures, and expert opinion show this group as being slightly more successful at deterrence than apprehension (their major mission). The data on other performance and effectiveness indicators were scant, but the trends for the change effected on selected criteria and for increased clearances and convictions tended to be positive. That is, there were more successes than failures.

The data further suggest that a combined use of uniformed tactical and civilian dress tactics may be the most successful approach, perhaps because it provides departments a greater degree of flexibility in solving difficult and complex problems.

Mechanical devices did not receive much attention in the evaluations analyzed in this study. Some documentation was available on the use of sophisticated technological equipment in six sites. In four of these sites, the devices accounted for a considerable proportion of the few failure ratings on the specialized patrols covered in the study. The reasons for these failures were not totally clear; however, it appeared that such equipment was either misused or not used at all so that evaluators assessed the devices as costly and ineffective aspects of the patrols' operations. The efficacy of these mechanical tactics, obviously, requires far more study before generalizations can be made from the few and generally inadequate evaluations covered in this study.

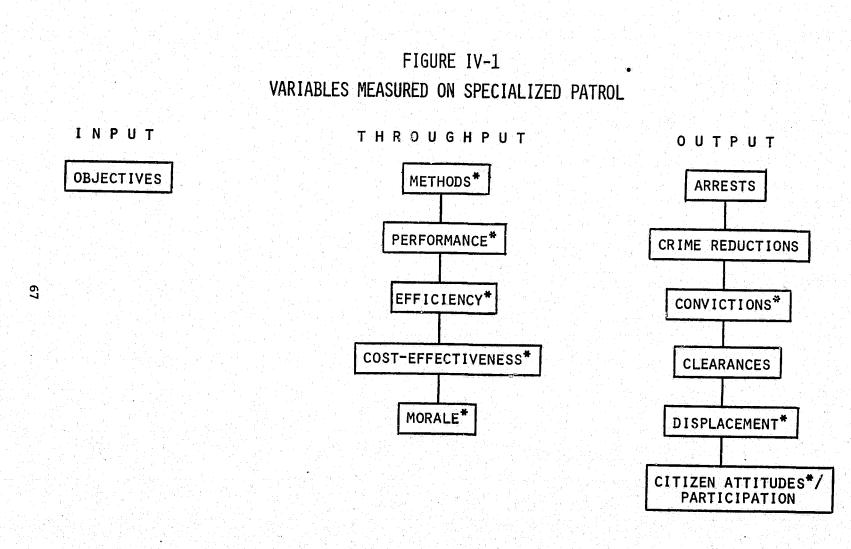
B. Deficiencies in the Knowledge Base

This section addresses the deficiencies, or gaps, in the knowledge base on specialized patrols, the reasons for these gaps in knowledge, and briefly touches on the problems of filling these gaps.

1. <u>Gaps</u>. What is know definitively about each variable listed in the analytic model (see Figure I-1) or about the intervening variables that could affect specialized patrol operations (see Table II-2)? The answer is: Very little. <u>All</u> these subject areas represent deficiencies in our knowledge on specialized patrols.

Only a few of these areas have even been subjected to an evaluation. Those variables typically included in evaluations are shown in Figure IV-1, with indications of those that have been evaluated only infrequently.

On the input side of the model, only the objectives have been tested. On the throughput side, there have been a few tests of methods (e.g., stakeout, decoy) and some evaluation of the process measures listed (performance, efficiency, cost-effectiveness, morale). The major focus has been on the primary outputs, especially arrest and crime reduction effectiveness. A few studies also addressed increases in clearance and conviction rates. The specialized patrols' impact on the communities they serve and the broader society (secondary outputs) has received only scant attention. Some very inadequate tests have been made of crime displacement and some evaluators have addressed citizen attitudes toward the patrols and/or their participation in prevention activities (e.g., target hardening, public education). Only rarely have these studies of citizens been



*MEASURED ONLY INFREQUENTLY.

based on good survey methodology. Except for citizen attitudes, none of the intervening variables identified in Table II-2 appear to have been addressed.

2. <u>Reasons for the gaps</u>. There are many explanations for the gaps in knowledge. One lies in the very complexity of the subject area. Another, but related, explanation lies in the lack of adequate research technology that would permit one to study every possible variable that might affect specialized patrol operations. Another is a more pragmatic consideration. That is, even if research methods were available to study all possible variables effecting the specialized patrols, the cost of such a study would probably be prohibitive.

Even in view of these considerations, the most important gaps in knowledge appear to have been created unnecessarily by:

- . Use of poor study designs
- . Failure to use adequate comparison groups

The use of noncomparable measures for studying the same phenomenon

The study designs fail on many scores. Most important among these are the failure to control for the interventions of nonspecialized personnel in the target areas assigned to specialized personnel, inadequate tests of displacement, the use of short-term measures and, especially, the failure to take into account the selection criteria for specialized patrol personnel. Since departments tend to choose the best performers to serve on specialized patrols, the evaluators have not utilized well-matched comparison groups; what has been studied primarily (but inadequately) is personnel selection rather than project assumptions or tactics. The picture is additionally confused by the use of many different performance and effectiveness measures, some of which are of questionable reliability and comprehensiveness.

C. Filling the Gaps

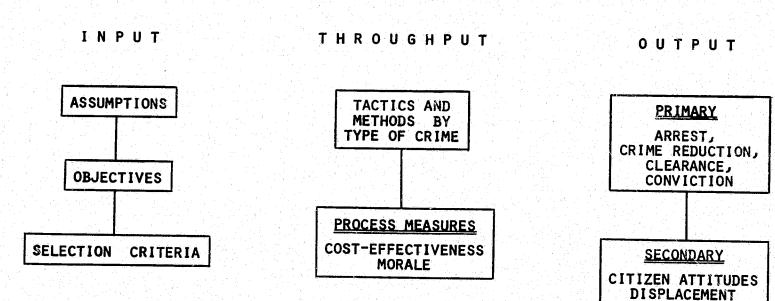
One could write a lengthy text on ways of filling all the gaps in knowledge on specialized patrols. In another report, we have taken a pragmatic approach in addressing this problem.²⁶

This approach recognizes that choices must be made; that one should first identify the most important gaps and set about to answer basic questions which will provide law enforcement personnel information they need to make decisions on crucial issues. This pragmatic approach also takes into consideration budget constraints and the exhorbitant cost of a study that would attempt to fill all the existing gaps.

In order to fill the most important gaps identified in Figure VI-2, two basic types of studies should receive first priority:

. Studies that will test the implicit assumption that specialized patrol will be more cost-effective than traditional patrol in certain crime situations

FIGURE IV-2 IMPORTANT KNOWLEDGE GAPS



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. Studies that will test the assumptions, tactics, and methods underlying the existence of project families and permit comparisons of the effectiveness (including cost-effectiveness) of different visibility levels, tactics, and methods by type of crime

Until these questions are answered, departments will not be provided the basic information required to help them in project planning, monitoring, and management.

1

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