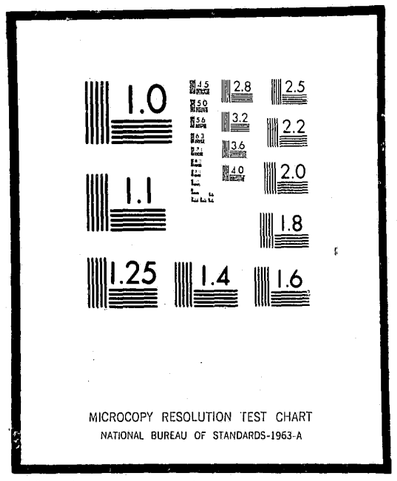

PHASE I NATIONAL EVALUATION OF SELECTED PATROL STRATEGIES, SPECIALIZED PATROL OPERATIONS UNDER THE NATIONAL EVALUATION PROGRAM

Product 4
Assessment of the Knowledge on Specialized Patrol

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ABSTRACT

This report on specialized patrols is designed to determine data reliability, assess success and failure, amass a knowledge base, and identify major gaps in knowledge.

Methods are described for rating the reliability of evaluations, crime figures, and expert (police) opinion. These reliability ratings are used in rating success and failure on three-point scales; that is, the same level of performance may be rated differently according to the reliability level of the data.

Major findings related to success and failure indicate that High/Low Visibility patrols are more effective at apprehension than deterrence while the reverse appears for the High Visibility and Low Visibility patrols. Overall ratings indicate that the Low and High/Low Visibility patrols are a Probable Success, the High Visibility patrols a Qualified Success. However, the low quality of the data base makes all ratings somewhat judgmental.

A sound knowledge base on specialized patrols does not exist. Tentative conclusions indicate that the combined use of civilian dress and uniformed tactical tactics may be the most successful approach and that mechanical device tactics are generally costly and ineffective.

Major gaps relate to the need for testing project assumptions, selections criteria, tactics, methods, cost-effectiveness, performance, and community impact.

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PREFACE AND ACKNOWLEDGMENTS

THE LEAA Evaluation Policy Task Force, a joint effort of State Planning Agencies (SPA) and Law Enforcement Assistance Administration(LEAA) representatives, has recommended that information on police methodology be produced through nationally-coordinated evaluations under the National Evaluation Program.

On January 10, 1975, the Institute for Human Resources Research (IHRR) under LEAA Grant Number 75-NI-99-0067, began a Phase I study of the topic area, Selected Patrol Strategies: Specialized Patrol Operations. The purpose of this Phase I study is to assess specialized patrol operations.

This is the fourth in a series of reports being prepared by IHRR. The first report was an analysis and discussion of the issues surrounding specialized patrol operations. The second report presented an overview of actual project activity. The third report classified projects into families, presented a model for analyzing projects on selected dimensions, discussed variables that have been and should be measured, and presented measures for assessing specialized patrols more adequately. This report discusses the reliability of the information on specialized patrols and the success and failure of selected projects on various performance and effectiveness measures. It assesses the state of knowledge on the subject area, identifies gaps in knowledge, and briefly describes means for filling these gaps.

We wish to acknowledge the assistance given us by the National Institute of Law Enforcement and Criminal Justice, LEAA Regional Offices, the State Planning Agencies, and the many local law enforcement officials and their staffs. All have given their assistance in locating and interpreting project information. Specifically, we wish to thank the members of our Advisory Board:

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- Dr. Richard Barnes
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SUMMARY

In this fourth of a series of specialized patrol reports, IHRR undertakes four tasks related to specialized patrols: a determination of the accuracy of data; an assessment of success and failure related to performance and effectiveness; the amassing of a tentative knowledge base; and the identification of deficiencies in our current knowledge on specialized patrols. To perform these tasks, we drew upon other IHRR studies of specific specialized patrols.

A. Methods of Assessment

1. Assessment of Information Sources. To determine the accuracy and reliability of the data on specific projects, it was necessary to assess the three major sources of information: evaluations, unevaluated crime figures and expert opinion (i.e., the judgments of police personnel). In each case, we applied three reliability ratings: high, medium, and low.

a. Evaluations. Evaluations were rated by several criteria: the use of multiple measures; the relevancy of the measures; the testing of hypotheses (assumptions); the accuracy of the data base; the adequacy of 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; multiple treatment interferences). Each evaluation was rated on each of these criteria; the particular rating for each criterion depended upon the extent to which the evaluation met certain specified standards (e.g., the percentage of experimental internal validity criteria considered by the evaluator).

b. Crime figures and other raw data. Crime figures gathered by departments were given a low reliability rating because of the questionable accuracy of crime statistics (see Chapter II). The ratings rose to medium reliability if an evaluator rated departmental statistics as being of better than average quality and to one of high reliability if departmental figures coincided with figures obtained by other sources (e.g., evaluations).

c. Expert opinion. A mere opinion of police personnel, without cited evidence and/or based on only a crime statistic or two, was given a low reliability rating. As departmental personnel cited more and more evidence (e.g., records of morale, safety, citizen complaints) the rating rose, according to specified criteria, to one of medium or high reliability. However, expert opinion is considered less reliable than other informational sources since it represents unverified information reported by persons who have a stake in the subject matter.

2. Assessment of Success and Failure. The reliability ratings of the informational sources were used to assist IHRR in devising a scale of success and failure. The scale for success consists of three ratings: Success, Probable Success and Qualified Success. The first rating represents the highest level of success and reflects a rather high level of performance and/or effectiveness as confirmed by an informational source rated high in reliability. The Probable Success and Qualified Success ratings represent respectively decreasing levels of performance and/or effectiveness and/or decreasing levels of informational reliability.

The failure scale (Failure, Probable Failure, Qualified Failure) was devised in the same manner. An Unknown category was applied where there were no data or where data were uninterpretable because of insufficient information.

Using these scales, we rated the three project families on selected criteria related to performance and effectiveness. These were the Low Visibility patrols (n = 8), the High Visibility patrols (n = 5), and the combined High/Low Visibility patrols (n = 8) represented in our selected sample.

3. Amassing a Tentative Knowledge Base. Since it was clear that available information would not permit our effort to be a definitive, final word on specialized patrol, we sought criteria for determining which descriptive and analytic data should be included and excluded from a tentative knowledge base. The basic criteria for inclusion of data rested on consistency

(i.e., characteristics that appeared frequently in the data), crucial differences between project families, and important relationships between different success/failure indicators.

4. Deficiencies in the Knowledge Base. To identify gaps in knowledge, we scrutinized any available data on each variable in our analytic model (see Chapter I, Figure I-1) and on intervening variables that might affect specialized patrol operations. To judge the relative importance of all gaps, we judged the relevance of each gap to the testing of assumptions underlying the existence of specialized patrol families. Crucial study design problems and other factors were identified to pinpoint the reasons for the gaps.

B. Assessment of Project Families

To assess success and failure and the knowledge base on each project family, we rated first the accuracy and reliability of the data sources and then rated each project and family on success and failure on the following selected criteria: objectives attainment (considered the poorest measure of success or failure), amount of change in measures of effectiveness, efficiency and cost-effectiveness, and other performance/effectiveness indicators (e.g., arrests, clearances, convictions, and crime reduction).

All informational sources were of questionable reliability (some less than others) so that even high reliability ratings were relative. Expert opinion was medium to high for the Low Visibility family, low for all others. Most crime figures

were of low reliability while evaluations varied on reliablity ratings.

The eight Low Visibility patrols had been evaluated least (only three of eight projects), the High/Low Visibility patrols most (six of eight projects were evaluated, some several times). All five High Visibility patrols had been evaluated (two were studied only by their departments).

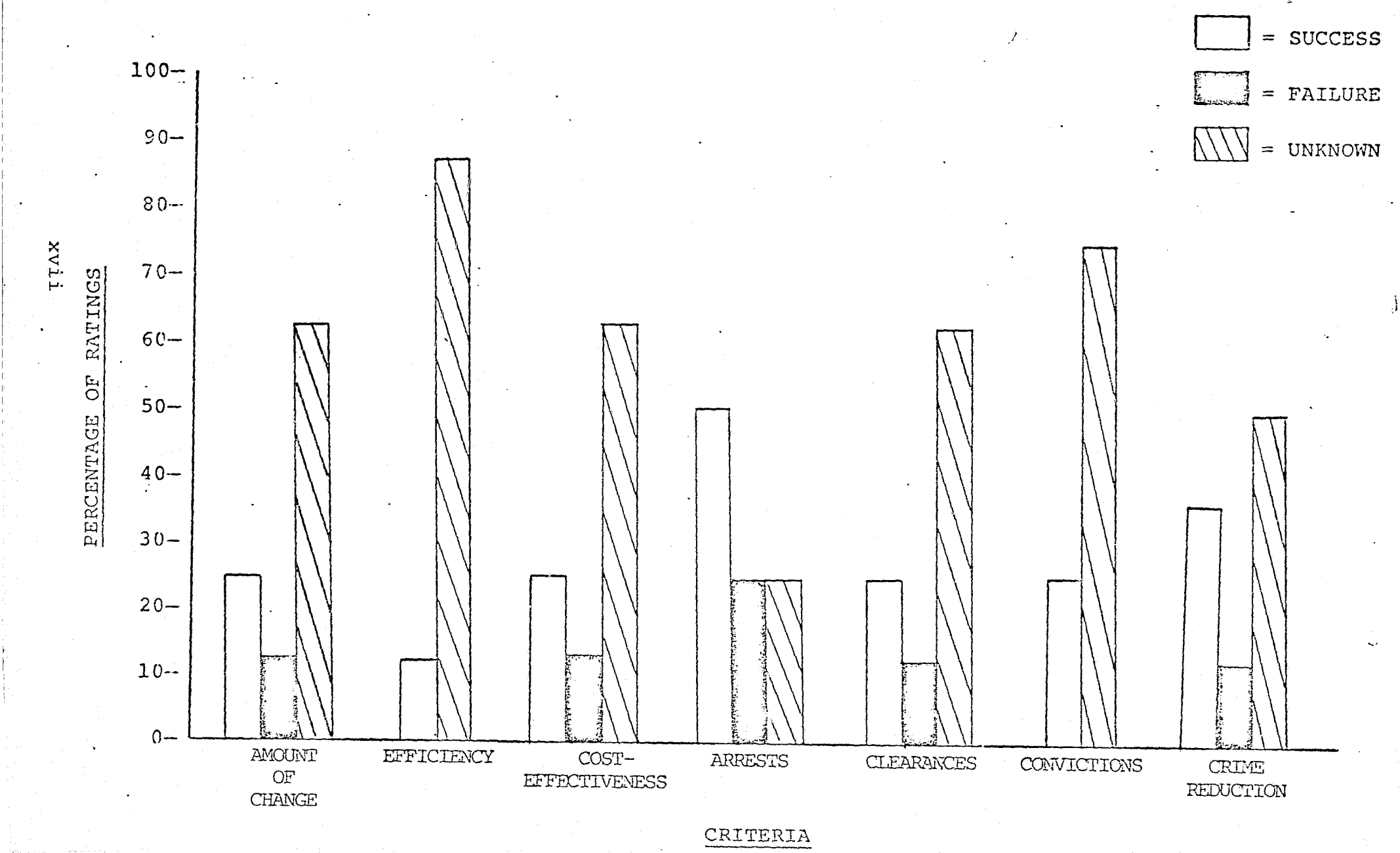
In the following sections, we summarize the Success/Failure ratings for each project family. We wish to emphasize that had we required unassailable evaluation studies to rate projects on success and failure, we would have made no ratings at all. The figures shown in the following sections are merely percentages based on a gross rating scale using information that ranged from fairly adequate to inadequate by stringent evaluation research criteria. The reader should review these results as possible trends and not as definitive conclusions about success or failure.

1. Low Visibility Patrols. Figure 1 shows the combined Success, combined Failure, and Unknown ratings for the Low Visibility patrols for amount of change on selected measures (largely crime reduction and apprehension), efficiency, cost-effectiveness, arrests, clearances, and convictions. The percentages shown represent evaluation and crime statistics data only so that a very high percentage of the ratings fall in the Unknown category.

The evaluative data do suggest a failure or two on five criteria: amount of change, cost-effectiveness, arrests,

FIGURE 1

LOW VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES--
EVALUATION/CRIME FIGURES



clearances and crime reductions. Success ratings are more frequent than Failure ratings on these criteria. The most impressive rating is for arrests, secondly for crime reduction.

However, if expert opinion is added, the trend is slightly reversed (see Figure III-1-2). The Success ratings for both arrests and crime reduction rise to 75 percent but there are more Failure ratings for arrests than crime reduction. Since expert opinion on Low Visibility patrols received a rather high reliability rating (with experts sometimes citing exact figures), the Low Visibility patrols may have been more successful than the data in Figure 1 suggest.

2. High Visibility Patrols. Figure 2 depicts the same types of data just described for the High Visibility patrols. Again, a high percentage of Unknown ratings appears for most criteria. The exceptions are arrests and crime reduction. The High Visibility patrols appear especially successful, by these ratings, in accomplishing their major mission--the reduction of crime.

3. Combined High/Low Visibility Patrols. Figure 3 depicts the overall ratings for the High/Low Visibility patrols. In this case, the graph is not dominated by Unknown ratings because of the various evaluations performed on this group. The graph portrays an efficient, effective group, one particularly proficient at effecting arrests and crime reductions. The Failure ratings are largely due to the use of costly, ineffective mechanical devices and other exotic equipment.

FIGURE 2

HIGH VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES--
EVALUATIONS/CRIME FIGURES

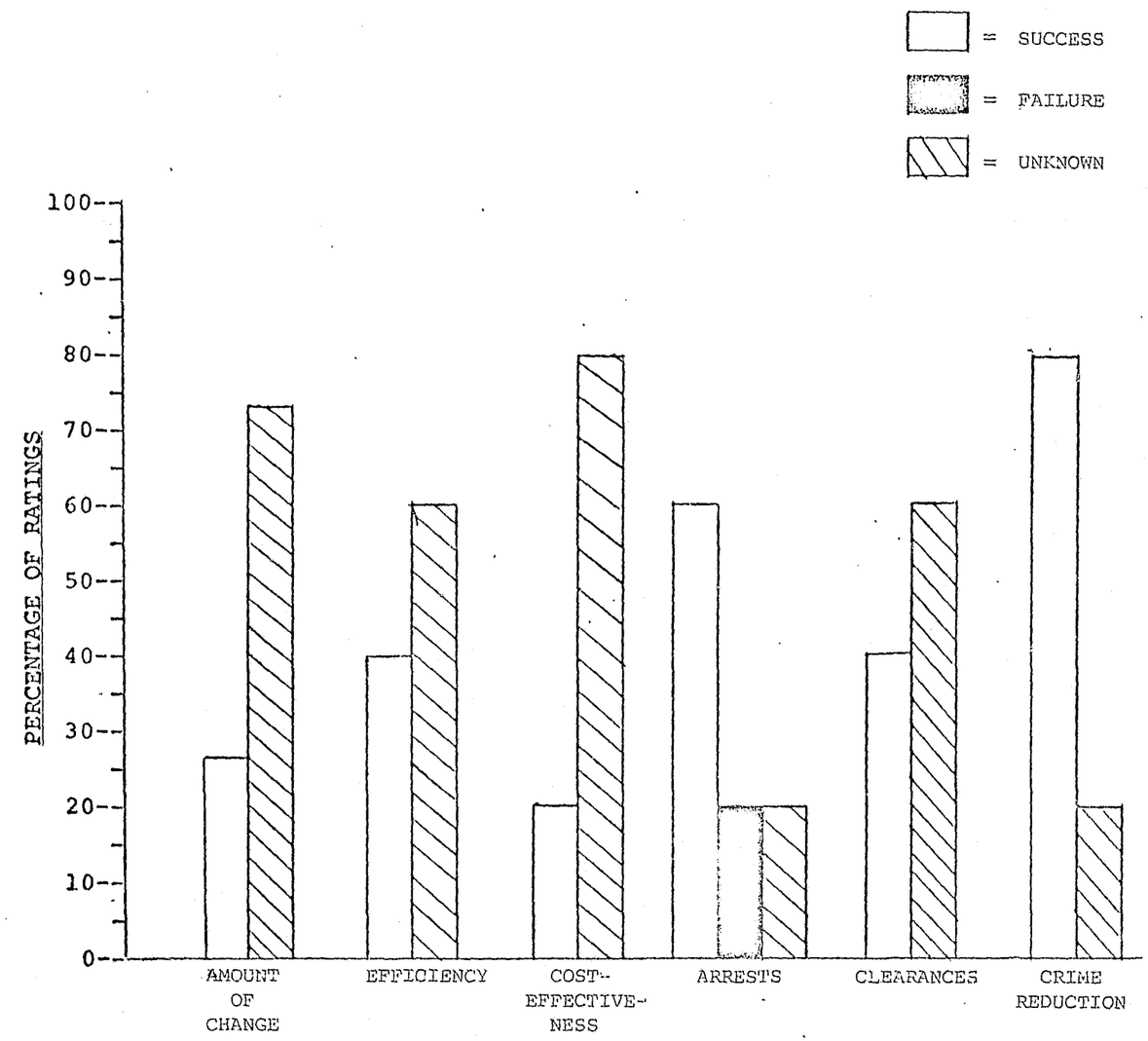
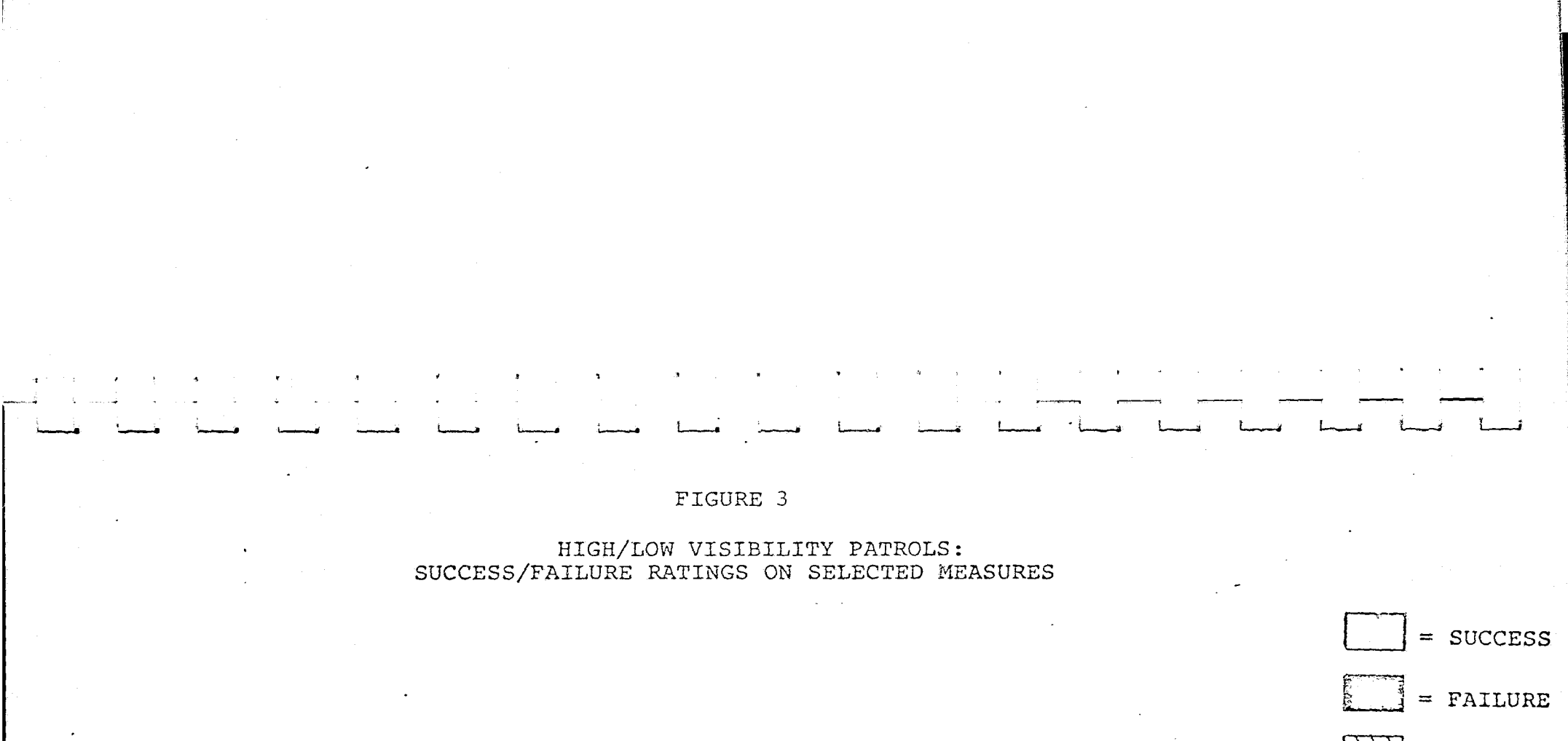


FIGURE 3

HIGH/LOW VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES



Although the data on High/Low Visibility patrols tended to be rated higher in reliability than data on other families, they were far from ideal. Thus, we cannot be certain that this patrol family was as successful as depicted in Figure 3.

5. Levels of Success/Failure. To determine just how successful or unsuccessful the patrol families were, we computed the percentage of ratings that fell into each category of Success and Failure (excluding ratings for objectives attainment).

The majority of the Low Visibility and High/Low Visibility ratings were, in rank order, in the (1) Probable Success and (2) Success categories. The bulk of the High Visibility ratings were in the (1) Qualified Success and (2) Probable Success categories. Thus, with some reservations (due to the poor quality of the data), we would consider the Low Visibility and High/Low Visibility patrols a Probable Success; the High Visibility family, a Qualified Success.

6. Impact. A review of the data on secondary outputs (e.g., displacement, citizen attitudes, impact on the courts) does not reveal any negative impact on the immediate community served by the patrols, although displacement may have occurred in some sites. Nor was there much evidence that specialization had a negative impact on the specialized patrols or their departments.

C. A Tentative Knowledge Base on Specialized Patrols

Our study of specialized patrols indicates that specialized tactics--especially civilian dress, uniformed tactical,

and mechanical devices--are greatly relied upon by police departments in cities with a population exceeding 50,000 persons. The choice of a given tactic seems to depend partly upon whether a department believes a high or low visibility strategy, or a combination of both strategies will be most effective in combatting target crimes. Increased apprehension is the prime mission of Low Visibility patrols (i.e., patrols relying on civilian dress and/or mechanical devices) while deterrence is the major mission of High Visibility patrols (i.e., patrols relying on a uniformed tactical tactic).

Regardless of the visibility level, which formed the basis for the IHRR families, all specialized patrols in our selected sample had much in common. These commonalities permit a general description of specialized patrols on the processes and activities summarized in the following paragraph.

Specialized patrol personnel tend to be selected because of their high performance (e.g., arrest rates) in traditional patrol. As specialized patrolmen, they generally receive additional training relevant to designated tactics or activities. Planning and deployment for specialized activities are based largely on crime analysis. The personnel are generally monitored by their own unit. The span of control is typically one sergeant to eight officers. Interventions tend to focus on burglary, robbery, and other Part 1 offenses, with coverage of commercial and residential areas. The methods used to combat target crime are roving patrol; saturation patrol; surveillance; stakeout; and, with civilian dress tactics, decoy and blending.

Some patrols may engage in prevention activities (e.g., target hardening, public education). In all cases, the major objectives are crime reduction and increased apprehension of target criminals.

Analytic data on the 21 selected projects suggest that all family types are rather successful in meeting these primary objectives. High Visibility patrols are more successful at deterrence (their major mission) than apprehension, while combined High/Low Visibility patrols are slightly more effective at apprehension than deterrence. The Low Visibility patrols seem slightly more successful in deterrence than in apprehension (their primary mission). All show some success at other objectives (e.g., increased clearance rates, maintaining public respect, enhancing citizen involvement). Overall, however, it is probable that a combined use of uniformed tactical and civilian dress tactics is the most successful approach. Mechanical devices, in general, are costly and ineffective.

D. Deficiencies in the Knowledge Base

1. Gaps. All variables shown in the IHRR model (Figure I-1) represent gaps in knowledge, despite some evaluation of the process measures, the primary outputs, and the secondary outputs listed in the model. Similarly, all intervening variables identified by IHRR as potential factors that could affect specialized patrol operations represent gaps in the knowledge base.

2. Reasons for Gaps. There are many explanations for the gaps in knowledge. The most important are:

- 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 interventions of nonspecialized personnel in the target areas assigned specialized personnel, inadequate tests of displacement, use of short-term measures, and, especially, failure to take into account the selections criteria for specialized patrols. Since departments tend to choose the best performers to serve on specialized patrols, and evaluations 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 and, generally inadequate, performance and effectiveness measures.

3. Filling the Gaps. What considerations need evaluation support in order to fill the gaps?

IHRR believes two considerations should receive first priority:

- Studies that will test the implicit assumption that specialized patrols will be more cost-effective than traditional patrol in combatting certain types of crime
- 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

I. INTRODUCTION

This is the fourth in a series of reports on specialized patrols prepared by the Institute for Human Resources Research (IHRR) for the National Evaluation Program of the National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration (LEAA). Our purpose here, as in previous reports, is to support the Phase 1 coordinated information-gathering effort of the National Evaluation Program. More specifically, our tasks in this report are to:

- Assess the accuracy and reliability of information on specialized patrol families
- Determine the performance and effectiveness of specialized patrol families
- Identify factors linked to success and failure of specialized patrol families
- Identify what is known about specialized patrols and important deficiencies in the knowledge base

The overall task, then, is one of assessing the state of knowledge on specialized patrols and identifying important deficiencies in the body of knowledge. Two subtasks outlined in the Phase 1 scope of work are not addressed in this report: alternative specialized patrol methods and their costs. The reason for these omissions are simply that we did not discover any alternatives which, in our judgment, were worthy of presentation and discussion.

In order to understand how IHRR arrived at some of the conclusions presented in this study, it seems useful to summarize some of the information presented in previous reports. These summaries are the focal point of the remainder of this chapter.

A. The Literature Review

From a review of the literature[1] relevant to specialized patrols, IHRR gathered some background information that is useful in this report. Some of this information is integrated into the different chapters of this report, where appropriate. At this point, it seems most useful to point to areas delineated in the literature that we felt should be considered in assessing the effectiveness of specialized patrols. These points can be summarized in the form of the following questions:

- Were specialized patrols implemented unnecessarily, as a kind of imitation of large, successful police department operations?
- Did specialization lead to high or low morale within the specialized unit? Other departmental units?
- Did specialization jeopardize unity of command?
- Did specialized patrol activities lead to increases in line-of-duty injuries or deaths?
- Did specialization increase or decrease cooperation within the department?
- Did the specialized patrol have a positive or negative impact on the community?
- Did the specialized patrol's operations lead to a displacement of target crimes?

These questions represent some of the advantages and disadvantages of specialization noted in the literature. Most are not questions typically addressed in an evaluation of specialized patrols. Nevertheless, IHRR feels that they are worthy of consideration in any assessment of specialized patrols and we have made it a point to search for these types of data throughout the tasks assigned in this Phase 1 evaluation.

Other useful information gathered through the literature review deals with evaluation per se: the typical study designs relied upon in evaluating specialized patrols, the type of data collected, the problems inherent in typical types of data and measurements, etc. Some of this information will be found in various parts of this report.

B. The IHRR Survey and Case Descriptive Study

To supplement the knowledge gained from the literature review and determine the universe of specialized patrol, IHRR surveyed about 400 law enforcement agencies throughout the nation via mail, personal, and telephone interviews. On-site visits were made to 22 departments having specialized patrols. From this survey, and a survey of evaluations on specialized patrols, IHRR selected 21 specialized patrol projects for in-depth study and analysis. This sample of 21 projects was purposively selected and is believed to represent about as much as is known on specialized patrols that rely on the three most commonly-used tactics: civilian dress, uniformed tactical, and mechanical devices such as night vision scopes, electronic surveillance equipment and other sophisticated technology. The universe of specialized patrols and the case descriptions of the selected 21 projects appear in the IHRR Product 2 report.[2]

In analyzing these 21 projects, we used a general systems model. This model 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) and the consequences of these interventions on the project and department (process measures)

- Output.--Those events resulting from project interventions that result in primary outputs (immediate outcomes) such as arrests, clearances and crime reductions; and, in secondary outputs (impact) such as displacement, arousal of public support and other effects on the community or broader society

The various parts of this general systems model are shown in Figure I-1.

C. Project Families and Measurement

The general systems model described briefly above proved useful in classifying the projects into families and has served well as an analytic model in this and our Product 3[3] reports.

Using the model, we identified three types of specialized patrol families from among the 21 selected for study in Product 2: Low Visibility patrols, High Visibility patrols, and combined High/Low Visibility Patrols. Table I-1 shows the types of input and throughput variables used to discriminate the three types of families. (The output variables did not prove useful in discriminating families because of the variety of output measures used across projects.)

As can be seen in Table I-1, the projects differed essentially only in the assumptions upon which they were based and the tactics they used. On all other variables, differences seemed randomly distributed across these three types of families. Using these two discriminative criteria, we have defined the three types of families as follows:

- Low Visibility patrols.--These patrols are based on the assumption that invisible police omnipresence, attained through the use of a civilian dress and/or mechanical devices unit, will lead to increases

FIGURE I-1

SYSTEMS MODEL

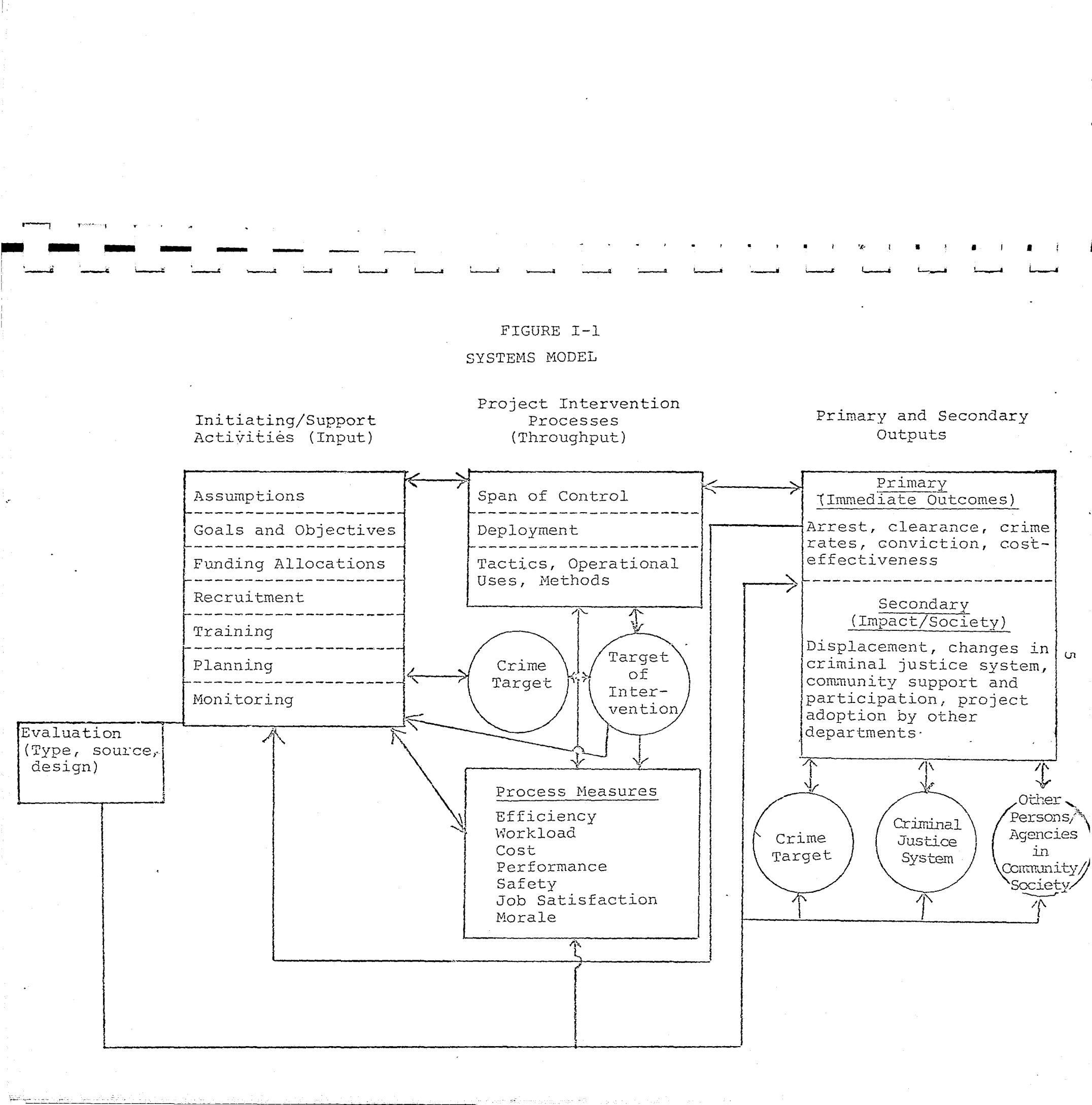


TABLE I-1

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 AND THUS REDUCE CRIME MOST EFFECTIVELY	VISIBLE POLICE PRESENCE WILL DETER CRIME & MAY LEAD TO INCREASED APPREHENSION	VISIBLE POLICE PRESENCE AND INVISIBLE OMNIPRESENCE WILL MORE EFFECTIVELY DETER CRIME AND INCREASE APPREHENSION
OBJECTIVES	REDUCE CRIME: INCREASE ARRESTS, CLEARANCE, CONVICTION RATES	SAME	SAME
SELECTIONS	"BEST" MAN FROM PD (SOME SUPPLEMENTAL USE OF VOLUNTEERS, 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

in apprehension for target crimes and, in turn, to reductions in target crimes

- High Visibility patrols.--These patrols are based 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 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
- Deter crimes

Deterrence is the main objective of High Visibility patrols, whereas increases in apprehension are the main objective of Low Visibility patrols. This difference in the rank order of expected outcomes or objectives and the tactics used to attain them, thus, constitute the major differences among High and Low Visibility families. The rank order of deterrence and apprehension in the combined High/Low Visibility patrols appears to follow that of the High Visibility patrols.

As part of the chain of assumptions common to each family, all patrol families are also expected to:

- 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

In the Product 3 report, we used the model presented in Figure I-1 to show those data elements in the model which have been measured on specialized patrols as well as those points which, in our judgment, should be, but have not been adequately measured. In addition, we discussed types of measures that could be used to test the assumptions underlying the existence of specialized patrol families. Other measures were presented which would be useful in assisting police departments to assess the efficiency and cost-effectiveness of specialized patrol projects.

The information presented in Product 3 has been useful in identifying parts of the knowledge base on specialized patrols as well as some of the deficiencies in this knowledge. References to the Product 3 report, therefore, will appear in various parts of this report.

D. Contents of this Report

The remainder of this report will focus on the following topics:

- Methods of assessment (Chapter II)
- Assessment of project families (Chapter III)
- A tentative knowledge base on specialized patrols (Chapter IV)
- Deficiencies in knowledge on specialized patrols (Chapter V)

NOTES AND REFERENCES

1. Institute for Human Resources Research. "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program: Product 1, Literature Search." Prepared under LEAA Grant No. 75-NI-99-0067. Bethesda, Maryland, 1975.

2. Institute for Human Resources Research. "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program: Product 2, The Universe and Selected Project Descriptions." Prepared under LEAA Grant No. 75-NI-99-0067. Bethesda, Maryland, 1975.

3. Institute for Human Resources Research. "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program: Product 3, Project Families, Synthesis Framework and Measurement." Prepared under LEAA Grant No. 75-NI-99-0067. Bethesda, Maryland, 1975.

II. METHODS OF ASSESSMENT

This chapter is concerned with the basic questions underlying the subsequent chapters of this report. That is, it relates to the methods which IHRR used to assess the present state of knowledge about specialized patrol projects in order to make some statement regarding:

- The accuracy and reliability of the knowledge base utilized in the IHRR studies
- The performance and effectiveness of selected project types
- The identification of factors which seem associated with success or failure of the projects
- Obvious deficiencies in present knowledge and the reasons for these deficiencies

In making this assessment, we rely upon several different sources of information:

- A review of published and semipublished material on specialized patrol and topics relevant to the operation of these patrols
- Questionnaire and interview data gathered from police departments across the nation
- Descriptive and evaluative reports collected from police departments on specialized patrols
- A body of literature devoted to research and evaluation methodology

Our methods of assessing specialized patrols lead, of necessity, to a certain amount of subjective judgment. The assessment does not involve on-site, formal evaluations of projects; our most objective methods of assessment, therefore,

lie in the application of accepted standards of research and evaluation to the available body of information on specialized patrol projects.

Our assessment has been limited by a number of factors such as time constraints, non-response of many police departments, inadequate access to certain informational sources within participating police departments and/or the police participants' lack of knowledge about certain functions of or information about the specialized patrols within their departments, the limited nature of the available literature on specialized patrols and, especially, by the poor quality of the evaluations of specialized patrols.

Given these limitations, we have approached this task with a certain "spirit of humility" and the recognition that our conclusions cannot be considered a definitive, final word on the subject of specialized patrols. We have endeavored, however, to weigh the data available to us carefully and to present an unbiased--albeit "subjectively" judgmental--view of different types of specialized patrols.

In this chapter, we will discuss the methodologies used by IHRR to assess:

- The accuracy and reliability of informational sources on the performance and effectiveness of specialized patrols
- Indicators of success and failure
- The amassing of a tentative knowledge base
- The identification of deficiencies in the knowledge base

A. Assessment of the Information Sources on Specialized Patrols

In order to present the state of knowledge on specialized patrols and to make some determination of their success and failure in terms of performance and effectiveness, we drew essentially upon three types of information. One represents information which comes from formal evaluations. The second type of information is simply raw data. These data are most often in the form of crime statistics (e.g., arrest rates, clearance rates, crime rates), figures that have not been subjected to a formal evaluation. However, some unevaluated raw data relates to secondary outputs (e.g., citizen support or participation) or the process measures shown in the IHRR model (e.g., job satisfaction and morale). The third type of information represents little more than the expert opinion of police personnel and other officials which, reportedly, has been formed through subjective judgments based on informal comparisons of selected information (e.g., crime statistics, conversations with citizens, personnel records) or, simply, experience.

In terms of accuracy or reliability, any of these types of data could, theoretically, range from bad to good quality. In the following sections, we will discuss the methods used by IHRR for assessing these three types of information. We relate these methods, where relevant, to topics such as success, failure, performance, and effectiveness.

1. Evaluations. Evaluation provides the most promising means of gathering reliable and accurate information on specialized patrols. An evaluation, however, does not guarantee accurate and reliable information.

The quality of the information gathered from evaluation is directly related to the quality of the study design (including the sampling). For example, the one-shot case study, often used to study specialized patrols, fails to control for any of the internal and external validity variables discussed by Campbell and Stanley[1] and summarized later in this section. Consequently, such a design tells us little that can be considered accurate or reliable about specialized patrol performance and effectiveness. Experimental and certain quasi-experimental designs, on the other hand, do control for many of these internal and external validity factors[2] and do so, in large part, because they introduce the use of well-matched control or comparison groups.

Consider the case where an evaluator systematically compares crime statistics (e.g., arrest, crime rates) for a specialized patrol one year after its implementation with the same types of data for traditional patrol at the end of the previous year and does so without matching these groups in any way. One could not be certain that the results obtained from such a study were an accurate or reliable reflection of the performance and effectiveness of specialized patrols. A high level of performance on the part of the specialized patrol could be attributed to the fact that the specialized

personnel, who represent the highest performers in the department (which they usually do), were placed in situations where the likelihood of arrest or deterrence was much greater than those in which traditional patrols operate, and so on.

A much better solution would be to compare the performance and effectiveness of specialized patrol personnel before and after their assignment to the specialized unit and/or with the output of some well-matched comparison group. Suppose one comparison centered around the level of crime reduction effected by both groups. In this case, it would still be crucial to make certain that the reporting of crime and criminal activity were similar in the areas served by the specialized patrol and any comparison group in order to point to differences in performance and effectiveness between the two groups. One could still not be certain of the accuracy of the actual crime rate but, with crucial factors held constant, one could state with some level of confidence that there was some or no difference between the two groups with regard to crime reduction. One could say, with some confidence, that any statistically significant difference might be related to the patrol tactic itself. Similarly, if one could be reasonably certain that the two different groups used the same criteria for making arrests for the same types of crimes, arrest rates might prove valuable indicators of performance and effectiveness. Finally, if the interactions of other parts of the police department or criminal justice system with both groups were constant, clearance or conviction

rates could be effective measures of differences in performance and effectiveness.

In real life, of course, it is usually difficult to control for variables that need to be held constant in order to derive statistical differences. Assuming that the most relevant factors have been held constant while measuring a single criterion is risky, given the inadequacies of present research methodology. The use of single criterion measurement is not recommended by practiced evaluators.

A far better solution lies in the use of multiple measures. As Donald Campbell[3] has noted, the imperfect validity of all measures can be overcome only by the use of multiple, independent measures. Even though all measures may be imperfect, confirmation of a statement by two or more independent measurement procedures greatly reduces the uncertainty of the interpretation of findings.

Following Campbell, we have used multiple measures as one means of assessing the reliability or, if one chooses, the validity of evaluation findings on specialized patrols. Our scaling of expert opinion and crime figures and other raw data, is based on multiple sources of information also. However, in the case of evaluation, the number of independent measures cannot be used as the sole criterion for judging the reliability and accuracy of the evaluation knowledge on specialized patrol. One must consider, from an evaluation viewpoint,

- The relevancy of the measure or measures used as a test of the hypothesis or hypotheses

- The adequacy of the study design in relation to the problem being studied (including comparison groups, locations, etc.)
- The accuracy of the data base used to make any comparisons (e.g., crime statistics)
- The appropriateness of statistical tests used in the study
- The generalizability of the findings

Another way of summarizing these considerations is to view them in terms of what Campbell and Stanley[4] have termed "internal validity" and "external validity."

The following criteria, adapted from Campbell and Stanley, illustrate eight different classes of extraneous variables which, if not controlled for in the experimental (or evaluation) design, might produce effects confounded with the effects of the stimulus or independent variable (i.e., the interventions of specialized patrols) and, thus, threaten internal validity. These are history, maturation, testing, instrumentation, statistical regression, selection biases, experimental mortality and selection-maturation interaction. Each of these variables is defined and illustrated in Table II-1.

Any of these variables can represent a rival alternative explanation for differences obtained in evaluations if proper safeguards are omitted from the design. IHRR staff, insofar as possible, will attempt to assess the accuracy and reliability of information gathered from evaluations by these internal and external validity criteria in order to answer the basic

TABLE II-1

CRITERIA FOR JUDGING INTERNAL VALIDITY

Criterion	Example
1. History: events occurring in time between two measurements that could produce changes in addition to experimental variable (best controlled by randomization of experimental sessions)	Measure conviction rates 1 mo. in 1973 same mo. in 1974; in meantime, courts have changed conviction procedures or offense criteria have changed (as in New York City for grand larcency, person)
2. Maturation: processes within respondents that change as a function of time (getting tired, bored, etc.) and may account for differences between measurements in two different time periods	Maybe specialized patrol staff would get bored or discouraged if they were not liked by community, Department, etc.; Hawthorne effect
3. Testing: effects of taking a test upon scores of subsequent tests (2 & 3 best are controlled when equally manifested in control and experimental group; randomization improves; control of maturation and testing factors)	If officers knew they were being "tested" in different time periods on basis of arrest or conviction rates, they might well change their practices so they will have better records for subsequent tests
4. Instrumentation: changes in the calibration of instruments or in observers or scorers (best controlled by fixed instrument; random assignment of observers or use of same observers in all sessions; and double-blind designs)	If arrest records were the test criterion and some changes were made in ways of recording arrests, this would be similar to changes in instrumentation
5. Statistical regression: operates where groups have been selected on the basis of their extreme scores; subsequent tests may show this group closer to the average mean if they were originally high scorers, above the mean if they were low (best controlled by random selection of groups)	Selection of only best officers might lead to regression scores (especially crucial when compare these to unmatched traditional)

TABLE II-1 (continued)

Criterion	Example
6. Selection biases: biases resulting in differential selection for the comparison groups (best controlled by random selection)	Specialized patrol compared with any traditional patrolman (i.e., not matched in some relevant way)
7. Experimental mortality: differential loss of respondents from comparison group (best solution: use all subjects who complete pre and post tests)	More traditional patrol drop out of experiment than specialized patrol staff
8. Selection-maturation interaction: which in certain multigroup quasi-experimental designs is confounded with effects of experimental variable (best controlled by sophisticated random designs)	Study design is not well controlled design with random selection of groups (including control group)
9. Testing of hypotheses: evaluation actually tested stated hypotheses (or assumptions)	Hypotheses states that civilian dress tactic more effective than uniformed to combat muggings; both groups tested in separate but comparable target areas
10. Measurement of objectives: actually measure the objectives stated	Objective is to increase conviction rates; conviction rates later measured

question: Can the observed effects be unambiguously attributed to the project's interventions, that is, independent variables?

However, because much of our data come from relatively simple evaluations, IHRR has added two other internal validity criteria: the testing of hypotheses and the testing of objectives. These, too, are briefly defined and illustrated in Table II-1.

A given evaluation may portray a specialized project in an exceedingly favorable light. The evaluator may recommend the adoption of the project by other departments and/or departmental personnel may adopt the project at face value, assuming it will succeed in their community.

These considerations lead us to view the accuracy and reliability of the information in terms of external validity. That is, we ask whether or not the evaluation has been performed in such a manner that one could reasonably assume that the project is generalizable or capable of being successfully adopted elsewhere.

Factors jeopardizing external validity or representativeness have been defined by Campbell and Stanley[5] for experimental settings:

- The reactive or interactive effect of testing, in which a pretest might increase or decrease the respondent's sensitivity or responsiveness to the experimental variable and, thus, make the results obtained for a pretest population unrepresentative of the effects of the experimental variable for the unpretested universe from which the experimental respondents were selected. An example of this in a nonexperimental project might be as follows: the experimental variable is quality arrest (ability to make arrests that withstood conviction); the

pretest equivalent is experience and training in making quality arrests, an experience not granted the unpretested universe.

- The interaction effects of selection biases and the experimental variable. In a nonexperimental setting, this might include projects where all specialized patrol personnel are selected on the basis of their ability to perform well in the selected tactical setting or on specified objectives (e.g., quality arrests); their success then would almost be assured but would not be generalizable to other policemen not having such abilities.

- Reactive effects of experimental arrangements which would preclude generalization about the effect of the experimental variable upon persons being exposed to it in nonexperimental settings. Any testing, observations, etc. that are outside the ordinary working conditions could affect external validity. In a nonexperimental setting, simply telling specialized patrol personnel (and any comparison group) that their performance will be studied in a given situation or time period could cause them to react in extraordinary ways not representative of their usual behavior and thus make the data unrepresentative.

- Multiple - treatment interference: likely to occur whenever multiple treatments are applied to the same respondents because the effects of prior treatment are not usually erasable. This might occur in nonexperimental settings where training and tactical experience of specialized personnel changes continuously over time.

It should be noted that the paucity of information on methodology in evaluation studies makes any such systematic assessment of internal and external validity difficult indeed. Further, the specialized patrol projects are seldom based on a systematic, experimental basis, such as that outlined by Campbell and Stanley. Nevertheless, the criteria which they have delineated, and those added by IHRR, provide useful standards by which one can assess the evaluative information on specialized patrols and will be used to the extent possible.

a. Criteria for rating the accuracy and reliability of evaluation data. As shown in Table II-2, simple low, medium and high ratings are used to assess the accuracy and reliability of evaluation data. The several criteria that must be assessed include the number of measures used, the relevancy of the measures, the adequacy of the study design in terms of internal and external validity, the accuracy of the data base, and the appropriateness of statistical tests used.

In many cases, of course, our rating of evaluation information will be equivalent to an unknown (UK), that is, data are either unavailable or too sparse on a given variable to make any rating at all.

2. Crime Figures and Other Raw Data. In a number of cases, the IHRR data base on the 21 projects contains some type of crime or crime-related figures or statistics. These are simply figures or statistics for a given activity for a given time period that have not been evaluated formally. These crime data are of four types: arrest, clearance, conviction, and crime increase/decrease figures. They may be in one of several forms: rates, percentages, raw numbers, averages, etc. Seldom did IHRR have accompanying data to convert these figures into rates where rates were not supplied. However, any such figures would be suspect in terms of reliability for the very reasons that make most widely used forms of crime statistics suspect (e.g., the Uniform Crime Reports of the Federal Bureau of Investigation).

TABLE II-2

CRITERIA FOR SCALING EVALUATION DATA

Criterion 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/ External Validity (Experimental Criteria Only)	Low: violates all or 1/4 of internal/external validity criteria relevant to project 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

TABLE II-2 (continued)

Criterion Rated	Scaling Criteria
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 department'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 used 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 of objectives adequately High: tests 1/2 or more of the objectives adequately

IHRR discussed the problems inherent in crime statistics at some length in its Product 1 report.[6] We can summarize the literature 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 and also may be affected by many societal factors (e.g., economic factors such as high unemployment rates, increased or decreased willingness of victims to report crime in any given time period). Arrest rates are also beset with problems, despite the method used to derive an arrest rate. 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, too, depends upon 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 which are outside the control of the police department. Similar problems arise with the use of conviction rates as performance or effectiveness measures. In short, the accuracy and reliability of crime figures is questionable. The extent to which the figures are inaccurate or unreliable has yet to be determined. Since the bulk of the IHRR information (including evaluations) rests on these types of data, our assessment of the knowledge on specialized patrol rests, indeed, on a shaky foundation.

For the reasons stated above, we have given a low reliability rating to police department crime figures. Our ratings

CONTINUED

1 OF 4

rise to medium when an evaluator rates the department's data base as being of better-than-average quality. Should a department's figures be consistent with those of an outside source (e.g., victimization survey figures), such departmental data receive a high reliability rating.

Other types of unevaluated, raw data include information on citizen complaints, support, and participation. These will be included in our discussions on specialized patrol, but simply viewed (rated) as positive or negative in impact.

3. Assessment of Expert Opinion. Since police departments, either because of philosophy and/or resources, are not overly committed to systematic evaluations of police activities and can draw upon only a limited knowledge base on specialized patrols, it is not surprising to find police personnel assessing the performance and effectiveness of specialized patrols in a subjective, informal manner, either in their conversations or in printed materials. This does not mean that their judgments may not be fairly accurate and reliable. Police personnel could base such judgments upon at least one or more of the following types of information:

- Statistics such as crime, arrest, conviction and/or clearance rates (referred to generally as "crime statistics")
- Observations of the behavior (e.g., enthusiasm, absenteeism) of specialized patrol personnel, as well as other personnel in the department, who might be affected by the specialized patrol
- Informal conversations with citizens who praise/condemn the special patrols

- Innumerable citizen requests for the patrol's services or removal of patrol
- Obvious, but unmeasured, increases/decreases in citizens' use of streets and/or public facilities in the areas served by specialized patrols
- Conversations with personnel in other parts of the criminal justice system which convey the impression of a positive/negative impact resulting from the patrol's activities (e.g., quality arrests which lead easily to convictions)

Citing a number of obvious benefits (or, conversely, disadvantages) of utilizing specialized patrols, such as those mentioned above, is certainly far different from a flat statement which says, in essence: "I just think the patrol is effective (or ineffective) though I have no proof. I have been in the Department for many years and can judge such things well." The latter might well represent a "save-face" measure, a stubborn refusal to look for evidence that might reflect adversely on one's decision to implement a special unit (or to admit to its effectiveness if one had opposed its implementation). Keeping one's eye on behavior and crime statistics and one's ear attuned to the community, on the other hand, could represent the only means available (because of resource constraints) to police personnel for assessing a specialized patrol and might be done as objectively as possible, despite the lack of formal evaluation.

It is impossible for IHRR to assess the objectivity of such subjective assessments by police personnel. However, we feel that documenting expert opinion is important: it represents one type of information base upon which police

departments sometimes depend. By documenting these subjective assessments of performance and effectiveness, we can also make some comparisons between what is believed and what appears to have been validated through evaluations. We should note, however, that we cannot assess the representativeness of the collected expert opinion. The expert may represent a chief of police, a unit commander, a lieutenant who IHRR staff was permitted to accompany on his assigned tour, or the published opinions of an unspecified person or persons. We have no method of determining how much interjudge agreement there might be if one were to survey the personnel of any police department to determine attitudes toward specialized patrol personnel and operations.

a. Criteria for rating expert opinion reliability. In attempting to assess expert opinion, we have used our best judgment in rating the available data according to the scale and criteria shown in Table II-3.

The reader will note that we do not give a high rating of reliability to statements citing crime statistics when they are used as a sole criterion for judging success, failure, performance, or effectiveness. The reasons for this decision lie partly in the general unreliability of crime statistics, a topic discussed in the previous section and also in the fact that this expert opinion represents merely verbal statements without supporting documentation.

However, should an expert cite several crime statistics, all pointing in the same direction with regard to success or

TABLE II-3

CRITERIA FOR SCALING OF EXPERT OPINION

Rating of Accuracy/ Reliability	Criteria
Low	No "evidence" cited for opinion
Medium	Expert cites only one type of crime statistic (e.g., arrest rate) and/or two or less unevaluated but relevant criteria (e.g., frequent citizen requests for specialized patrol services)
High	Expert cites two or more types of crime statistics which consistently point in the same direction (e.g., to success or failure) and/or cites three or more other relevant criteria (e.g., frequent requests for patrol's services, frequently expressed positive attitudes by citizens, high morale as indicated by observed low turnover, absenteeism)

failure of the specialized patrol, this would increase our rating of the reliability of his stated judgment. The reliability of an expert opinion also rises if he cites information related to the impact wnich the specialized patrol has on the specialized unit, the department, and/or the community it serves. In summary, reliability increases as the number of different types of evidence cited increases.

In cases where police personnel actually supplied IHRR with raw data, such as crime statistics, we have selected these data as a basis for rating success or failure, rather than expert opinion, per se, as will be noted in a subsequent section. However, where appropriate, we will single out expert opinion regarding a given specialized patrol unit or activity.

B. Assessment of Success and Failure

In an ideal world, all social interventions might be subjected to careful experimental variations and to examination by evaluators with fool proof designs and measures. In such a case, performance and effectiveness could be judged solely in terms of the accuracy and reliability of the evaluation data. In the real world, of course, social interventions are more often unevaluated than evaluated and serious researchers can generally vouch for little more than a probability level in regard to the accuracy and reliability of their data.

Our assessment of the accuracy and reliability of the information on specialized patrol families (see Chapter III) led us to one conclusion: criteria, in addition to the accuracy of evaluative data, were needed if we were to make even tentative

conclusions about the success and failure of specialized patrols as each relate to performance and effectiveness.

1. Variables of Interest. In evaluation terms, IHRR attempted to determine the success, failure, performance, and effectiveness of specialized patrol activities by analyzing data related to three types of variables:

- Independent variables, that is, those activities of specialized patrol which are allowed to vary while other factors are held constant. In nonexperimental projects where these variables are undefined, we define independent variables simply as the tactics (i.e., civilian dress, uniformed tactical and mechanical), the operational uses of these tactics (i.e., location oriented, crime oriented and suspect oriented), and the methods (e.g., decoy, blending stakeout).

- Dependent variables, that is, those factors that are expected to change as a result of the intervention (independent variables). Dependent variables under consideration include such factors as crime rates, arrest rates, clearance rates, quality arrests, productivity measures, morale and job satisfaction, community attitudes toward the project, the project's influence on the criminal justice system, etc. Some dependent variables, such as crime, arrest and clearance rates, are perceived as primary outputs that affect the process (i.e., both the police department and the specialized patrols) and the community. Others, such as morale and job satisfaction, are perceived as process variables that may have immediate or long-term impact. Community attitudes and the patrol's influence on the criminal justice system and society at large are viewed as secondary outputs whose impact can be immediate but also long-term in effect.

- Intervening variables, that is, processes that intervene between the independent and dependent variables. The number of possible intervening variables in this case is unknown; however, we list those thought to be of greatest significance in Table II-4, together with the place of the variable within various societal systems.

TABLE II-4

INTERVENING FACTORS AFFECTING SPECIALIZED PATROLS

Under Department Control	Not Under Department Control
Funding Level (in part)	Funding Level (in part)
Planning . Goal Setting . Crime Analysis . Organization of Patrol . Deployment Practices . Manpower Allocations	Community Input into Planning
	Societal Changes . Unemployment . Criminal Organization Changes
Recruitment/Selections Criteria	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	SES, Size & Other Characteristics of Target Areas/Persons
Police-Community Relations Efforts	Characteristics of Criminals
Police Relations with Other Parts of Criminal Justice System	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	

In our study we have found that these intervening variables appear simply as descriptive project characteristics. None has been seriously studied by evaluators. However, as part of our assessment, IHRR will select those intervening variables that appear, in our judgment, to reflect important deficiencies in the knowledge base on specialized patrols. And, we will present the available descriptive knowledge that exists on these intervening variables.

2. Variables Measured. Figure II-1, adapted from the IHRR Product 3 report,[7] shows the types of dependent variables that have been studied in our sample of specialized patrols. Because of inadequate study designs, no adequate tests of independent variables were made.

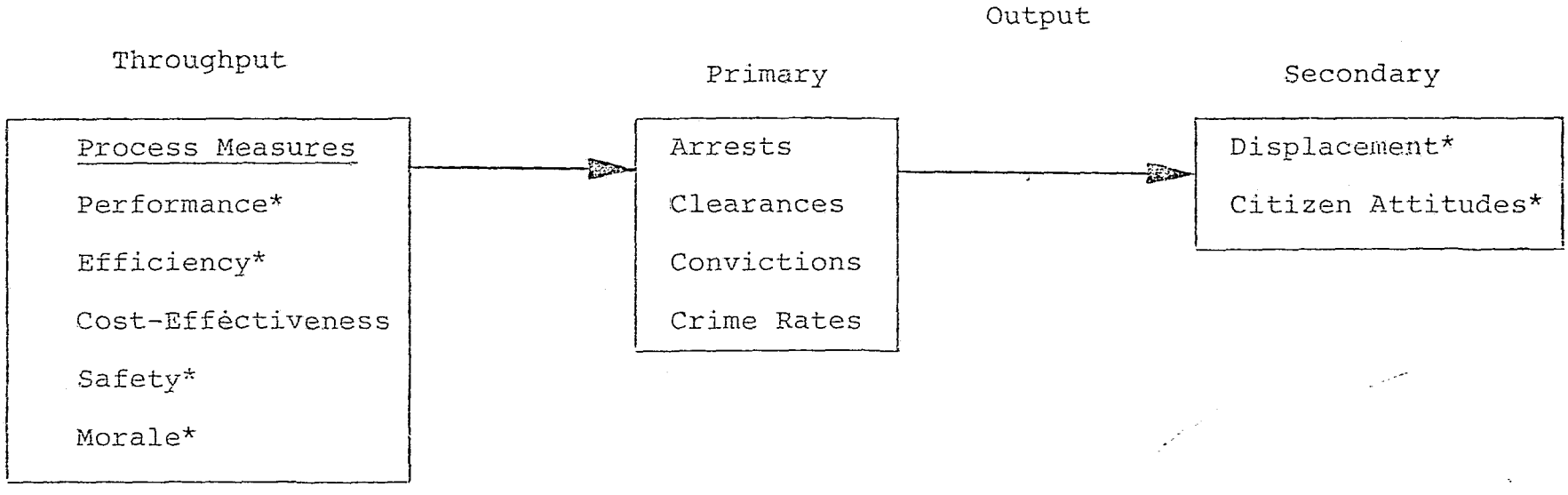
As shown in Figure II-1, the dependent variables most often studied were what are termed in the IHRR model as "primary outputs": arrests, convictions, clearances, and reductions in crimes. A few studies have addressed such secondary outputs as displacement (though not adequately) and citizen attitudes. Other dependent variables that have received a little attention from evaluators are what are termed in our model as "process measures." Thus, we have some scant information on performance, efficiency, cost-effectiveness, safety, and morale.

This paucity of data, combined with a knowledge base of questionable accuracy, greatly limits our ability to assess performance and effectiveness in terms of success or failure.

3. Assessing Performance and Effectiveness. One task assigned to IHRR was to determine the range of performance and

FIGURE II-1

VARIABLES MEASURED ON SPECIALIZED PATROLS



*Tested only infrequently.

effectiveness among and across specialized patrol families. In order to determine a range, however, one must have comparable data that will permit reliable comparisons to be made on any type of activity.

The data available to IHRR are, in general, not comparable. We have some evaluation data, some crime figures, and some expert opinion. With these diverse sources, we can only look at points of agreement and disagreement. In evaluations, many different types of measures were used to determine performance and/or effectiveness for any given activity. For example, data on arrest performance/effectiveness include an average number of arrests for a unit for a limited time period, an average number of arrests per officer, an arrest rate, the percentage of arrests made by the specialized patrol of all departmental arrests, the actual number of arrests, arrest figures for a target area served by specialized as well as traditional patrol with no breakdown for the types of units, etc. Accompanying data were insufficient to permit IHRR to devise some standard rate or other figure in order to make the data comparable across projects.

Further, there were serious flaws in the evaluation designs which hindered any definitive conclusion regarding a range of performance or effectiveness or, for that matter, drawing any simple conclusions about performance or effectiveness. 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 (or no) study of displacement

Given all the problems with the data, we were faced with the question as to how we might best make some tentative conclusions regarding the performance and effectiveness of the specialized patrols under study.

Our solution to this dilemma is tied to our criteria and ratings for success and failure which are discussed in the following section.

4. Assessing Success and Failure. The success or failure of specialized patrols could be defined in a number of ways. One could establish standards, for example, perhaps in the form of a quantitative number (e.g., rate). Projects falling below this standard could be termed a failure. Those meeting or exceeding the standard would be judged a success. The problem with this method is that no comparative criteria seem to exist which would permit an evaluator to establish sound standards. National standards, such as the Uniform Crime Reports, Federal Bureau of Investigation, are for entire departments and do not single out specialized patrols. The IHRR figures gathered on specialized patrols represent a diversity of noncomparable data and measures which defy any standardization. Both means of establishing some standards (i.e., use of national averages and comparative figures) were considered by IHRR but abandoned because they appeared inappropriate and invalid.

Another means was to consider for success or failure ratings, only those projects whose evaluations were rated medium to high on internal and external validity. This criterion would have left us with almost no means for even estimating success or failure since the bulk of ratings on internal and external validity were low. In addition, stringent evaluation criteria would have ignored considerations important to the law enforcement system: their definitions of success and failure. We will discuss these system considerations in the following section.

a. Some considerations in defining success and failure. IHRR recognizes that we cannot know all of the reasons why a specialized patrol is of value to a police department. For example, if we reviewed the data on the Houston, Texas, specialized patrol only in terms of its overall performance on arrests, we would rate the project a failure. We know, however, that this specialized patrol was established to handle a very specific and difficult task--the handling of barricade and hostage cases. These cases do not occur often; the unit cites five cases in five months. Thus, the unit spends its nontarget time performing duties to supplement the needs of other units. These duties include arrests for major and minor offenses, serving of warrants, and other duties that really do not require personnel as highly trained as the specialized unit. Nevertheless, the unit seems to be important to the Houston department; their success is determined by their ability to handle sensitive, but infrequent hostage and barricade situations. Had we not had this insight, we would probably have rated the unit as a failure

since its performance is not particularly outstanding and its budget exceedingly high. Having learned the importance of the unit to the Houston department, through site visit interviews, tempered our ratings, leading generally to a "Qualified Success" rather than a "Failure" rating on a specific activity.

This 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 and, to some extent, the control of public officials. Citizen demands are part of the considerations. Barricade and hostage incidents are a case in point. Another is the New York Transit Authority's night patrol, a project included in our High Visibility Patrol family. Subway riders, concessionaries and other interested parties seek protection from robbers. The cost to New York City for this night protection is $13 million a year. In more mundane terms, the cost is $35,000 per deterred felony. Again, IHRR would be tempted toward a failure rating on the basis of cost. Our rating is tempered by the remarks of high public officials that the project is a "stunning success" and the willingness of New York City to pay such a price for protection in the subways.

To summarize our point, success or failure cannot be defined solely in terms of an evaluators' determination of cost-effectiveness, level of performance, or degree of effectiveness. The definitions, to be meaningful to decisionmakers, include considerations of public welfare and local political issues.

What appears as an overly costly endeavor to outsiders, may well be considered a small cost for an important gain to those in decisionmaking positions. We do feel, however, that critical resource allocations should rest on sound evaluations as well as considerations relating to public welfare and political issues. Sound evaluations, in fact, could assist decisionmakers in deciding on critical resource allocations, such as whether to choose a less-costly traditional patrol or some type of specialized patrol tactic to combat a given crime situation. We will discuss methods by which evaluation could assist decisionmakers in resource allocations and in making judgments on performance and effectiveness in our next report. At this point, we will turn to our methods of judging the success or failure of specialized patrol families in this report. To the extent possible, we have considered the accuracy and reliability of information in our ratings.

b. IHRR's methods of judging success and failure. In order to make some tentative conclusions regarding the success or failure of specialized patrol families, IHRR used several methods:

- Assessment of expert opinion with regard to success or failure
- Assessment of objectives attainment, that is, the number of objectives totally met and partially met by a specialized patrol project and project family
- The amount of change effected by a specialized patrol project and project family
- Ratings based on a blend of performance and effectiveness figures on a specialized patrol project and family and the reliability and type of informational source that provided the data being rated; these ratings take into consideration the meaning of success and failure held by public officials and decisionmakers within the police departments

- The acceptance of a specialized patrol project or project family by the community (as indicated by positive attitudes, requests for service, and other secondary output measures), and the successful adoption of a project elsewhere. These criteria represent a type of systems external validity which we feel is an important consideration in judging success and failure

- The effects which a specialized patrol project or project family has on the specialized unit or department (e.g., effects on morale, as judged by attitude surveys, turnover, etc., and the presence or absence of dissension between the specialized unit and other units in the department)

The last two criteria are not given the importance of other criteria, partly because there is little information on these two types of criteria and partly because their impact on the performance and effectiveness of specialized patrols is not well understood. We will simply quantify the number of positive and negative effects noted on the community acceptance, project adoption, and impact within the specialized unit and department and relate, descriptively, any noted relationships between these data and other information on project success and failure.

i. Expert opinion--a questionable success and failure indicator. Table II-5 shows the criteria used to rate project success or failure according to expert opinion. As can be noted, there are four types of ratings for success: one is simply a Success rating, unqualified, except for the various caveats discussed throughout regarding the accuracy and reliability of the data base. This rating does rest, however, on a high reliability rating of the expert opinion information. Probable Success is dependent upon a medium reliability rating of expert opinion, and Qualified Success upon a low reliability rating. The criteria for Failure ratings

TABLE II-5

SUCCESS/FAILURE RATINGS: EXPERT OPINION

Rating	Criterion
S = Success F = Failure	Expert opinion rated high on reliability criteria
PS = Probable Success PF = Probable Failure	Expert opinion rated medium on reliability criteria
QS = Qualified Success QF = Qualified Failure	Expert opinion rated low on reliability criteria
U = Unknown	No expert opinion cited

of expert opinion are the same as those listed for success. The other rating(Unknown) simply indicates that IHRR has no expert opinion data on a project.

One point should be stressed: IHRR does not consider this type of success or failure indicator as reliable as the the ones to be discussed in the following section, as we do not always have other types of information (e.g., evaluations) to support these opinions of experts. Further, the experts all had some type of stake in the outcomes of the project being assessed and could not be considered unbiased.

We will use expert opinion ratings where appropriate, but will present these ratings separately from ratings based on evaluative and/or crime statistics data. Thus, we may present in tabular form the ratings of experts on objectives attainment and the ratings on objectives attainment gathered from evaluations and/or crime statistics. We will, however, compare the expert opinion rating with the other types of ratings and do so wherever they apply to the other types of ratings shown in the following sections.

ii. Attainment of objectives: a questionable success/failure indicator. In the field of evaluation, a test of the extent to which an intervention has led to the attainment of specific objectives is often used as an indicator of the success or failure of an intervention. Further, evaluators often encourage projects to set specific objectives, cast in quantifiable and measurable terms. IHRR believes the practice of assessing objectives attainment is a questionable criterion for determining success or failure. The following examples are intended to illustrate our

objections to the criterion of objectives attainment as a sole measure of success or failure. The objections apply to cases where objectives are stated in global terms (e.g., crime reduction) as well as to those framed in specific, quantifiable terms (e.g., a 5 percent reduction in vehicle theft).

It is true that objectives framed in specific, quantifiable terms can simplify measurement and the interpretation of findings; however, the practice can also load the results. For example, the attainment of a 5 percent reduction in a target crime would meet the objective of a 5 percent reduction in the target crime. The attainment of a 4.9 percent reduction in the target crime would not meet the stated objective. To call this project a failure, obviously, would be ludicrous.

In another case, an objective may be unrealistic. That is, a specialized patrol may not be able to achieve a high performance level (e.g., a 60 percent increase in convictions) if the resources allocated to the project are insufficient for attaining a stated objective (or, if attainment is dependent upon an institution outside the department's control, such as courts). In still another case, a project may fail to meet an objective and still show a comparatively good record. Take the case in which a project's target area shows an increase in the 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 increase in the target crime and adjoining areas show a high increase in this crime and there is no evidence that the specialized patrol has displaced

crime to these areas? We feel it would be an injustice to rate this last case as a total failure.

Such examples should suffice to illustrate our objections to using objectives attainment as a sole criterion for judging the success or failure of a specialized patrol project or family. We do provide an assessment of objectives attainment. We will show the number of objectives that have been addressed by evaluators in their studies of specialized patrols and we will show, for each project and family, those that have been met, unmet, or represent an unknown (or uninterpretable) bit of information according to evaluations, crime figures, and expert opinion. And, we will rate each by the success and failure criteria shown in Table II-6. We will not, however, compare these results with other ratings of success and failure because of our stated objections to its use as a success/failure indicator; however, we will compare the objectives attainment data across all family types.

iii. Amount of change. A more relevant measure for judging success or failure is, we believe, the amount of change on a specific set of criteria effected by a specialized patrol project or family. To some extent, this criterion addresses objectives attainment but does so in a way that provides far more meaningful information. One does not ask simply: Did the project reduce crime and, therefore, attain its stated objective? Rather, one asks: To what extent was crime reduced by the project? Preferably, one would address the latter question by using a well-matched control group, by controlling for important intervening variables and by performing statistical tests that could determine whether or not the change was significantly different over time and between the specialized patrol and its comparison group.

TABLE II-6

SUCCESS/FAILURE RATINGS:
OBJECTIVES ATTAINMENT

Rating	Criterion
S = Success F = Failure	1. Objectives attainment level based on comparatively adequate evaluation 2. Objectives attainment level based on raw data supported by IHRR interviews and/or evaluation
PS = Probable Success PF = Probable Failure	1. Objectives attainment level based on only fairly adequate evaluation 2. Based on raw data, unsupported by IHRR interviews and/or evaluation
QS = Qualified Success QF = Qualified Failure	1. Objectives attainment level data contradictory (e.g., conflicting results from different evaluations)
U = Unknown	1. No data; unable to interpret data in terms of success or failure

We do not have amount of change data on each specialized patrol project under study. Nor are the available data based on sound evaluation designs that use well-matched comparison groups. Some of the available evaluations cannot even separate out the activities of the specialized patrol from the traditional patrol in a given target area which is then compared to nontarget areas. In still other cases, the amount of change data exist only in the form of unanalyzed crime figures.

Nevertheless, IHRR felt that the available information on the extent of change effected by a specialized patrol and/or within its target area provided the best measure of success or failure available to us. The criteria for rating amount of change as being an indicator of success appear in Table II-7. Similar criteria for failure ratings on amount of change appear in Table II-8.

iv. Performance and effectiveness indicator ratings.

The same types of success/failure ratings shown in previous sections are used to make some judgments on certain process measures: efficiency, cost-effectiveness and, in the case of one family type, safety. Each type of primary output shown in the IHRR model will also be judged by these ratings. These primary output measures are often indicators of performance as well as effectiveness. The ratings and criteria appear in Table II-9. The criteria for success or failure are less stringent than those required for the amount of change indicator. That is, the ratings are less stringently tied to statistical significance. Since few adequate statistical tests appear in the data, we feel performance should be judged by standards other than statistical tests, as can be

TABLE II-7

SUCCESS RATINGS: AMOUNT OF CHANGE

Rating	Criteria
S = Success	1. 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 2. Amount of change is high and statistically significant but data include combined output of specialized patrol and nonspecialized patrol
QS = Qualified Success	1. Amount of change is fairly low; no statistical tests have been performed 2. Two or more evaluations 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 for nontarget area and/or nonspecialized patrol
U = Unknown	1. No data; data uninterpretable because of inadequate comparison criteria

TABLE II-8

FAILURE RATINGS: AMOUNT OF CHANGE

F = Failure	1. Amount of change is not statistically significant in the desired direction; adequate test 2. Amount of change not in desired direction and performance/outcome poorer than nontarget areas/nontarget specialized patrol; no statistical tests performed
PF = Probable Failure	1. Amount of change is not statistically significant; not very adequate test
QF = Qualified Failure	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	1. No data; data uninterpretable because of inadequate comparison criteria

seen in Table II-9.

As with other types of information assessed by these types of ratings, these performance and effectiveness indicators will be assessed for each project family and across project families.

v. Other considerations. As noted previously, we will consider also the impact which the specialized unit has on the morale of its personnel and the morale of the department as well as various secondary outputs shown in the IHRR model. The secondary outputs largely cover displacement, citizen attitudes and the patrols' impact on other parts of the criminal justice system. Since our information on these factors is scant and is seldom based on formal evaluations, IHRR has not attempted to use the types of ratings shown in previous sections. Rather, our assessment will merely point to effects that appear to be in a positive or negative direction and the data will be used to provide further insight into success and failure of specialized patrol projects.

iv. Overall ratings. At the conclusion of our discussion of each project family, IHRR will present two types of ratings for the following criteria:

- Amount of change
- Efficiency
- Cost-effectiveness
- Arrest performance/effectiveness
- Clearance performance/effectiveness
- Conviction performance/effectiveness
- Crime reduction

For each of these criteria, we will present combined Success, combined

TABLE II-9

SUCCESS/FAILURE RATINGS: INDIVIDUAL ACTIVITIES: PERFORMANCE AND EFFECTIVENESS

Rating	Criterion
S = Success F = Failure	1. Based on comparatively adequate evaluation 2. Based on adequate raw data supported by IHRR interview data and/or evaluation
PS = Probable Success PF = Probable Failure	1. Based on only fairly adequate evaluation 2. Based on adequate raw data; unsupported by IHRR interviews and/or evaluation
QS = Qualified Success QF = Qualified Failure	1. 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)
U = Unknown	1. No data; data uninterpretable because of inadequate comparison criteria

Failure, and Unknown (no data) ratings. We will then provide another very gross type of rating for these criteria combined. For all combined Success and all combined Failure ratings, we will present the percentages which each separate rating (e.g., Success, Probable Success, Failure, Qualified Failure) represents, or a level of success and level of failure rating.

The first type of rating--the combined Success, combined Failure, and Unknown ratings--will permit IHRR to show, in very gross terms, the percentage of success and failure on the selected criteria as well as the gaps in knowledge on these criteria for each family type.

Since our Success and Failure ratings are related to reliability ratings of the informational sources, the second type of rating will provide a gross measure as to how successful or unsuccessful the project families were across all selected criteria (see Parts 1-3, Chapter III).

These same procedures will be followed to make comparisons of project families (see Part IV, Chapter III). In addition, we will compare project families on objectives attainment, though, as noted earlier, we believe this to be the poorest indicator of success or failure.

One final word: The overall ratings, using either method discussed above, should be viewed with some caution. The reasons largely have been explained previously: the questionable accuracy of the data, the noncomparability of measures among and between families on the same criterion, and, we should add, the questionable comprehensiveness of some measures on particular criteria. The

latter is especially applicable to the categories of efficiency and cost-effectiveness, though somewhat applicable to other categories as well. IHRR has placed available data into the most appropriate category. The results shown for a category by no means indicate that they are based on comprehensive measures, or even the most relevant measures of a given category.

C. Amassing a Tentative Knowledge Base

The amassing of the knowledge on specialized patrol was a specific task assigned to IHRR in this Phase I evaluation. Prior to writing this report, IHRR has undertaken this task by:

- Performing a literature search
- Surveying police departments, State Planning Agencies and other law enforcement personnel across the nation
- Reviewing various evaluation reports on specialized patrol
- Performing an in-depth study on 21 specialized patrol projects purposively selected as being representative of the existing knowledge on specialized patrols
- Synthesizing the 21 projects into project families
- Assessing the measurements used to study specialized patrols and the variables that have been measured on project families.

This report will continue and complete the task of amassing a knowledge base on specialized patrols by:

- Assessing the accuracy and reliability of existing knowledge on specialized patrols
- Assessing the success and failure of specialized patrol projects and families

In performing these latter tasks and amassing the knowledge on specialized patrols, IHRR will draw upon findings presented in its previous reports.

After the completion of our previous reports and an initial assessment of the work presented in this report, it became apparent that we could provide little knowledge that could be considered a conclusive, final word on specialized patrols. Many of the reasons for our inability to provide a comprehensive, conclusive knowledge base on specialized patrols were discussed in previous reports and in the previous sections of this report. We can summarize the most important of these as follows:

- Too few evaluations have been done on specialized patrols
- Existing evaluations are often of a quality unacceptable to the research community
- The existing evaluations are such that they leave essentially untested the assumptions upon which projects are based and the interventions which they use to accomplish their objectives
- Existing research findings are not based on comparable measures, a fact that confounds any assessment of knowledge about performance, effectiveness, success, or failure

Given a data base of questionable accuracy and reliability, IHRR can do little more than provide a tentative and limited set of conclusions about specialized patrols--a questionable knowledge base, indeed.

We found ourselves faced with two possibilities: one was to bypass any conclusionary statements and concentrate only on delineating important deficiencies in the knowledge base. The other was to establish some criteria for inclusion and exclusion of material from a tentative set of conclusions. We chose the latter course with the belief that such tentative knowledge could be useful to law enforcement personnel.

This tentative knowledge base will include:

. Descriptive material on the projects

. Conclusions drawn from our assessment of the projects

The criteria for including or excluding both descriptive and assessment data are discussed below.

1. Descriptive Material. The descriptive material to be included in our tentative knowledge base consists of:

. Selected information from the IHRR literature review relevant to important variables assessed on the 21 selected patrol projects

. A selected set of characteristics common to all 21 specialized patrols (regardless of family type); these represent simple, quantatively-based conclusions about the departmental milieu in which these patrols operate and include information on planning, training, monitoring, span of deployment, and other input and throughput variables listed in the IHRR model

. Special insights into reasons for success or failure that remain unevaluated

2. Assessment Information. From the IHRR ratings on the success and failure of specialized patrol activites, we will select findings for inclusion in the tentative knowledge base that:

. Appear consistently across a project family or families

. Represent what may be crucial differences by family type and/or tactic

. Represent what might be important relationships between different indicators of success or failure

D. Deficiencies in the Knowledge Base

To identify deficiencies in the knowledge base, IHRR will utilize the model presented in Chapter I. For each variable shown in the model, we will identify and judge the importance of

the deficiencies on any given variable to our understanding of specialized patrol. In addition, we will review knowledge deficiencies on important intervening variables (see Table II-4) and make some judgment as to the importance of the study of these variables in increasing our knowledge on selected intervening variables.

To juc e the relative importance of each gap, we will identify points or variables that must be measured in order to adequately test the assumptions underlying the existence of specialized patrols.

To identify reasons for deficiencies in the knowledge base, we will review our studies to identify evaluation design problems and other factors that hinder the formation of a sound knowledge base on specialized patrols.

NOTES AND REFERENCES

1. Campbell, Donald T., and Stanley, Julian C. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally, 1963.

2. Ibid.

3. Campbell, Donald T. "Reforms as Experiments." American Psychologist 24:409-429.

4. Campbell and Stanley, pp. 4-6.

5. Ibid.

6. Institute for Human Resources Research. "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program: Product 1, Literature Search." Prepared under LEAA Grant No. 75-NI-99-0067. Bethesda, Maryland, 1975.

7. Institute for Human Resources Research. "Phase I National Evaluation of Selected Patrol Strategies: Specialized Patrol Operations Under the National Evaluation Program: Product 3, Project Families, Synthesis Framework, and Measurement." Prepared under LEAA Grant No. 75-NI-99-0067. Bethesda, Maryland, 1975.

III. ASSESSMENT OF PROJECT FAMILIES

In this chapter, IHRR uses the methods described in Chapter II to assess each project family in terms of the reliability of data and success and failure. At the conclusion of the chapter, comparisons are made across project families. This information is presented in the following sections of this chapter:

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

We wish to stress again the fact that the IHRR ratings of success and failure are relative; that is, they are gross, comparative judgments based on existing knowledge of questionable accuracy and reliability.

Part 1
Low Visibility Patrols

According to IHRR estimates, a sizeable number of law enforcement agencies across the nation seem to assume that low visibility tactics are an effective way of combatting certain forms of crime. The belief seems most prevalent in large cities with populations over 50,000. More formally stated, this commonly-shared assumption reads: Increased invisible police presence will effectively lead to increases in apprehension of target criminals and, in the long run, to decreases in target crimes. Low visibility tactics (civilian dress and/or mechanical devices) are commonly expected also to increase conviction rates, decrease public fear of victimization, and enhance public safety and citizen support of and participation in police activities. Burglary, robbery, and other Part 1 offenses are typical target crimes: patrol protection and coverage extend geographically to both commercial and residential areas and inhabitants.

What conclusive evidence exists to support the basic assumption that Low Visibility patrols are an effective means of increasing apprehension and attaining other objectives? If one looks to sound, unassailable evaluative data, the answer is simple: None. However, a somewhat more affirmative answer emerges from a review of comparative data and reported expert opinion.

We will present the information on what we believe is known about Low Visibility patrols in this Part 1 section. The final

sample upon which our findings are based consists of seven patrols that rely heavily on a civilian dress tactic (one of these also uses mechanical devices) and one basically mechanical devices unit backed by traditional uniformed patrol. The sample was purposively selected and appears to be representative of the data that exist on Low Visibility patrols. The names and locations of these eight patrols are listed below.

- 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
- Tac II Alarm System Program, Birmingham, Alabama

We will refer to these specialized patrols throughout this Part 1 section by using the name of the city in which each is based.

A. The Knowledge Base: Accuracy and Reliability

The knowledge base on the Low Visibility patrol studies consists of evaluative data, crime figures and other raw data, and expert opinion. As the discussion below indicates, this knowledge base cannot be considered highly accurate or reliable.

1. Evaluations. Of the eight Low Visibility patrols selected for study, only three were formally evaluated: these include the projects in New York, San Francisco, and Henrico County. None of these evaluations controlled for any of the internal or

external validity factors adapted from Campbell and Stanley (see Chapter II, Section A, 1). Further, because of the failure to control for these factors, especially selection biases, the evaluations failed to provide a real test of the basic hypothesis (assumption) underlying Low Visibility patrols; that is, that civilian dress and/or mechanical device tactics will be effective in combatting crime. Nor did one evaluation test all stated project objectives.

Our ratings of these evaluations appear in Table III-1-1. As can be seen, the highest ratings for the greatest number of evaluations are for testing project objectives, for using multiple measures, and for using relative measures. However, high reliability ratings are given only to two evaluations and these only for the criterion of testing project objectives.

2. Crime Figures and Other Raw Data. Three departments were able to supply some information in the form of crime figures: these included the projects in Boston, Miami, and Birmingham. All were figures from the departments with no outside checks on reliability; they, therefore, were rated as being of low reliability according to the IHRR criteria for rating crime figures. Some raw data were provided also on the impact which Low Visibility patrols had on themselves, their departments, and their communities.

3. Expert Opinion. From evaluation documentation and/or interviews, IHRR was provided some information in the form of expert opinion on seven projects; the Henrico County project was the exception.

TABLE III-1-1

LOW VISIBILITY PATROLS:
RATINGS OF EVALUATIONS

CRITERION	IHRR RATING	NUMBER
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 1
APPROPRIATENESS OF STATISTICAL TESTS	LOW MEDIUM	2 1
TESTS HYPOTHESES (ASSUMPTIONS)	LOW	3
MEASURES OBJECTIVES	HIGH LOW	2 1

Using the criteria listed in Chapter II (Table II-3), we rated the available expert opinion as follows:

- Low reliability - n = 1 project
- Medium reliability - n = 2 projects
- High reliability - n = 4 projects

According to these ratings, the majority of the departments were not content to base their subjective conclusions on one or two criteria. Rather, they sought several types of evidence upon which to base their judgments. Expert opinion, then, appears to be fairly reliable, as judged by the IHRR criteria. We caution again that we cannot assess the validity of this type of information for the reasons discussed in Chapter II (A-3).

4. Assumptions and Objectives: Testability and Measurability. Given that no conclusive statement can be made regarding the knowledge base on Low Visibility patrols, we scrutinized the projects' assumptions and objectives to determine whether or not they contributed to the deficiencies in knowledge. In summary, we asked whether they were capable of being tested and measured and if they have been tested and measured.

a. Assumptions.[1] As noted in the IHRR Product 3 report, project assumptions tend to infer objectives; however, the projects also tend to specify objectives separate from what we have termed as assumptions. We will consider here only the basic assumption upon which Low Visibility patrols seems to be based: low visibility, attained through the use of a civilian dress and/or mechanical device tactic, will be an effective way to combat target crimes. One can infer that departments believe that Low

Visibility patrols will be more effective than (a) another type of specialized patrol and/or (b) traditional patrol.

The basic assumption, and the subassumptions inferred by IHRR, which lead to the establishment of a Low Visibility patrol are testable. However, they require--first and foremost--a carefully-selected comparison or control group and a well-thought-out study design. IHRR found no evidence that any study had utilized an adequate comparison group or study design to test these basic beliefs.

b. Objectives. When we asked whether or not the objectives set for Low Visibility patrols were measurable using appropriate evaluation criteria, the answer in almost every instance was an affirmative one. As in the case of assumptions, knowledge deficiencies cannot be blamed on any lack of untestable or unmeasurable variables.

Table III-1-2 summarizes the types of objectives set across Low Visibility projects as well as the number of assessments made of each type of objective. The latter figures include some rather informal assessments or comparisons made by departments as well as those measured in formal evaluations.

It is obvious from reviewing Table III-1-2 that objectives are often set forth without ever being measured. In eight cases, objectives were stated in very specific terms, such as "a 5 percent reduction in vehicle theft," a practice that simplified measurement procedures but by no means guaranteed that any measurement would be made.

TABLE III-1-2

LOW VISIBILITY PATROLS:
TYPES OF OBJECTIVES AND NUMBER OF
EACH TYPE ASSESSED

TYPE OF OBJECTIVE	NUMBER STATED	NUMBER ASSESSED
REDUCE TARGET CRIME	6	3
INCREASE ARRESTS	2	0
INCREASE QUALITY ARRESTS	2	2
INCREASE CONVICTIONS	3	1
INCREASE CITIZEN SAFETY	3	0
DECREASE CITIZEN FEAR	1	0
INCREASE CITIZEN SUPPORT/PARTICIPATION	2	1
OTHER	2	2

B. Ratings of Success and Failure

Following the methodology specified in Chapter II, we base our tentative assessment of the success and failure of Low Visibility patrol activities on the following:

- Attainment of objectives
- Amount of change
- Ratings of success and failure
- Descriptive data

The ratings of expert opinion will be introduced where relevant.

1. Attainment of Objectives. Table III-1-3 shows the number of project objectives attained by each Low Visibility patrol. The ratings of Success and Failure follow the criteria shown in Table II-5 and are based on three types of informational sources: evaluations, crime figures, and expert opinion.

If one could be certain that all the informational sources were accurate, the Low Visibility patrols would have a rather impressive record of meeting their objectives, with the exception of the Henrico County project.

However, when we view objectives attainment in terms of our rating criteria, the record is less impressive. Table III-1-4 summarizes the scores on the ratings listed in Table III-1-3.

As shown in Table III-1-4, there were three Success ratings and an equal number of Failure ratings. The latter are tempered somewhat by the three Probable Success and one Qualified Success ratings. By combining all evaluation/crime figure success ratings, the Low Visibility patrols attained one-third (33 percent) of their 21 stated objectives and failed to attain 14 percent of the

TABLE III-1-3

LOW VISIBILITY PATROLS:
ATTAINMENT OF OBJECTIVES

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

TABLE III-1-4

LOW VISIBILITY PATROLS:
SUCCESS AND FAILURE "SCORES" ON OBJECTIVES ATTAINMENT

RATING	EVALUATIONS/CRIME FIGURES	EXPERT OPINION
SUCCESS	3	8
PROBABLE SUCCESS	3	1
QUALIFIED SUCCESS	1	--
FAILURE	3	--
UNKNOWN*	11	12

*Represents the actual number of UNKNOWN ratings for the two types of information sources shown in the column headings. Each column, thus, totals 21, or the number of stated objectives.

objectives; all others were undetermined (Unknown) using evaluation or unevaluated crime figures.

Looking only at the expert opinion ratings, we find eight Success ratings and one Probable Success. Using these two types of ratings, the Low Visibility patrols achieved 43 percent of the stated objectives. (The remaining percentage represents an Unknown rating, indicating the lack of expert opinion on certain stated objectives.)

Our objections to the criterion of objectives attainment were stated in some detail in Chapter II (Section B-4) and will not be repeated here. We will turn now to what we have argued is a better success/failure criterion: the amount of change effected by specialized patrols.

2. Amount of Change. Table III-1-5 shows the data on the amount of change effected by specialized patrols through certain activities, according to evaluations, crime figures, and expert opinion. As noted, experts claim positive changes, that is, increases in arrests (Nashville, Memphis) and crime reduction (Boston, Memphis, Miami, and Birmingham).

Using the figures shown in Table III-1-5, and the expert opinion data which we rated, we obtain the scores shown in Table III-1-6 for amount of change.

Looking only at the evaluation/crime figures scores shown in Table III-1-6, two projects appeared to be somewhat successful in reducing crime; one seemed to fail in changing crime rates in the desired direction. Two projects appeared successful in increasing arrests; one seems to have failed to increase arrests.

TABLE III-1-5

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

PROJECT	TYPE/SOURCE	LVP	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	INCREASED		(PS)
	CRIME RED.: EO	REDUCED		(PS)
SAN FRANCISCO	ARRESTS: EVAL	"VERY SLIGHT" INCREASE	YR. PRIOR TO PROJECT	PF
	CRIME RED.: EVAL	12.3% RED., TARGET CRIME	YR. PRIOR TO PROJECT	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 (ALARM SYSTEM)	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.

TABLE III-1-6

LOW VISIBILITY PATROLS:
SUCCESS/FAILURE "SCORES" ON AMOUNT OF CHANGE

RATING	EVALUATION/CRIME FIGURES		EXPERT OPINION	
	ARRESTS	CRIME RED.	ARRESTS	CRIME RED.
SUCCESS				3
PROBABLE SUCCESS	2	1	2	1
QUALIFIED SUCCESS		1		
PROBABLE FAILURE	1	1		
UNKNOWN	5	5	6	4

The inclusion of expert opinion provides some coverage of all projects on arrests or crime reductions: all experts point to positive results though three ratings are in the Probable Success category because of a medium reliability rating of the expert opinion data.

Given so few hard data on the amount of change criterion, we are hesitant to make any very conclusive statement about the success or failure of Low Visibility patrols in effecting change. However, we do note that police personnel appear convinced that these patrols are effective change agents.

We will turn to other measures to see if they provide a better understanding regarding the success and failure of these projects. Some of the data listed in the amount of change table also appear again in Section 4 where they will be rated somewhat more liberally as performance/effectiveness (i.e., statistical significance will not be required as stringently for the Success rating).

3. Efficiency, Cost-Effectiveness, and Safety. Table III-1-7 shows the available data on efficiency, cost-effectiveness, and safety for Low Visibility patrols.

The best data available on all these process measures comes from the New York City project which appears to be efficient, safe, and probably cost-effective. The Henrico County project, unsuccessful by many other IHRR ratings, also appears to be costly in terms of the results gained.

TABLE III-1-7

LOW VISIBILITY PATROLS--EFFICIENCY, COST-EFFECTIVENESS, SAFETY

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATING
	Efficiency			
New York City	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)
	Cost			
New York City	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 Cost per auto recovered: Evaluation	$3,069 per vehicle theft arrest $1,087 per felony arrest $ 472 per auto recovered		PS
Henrico Co.	Overall cost: Evaluation	"High costs, low results...no arrests from use of $25,000 alarm system"		F
All Others	Unknown			U (n=5)
	Safety			
New York City	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.

Note that the mechanical device tactic was particularly nonproductive and costly. An evaluation suggests that the San Francisco project was probably cost-effective also.

The few expert opinion ratings are positive; the Boston and Birmingham units appear to contribute to the safety of police personnel.

But, again, we have few data upon which to judge Low Visibility patrols.

4. Performance and Effectiveness. The data presented in this section can be labeled as primary output or effectiveness measures; however, many can be preceived also as the process measure labeled performance in the IHRR model. We have not separated the data into different sections (i.e., process vs primary output) in order to avoid repeating much of the same data in different sections.

The various data presented in this section will be summarized at the conclusion of this section in order to present an overview of the Low Visibility patrols' success and failure on these performance and effectiveness measures.

a. Arrest performance and effectiveness. Table III-1-8 shows the available information on the arrest performance/effectiveness of Low Visibility patrols.

Here, as elsewhere, the Henrico County project appears as a Failure. The San Francisco project is also a Probable Failure with regard to arrest performance. All other ratings reflect some degree of success; for two projects

CONTINUED

2 OF 4

TABLE III-1-8

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	Number: Crime Figures	8 "in progress" robbery arrests in two months	No "in progress" arrests in non-target areas	S

NOTE: Ratings of "expert opinion" appear in parentheses.

(Nashville and Memphis) the rating reflects a Probable Success based on expert opinion. The crime figures from Boston and Miami suggest that their specialized patrols also were a Probable Success in effecting increases in arrests. The New York and Birmingham projects appear, by our ratings, as the most successful of the eight Low Visibility patrols in apprehending target criminals.

b. Clearance and conviction performance and effectiveness. Table II-1-9 provides information on clearances and convictions. The New York City project, and the Boston project modeled after it, appear quite successful in effecting a high conviction rate. The Nashville project rates a Probable Success based on expert opinion.

Two Probable Success ratings appear for clearance rates; these are for the projects in San Francisco and Miami. The Henrico County project is rated a Failure in regard to its clearance rates.

c. Crime reduction and other activity. Table III-1-10 shows crime increase/decrease figures for six Low Visibility patrols. Four ratings on crime reduction are based on expert opinion. According to our ratings on the information from these experts, the Boston and Birmingham projects appear as a Success while the Nashville and Miami projects are rated as a Probable Success.

Data from the three evaluations on crime increases or decreases led us to give a Success rating to the San Francisco project, a Probable Success to the New York City project,

TABLE III-1-9

LOW VISIBILITY PATROLS--CLEARANCE AND CONVICTION PERFORMANCE/EFFECTIVENESS

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATING
	Clearances			
San Francisco	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)
	Convictions			
New York City	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.

TABLE III-1-10

LOW VISIBILITY PATROLS--CRIME REDUCTIONS AND OTHER PERFORMANCE MEASURES

PROJECT	TYPE/SOURCE	LVP	COMPARISON/CRITERIA	RATING
	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"		(S)
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 non-target 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	"Successful"		PS
	Saturation sweeps: Evaluation	"Successful"		
	Inspection of businesses: Evaluation	"Unsuccessful"		
	Recovery of stolen autos: Evaluation	"Poor recovery rate"	Before/after project	
	Diversion of Juveniles: Evaluation	81 of 94 diversions successful	94 diversions of 531 contacts	

NOTE: Ratings of "expert opinion" appear in parentheses.

and a Probable Failure rating to the Henrico County project on this measure.

Several other activities undertaken by the San Francisco project (investigations, saturation sweeps, inspections of businesses, recovery of stolen property, and diversion of juveniles from the criminal justice system) were a Probable Success.

d. Summary: performance/effectiveness ratings. Table III-1-11 summarizes the IHRR ratings on arrests, clearances, convictions, and crime reduction for the eight Low Visibility patrols. (The other category does not appear in the table since it applies to only one project.)

From the ratings made on arrest data from evaluations and/or crime figures for six projects, one-half appeared successful while one-fourth (n = 2) appeared unsuccessful. Adding expert opinion ratings for arrests brings the success levels to 87.5 percent. These data suggest that the Low Visibility Patrols may have been fairly successful in apprehending criminals--a basic part of the assumption upon which these patrols are based.

The scant data on other performance/effectiveness criteria provides little means for any determination on success or failure on these activities. Adding expert opinion ratings to the crime reduction Success column in Table III-1-11 does suggest that the majority (75 percent) of the Low Visibility patrols may have been fairly successful in reducing crime.

TABLE III-1-11

LOW VISIBILITY PATROLS:
SUMMARY OF PRIMARY OUTPUTS

TYPE OF ACTIVITY	#/% PROJECTS PRESENTING DATA	RATING/EVAL. CRIME FIGURES				% SUCCESS	% FAILURE
		S	PS	F	PF		
ARREST (EV/CF) (EV/CF/EO)*	6 (75.0%) 8 (100)	2	2	1	1	50.0* (87.5)	25.0
CLEARANCE (EV/CF)	3 (37.5)		2	1		25.0	12.5
CONVICTION (EV/CF/EO)*	2 (25.0) 3 (37.5)	2				25.0* (37.5)	
CRIME REDUCTION (EV/CF) (EV/CF/EO)*	3 (37.5) 7 (85.5)	1	2		1	35.5* (75.0)	12.5

KEY: EV/CF = EVALUATION ON CRIME FIGURES
EV/CF/EO = EVALUATION, CRIME FIGURES, AND EXPERT OPINION RATINGS COMBINED

*Adds the "Qualified Success" ratings from "expert opinion" to "Percent Success" column.

5. Comparisons of Selected Success/Failure Criteria. Figures III-1-1 and III-1-2 graphically depict the percentage of combined Success, combined Failure, and Unknown ratings for criteria believed most important for assessing the Low Visibility and other specialized patrol families. These criteria are amount of change for two measures (arrests, crime reduction), efficiency, cost-effectiveness, arrests, clearances, convictions, and crime reduction.

These data appear first (Figure III-1-1) for the (combined) evaluations and crime figures sources only. As can be noted, the majority of ratings on each criterion fall into the Unknown category, an indication of how few hard data exist on Low Visibility patrols. These data point rather consistently to at least two failures on most criteria. All this is scant information, indeed, for judging this group of specialized patrol projects.

Figure III-1-2 combines the evaluation/crime figures data with information representing expert opinion. This addition adds nothing new to the measures of efficiency, cost and clearances. Amount of change, arrests, and crime reduction measures, on the other hand, rise dramatically by the addition of expert opinion. A slight rise appears in the conviction measure also.

Using only the evaluation/crime figures rating, the Low Visibility patrols appear fairly successful in apprehending criminals; the remaining measures are clouded by far too many unknowns to allow one to make a statement regarding

FIGURE III-1-1

LOW VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES--
EVALUATION/CRIME FIGURES

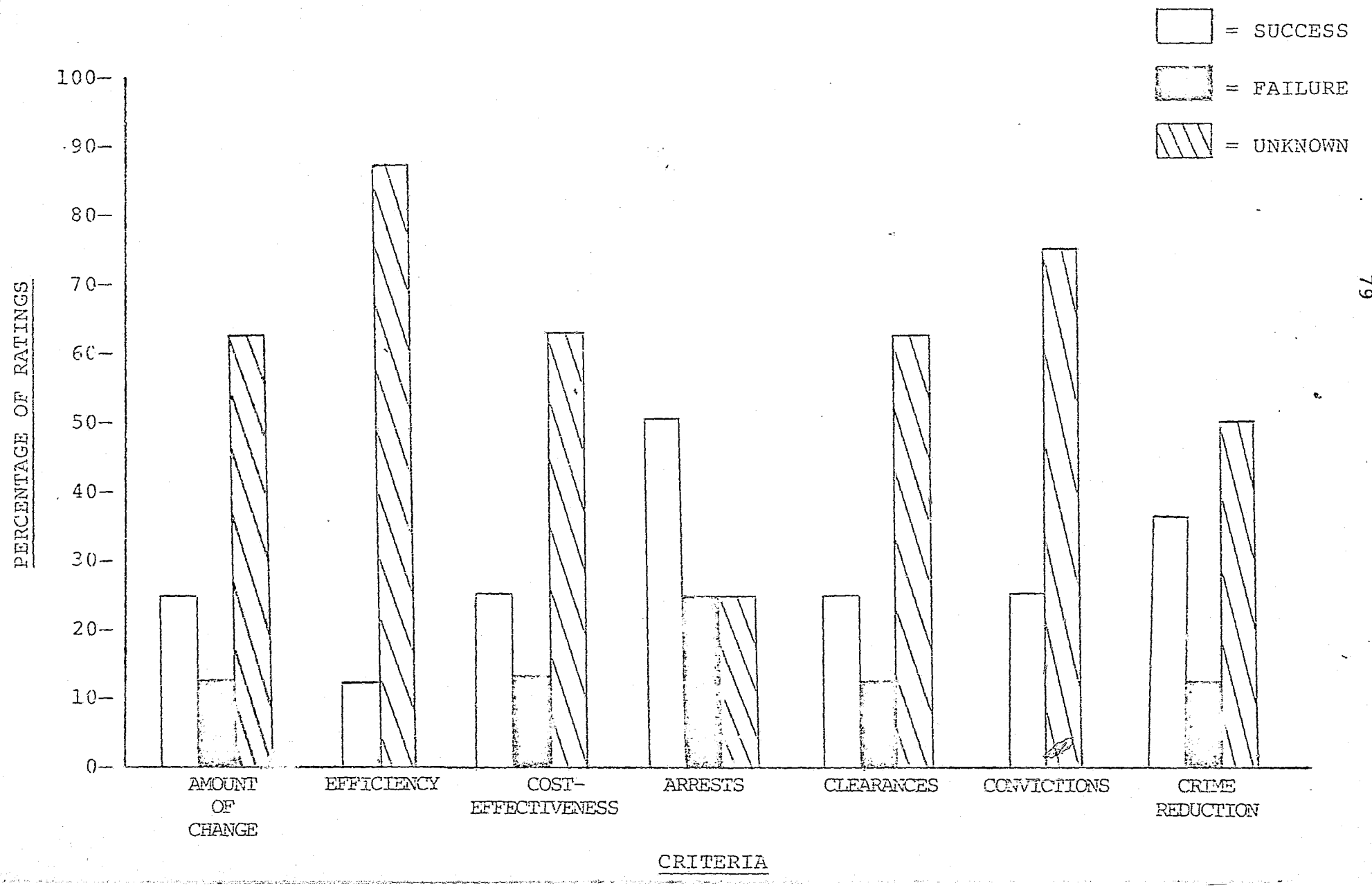
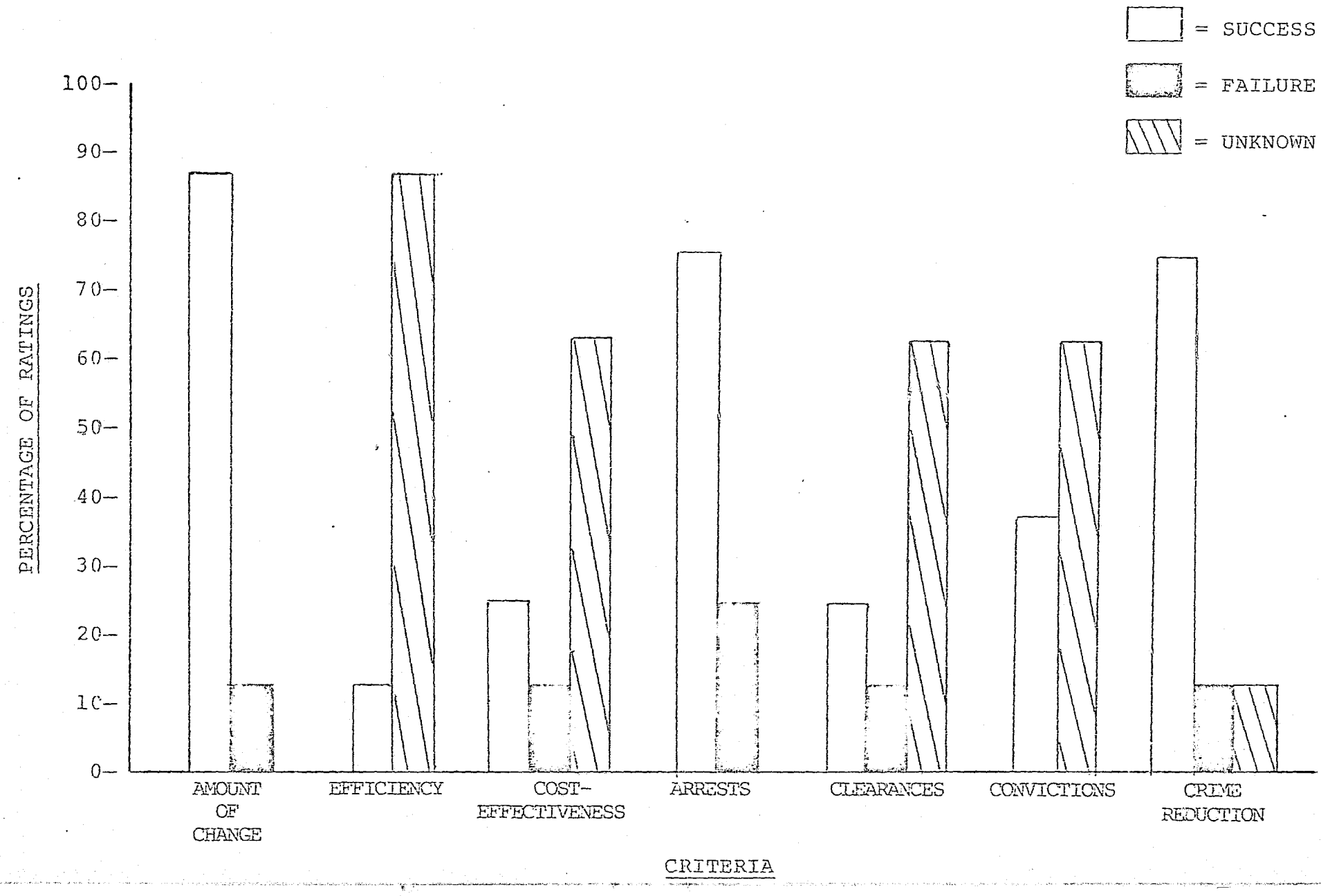


FIGURE III-1-2

LOW VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES--
EVALUATIONS/CRIME FIGURES/"EXPERT OPINION"



success or failure. By adding expert opinion, Low Visibility patrols appear successful in affecting desired change, apprehending criminals, and reducing crime.

How successful is another question. Since all Success and Failure shown in Figure III-1-1 and Figure III-1-2 represent combined ratings, and our Success/Failure ratings are related to our ratings of the reliability of each informational source, we reviewed the percentage of each type of Success and Failure rating used in this report which is represented in the combined figures for (1) evaluation/crime figures information and (2) expert opinion. The results appear in Table III-1-12.

The column for evaluation/crime figures shown in Table III-1-12 represents a total of 25 ratings for all data represented in Figure III-1-1 and Figure III-1-2. The expert opinion column represents a total of 13 ratings represented in Figure III-1-2.

Since inclusion in the Success or Failure and Probable Success and Probable Failure categories denotes fairly reliable data (comparatively speaking), the success/failure proportions shown in Figure III-1-1 and Figure III-1-2 should be fairly reliable. This provides some added confidence to the percentages of success/failure shown.

Given the fact that the expert opinion information was mostly rated high to medium on reliability and we have so few evaluations on the Low Visibility patrols, we are led to the tentative conclusion that this group, on the whole,

TABLE III-1-12

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%	---
FAILURE	12%	--
PROBABLE FAILURE	16%	--

was at least a Probable Success in effecting change in the desired direction, apprehending criminals, and reducing crime. The Henrico County project was seemingly an exception since it received some type of Failure rating on most measures.

We will discuss some of our insights into the probable success and failure of this group of Low Visibility patrols at the conclusion of this section. Before doing so, we will briefly present some data on the impact which this group had on the communities it served, its own units, and the departments in which it operated.

6. Community/Department Impact. Table III-1-13 shows some data on displacement and community attitudes (secondary outputs) for Low Visibility patrols.

As can be seen, statistical tests suggested some displacement in two sites, none in another. These were not very adequate tests. For example, in the New York City case, displacement was probably attributable to the presence of a uniformed unit rather than the civilian dress unit.

The information related to citizen attitudes (including businesses) was not based on extensive study, even when cited by an evaluator. Such data as exist suggest the Low Visibility patrols were generally perceived favorably within their communities.

There is little information on the impact which these patrols had on the process. An evaluation of morale among the Henrico County patrol revealed that morale was good to

TABLE III-1-13

LOW VISIBILITY PATROLS:
SECONDARY OUTPUTS--IMPACT ON COMMUNITY

PROJECT	SOURCE	IMPACT/CRITERIA
	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 1st 6 MO; 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

EVAL = Evaluation
EO = Expert Opinion
CF = Crime Figures

excellent among men in the unit. Thus, in this case, failure in various activities (as judged by the same evaluator and by IHRR) did not appear to have an adverse effect on morale within the unit.

Expert opinion cites high morale among the specialized patrol projects in New York City, Nashville and Birmingham. Both Miami and the New York City experts report good relations between their specialized patrols and other departmental units.

Overall, then, we have no information of any adverse impact which Low Visibility patrols have had on their communities (except for some possible displacement to adjacent areas) or their departments.

7. Insights into Success and Failure. Low Visibility patrols assessed by IHRR range from the very sophisticated (New York City) to the very simple (Birmingham). The reasons for the wide range of performance within the eight projects described are presented according to those techniques or project elements that were deemed successful and those that IHRR or others judged failures.

Successful

- Planning and cooperation with other units--Both New York City and Boston rated high in this area. The perceived danger engendered by their use of decoy operations made it essential to officers' safety that activities be coordinated with other units.

- Strong court cases --The decoy operations employed in New York City and Boston resulted in very strong court cases. The felony conviction rates for both projects are high. Similarly, Birmingham has been able to employ its Tac II alarm system in a manner

that has resulted in on-scene robbery apprehensions that should convert to high conviction rates.

- Use of exceptional personnel--All of the projects, with the exception of Birmingham created and staffed a separate specialized patrol unit in implementing these tactics. These projects made use of exceptional, hand-picked personnel from other existing units.

- Above-average job satisfaction and morale-- New York City, Nashville, Henrico County, and Birmingham all reported high levels of job satisfaction and morale among project personnel.

- Financial support--New York City, San Francisco, Henrico County, and Miami all provided data indicating significant financial support from Federal, state, and local sources.

- Use of equipment--New York City's use of vehicles for decoy and surveillance and Birmingham's exceptional success with the Tac II alarm system were the most outstanding examples of equipment success. Birmingham is especially noteworthy since success was apparently achieved without devoting excess manpower to the operation.

- Intensive training--New York City, San Francisco, and Henrico County all provided specialized training for project personnel. For New York City and San Francisco, this was apparently successful and may have contributed to overall project success. For Henrico County, it may have been of marginal value.

Failure

- Low productivity--some projects and project elements appeared costly in terms of overall productivity compared to dollars and/or man hours expended. The use of stakeouts, alarms, and a helicopter by Henrico County, for instance, appeared to be a failure. Even the apparently successful New York City decoy operations may be less productive (8.2 man days per felony arrest) than many departments would be willing to accept.

Another consideration is adaptability: Will a successful project in one site be successful in another? We have little insight into this problem. However, the high

costs of equipment in a successful project like that of New York City may place similar decoy tactics beyond the financial reach of many departments.

Part 2
High Visibility Patrols

High Visibility patrols, as defined by IHRR, assume that increased police visibility, accomplished through a uniformed tactical tactic, will be an effective way of deterring crime and of leading to increased apprehension. This family type, according to our survey estimates, is almost as popular in usage as Low Visibility patrols and is more apt to be adopted by city departments serving a population of 50,000 or more persons.

The assumptions underlying this family type differ from those upon which Low Visibility patrols are based in the greater and prime emphasis given to deterrence. These specialized patrols, too, are expected to increase arrests, clearances, citizen safety, citizen support and participation, and to decrease the public's fear of crime. Part 1 offenses--especially robbery and burglary--are prime crime targets and geographical coverage extends to both residential and commercial areas.

Are High Visibility patrols an effective way of combatting Part 1 offenses? The evaluative data and crime figures provide no conclusive answer; expert opinion tends to yield somewhat enthusiastic responses.

Our search for an answer to this question is based on five purposively selected High Visibility patrols believed to be representative of the data that exist on this family type. These patrols are listed below:

- 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

The projects will be referred to in this section by the name of the city in which they operate.

A. The Knowledge Base: Accuracy and Reliability

The knowledge base on High Visibility patrols is difficult to assess in terms of accuracy and reliability for the reasons cited in Chapter II.

1. Evaluations. Of the five projects, three were formally evaluated by private firms. These were the projects in Alexandria, Cleveland, and New York City. The remaining two were evaluated by their departments (although IHRR was unable to obtain complete documentation of these two departmental evaluations). Table III-2-1 shows the IHRR ratings of the four evaluations for which we have some documentation; the reasons for rather low ratings are the same as those cited previously for Low Visibility patrols. However, the study of the New York City project did exhibit some noteworthy features, most especially in its assessment of crime statistics over an eight-year period by type of crime and, appropriately in this instance, by time (days vs. nights) so as to separate the patrol under study from units not under study. Unfortunately, not all relevant data could be separated by type of patrol, a fact

TABLE III-2-1

HIGH VISIBILITY PATROLS:
RATINGS OF EVALUATIONS

CRITERION	IHRR RATING	NUMBER
NUMBER OF MEASURES	LOW	2
	MEDIUM	2
RELEVANCY OF MEASURES	LOW	2
	MEDIUM	2
ADEQUACY OF DESIGN: INTERNAL VALIDITY (EXPERIMENTAL CRITERIA)	LOW	3
	MEDIUM	1
ADEQUACY OF DESIGN: EXTERNAL VALIDITY (EXPERIMENTAL CRITERIA)	LOW	3
	MEDIUM	1
ACCURACY OF DATA BASE	LOW	3
	MEDIUM	1
APPROPRIATENESS OF STATISTICAL TESTS	LOW	3
	HIGH	1
TESTS HYPOTHESES (ASSUMPTIONS)	LOW	5
MEASURES OBJECTIVES	LOW	3
	MEDIUM	2

that made parts of this study more unreliable by IHRR criteria than others.

2. Crime Figures, Other Raw Data, and Expert Opinion. Some expert opinion was available for all High Visibility patrols and we were able to attain some crime statistics and a few evaluation figures from the two projects whose documented evaluation we could not obtain. The reliability of the expert opinion was low in all cases, as rated by IHRR criteria, and we have no reason to believe that departmental statistics were of any unusually high caliber.

3. Assumptions and Objectives: Testability and Measurability.

a. Assumptions. The assumptions upon which these High Visibility patrols were based remain untested, despite the fact that they were testable.

b. Objectives. Most project objectives were also measurable. Table III-2-2 summarizes the types of objectives set across projects as well as the number of formal and informal assessments made of each type of objective. As in the case of Low Visibility patrols, one can note that the objectives of this High Visibility group were not always tested. It is worth noting also that there is far less mention of civilians in the objectives of High Visibility patrols than in the objectives of Low Visibility patrols.

B. Ratings of Success and Failure

1. Attainment of Objectives. Table III-2-3 shows the 22 objectives of the High Visibility patrols and the number that have and have not been met according to our three types of informational sources. If one judged these High Visibility patrols by these criteria, they would appear, in general, as failures.

TABLE III-2-2

HIGH VISIBILITY PATROLS:
TYPES OF OBJECTIVES AND NUMBER OF
EACH TYPE ASSESSED

TYPE OF OBJECTIVE	NUMBER STATED	NUMBER ASSESSED
REDUCE TARGET CRIME	10	6
INCREASE ARRESTS	3	3
INCREASE CLEARANCES	3	2
INCREASE CITIZEN PARTICIPATION	1	1
RECOVER STOLEN PROPERTY	1	1
OTHER	4	1

TABLE III-2-3

HIGH VISIBILITY PATROLS:
ATTAINMENT OF OBJECTIVES

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

KEY: EVAL = Evaluation; EO = Expert Opinion; CF = Crime Figures; N/A = not applicable since insufficient time for evaluation. "Expert Opinion" ratings are shown in parentheses.

* Supposedly based on an evaluation
** Questionable data
*** Excludes some subobjectives

Table III-2-4 shows the scores for objectives attainment by High Visibility patrols.

The scores obtained from IHRR ratings do not point to a high level of objectives attainment; many projects were Failures or Successes by the ratings obtained from evaluation/crime figures data. However, all these ratings only represent 47 percent of the stated objectives; the remaining 53 percent of the objectives are represented in our Unknown category. In reviewing these ratings, it should be noted also that Failure ratings apply to one project--that in Alexandria, Virginia. This project was considered a failure by its department also, a fact that lead the department to revamp the patrol. The changes (not part of this study) have reportedly lead to a much greater level of success.

The expert opinion ratings all represent a Qualified Failure; however, these ratings account for only about 45 percent of the stated objectives. The lack of expert opinion on the remaining objectives leaves 55 percent of the objectives undetermined by this informational source.

This apparent picture of failure is somewhat misleading. Except for the Alexandria project, some type of expert opinion reveals that departments and city officials were pleased with these projects.

The Dallas Police Department attributes the failure to attain project objectives to a general rise in crime in the area. It is not displeased with its specialized patrol. Similarly, the projects in Cleveland, San Jose, and New York City elicit favorable responses from their departments and/or high-ranking city officials.

TABLE III-2-4

HIGH VISIBILITY PATROLS:
SUCCESS AND FAILURE "SCORES" ON OBJECTIVES ATTAINMENT

RATING	EVALUATIONS/CRIME FIGURES	EXPERT OPINION
SUCCESS	2	--
PROBABLE SUCCESS	2	--
QUALIFIED SUCCESS	--	--
FAILURE	4	--
QUALIFIED FAILURE	--	10
UNKNOWN*	14	12

*The actual number of UNKNOWN ratings for the two informational source types shown in column headings. Each column, thus, totals the number of objectives (n = 22).

The problem here is that these remarks were quite general and unrelated to specific objectives. Thus, again, objectives attainment does not appear to be the best measure of the success or failure of specialized patrols.

2. Amount of Change. The information and ratings presented in Table III-2-5 show that three High Visibility patrols did effect some positive change over time, though the amount of change was not always as great as that specified in a project's objectives. Nor were the success ratings particularly high. Only two Probable Success ratings appear; all others are a Qualified Success rating.

These data seem to be more meaningful measures of success, failure, performance, and effectiveness than the objectives attainment measures and certainly portray the High Visibility patrols in a somewhat more favorable light than the objectives attainment measure. Unfortunately, only a few of the performance and effectiveness types of data were reported and/or evaluated in the form of amount of change so that these data do not permit one to be overly sure of success.

3. Efficiency and Cost-Effectiveness. Table III-2-6 shows the few available data on the efficiency and/or cost-effectiveness of High Visibility specialized patrols. All ratings are either a Probable Success or Qualified Success. The one cost measure (New York City) shows a rather high cost per felony deterred ($35,000) and receives a Qualified Success rating (rather than a Failure rating) only because the Department and City appear to feel this cost represents an important activity which they are willing to fund.

TABLE III-2-5

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

PROJECT	TYPE/SOURCE	HVP	COMPARISON/ CRITERIA	RATING
DALLAS	RED. IN PROBLEM AREAS:** EVAL, CF	-18.4%, 22 PROBLEMS, 10 DAYS	SAT. PATROL: -11.5%, 26 PROBLEMS, 10 DAYS	QS
		-22.1%, 30 DAYS	-18.4%, 30 DAYS	QS
CLEVELAND	CLEARANCES: EVAL	+16.0%	OVER PREVIOUS YEAR	PS
NEW YORK TAPD	ARRESTS: EVAL		HVP: 2 DIFFERENT YEARS	
	(TOLL BOOTH ROBBERIES)	+0.1%		QS
	(PASSENGER ROBBERIES)	-8.6%*		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.

TABLE III-2-6

HIGH VISIBILITY PATROLS--EFFICIENCY AND COST-EFFECTIVENESS

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
	Efficiency			
Cleveland	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
	Cost-Effectiveness			
New York TAPD	Felonies deterred: Evaluation	It cost $35,000 per felony deterred	None	QS
All Others	Unknown			U (n=3)

4. Ratings of Performance and Effectiveness. Again, we present primary outputs (effectiveness) and process measures (performance) together and will summarize the various measures at the conclusion of the section in order to provide an overview of success and failure as determined by the ratings of the various activities discussed in this section.

a. Arrest performance and effectiveness. Table III-2-7 shows the available data on the arrest activity among four High Visibility patrols under study. The Alexandria project appears again as a Failure; another three as a Probable Success or Qualified Success. The form in which the data are generally presented defy any general conclusions regarding performance level.

b. Clearances. Only two projects have any information on clearances: one presents the data in terms of number, the other in percentage terms. Again, we can only give a Probable Success and Qualified Success rating. (See Table III-2-8.)

c. Crime reduction and other activity. Some evaluative data are reported for four High Visibility patrols, as shown in Table III-2-9. The ratings for four projects indicate Qualified Success in crime reduction.

The Other category shown in Table III-2-9 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.

d. Summary: performance and effectiveness ratings. Table III-2-10 summarizes the IHRR ratings of three performance/effectiveness measures: arrests, clearances, and crime reduction. (The

TABLE III-2-7

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 non-target 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 production when 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		Compares favorably with city police and national averages	
	Toll booth robberies	1970 = 3.2%* 1971 = 3.3%*		QS
	Passenger robberies	1970 = 21.1%* 1971 = 12.5%*		

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

TABLE III-2-8

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	16.0% increase over a similar period in the previous year	Compared to the number cleared in 1972	PS
All Others	Unknown			U

TABLE III-2-9

HIGH VISIBILITY PATROLS--CRIME REDUCTION AND OTHER ACTIVITIES

PROJECT	TYPE/SOURCE	HVP	COMPARISON/CRITERIA	RATING
	Crime Reduction			
Alexandria	Percent increase: Evaluation			QS
	Burglaries:	6.2% in target areas in 7 months	23% increase in rest of city in 7 months	
	Robberies:	12.1% in target areas in 7 months	38% increase in rest of city in 7 months	
Dallas	Percent reduction in "problems":* Crime Figures	18.4% reduction on 22 "problems" for 10 days and 22.1% for 30 days	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
	Other			
Alexandria	Recovered property: Evaluation	Generally "high" recovery rate		QS
	Number of security surveys: Evaluation	Only 17 residences and 20 businesses surveyed in 7 months		F

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

Other category is omitted since only one project would legitimately appear in this category.) A score appears in the table in the form of a percentage of Success and Failure; however, the reader should note that the remaining percentage represents an unknown in terms of Success or Failure on these primary outputs.

As shown in Table III-2-10, 60 percent of the projects were somewhat successful in their arrest activity, whereas one project (20 percent) was not. Similarly, 80 percent appeared somewhat successful in reducing crime and 40 percent successful in clearing crimes. However, of the success ratings across all activities listed, 78 percent were of the lowest success rating (Qualified Success).

5. Comparison of Selected Success/Failure Criteria. Figure III-2-1 graphically depicts the combined success and failure ratings for High Visibility patrols on three measures for amount of change (arrests, crime reduction, clearances), efficiency, cost-effectiveness, arrests, clearances, and crime reduction. (No data are available on convictions.) Almost all ratings are based on evaluation data.

Again, we have a large proportion of Unknown ratings for efficiency and cost-effectiveness as well as for amount of change and clearances.

The available data suggest that the High Visibility patrols were rather successful at deterrence--their prime basis for existence. The data suggest also that they were reasonably successful in apprehending criminals; in this case, one project (Alexandria) was considered a failure.

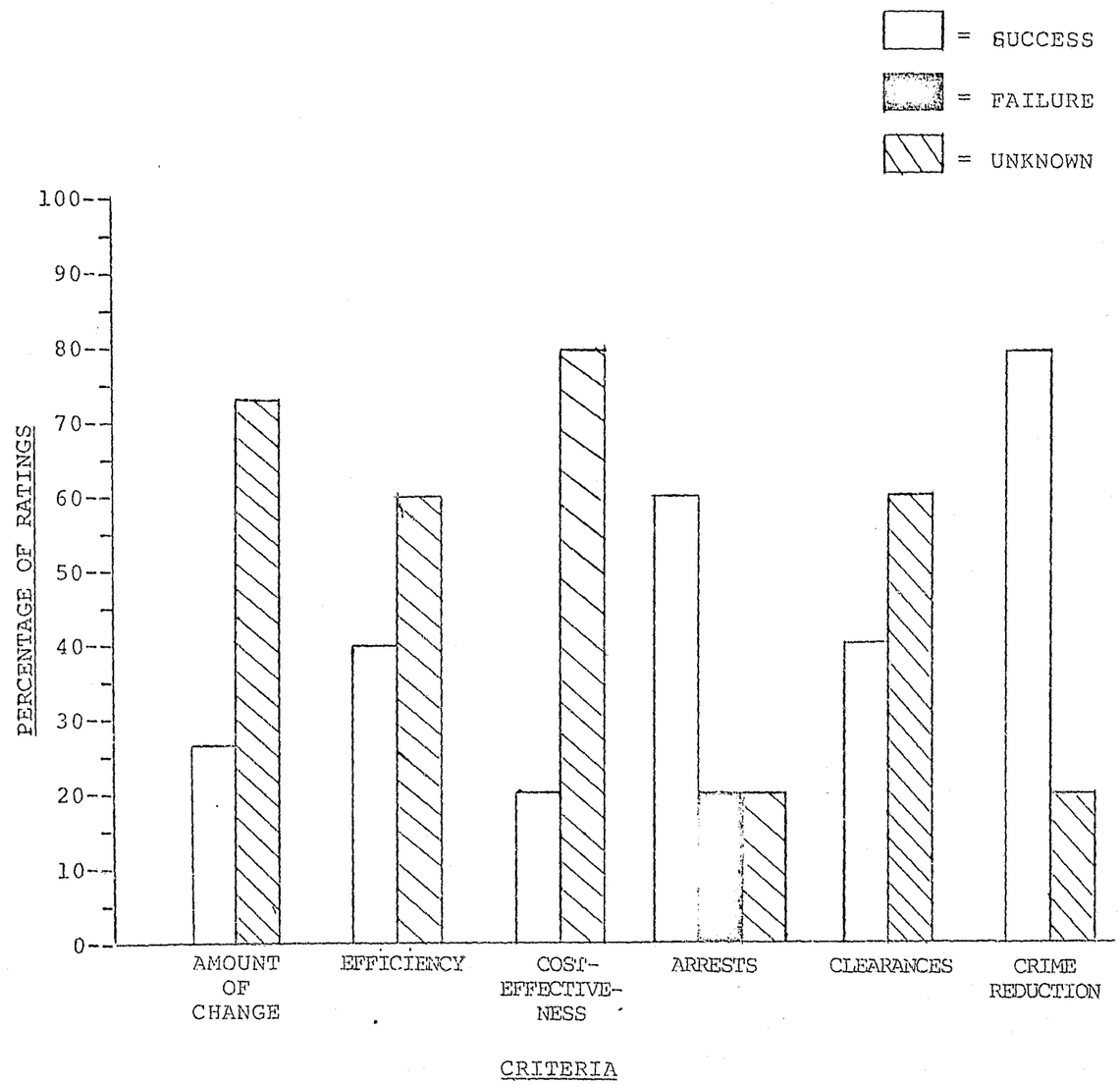
TABLE III-2-10

HIGH VISIBILITY PATROLS:
SUMMARY OF SELECTED PERFORMANCE/EFFECTIVENESS RATINGS

TYPE OF ACTIVITY	N/% PROJECTS PRESENTING DATA	RATING (n)				PERCENT SUCCESS	PERCENT FAILURE
		PS	QS	F	U		
ARREST	4 (80%)	1	2	1	1	60	20
CLEARANCES	2 (40%)	1	1		3	40	
CRIME REDUCTION	4 (80%)		4		2	80	

FIGURE III-2-1

HIGH VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES--
EVALUATIONS/CRIME FIGURES



How successful is another question? Again, we break down the combined ratings into percentages of each rating category. The results are shown in Table III-2-11 for all ratings of success and failure represented in Figure III-2-1.

As shown in Table III-2-11, the majority of the ratings (63 percent) fall into the Qualified Success category--the category representing the least reliable information. Thirty-two percent were based on information rated as being more reliable than that represented in the Qualified Success category, thus, pointing to about one-third Probable Success level. Only 5 percent (one rating) fell into the Failure category.

From these data, IHRR would judge the High Visibility patrols as being at least a Qualified Success. Some reasons for these successes and failures will be discussed at the conclusion of this section on High Visibility patrols. Before discussing our insights into success and failure, we will turn to the available data on impact.

6. Community/Department Impact. Table III-2-12 presents the available data on the impact which these High Visibility patrols had on their communities. The bulk of this information is based on informal assessments and/or comments by evaluators.

As shown in Table III-2-12, displacement probably occurred in two sites (Alexandria and New York City), suggesting some negative impact. Citizen attitudes, on the other hand, appear favorable.

Some data are available on the impact which four High Visibility patrols had on their units and departments. We did note that the Alexandria department was displeased with its specialized patrol

TABLE III-2-11

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

RATING	PERCENT
SUCCESS	
PROBABLE SUCCESS	32
QUALIFIED SUCCESS	63
FAILURE	5
PROBABLE FAILURE	
QUALIFIED FAILURE	

TABLE III-2-12

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 HRS. ON SUBWAY
	COMMUNITY ATTITUDES	
ALEXANDRIA	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

and eventually made a number of changes. Prior to these changes, an attitude survey revealed that morale was only low to average among the specialized personnel and that the coordination between this unit and other units of the Alexandria department was not high.

The departments in Dallas, San Jose, and New York City were reportedly pleased with their specialized units. (No data were available from Cleveland; however, high city officials were pleased with the Cleveland patrol so one would assume it was perceived favorably by the department also.)

7. Insights into Success and Failure. All of the five High Visibility patrols reviewed by IHRR had been evaluated formally, three from outside the department. The following are some of the reasons for success and/or failure of projects or project elements. IHRR's assessment is based on the evaluations, crime statistics, personal interviews, and/or site visits.

Success

- Funding--All five uniformed tactical units appeared to enjoy very strong financial support from Federal, state and local sources. This could be an indication of strong political support from elected officials for a program to put more highly visible policemen on the street.

- Selection criteria--San Jose and Cleveland were the only projects to select the best men available for assignment to specialized patrol. Personnel in these projects also seemed to have high productivity.

- Effect on crime--As a group, High Visibility patrols exhibited an ability to at least influence crime patterns. Where it was measured (Alexandria, Cleveland, New York City), crime at least shifted in response to High Visibility tactics.

- Planning--All of the High Visibility patrols were deployed on the basis of perceived need according to reported crime statistics. They were, therefore, assigned to areas where the likelihood of impact was greatest.

Failure

- Volunteer overtime--The Alexandria project had very poor results with the use of volunteer officers on an overtime basis (the Indianapolis High/Low project experienced similar problems with this approach). Alexandria officials reported a dramatic increase in project effectiveness and officer productivity when this approach was abandoned and hand-picked personnel were substituted.

- Training--Only San Jose appears to have taken advantage of the specialization to introduce exceptional training for project personnel. Lack of specialized training may have impeded the success rate of other projects.

Although it is not strictly a characteristic contributing to failure, it should be noted that the cost-effectiveness of High Visibility patrols may be quite low; the best example of this was the reported figure of $35,000 per felony crime deterred in the New York Transit evaluation.

Part 3
Combined High/Low Visibility Patrols

Among the projects visited and studied by IHRR, many assumed that some combination of high and low visibility levels would be an effective way to combat target crimes. More specifically, the assumption seemed to be that a multi-faceted approach that relies on less visible as well as visible police presence, achieved through the use of uniformed tactical and civilian dress and/or mechanical device tactics, will effectively deter crime and increase the likelihood of apprehending target criminals. These combined High/Low Visibility patrols are commonly expected also to increase convictions, clearances, citizen support and participation; decrease citizen fear of victimization; and enhance public safety. The High/Low Visibility patrols represented in the sample discussed in this report were highly focused on burglary with some attention to other Part 1 offenses. Patrol protection and coverage extend geographically to both commercial and residential areas and inhabitants.

Of all patrol families under study in this report, the High/Low Visibility group has been evaluated most. Yet, in this case, as in the case of other families, no conclusive evidence exists regarding the success or failure of these projects.

The projects under study in this portion of the report are listed below by title, city, state, and types of tactics employed:

- 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 (civilian dress and mechanical devices)
- 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.

In the pages that follow, IHRR will refer to each project by the name of the city in which it operates.

A. The Knowledge Base: Accuracy and Reliability

The knowledge base on the High/Low Visibility patrols under study includes evaluation data, crime figures, and other raw data and expert opinion. Our assessment of the accuracy and reliability of these informational sources appears in the following sections.

1. Evaluations. Of the eight High/Low Visibility patrols selected for study, only two have not been formally evaluated. These are the projects in Greensboro and Houston. Among the remaining six, two have been subject to external evaluations (Denver, San Francisco) as well as internal evaluations. The Denver project was also evaluated by two private firms. The Portland project provides the only data from a victimization survey among the 21 projects reviewed in this report; it was also evaluated by the Oregon Law Enforcement Council. The projects in Indianapolis and Virginia Beach were each evaluated by a private firm.

Thus, for six projects, we have eight external evaluations and two internal evaluations. IHRR does not have complete reports from all of these evaluations. Further, the final reports available do not always provide much detail on the methodologies used to evaluate these patrols, a fact that compounds the difficulty of assessing the accuracy and reliability of these data.

Table III-3-1 shows the IHRR ratings of these evaluations, as based on the criteria presented in Chapter II. As with other project families, the highest ratings on the

TABLE III-3-1

HIGH/LOW VISIBILITY PATROLS:
RATINGS OF EVALUATIONS*

CRITERION	IHRR RATING	NUMBER
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: EXERNAL 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

*The number of evaluations exceeds the number of projects.

evaluations of High/Low Visibility patrol are for testing project objectives, using multiple measures and using relevant measures. The percentage of evaluations receiving these higher ratings (high to medium) is greater for these High/Low Visibility patrols than for other patrol families, suggesting that the data on High/Low Visibility patrols may be a little more accurate and reliable than the evaluative data for other patrol families. However, it should be noted that the ratings on internal and external validity are poor in this case also and that the evaluations have not provided an adequate test of the assumptions upon which High/Low Visibility patrols are based. Fairly high ratings do appear for the adequacy of statistical tests (used only in seven evaluations) but not for the accuracy of the data bases. Thus, accuracy and reliability are still highly suspect.

2. Crime Figures, Other Raw Data, and Expert Opinion. Some crime figures are available from all High/Low Visibility projects. Further, some internal, informal comparisons of crime figures were made by the departments in Houston and Indianapolis; these add to the comparative information gathered from the ten evaluations.

Two departments (Virginia Beach and Denver) appear to maintain better than average crime statistics. Ratings of expert opinion, however, yielded consistently low reliability ratings.

3. Assumptions and Objectives: Testability and Measurability.

a. Assumptions. As in the case of the other two specialized patrol families, no real test was made of the assumptions underlying the existence of the High/Low Visibility projects. The assumptions, however, are testable.

b. Objectives. Of the 16 stated objectives of the High/Low Visibility patrols, three-fourths were assessed. Table III-3-2 shows the general types of objectives and the number of each type known to have been assessed. As can be noted, one-half of the objectives involved reducing crime; these were all assessed.

B. Ratings of Success and Failure

1. Attainment of Objectives. Table III-3-3 shows the objectives that were attained according to the different informational sources as well as the IHRR ratings of objectives attainment.

Because of the conflicting results from some studies, the review of the met and unmet columns in Table III-3-3 becomes confusing. The IHRR ratings shown in Table III-3-3 take into account our ratings of the reliability of the data reported from conflicting studies. Inspection of Table III-3-4 shows the scores from the ratings, thus simplifying the data shown in Table III-3-3.

Viewing only the evaluations/crime figures data, these High/Low Visibility patrols had some known success in attaining

TABLE III-3-2

HIGH/LOW VISIBILITY PATROLS:
TYPES OF OBJECTIVES AND NUMBER OF EACH TYPE ASSESSED

TYPE OF OBJECTIVE	NUMBER STATED	NUMBER ASSESSED
REDUCE CRIME	8	8
INCREASE ARRESTS	2	1
INCREASE CONVICTIONS	1	1
INCREASE COMMUNITY INVOLVEMENT	1	1
OTHER	4	1

TABLE III-3-3

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 (MINIMUM OF 10%) IN SPECIFIC TARGET CRIMES IN SHORT PERIOD	EVAL			PS
INDIANAPOLIS	REDUCE BURGLARY 20%		EVAL		PF
	INCREASE ARRESTS	EVAL			PS
	INCREASE CONVICTIONS		EVAL		F
VIRGINIA BEACH	REDUCE BURGLARY 5% IN SHORT PERIOD	EVAL			S
HOUSTON	HANDLE HOSTAGE & BARRICADE CASES	CF			S
DENVER	REDUCE BURGLARY 5%	CF,EVAL*	EVAL*		PS
	REDUCE ROBBERY 5%	CF,EVAL*	EVAL*		PS
	INCREASE COMMUNITY INVOLVEMENT	EVAL			S
SAN FRANCISCO	REDUCE BURGLARY	EVAL**	EVAL**		S/F
PORTLAND	INCREASE ARRESTS 3%, 1 YR.			X	U
	REDUCE BURGLARY 60%	EVAL**	EVAL***		PS
	PROVIDE CRIME ANALYSIS IN 24 HRS			X	U
	IMPROVE FORENSIC INVESTIGATIONS			X	U
	PROVIDE MANPOWER TO REDUCE TARGET CRIMES IN 30 DAYS			X	U

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.

TABLE III-3-4

HIGH/LOW VISIBILITY PATROLS:
SUCCESS/FAILURE "SCORES" ON OBJECTIVES ATTAINMENT

RATING	EVALUATIONS/ CRIME FIGURES	EXPERT OPINION
SUCCESS	3.5	
PROBABLE SUCCESS	5.0	
QUALIFIED SUCCESS		1.0
FAILURE	1.5	
PROBABLE FAILURE	1.0	
UNKNOWN*	5.0	15.0

*Represents the actual number of Unknown ratings for the two types of informational sources shown in the column heading. Each column totals 16.

CONTINUED

3 OF 4

53 percent of their stated objectives; adding the one expert opinion rating increases the percentage of Success ratings on objectives attainment to over 59 percent. From the available data, it appears that only 15.6 percent of the objectives were not met. This is the most successful record of objectives attainment of all project families.

2. Amount of Change. Table III-3-5 shows the available data on change affected by the High/Low Visibility patrols. The number of different change measures is quite high, as can be noted. Table III-3-6 summarizes the scores on the amount of change indicator. Since there is only one expert opinion rating, it is included with the other ratings in Table III-3-6 on the belief that it could not bias the results because of the large number of ratings.

According to IHRR calculations, there were 33 possible measures of relevance related to the amount of change indicator. The High/Low Visibility patrols effected positive change in 18.5 (56 percent) of these areas and failed, according to known data, in only 3.5 (1 percent) of these areas. In effecting increases in arrests and decreases in crime, these patrols show a 78 percent Success level, although 28 percent of these ratings fall into the Qualified Success category.

3. Efficiency and Cost-Effectiveness. Table III-3-7 presents the available data on efficiency and cost-effectiveness measures on six High/Low Visibility patrols. Although some of these data represent only an evaluator's conclusions,

TABLE III-3-5

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

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
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
Virginia 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	QF
	(cases offender guilty of lesser charge)	145% increase	Crime figures previous year	QS
	Clearances	73.5% increase (98.8% made by H/LVP)	Crime figures previous year	S*
Denver	Crime reduction: Evaluation (burglary)	38% decrease	Crime figures prev. yr., targ. area	PS
	(robbery)	21% decrease	Crime figures prev. yr., targ. area	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	PS

(Table continued on next page.)

TABLE III-3-5 (CONTINUED)

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Denver (continued)	Clearances: Evaluation (burglary)	38% increase, target area	First quarter	QS
	(robbery)	11% increase, target area	City wide increase 31%, one year	QS
San Francisco	Crime reduction: Evaluation	Burglary decline first 6 months; increase last 6 months		QS QF
Portland	Crime reduction: Evaluation	Declined (victimization survey) Increased (eval. reported crime)		QS
	Value property stolen: Evaluation	Increased 44-48.8%	Crime figures previous year	QF

NOTE: Ratings of "expert opinion" appear in parentheses.
* = Exceptional rating; statistical significance not made, seems unrequired.

TABLE III-3-6

HIGH/LOW VISIBILITY PATROLS--
SUCCESS/FAILURE "SCORES" ON AMOUNT OF CHANGE

RATING	ARRESTS	CRIME REDUCTION	OTHER*
SUCCESS		1.0	1.0
PROBABLE SUCCESS	3.0	4.0	2.0
QUALIFIED SUCCESS	2.5**	2.0	3.0
PROBABLE FAILURE			1.0
QUALIFIED FAILURE	0.5**		2.0
UNKNOWN	2.0	1.0	8.0

*Largely data related to clearances, convictions, court dispositions; UNKNOWN represents only the clearances and these court-related measures (combined), that is, a total of four projects do not report these two types of data.

**The .05 appears for the San Francisco project which was successful/unsuccessful in different parts of the same year.

without presentation of pertinent figures, they do represent the most information gathered on these measures among the three patrol families.

Sixteen of the ratings shown are for use of personnel, tactic, or special method (e.g., informant's fund). Four are for use of mechanical devices or costly equipment, such as helicopters. This specialized technology accounts for the four Failure ratings shown in Table III-3-7. All other ratings fell into one of the Success categories; two were Success ratings (stakeouts and informant's fund, Virginia Beach), ten were Probable Successes and four were Qualified Successes.

4. Performance and Effectiveness. A large number of measures also appear on other performance and effectiveness indicators. The various data will be summarized at the conclusion of this section.

a. Arrests. Table III-3-8 shows available data on arrest performance and effectiveness among seven of the eight High/Low Visibility patrols. Most of the ratings are based on evaluations.

No Failure ratings appear for arrest performance/effectiveness; most ratings represent a Probable Success.

b. Clearances. Table III-3-9 presents information on clearance performance and effectiveness for four of the High/Low Visibility patrols. With the exception of the Portland project (which IHRR was unable to rate on the basis of available information), all ratings fell into one of the Success

TABLE III-3-7

HIGH/LOW VISIBILITY PATROLS--EFFICIENCY AND COST-EFFECTIVENESS

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Greensboro	Unknown			U
Portsmouth	Surveillance equipment: Evaluation	Costly, underutilized		PF
	Helicopter patrol: Evaluation	Costly--85 calls, 13 arrests		PF
	Stakeouts: Evaluation	Costly--1 arrest per 76.5 man hours		QS
	Fingerprint specialist: Evaluation	Costly--used on only 48 cases, 16.7% success ratio		QS
Indianapolis	Remote burglar alarms: Evaluation	Unsatisfactory: returned to manufacturer for repairs, changes. Costly.		F
Virginia Beach	Stakeouts: Evaluation	One arrest per 32.4 man hours		S
	Surveillance equipment: Evaluation	Unproductive, overutilized at first, used rarely later		PF
	Informant's fund: Evaluation	34 target arrests ($14.14 per arrest), 84 clearances ($5.98 per clearance)	$490 expended	S
Houston	Unknown			U
Denver	Detective/patrol coordination: Evaluation	Efficient		PS
	Use of most qualified personnel: Evaluation	Efficient		PS
	Concentration on limited precincts: Evaluation	Efficient		PS
San Francisco	Stakeouts: Evaluation	Inefficient unless based on solid intelligence		QS
	Civilian clothes tactic: Evaluation	Efficient only in daytime		PS
	Field Interrogations: Evaluation	Efficient		PS
Portland	Fencing operation: Evaluation	Successful in interdicting operations (terms of efficiency)		PS
	Specialized surveillance team: Evaluation	Efficient		PS
	Large missions: Expert Opinion	Very costly		(QS)
	Small missions: Expert Opinion	Not uniformly cost-effective		(PS)
	Use of overtime funds to support specialized personnel: Expert Opinion	Cost-effective; provides more crucial target response		(PS)
	2-man foot patrol: Evaluation	Cost-effective for suppressing street crimes		PS

NOTE: Ratings of "expert opinion" appear in parentheses.

TABLE III-3-8

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 non-target 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 non-target 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 non-target 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 non-target areas	PS

Table continued on next page.

TABLE III-3-8
(Continued)

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATIN
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 misdemeanor arrests	Accomplished in 251 man days	QS
	Hostage/barricade apprehensions: Crime Figures	5 such cases handled in 5 months	Over 5-month period	S
Denver	Percent of arrest for target crimes: Evaluation	22% of random selection of SCAT arrests were for target crimes	Over 1-year period	PS
San Francisco	Number of burglary arrests: Evaluation	331 arrests (most for burglary and related offenses)	Over 12-month period	PS
Portland	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

TABLE III-3-9

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%	S
		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)	S
Portland	Number of crimes cleared: Evaluation	437 crimes (unspecified) cleared	In 9 months	U
All Others	Unknown			U (n=4)

categories. These ratings suggest that the Portsmouth, Virginia Beach, and Denver projects were quite successful in increasing clearance rates.

c. Convictions and related data. Table III-3-10 shows the information on convictions and related data (e.g., court dispositions) for four of the High/Low Visibility patrols. Here, we find one Failure rating for Indianapolis where 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. Crime reduction. Table III-3-11 presents information on crime increases and decreases in seven of the eight High/Low Visibility target areas. In this case, there are 12 Success ratings, one Qualified Success rating (representing expert opinion), and one Probable Failure rating. An impressive record by IHRR criteria.

However, as will be noted in a later section, displacemetn 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-3-11. However, this possibility of displacement raises a question about the high level of success shown for these projects.

TABLE III-3-10

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	1st degree burglary 67% 2nd degree burglary 86%	12-month period 12-month period	PS
	Ratio of arrests to convictions for burglary in target areas: Evaluation	No statically significant change	Over previous year in target areas or in non-target areas	F
Virginia Beach	Dispositions: Evaluation	47.9% decrease in cases where offender found guilty of offense charged	Compared year before/after H/LVP	PS*
		145% increase in cases where offender found guilty of lesser offense	Compared year before/after H/LVP	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	Robbery: 55:90 Burglary: 93:164	Year prior to H/LVP: 24:41 Year prior to H/LVP: 85:120	PS PS
	Percent increase in cases considered: Evaluation	Robbery increased 120%	Statistically significant compared to previous year	S
		Burglary increased 37%	Statistically significant compared to previous year	S
All Others	Unknown			U (n=4)

*Probably due to plea bargaining.

TABLE III-3-11

HIGH/LOW VISIBILITY PATROLS--CRIME REDUCTION

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATIN
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	30% increase in non-target areas compared to one year before/after H/LVP	S
		Business burglaries increased 6% in target areas	20% increase in non-target areas compared to one year before/after H/LVP	S
Virginia Beach	Percent decrease in burglary: Evaluation	Overall burglary down 17.1%	One year before/after H/LVP	S
		Residential burglary down 18.3%	One year before/after H/LVP	S
		Commercial burglary down 14.8%	One year before/after H/LVP	S
Houston	Unknown			U
Denver	Percent decrease in serious crime: Evaluation	Burglary in target areas down 38%	6.2% increase in remainder of city compared to previous year	S
		Robbery in target areas down 21%	Compared to previous year	S
		Murder & aggravated assault also declined (unspec.) in target area	Compared to previous year	S
San Francisco	Decrease in burglaries: Evaluation	Burglaries declined 1st 6 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%		S
		Burglary down 16%		S
		Assault up 2%		PF

NOTE: Ratings of "expert opinion" appear in parentheses.

e. Other performance/effectiveness measures. Table III-3-12 shows several other activities engaged in by four projects. Four ratings involve stolen property; one involves technical crime searches. The Indianapolis project could not be rated on value of stolen property recovered since the data are for the entire city and do not separate out the areas served by the specialized patrol. The Virginia Beach project was rated a Probable Success on recovery of stolen property and the Denver project a Success on its technical crime searchs. The Portland project, evaluated by measures of the value of stolen property taken in burglaries and robberies, appears as a Probable Failure since the value of stolen properties increased.

f. Summary: performance and effectiveness ratings. Table III-3-13 summarizes the performance and effectiveness ratings for arrests, clearances, convictions (and related data) and crime reduction.

The combined Success ratings, as shown in Table III-3-13, are quite high, especially for the arrest and crime reduction categories. In part, the ratings are high on these two categories because they represent multiple measures. However, if we consider only the number of projects that fall within the different Success ratings, rather than the number of measures, we still obtain an 87.5 percent Success rating for arrests and a 75 percent Success rating for crime reduction.

TABLE III-3-12

HIGH/LOW VISIBILITY PATROLS--OTHER PERFORMANCE AND EFFECTIVENESS MEASURES

PROJECT	TYPE/SOURCE	H/LVP	COMPARISON/CRITERIA	RATING
Indianapolis	Value of stolen property recovered: Evaluation	Overall value of stolen property recovered citywide decreased 1.72%	Compared to previous year	U
Virginia Beach	Percentage of property recovered: Evaluation	82.9% of all stolen property recovered	During first year of H/LVP	PS
Denver	Increase in technical crime searches: Evaluation	Technical crime searches in target area up 198%	Compared to year before/after H/LVP	S
Portland	Value of property taken in burglaries & robberies: Evaluation	Burglaries--value up 48.8% Robberies--value up 44.2%	Compared to year before/after H/LVP	PF

TABLE III-3-13

HIGH/LOW VISIBILITY PATROLS:
SUMMARY OF SELECTED PERFORMANCE AND EFFECTIVENESS RATINGS

TYPE OF ACTIVITY	#/% OF PROJECTS PRESENTING DATA	RATING (n)						% SUCCESS*	% FAILURE*
		S	PS	QS	F	PF	U		
ARRESTS	7 (87.5)	3	11	2			1	94.0	
CLEARANCES	4 (50.0)	5					4	55.5	
CONVICTIONS (RELATED DATA)	4 (50.0)	2	6		1		4	69.2	
CRIME REDUCTION	7 (87.5)	12		1**		1	1	86.7	6.7

*Based on number of ratings; Unknown ratings represent number of projects.

**Represents expert opinion.

5. Comparison of Selected Success/Failure Criteria. Figure III-3-1 graphically depicts the combined Success and Failure ratings for the High/Low Visibility patrols on the various amount of change measures, efficiency, cost-effectiveness, arrests, clearances, convictions (and related data), and crime reductions. The few expert opinion ratings are included since they do not bias the results because of the large number of measures.

The combined Success ratings are quite impressive on all criteria; the Failure ratings are few. The highest Failure rating appears for cost-effectiveness. This is largely due to costly, inefficient mechanical devices. The other least impressive ratings are for amount of change, clearances, and convictions. In all cases, a high percentage of the ratings fall into the Unknown category.

Again we ask: What percentage of the combined Success and Failure ratings fall into the different categories (levels) of Success and Failure. Table III-3-14 shows these data.

As shown in Table III-3-14, the greatest percentage of the ratings (57 percent) fall into the Probable Success category. The next highest percentage falls into the Success category. These data suggest that the High/Low Visibility patrols were at least a Probable Success in most of their endeavors.

FIGURE III-3-1

HIGH/LOW VISIBILITY PATROLS:
SUCCESS/FAILURE RATINGS ON SELECTED MEASURES

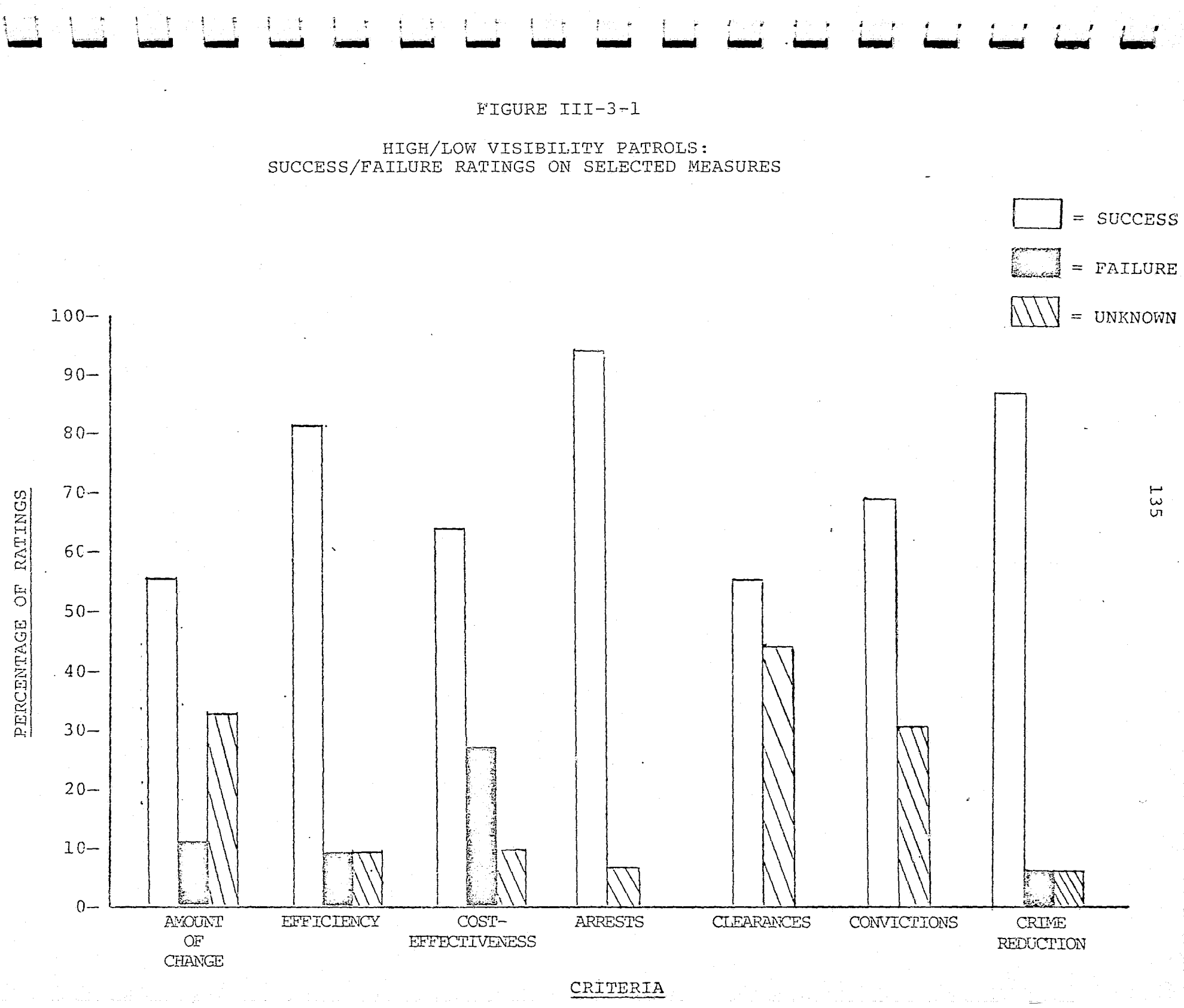


TABLE III-3-14

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

RATING	PERCENT
SUCCESS	17
PROBABLE SUCCESS	57
QUALIFIED SUCCESS	15
FAILURE	2
PROBABLE FAILURE	6
QUALIFIED FAILURE	3

We will present some insights into this success at the conclusion of this part of the chapter. At this point, we will turn to the information on the impact which High/Low Visibility patrols had on their communities and departments.

6. Community/Department Impact. Table III-3-15 lists the various effects which the High/Low Visibility patrols may have had on their communities and the broader society.

As noted earlier, displacement may have occurred in three sites. In the case of San Francisco, this was perceived favorably by the department since criminals were more easily apprehended in outlying areas.

Under the "Impact on Courts" column, the hiring of an attorney by one HIT project (Virginia Beach) was viewed as a successful effort while in another HIT project (Portsmouth), the use of an attorney was unsuccessful, largely because he was inexperienced. The Indianapolis project increased the court's workload, a fact that resulted in the court hiring additional personnel. However, these personnel became overburdened by handling all the department's cases. A study is underway to determine if a more limited caseload will lead to more successful results. In Denver, San Francisco, and Portland, the specialized patrols appeared fairly successful in their interactions with the courts although the level of prosecution was disappointing in San Francisco. Taken together, these data suggest that some of these patrols had a considerable impact on the courts in their communities.

Data on citizen attitudes toward and/or involvement with specialized patrol operations in six sites largely point to a positive impact on the community.

TABLE III-3-15

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	PROBABLE
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.

(TABLE CONTINUED NEXT PAGE)

TABLE III-3-15
(CONTINUED)

PROJECT	TYPE/SOURCE	IMPACT
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 & 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; DIFFICULT TO INTERPRET BECAUSE OF CHANGES IN PLEA BARGAINING PROCESS
CITIZEN ATTITUDES/ INVOLVEMENT		
INDIANAPOLIS	CITIZEN SURVEY: EVAL	MAJORITY OF RESPONDENTS FELT POLICE DOING GOOD JOB
VIRGINIA BEACH	COMMUNITY AWARENESS PROGRAM: EVAL	WELL RECEIVED; OVER 25,000 PERSONS ATTENDED 204 PRESENTATIONS IN 9 MONTHS
HOUSTON	CITIZEN COMPLAINTS, COMPLIMENTS, ETC.: EC	PATROL IS SUCCESSFUL IN COMMUNITY: ONLY 1 CITIZEN COMPLAINT, 5 COMPLIMENTING LETTERS. NO CITIZEN INQUIRIE 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 INDIVIDUALS, 79 WITH GROUPS, 1,046 SECURITY CHECKS, & DISTRIBUTION OF 2,657 PREVENTION BOOKLETS. TARGET HARDENING SUCCESS LIMITED BY LOW INCOME OF RESIDENTS

(TABLE CONTINUED NEXT PAGE)

TABLE III-3-15
(CONTINUED)

PROJECT	TYPE/SOURCE	IMPACT
SAN FRANCISCO	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

Information largely supplied by evaluations on five projects indicates that morale was good to very high among the specialized patrols in Portsmouth, Virginia Beach, Denver, San Francisco, and Portland. In two cases--Portsmouth and San Francisco--the specialized patrols were a cause of some dissension in their departments; however, the dissension in San Francisco disappeared soon after the unit's implementation. One evaluator also reports that there is little cooperation between the Denver specialized patrol and other units in the department. The specialized patrols in Indianapolis and Virginia Beach appear to enjoy good relationships with other departmental units. There is no indication that the more negative cases cited affected the performance or effectiveness of the specialized patrols.

7. Insights into Success and Failure. IHRR assessed eight projects employing various levels of both high and low visibility. Like the other two families, certain projects or project elements seemed to have a particularly strong effect on project success or failure. We have identified and categorized those that seemed especially noteworthy.

Success

- Peer group review--The only project to employ the management tool of peer group review was the Virginia Beach HIT project. IHRR believes this to be a major contributing factor to the overall success of this project and to its emergence as the most effective of the various HIT approaches.

- Flexibility--High/Low Visibility patrols exhibited the ability to vary their approach to specific crime problems. Portland was especially noteworthy in its task force approach which employed patrolmen on specific missions for short-term periods.

- Recruitment--All projects, to some extent, went through a selective screening process in choosing personnel for the specialized patrols. These were typically the high performers and/or those persons with a particular interest in the patrol objective.

- Planning--With the exception of Houston, all projects deployed on the basis of some type of crime analysis. Portland employed the crime analysis in an exceptional manner in that the analysis was performed prior to the creation of a task force to address the problem. Portland's approach appeared related to its success.

- Arrest rates--Where it was measured (Indianapolis, Virginia Beach, Houston, Denver, San Francisco, and Portland), arrest performance was at least adequate and in some instances exceptional.

- Training--Six of the eight projects provided specialized training for project personnel. IHRR found this a desirable feature in that all were apparently successful at some level.

Failure

- Use of volunteer overtime personnel--Indianapolis (like the High Visibility Alexandria HIT project) discarded the use of volunteer overtime personnel as unproductive and administratively difficult to manage.

- Exotic equipment--For the most part, exotic equipment such as helicopters, surveillance vans, remote alarms, and night vision devices were not cost-effective and tended to fall into disuse in many instances.

Part 4
Comparisons of Project Families

In this section, IHRR will compare the three project families on the following criteria:

- Objectives attainment
- Amount of change
- Efficiency
- Cost-effectiveness
- Arrest performance/effectiveness
- Clearance performance/effectiveness
- Convictions performance/effectiveness
- Crime reduction
- Level of success and failure

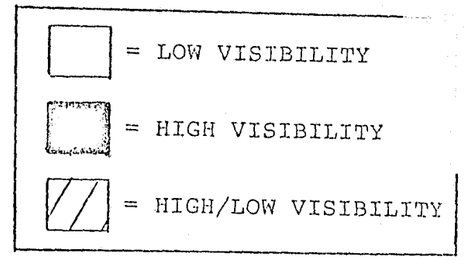
The presentation of data on objectives attainment is intended largely to show that this criterion is not the best indicator of success or failure of specialized patrols.

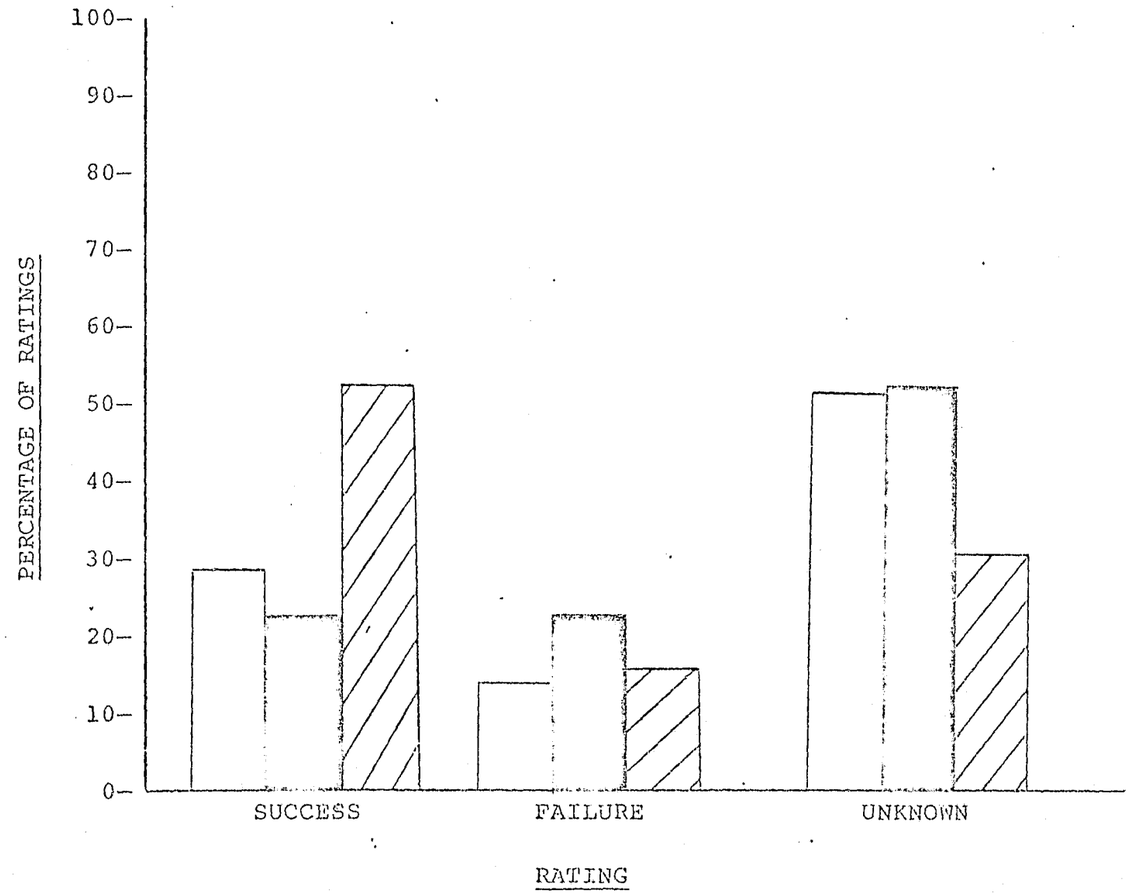
The remaining measures are, we believe, more relevant indicators of success or failure

1. Objectives Attainment. Figure III-4-1 graphically depicts the evaluation/crime figures information on objectives attainment. By these criteria, the High/Low Visibility patrols were rather successful in attaining their objectives: 53 percent of their ratings fall in a Success category, 16 percent in a Failure category. For the other two families, a large number of Unknown ratings appear. The Low Visibility group appears

FIGURE III-4-1

COMPARISON OF FAMILIES:
OBJECTIVE ATTAINMENT





more successful than unsuccessful (and the Success ratings would rise to 43 percent if one included expert opinion). The Success ratings would be about equal to the Failure ratings for the High Visibility group. Including expert opinion, Failure ratings rise to 36 percent for this group. Yet, their departments were pleased with these High Visibility patrols.

In part, the failures are attributable to the practice of setting objectives in precise, quantifiable terms. Objectives setting has typically been followed by large increases in crime, making it difficult to fulfill specified objectives framed in quantitative terms. Yet, the patrols may effect a large proportion of arrests and even reduce crime--though perhaps not at a level specified in their objectives. Objectives expressed in quantifiable terms are static numbers that perhaps should not be used for dynamic, changing social phenomenon, at least not as a sole indicator of success or failure.

2. Amount of Change. The amount of change effected by an intervention is, we believe, a more credible measure of success or failure.

The various measures of change effected by the three specialized patrol families were not comparable and not always of excellent or even good quality; however, this noncomparability and credibility of measurement pertained to all families (though the credibility may have been slightly higher for the High/Low Visibility family). We present the percentage of combined Success and combined Failure ratings, together with Unknown ratings,

in Figure III-4-2. Because there were so few evaluations on the Low Visibility family, we present two separate types of figures. One is for evaluations and/or crime figures only; the second adds expert opinion to the evaluation/crime figure data. Since the reliability of expert opinion was rather high for the Low Visibility family, this combined rating may be a fairly adequate portrayal of the amount of change effected by Low Visibility patrols.

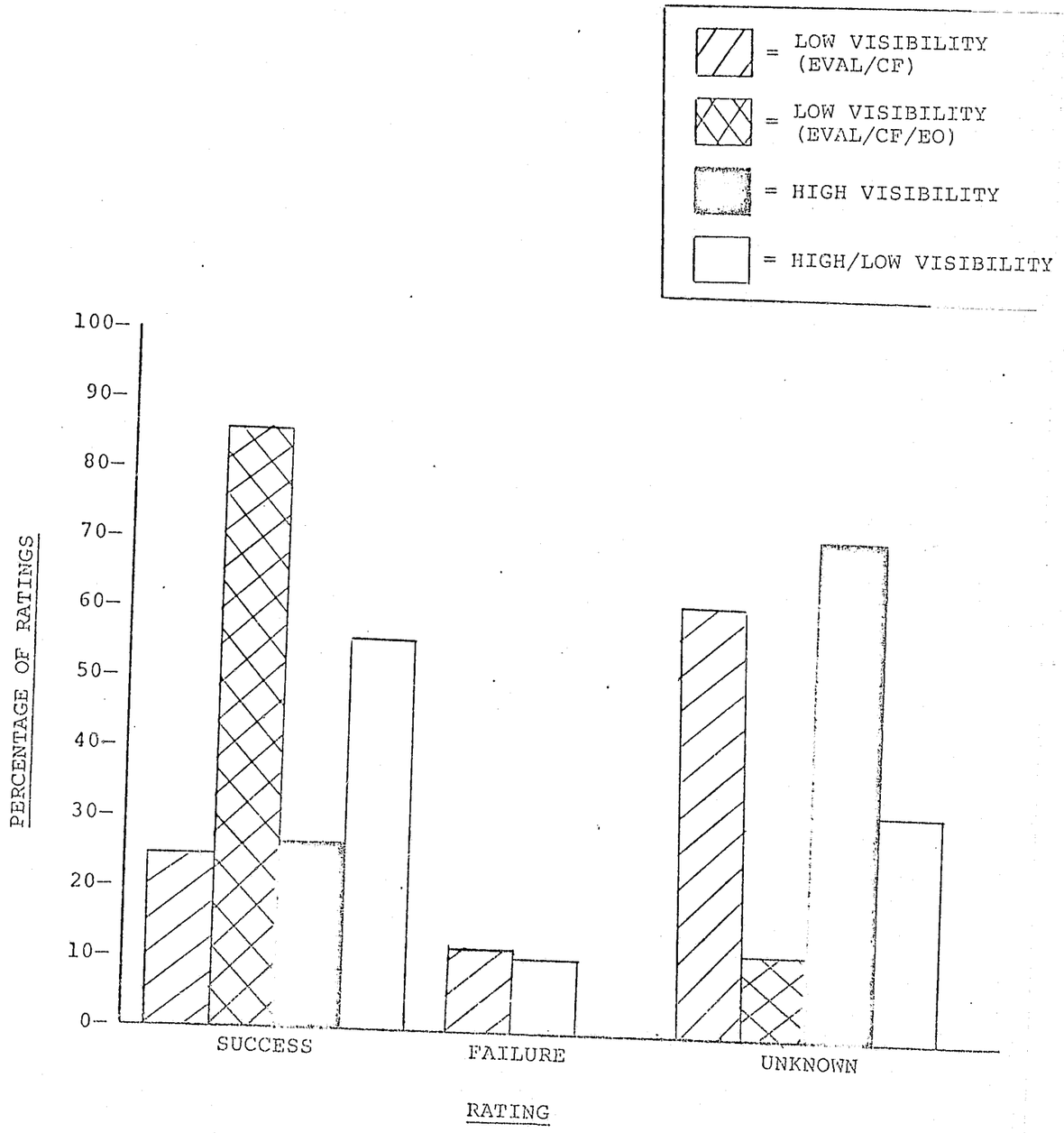
If one accepts the credibility of expert opinion for the Low Visibility patrol family, it appears the most successful in effecting change. If one eliminates this expert opinion, the Low Visibility patrol family compares with the High Visibility family on success on this measure (both show approximately a one-fourth percentage of Success). The High/Low Visibility family appears quite successful by these ratings, especially considering the large number of ratings that comprise this combined percentage (56 percent) figure.

Both the Low and High/Low Visibility families have one failure represented in Figure III-4-2.

For the selected measures that represent amount of change for each family, our gross calculations show that many projects were not assessed on all of these measures, thus, creating a large percentage of Unknown ratings. These ratings are particularly high for High Visibility patrols (73 percent) and for evaluative/crime figure comparisons for Low Visibility patrols (62.5 percent).

FIGURE III-4-2

COMPARISON OF FAMILIES:
AMOUNT OF CHANGE



These data suggest that the High/Low Visibility patrols were rather successful in effecting change in the desired direction and that the Low Visibility patrol may have been rather successful also. The success of the High Visibility patrol is questionable because of the large percentage of Unknown ratings.

3. Efficiency and Cost-Effectiveness. The data on two process measures--efficiency and cost-effectiveness--were both scant and, overall, of questionable comprehensiveness.

a. Efficiency. Figure III-4-3 presents the available figures on efficiency for each family. Such measures as exist do indicate that the High/Low Visibility patrols were efficient in many ways, though one Failure rating is shown for this family. All ratings for the High Visibility patrols fall into the Success range, though 60 percent of the ratings are in the Unknown category. The efficiency of Low Visibility patrols can hardly be commented on since almost all ratings fall in the Unknown category.

b. Cost-effectiveness. Figure III-4-4 presents the available data on cost-effectiveness. Except for the High/Low Visibility patrol, this criterion represents a large gap in knowledge. A few Low and High Visibility patrols were assessed on cost-effectiveness; the former has 25 percent of its ratings in the Success category and 12.5 percent in the Failure category, whereas the High Visibility family has 20 percent of its ratings in the Success category, the remaining in the Unknown category.

The High/Low Visibility family shows a 64/27 percent Success/Failure ratio on the cost-effectiveness criterion. The Failure

FIGURE III-4-3

COMPARISON OF FAMILIES:
EFFICIENCY

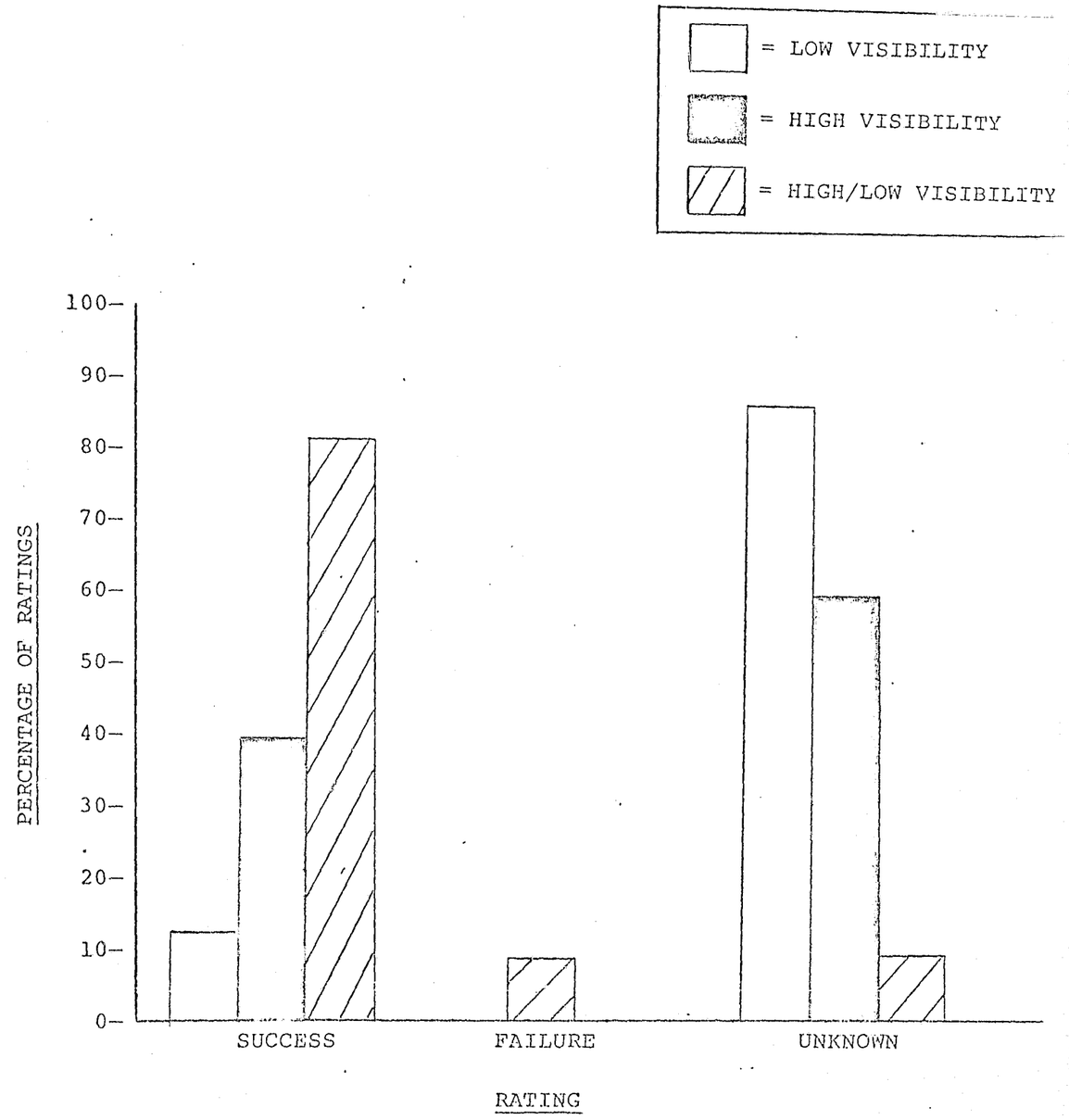
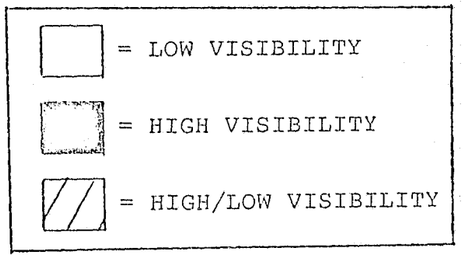
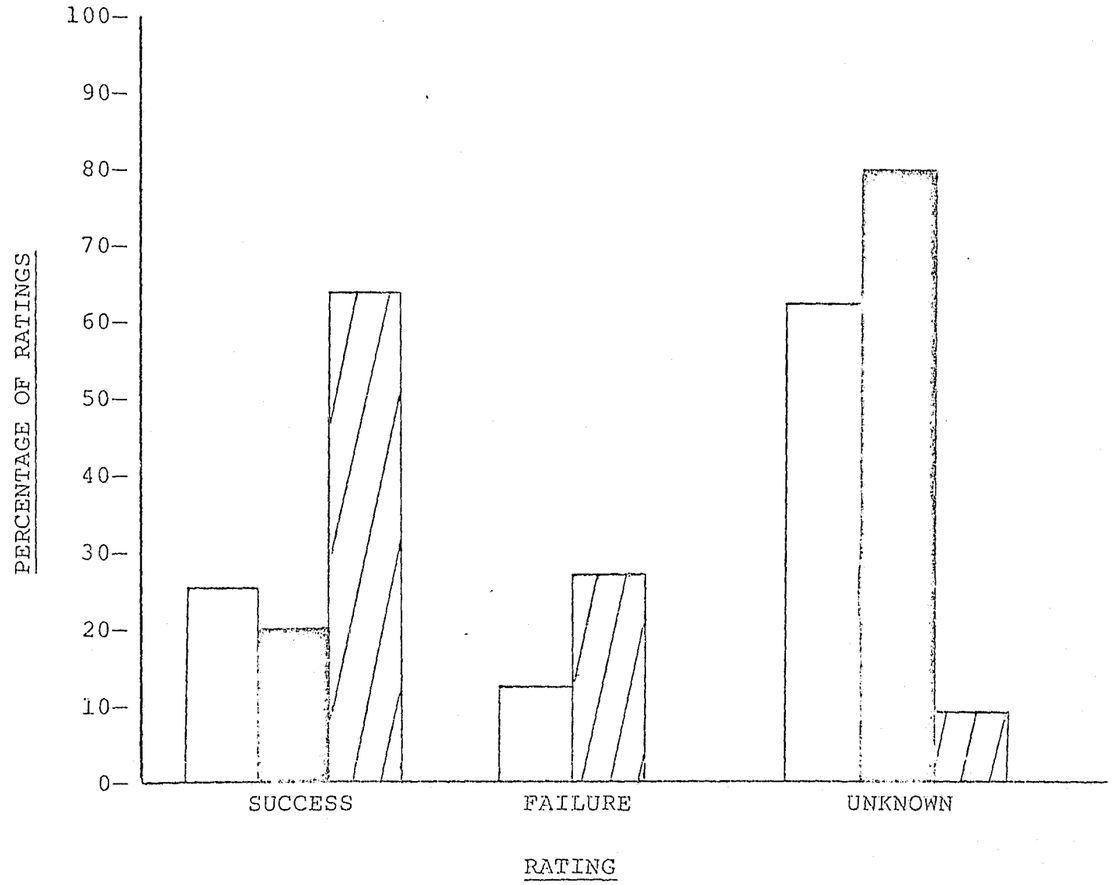


FIGURE III-4-4

COMPARISON OF FAMILIES:
COST-EFFECTIVENESS





ratings represent mechanical device tactics and use of helicopters. All Success ratings represent some use of personnel, a tactic or method.

4. Performance and Effectiveness. This section shows comparative ratings for various criteria subsumed under performance and effectiveness measures--arrests, clearances, convictions, and crime reduction.

a. Arrests. Figure III-4-5 presents the ratings for the families on arrest performance and effectiveness. Again, two types of ratings appear for the Low Visibility family: one for evaluation and/or crime figures and one which adds expert opinion to these data.

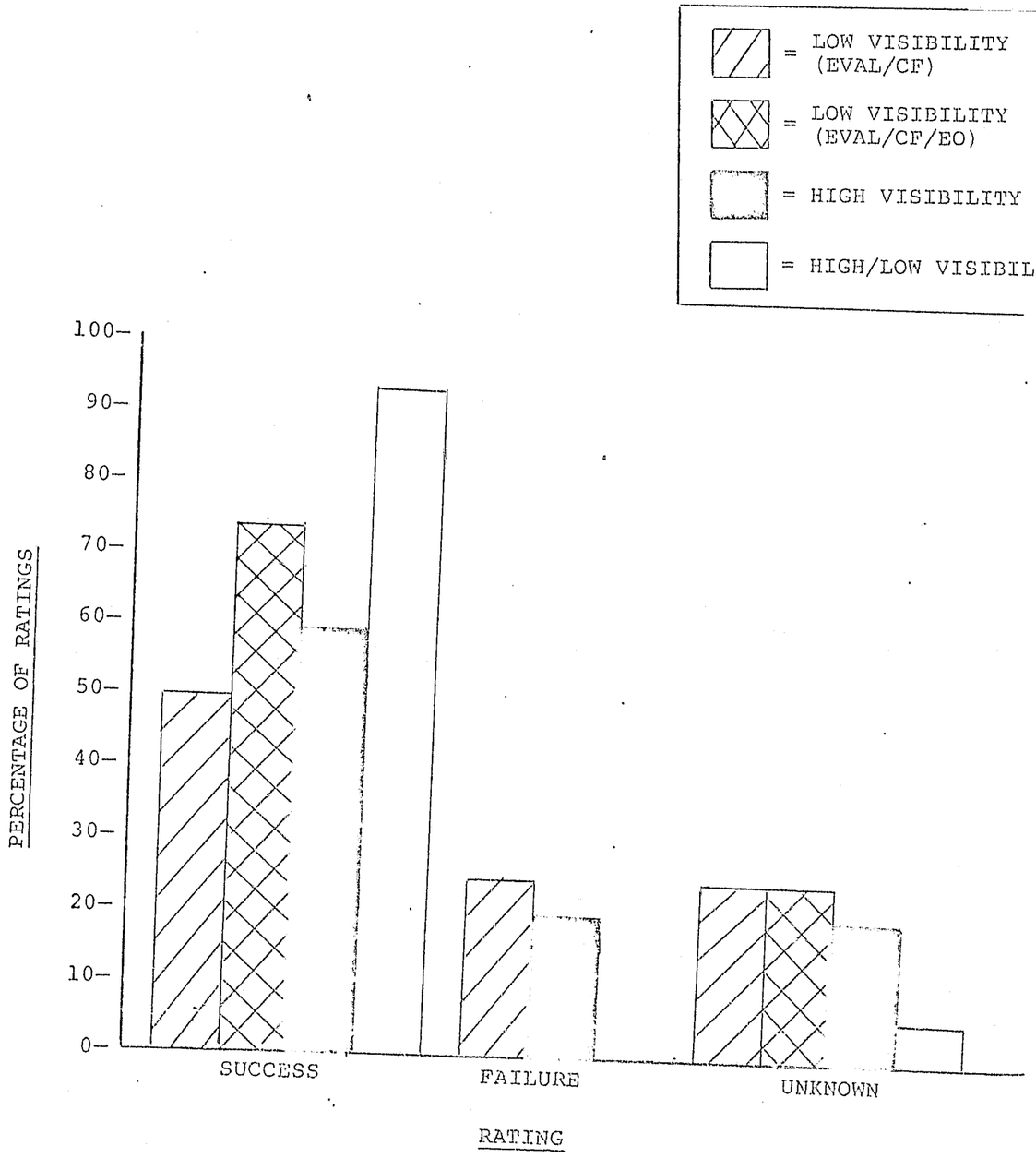
By either type of rating, the Low Visibility family appears rather successful in apprehending criminals; this family shows 50 percent of its ratings in the Success category without inclusion of expert opinion and 75 percent with the inclusion of expert opinion. Some ratings do fall into the Failure category (25 percent), suggesting that low visibility tactics may not always accomplish the major mission for which they are intended.

The High Visibility patrols also appear in the Failure category. The one rating is for the Alexandria project, which has undergone drastic changes since these data were assessed. However, the remaining High Visibility patrols appear as a Success in apprehending criminals.

The High/Low Visibility patrols appear, with one exception (an Unknown rating), as a Success in their arrest performance and effectiveness.

FIGURE III-4-5

COMPARISON OF FAMILIES:
ARREST PERFORMANCE/EFFECTIVENESS



b. Clearances. Figure III-4-6 shows the performance and effectiveness data on clearances. Close to one-half or more of the ratings for all family types fall in the Unknown category, pointing to another sizable gap in our knowledge on specialized patrols.

There is, however, only one Failure rating (for the Low Visibility family) and all family types show some success in increasing clearances. Over one-half (55.5 percent) of the ratings for the High/Low Visibility family fall into the Success category, suggesting that this group may have been quite effective in increasing its clearance rates.

We do not know whether these ratings represent comparable methods of calculating clearance rates and, therefore, cannot be certain that success means the same in each case (or even within families).

c. Convictions. As shown in Figure III-4-7, no information is available on High Visibility patrols regarding their performance and effectiveness in obtaining convictions. With or without including expert opinion, there is also little information on Low Visibility patrols on this measure, although all available data point to success in convictions. Again, we have largely a gap in the knowledge on specialized patrols. The partial exception is the High/Low patrol family. In this case, 69.2 percent of the ratings fall into the Success category, indicating that this group may have been fairly effective in obtaining convictions.

FIGURE III-4-6

COMPARISON OF FAMILIES:
CLEARANCE PERFORMANCE/EFFECTIVENESS

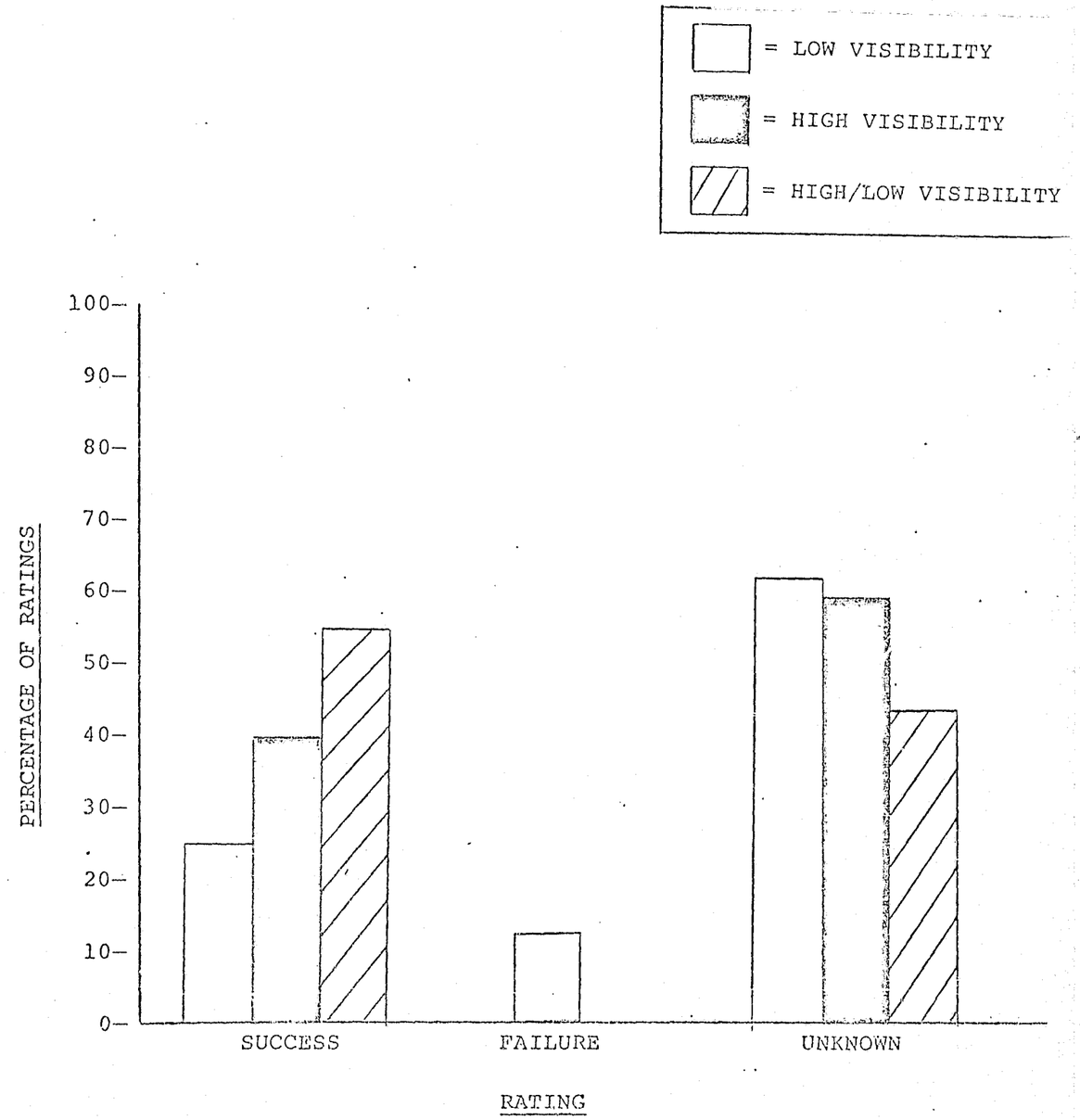
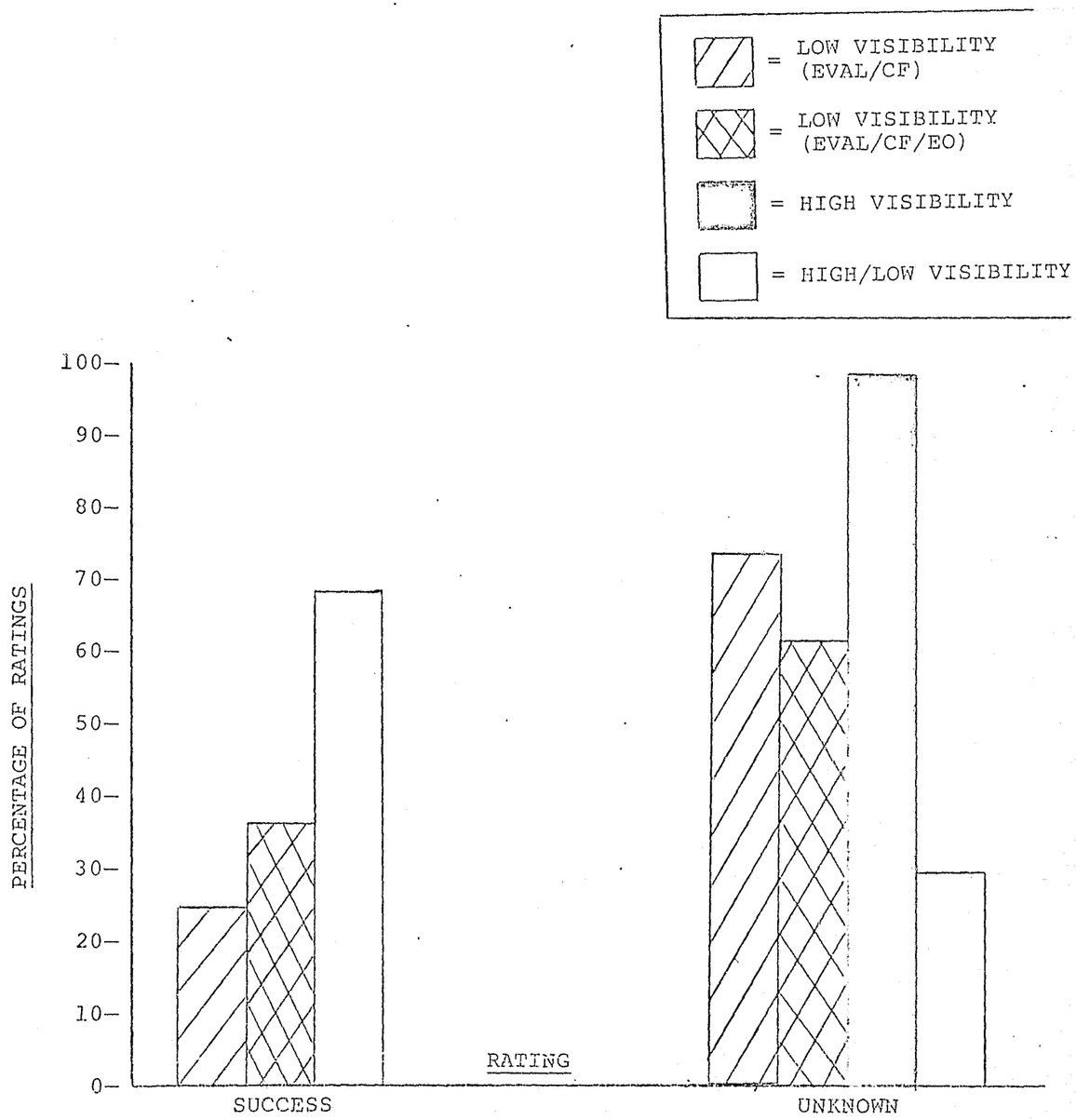


FIGURE III-4-7

COMPARISON OF FAMILIES:
CONVICTION* PERFORMANCE/EFFECTIVENESS



*Contains related data (e.g., depositions) on High/Low Visibility family.

d. Crime reduction. If one accepts the expert opinion information for Low Visibility patrols, all project families appear unusually successful in reducing crime. There were a few Failure ratings, as shown in Figure III-4-8, and some Unknown ratings (the latter is high only for Low Visibility data based on evaluations and/or crime figures).

It is interesting to compare these figures to those shown in Figure III-4-5 for arrest performance and effectiveness.

The Low Visibility patrols (if one accepts expert opinion) appear equally successful in arrests and crime reductions but show fewer failures in crime reduction than arrests. The High Visibility patrols appear more successful at deterrence--their major mission--than in apprehending criminals. The High/Low Visibility patrols appear highly successful in both endeavors but more effective in apprehension than crime reduction.

e. Summary. Although many gaps exist in the knowledge on amount of change, cost-effectiveness, and various performance and effectiveness measures, such knowledge as exists portrays far more successes than failures among this sample of specialized patrols. They appear especially successful in two of their primary missions--apprehension of criminals and deterrence of crime.

4. Comparison of Levels of Success and Failure. Table III-4-1 shows the percentage of the combined Success and Failure ratings shown for all criteria considered in this section (except objectives attainment) which fall into each type of Success and Failure category. This provides a gross portrayal of the level of success and failure effected by each family across the selected criteria.

FIGURE III-4-8

COMPARISON OF FAMILIES:
CRIME REDUCTION

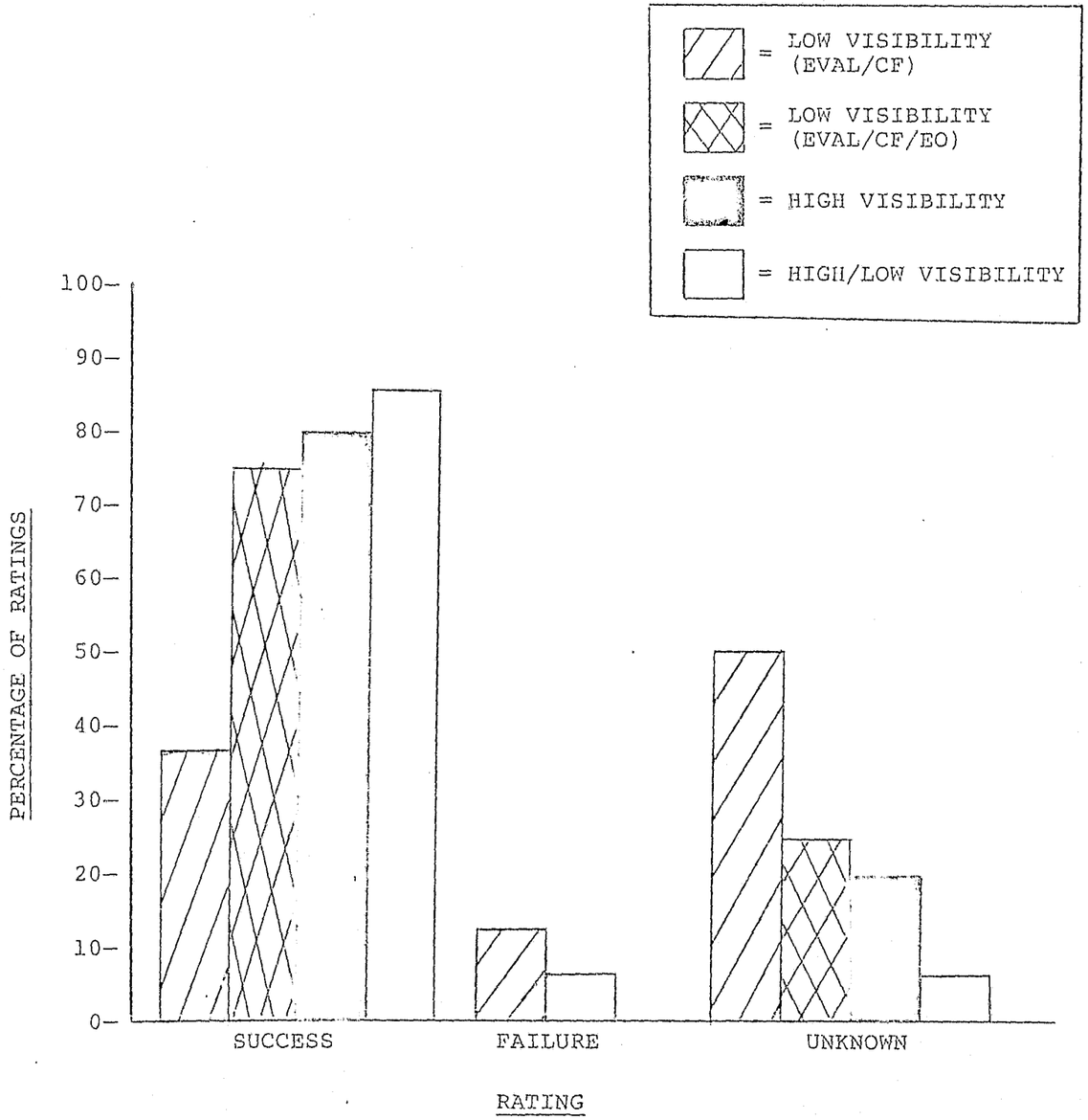


TABLE III-4-1

COMPARISON OF FAMILIES:
PERCENTAGE OF DIFFERENT RATINGS OF SELECTED MEASURES

RATING	LOW VISIBILITY PATROLS		HIGH VISIBILITY PATROLS	HIGH/LOW VISIBILITY PATROLS
	(1)	(2)		
SUCCESS	24%	46%		17%
PROBABLE SUCCESS	44%	54%	32%	57%
QUALIFIED SUCCESS	4%		63%	15%
FAILURE	12%		5%	2%
PROBABLE FAILURE	16%			6%
QUALIFIED FAILURE				3%

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

Given the fact that Success/Failure ratings are highly dependent upon the level of reliability of the data, as judged by IHRR, the figures shown in Table III-4-1 are as accurate a portrayal as we are able to make 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, we would rate the Low Visibility patrols and the High/Low Visibility patrols as a Probable Success (a fairly high rating by IHRR criteria) and the High Visibility patrols as a Qualified Success (a comparatively low rating by IHRR criteria). The Failure ratings shown in Table III-4-1 can be attributed largely to two factors:

- The general lack of success of two projects (the HIT programs in Henrico County and Alexandria, Virginia)
- The high cost and noneffectiveness of mechanical device tactics (with the exception of the Birmingham project)

IV. A TENTATIVE KNOWLEDGE BASE

According to the IHRR survey, 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 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 secondarily, to deter target crime.

These assumptions regarding the efficacy of different visibility levels led IHRR 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 whereas 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. We call this 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 multi-tactic 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 these 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 a 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, IHRR concluded that definitive answers to these questions have not emerged from evaluation research. We then purposively selected a sample of projects from which to build a tentative set of conclusions. This sample represented all project

families and was selected because it was believed to represent about as much as is known on the most commonly used forms of specialized patrol.

After an intensive review and analysis of this sample of projects, we have a tentative set of conclusions that are based on descriptive material of the setting in which specialized patrols operate as well as simple quantitative analysis related to performance and effectiveness. These tentative conclusions are related in the following sections.

1. A Common Setting. In the IHRR review of evaluations of specialized patrols, we found that evaluators have given almost no attention to the setting in which specialized patrols operate. Our own simple analysis of descriptive material indicates that all three families in our selected sample of specialized patrols tend 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.

- Recruitment and selections criteria--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.

- Planning--From 60 to 100 percent of all family types rely 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.

- 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).

- Span of control--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.

- Operational modes--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, utilize 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.

- Crime targets--Each family type was represented by some projects (25 to 63 percent) that were concerned with combating all or most types of serious crimes (e.g., homicide, assault, rape, burglary, robbery, larceny). All other types 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 Visibility 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.

Our 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, we can describe a composite or typical patrolman in his work 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 better accomplish his major tasks--apprehension 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. Success and Failure. Our analytic data related to the performance and effectiveness of specialized patrols rests upon a data base of questionable accuracy and reliability. From our rather gross ratings on this questionable data base, each of the project families appears rather successful in meeting their 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 combined High/Low Visibility patrols; that is, they were slightly more successful at apprehension than deterrence. The Low Visibility patrols are most difficult to

assess since there were so few evaluations on this group; however, such data as exist 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; however, 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.

Our 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. However, the data rather strongly suggest that mechanical devices, in general, are costly and ineffective. The one exception to this trend appeared in the Birmingham project where an alarm system placed in business establishments was reacted to immediately by traditional patrolmen, but, until activated, required no patrol man hours.

CONTINUED

4 OF 4

V. DEFICIENCIES IN THE KNOWLEDGE BASE

In this chapter, IHRR will address the deficiencies, or gaps, in the knowledge base on specialized patrols; the reasons for these gaps in knowledge; and briefly address the problem of filling the gaps.

A. Gaps

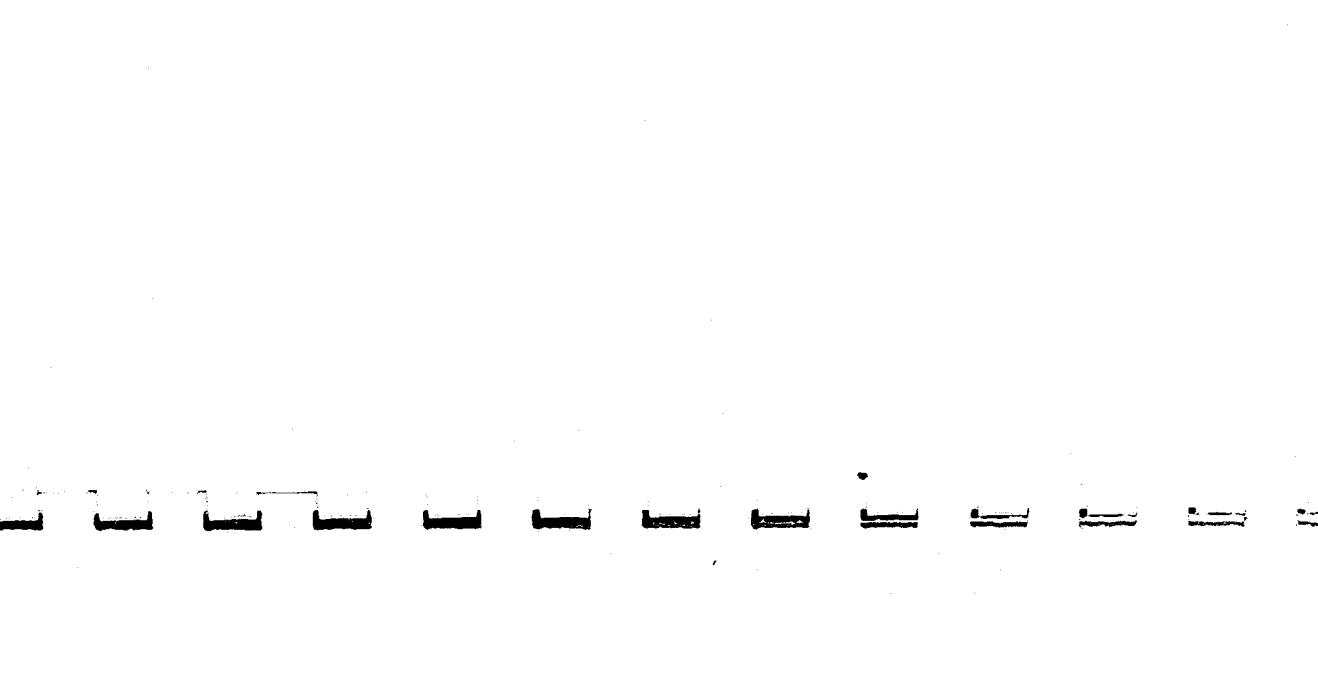
When we ask what is known definitively on each variable listed in our analytic model (see Figure 1, Chapter 1) or about the intervening variables that could affect specialized patrol operations (see Table II-4, Chapter II), we can only conclude that all these subject areas represent deficiencies in our knowledge on specialized patrols.

Only a few of these areas have even been subject to evaluations. Those typically included in evaluations are shown in Figure V -1, with indications of those that are 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 what IHRR terms "primary outputs"--especially arrest and crime reduction effectiveness. A few studies also address increases in clearance and conviction rates.

FIGURE V -1

VARIABLES MEASURED ON SPECIALIZED PATROL



* Measured only infrequently

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 based on good survey methodology. Except for citizen attitudes, none of the intervening variables identified by IHRR have been addressed, to our knowledge.

B. Reasons for the Gaps

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, IHRR feels that the most important gaps in knowledge 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, and 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, many 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. IHRR has taken a pragmatic approach in addressing this problem.

It seems to us that choices should be made. One should identify first 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 V -2, IHRR believes 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

- 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.

In its subsequent report , IHRR will present study designs tailored to fill the most important gaps in our knowledge on specialized patrol.

FIGURE V -2

IMPORTANT KNOWLEDGE GAPS

END