

THE KANSAS CITY PREVENTIVE PATROL EXPERIMENT

A Summary Report



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By

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FOREWORD

This is a summary report of the findings of an experiment in policing that ranks among the few major social experiments ever to be completed. The experiment was unique in that never before had there been an attempt to determine through such extensive scientific evaluation the value of visible police patrol.

The year-long experiment tested the effectiveness of the traditional police strategy of routine preventive patrol and sought to determine whether the resources in the Kansas City, Missouri, Police Department ordinarily allocated to preventive patrol could safely be devoted to other, perhaps more productive strategies.

It is not easy for police departments to conduct operational experiments. For one thing, maintaining experimental conditions cannot be permitted to interfere with police responsibility for life and property. For another, evaluation of an experiment by outside investigators can be threatening to police administrators. In addition, police personnel are not oriented to research. Too often police supervisors and officers are so busy with complex, ever-changing, day-to-day problems that they do not devote time to aid in experimental efforts.

By 1971, the Kansas City Police Department had a chief with unusually long tenure—at that point ten years. The average length of service of police chiefs in more urban areas is less than half that. The chief in Kansas City was respected and supported by both the community and his officers. He was progressive and willing to innovate. He championed participatory management. Sworn personnel from colonels through officers on the street contributed to the decision-making process of the department.

In 1971, Chief Clarence M. Kelley said, “Many of us in the department had the feeling we were training, equipping, and deploying men to do a job neither we, nor anyone else, knew much about.”

Chief Kelley, now Director of the FBI, sought assistance from the Police Foundation for developing several experimental projects including the patrol experiment described in this report. His unusual willingness to allow experimentation and evaluation provided an opportunity for the Foundation to support the type of pioneering work to which it is dedicated. To undertake the experiment, the department willingly made use of civilian experts in such areas as planning and organizational change. The receptivity of the Kansas City Police Department to the use of civilian specialists was of critical importance. If policing is to progress, it must employ a wide variety of skilled persons: statisticians, analysts, economists, and others. Just as many police departments use legal advisors, they should also employ other trained professionals.

Because the Kansas City Police Department had excellent leadership, internal planning capability, the support of the community, and enlightened officers, it was able to mount and sustain the experiment in preventive patrol. The results are noted both in this report and in the preface by the current chief, Joseph D. McNamara, who is continuing the police department’s tradition of innovation and research. 

This summary report has been prepared because the police department and the Police Foundation believe the results of the experiment are important to police administrators and officers, municipal and other government officials, and citizens who may not have the time to study a lengthy technical report which the Foundation is also publishing.

The experiment answered one question and, in the process, raised many new ones. The Police Foundation welcomes the opportunity to assist police departments which seek answers to crucial questions about their use of resources and are willing to accept the burden and the challenge of joining in scientific research.

Patrick V. Murphy
President
Police Foundation

PREFACE

Police patrol strategies have always been based on two unproven but widely accepted hypotheses: first, that visible police presence prevents crime by deterring potential offenders; second, that the public's fear of crime is diminished by such police presence. Thus, routine preventive police patrol was thought both to prevent crime and reassure the public.

The Kansas City, Missouri, Police Department conducted an experiment from October 1, 1972, through September 30, 1973, designed to measure the impact routine patrol had on the incidence of crime and the public's fear of crime. This experiment, made possible by Police Foundation funding, employed a methodology which accurately determined that traditional routine preventive patrol had no significant impact either on the level of crime or the public's feeling of security.

Three controlled levels of routine preventive patrol were used in the experimental areas. One area, termed "reactive," received no preventive patrol. Officers entered the area only in response to citizen calls for assistance. This in effect substantially reduced police visibility in that area. In the second area, called "proactive," police visibility was increased two to three times its usual level. In the third area, termed "control," the normal level of patrol was maintained. Analysis of the data gathered revealed that the three areas experienced no significant differences in the level of crime, citizens' attitudes toward police services, citizens' fear of crime, police response time, or citizens' satisfaction with police response time.

What do these results mean?

A great deal of caution must be used to avoid the error of believing that the experiment proved more than it actually did. One thing the experiment did not show is that a visible police presence can have no impact on crime in selected circumstances. The experiment did show that routine preventive patrol in marked police cars has little value in preventing crime or making citizens feel safe.

It would be a grave error to assume that this study implies in any way that fewer police officers are needed in any specific jurisdiction. The study shows something quite different, with profound implications for police administrators. The experiment revealed that the noncommitted time of the police officers (60 percent in the experiment) can be used for purposes other than routine patrol without any negative impact on public safety.

We believe that the preventive patrol experiment suggests that deployment strategies should be based on specific crime prevention and service goals as opposed to routine preventive patrol. The Kansas City Police Department is currently attempting to improve its delivery of services to the public by using resources freed from routine patrol to achieve new levels of police and community cooperation through its Interactive Patrol Project. At the same time, we are moving into a major program designed to develop directed patrol deployment systems.

The results of the preventive patrol experiment described in this report repudiated a tradition prevailing in police work for almost 150 years. The toppling of traditions brings forth uneasiness inherent in the process of great change. Yet, the experiment demonstrated something that should make the great changes we face less disturbing. The project was conceived by patrol personnel and executed by them with technical assistance from researchers. Thus, it is apparent that, with the right kind of leadership and assistance, urban police departments have the capability to mount successful controlled experiments necessary to develop viable alternatives to the obsolescent concept of preventive patrol.

*Joseph D. McNamara
Chief of Police
Kansas City, Missouri*

A NOTE ON EVALUATION

The evaluation of the preventive patrol experiment was a massive and complex job to complete. The considerable difficulties to be expected in large-scale social experimentation and evaluation were compounded by two additional major factors. One was the speed with which the experiment and the evaluation data collection had to be mounted once the Kansas City Police Department generated the momentum necessary to start and to sustain the experiment. The other factor was the relative inexperience at the time of those who had to take on the processes of experimentation and evaluation.

The summary and technical reports deal frankly with the problem and difficulties these factors caused or allowed to occur and how and to what extent their consequences were surmounted or minimized by administrative action within the police department or by use of multiple approaches, analytical techniques, and sheer hard work by members of the evaluation team. This experiment, like the relatively few other social experiments which have been fully recorded, was not perfect. However, it is a tribute to both the department and to the experiment's evaluators led by Dr. George L. Kelling that these things can be said:

- Despite occasional trespassing across experimental boundaries, experimental conditions were maintained reasonably well;
- Despite some early measurement design mistakes, trouble in collecting some items of data and added labor to validate or to correct other data items, an immense mass of data usable for the purposes to which it was to be put was collected and processed;
- Through analysis of these data, using in many instances techniques in the forefront of methodological development, assessments from a multiplicity of measures and angles of view yielded consistent evidence of the lack of effects of any consequence on crime, citizen fear or satisfaction due to either increasing or decreasing routine patrol within the range of variation tested.

If any effects occurred that could be ascribed to the experiment, they were so subtle as to escape detection by any of the elaborate array of measurements that were used.

A good deal was learned from the Kansas City experience about what to expect in mounting, conducting, and evaluating major experiments in policing. Some things were learned that could help to avoid certain problems in other such experiments, some about what to do to abate their consequences another time, some—as life would have it—about what must simply be endured. It is hoped that distribution of the summary report and the large technical report on the experiment will help other courageous police departments, and evaluators who work with such departments, to test new or old ideas better and more easily.

The Police Foundation specifically welcomes the additional insights into methodology and practice that will undoubtedly come from the review of these reports by other researchers, evaluators, and police practitioners. It is by such open exchange, as the Foundation continues to publish methods and results of experiments developed in partnership with leading police agencies, that objective knowledge and confidence in the experimental approach to police

questions will grow.

A key element in the thoroughness of the two reports on the experiment and in the full interpretative analyses they contain was the dedicated professional assistance rendered by the Police Foundation Evaluation Advisory Group. Members of this group who reviewed several drafts of these reports are:

Professor Francine Rabinovitz

Department of Political Science
Massachusetts Institute of Technology

Professor Albert J. Reiss, Jr.

Department of Sociology
Yale University

Professor Lee Sechrest

Department of Psychology
University of Florida

Professor Hans Zeisel

The Law School
University of Chicago

We are particularly indebted to Professor Donald T. Campbell, of the Psychology Department of Northwestern University, for agreeing at very short notice to be an additional reader of the technical report. His views and advice have been both encouraging and helpful.

*Joseph H. Lewis
Director of Evaluation
Police Foundation*

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This study was funded by the Police Foundation and has involved the efforts of police officers, police administrators, foundation staff, academic consultants and evaluators.

Special appreciation is expressed to FBI director Clarence M. Kelley, the former chief of the Kansas City Police Department, who made the preventive patrol experiment possible through his support of the department's South Patrol Task Force and of those officers who developed the project. The support of Joseph D. McNamara, the current chief of police, assured the successful completion of the experiment. The support of the police department was also assured through the activities of Lt. Col. Bryce Thompson, Lt. Col. James Newman, Maj. Willard Shaffer, Maj. Guy Hines, and Maj. Sidney Harlow. For direct program assistance we thank police officers Michael Travis, Donald Johnson, and James Post.

The work of Mark Furstenberg, formerly a Police Foundation associate director, was crucial and significantly enhanced the development and ultimate completion of the experiment. Consultant Robert Wasserman assisted the Kansas City Police Department in articulating its experimental plans and developing the resources to carry through with this experiment. Especially noted is Thomas Sweeney's ongoing work within the police department's Operations Resource Unit. His effort has helped to maintain the inquiring atmosphere necessary for experimentation. As foundation-assisted programs developed within the department, assistant foundation director Catherine Milton provided continuous support and encouragement in her role as program officer.

The Midwest Research Institute is thanked for providing technical assistance and support services. This effort included instrument development, survey sample design, survey coordination, preparation of data, and data analyses.

Consultation to project development and analysis was provided by Wanzer Drane, PhD, Southern Methodist University; J.T. Evanson, PhD, University of Wisconsin; Herman Goldstein, University of Wisconsin; Irving Piliavin, PhD, University of Wisconsin; G. William Walster, PhD, University of Wisconsin; Carl S. Werthman, PhD, University of California; and Victor L. Willson, PhD, University of Minnesota.

Additional thanks go to Charles Rogovin, former president of the foundation, for his early support of the project; William H.T. Smith, staff director of the foundation; Thomas F. McBride, former staff director of the foundation; Thomas Brady, communications director of the foundation; Sharon J. Winkler, public information office for the foundation; Michael E. Carbine, writing consultant to the foundation's Kansas City evaluation staff; Phil Sawicki, editorial consultant to the foundation; and Janet Stafford of the foundation staff.

The authors wish to express particular gratitude to foundation president Patrick V. Murphy for his support and patience during the hectic and trying period of data analysis and preparation of this report.

Joseph H. Lewis, director of evaluation for the foundation, is most specially thanked for his support throughout the entire experiment and for his suggestions. His constant stabilizing

wisdom was always present, and his guidance was always helpful and never inhibiting.

Finally, appreciation is expressed to all those Kansas City police officers and supervisors who helped to maintain the experiment and carry it through to its conclusion. Without their help, it is doubtful that the experiment could have succeeded.

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I. INTRODUCTION AND MAJOR FINDINGS

Ever since the creation of a patrolling force in 13th century Hangchow, preventive patrol by uniformed personnel has been a primary function of policing. In 20th century America, about \$2 billion is spent each year for the maintenance and operation of uniformed and often superbly equipped patrol forces. Police themselves, the general public, and elected officials have always believed that the presence or potential presence of police officers on patrol severely inhibits criminal activity.

One of the principal police spokesmen for this view was the late O.W. Wilson, former chief of the Chicago Police Department and a prominent academic theorist on police issues. As Wilson once put it, "Patrol is an indispensable service that plays a leading role in the accomplishment of the police purpose. It is the only form of police service that directly attempts to eliminate opportunity for misconduct. . . ." Wilson believed that by creating the impression of police omnipresence, patrol convinced most potential offenders that opportunities for successful misconduct did not exist.

To the present day, Wilson's has been the prevailing view. While modern technology, through the creation of new methods of transportation, surveillance and communications, has added vastly to the tools of patrol, and while there have been refinements in patrol strategies based upon advanced probability formulas and other computerized methods, the general principle has remained the same. Today's police recruits, like virtually all those before them, learn from both teacher and textbook that patrol is the "backbone" of police work.

No less than the police themselves, the general public has been convinced that routine preventive patrol is an essential element of effective policing. As the International City Management Association has pointed out, "for the greatest number of persons, deterrence through ever-present police patrol, coupled with the prospect of speedy police action once a report is received, appears important to crime control." Thus, in the face of spiraling crime rates, the most common answer urged by public officials and citizens alike has been to increase patrol forces and get more police officers "on the street." The assumption is that increased displays of police presence are vitally necessary in the face of increased criminal activity. Recently, citizens in troubled neighborhoods have themselves resorted to civilian versions of patrol.

Challenges to preconceptions about the value of preventive police patrol were exceedingly rare until recent years. When researcher Bruce Smith, writing about patrol in 1930, noted that its effectiveness "lacks scientific demonstration," few paid serious attention.

Beginning in 1962, however, challenges to commonly held ideas about patrol began to proliferate. As reported crime began to increase dramatically, as awareness of unreported crime became more common, and as spending for police activities grew substantially, criminologists and others began questioning the relationship between patrol and crime. From this questioning a body of literature has emerged.

Much of this literature is necessarily exploratory. Earlier researchers were faced with the problem of obtaining sufficient and correct data, and then devising methodologies to

interpret the data. The problems were considerable, and remain so.

Another problem facing earlier investigators was the natural reluctance of most police departments to create the necessary experimental conditions through which definitive answers concerning the worth of patrol could be obtained. Assigned the jobs of protecting society from crime, of apprehending criminals, and of carrying out numerous other services such as traffic control, emergency help in accidents and disasters, and supervision of public gatherings, police departments have been apprehensive about interrupting their customary duties to experiment with strategies or to assist in the task of evaluation.

It was in this context that the Kansas City, Missouri, Police Department, under a grant from the Police Foundation, undertook in 1972 the most comprehensive experiment ever conducted to analyze the effectiveness of routine preventive patrol.

From the outset the department and the Police Foundation evaluation team agreed that the project design would be as rigorously experimental as possible, and that while Kansas City Police Department data would be used, as wide a data base as possible, including data from external measurements, would be generated. It was further agreed that the experiment would be monitored by both department and foundation representatives to insure maintenance of experimental conditions. Under the agreement between the department and the foundation, the department committed itself to an eight-month experiment provided that reported crime did not reach “unacceptable” limits within the experimental area. If no major problems developed, the experiment would continue an additional four months.

The experiment is described in detail later in this summary. Briefly, it involved variations in the level of routine preventive patrol within 15 Kansas City police beats. These beats were randomly divided into three groups. In five “reactive” beats, routine preventive patrol was eliminated and officers were instructed to respond only to calls for service. In five “control” beats, routine preventive patrol was maintained at its usual level of one car per beat. In the remaining five “proactive” beats, routine preventive patrol was intensified by two to three times its usual level through the assignment of additional patrol cars and through the frequent presence of cars from the “reactive” beats.

For the purposes of measurement, a number of hypotheses were developed, of which the following were ultimately addressed:

- (1) crime, as reflected by victimization surveys and reported crime data, would not vary by type of patrol;
- (2) citizen perception of police service would not vary by type of patrol;
- (3) citizen fear and behavior as a result of fear would not vary by type of patrol;
- (4) police response time and citizen satisfaction with response time would vary by experimental area; and
- (5) traffic accidents would increase in the reactive beats.

The experiment found that the three experimental patrol conditions appeared not to affect crime, service delivery and citizen feelings of security in ways the public and the police often assume they do. For example:

- as revealed in the victimization surveys, the experimental conditions had no significant effect on residence and non-residence burglaries, auto thefts, larcenies involving auto accessories, robberies, or vandalism—crimes traditionally considered to be deterrable

- through preventive patrol;
- in terms of rates of reporting crime to the police, few differences and no consistent patterns of differences occurred across experimental conditions;
- in terms of departmental reported crime, only one set of differences across experimental conditions was found and this one was judged likely to have been a random occurrence.
- few significant differences and no consistent pattern of differences occurred across experimental conditions in terms of citizen attitudes toward police services;
- citizen fear of crime, overall, was not affected by experimental conditions;
- there were few differences and no consistent pattern of differences across experimental conditions in the number and types of anti-crime protective measures used by citizens;
- in general, the attitudes of businessmen toward crime and police services were not affected by experimental conditions;
- experimental conditions did not appear to significantly affect citizen satisfaction with the police as a result of their encounters with police officers;
- experimental conditions had no significant effect on either police response time or citizen satisfaction with police response time;
- although few measures were used to assess the impact of experimental conditions on traffic accidents and injuries, no significant differences were apparent;
- about 60 percent of a police officer's time is typically noncommitted (available for calls); of this time, police officers spent approximately as much time on non-police related activities as they did on police-related mobile patrol; and
- in general, police officers are given neither a uniform definition of preventive patrol nor any objective methods for gauging its effectiveness; while officers tend to be ambivalent in their estimates of preventive patrol's effectiveness in deterring crime, many attach great importance to preventive patrol as a police function.

Some of these findings pose a direct challenge to traditionally held beliefs. Some point only to an acute need for further research. But many point to what those in the police field have long suspected—an extensive disparity between what we want the police to do, what we often believe they do, and what they can and should do.

The immediate issue under analysis in the preventive patrol experiment was routine preventive patrol and its impact on crime and the community. But a much larger policy issue was implied: whether urban police departments can establish and maintain experimental conditions, and whether such departments can, for such experimentation, infringe upon that segment of time usually committed to routine preventive patrol. Both questions were answered in the affirmative, and in this respect the preventive patrol experiment represents a crucial first step, but just one in a series of such steps toward defining and clarifying the police function in modern society.

What the experiment did not address was a multitude of other patrol issues. It did not, for example, study such areas as two-officer patrol cars, team policing, generalist-specialist models, or other experiments currently underway in other departments. The findings of this experiment do not establish that the police are not important to the solution of crime or that police presence in some situations may not be helpful in reducing crime. Nor do they automatically justify reductions in the level of policing. They do not suggest that because the majority of a police officer's time is typically spent on non-crime related matters, the amount of time spent on crime is of any lesser importance.

Nor do the findings imply that the provision of public services and maintenance of order

should overshadow police work on crime. While one of the three patrol conditions used in this experiment reduced police visibility in certain areas, the condition did not withdraw police availability from those areas. The findings in this regard should therefore not be interpreted to suggest that total police withdrawal from an area is an answer to crime. The reduction in routine police patrol was but one of three patrol conditions examined, and the implications must be treated with care.

It could be argued that because of its large geographical area and relatively low population density, Kansas City is not representative of the more populous urban areas of the United States. However, many of the critical problems and situations facing Kansas City are common to other large cities. For example, in terms of rates of aggravated assault, Kansas City ranks close to Detroit and San Francisco. The rate of murder and manslaughter per 100,000 persons in Kansas City is similar to that of Los Angeles, Denver and Cincinnati. And in terms of burglary, Kansas City is comparable to Boston and Birmingham. Furthermore, the experimental area itself was diverse socioeconomically, and had a population density much higher than Kansas City's average, making the experimental area far more representative and comparative than Kansas City as a whole might be. In these respects, the conclusions and implications of this study can be widely applied.

II. DESCRIPTION OF THE PREVENTIVE PATROL EXPERIMENT

The impetus for an experiment in preventive patrol came from within the Kansas City Police Department in 1971. While this may be surprising to some, the fact is that by that year the Kansas City department had already experienced more than a decade of innovation and improvement in its operations and working climate and had gained a reputation as one of the nation's more progressive police departments.

Under Chief Clarence M. Kelley, the department had achieved a high degree of technological sophistication, was receptive to experimentation and change, and was peppered with young, progressive and professional officers. Short- and long-range planning had become institutionalized, and constructive debates over methods, procedures and approaches to police work were commonplace. By 1972, this department of approximately 1,300 police officers in a city of just over half a million—part of a metropolitan complex of 1.3 million—was open to new ideas and recommendations, and enjoyed the confidence of the people it served.

As part of its continuing internal discussions of policing, the department in October of 1971 established a task force of patrol officers and supervisors in each of its three patrol divisions (South, Central and Northeast), as well as in its special operations division (helicopter, traffic, tactical, etc.).* The decision to establish these task forces was based on the beliefs that the ability to make competent planning decisions existed at all levels within the department and that if institutional change was to gain acceptance, those affected by it should have a voice in planning and implementation.

The job of each task force was to isolate the critical problems facing its division and propose methods to attack those problems. All four task forces did so. The South Patrol Division Task Force identified five problem areas where greater police attention was deemed vital: burglaries, juvenile offenders, citizen fear, public education about the police role, and police-community relations.

Like the other task forces, the South task force was confronted next with developing workable remedial strategies. And here the task force met with what at first seemed an insurmountable barrier. It was evident that concentration by the South Patrol Division on the five problem areas would cut deeply into the time spent by its officers on preventive patrol.** At

*The historical presentation should be viewed with care, since many episodes, concerns and problematic areas have been omitted in the interests of brevity. Chapter II of the technical report deals in greater detail with the events leading to the experiment, while Chapter IV discusses many of the technical and administrative problems experienced during that time. A comprehensive description of the experiment's development would require a volume in itself, and an analysis of the organizational dynamics involved in designing and administering the preventive patrol experiment will be published by the Kansas City evaluation staff at a later date.

**In this report, routine preventive patrol is defined as those patrol activities employed by the Kansas City Police Department during the approximately 35 percent of patrol duty time in which officers are not responding to calls for service, attending court or otherwise unavailable for self-initiated activities. (The 35 percent figure was a pre-experimental estimate developed by the Kansas City Police Department for use in determining officer allocation.) Information made available daily to patrol officers includes items such as who in their beats is wanted on a warrant, who is wanted for questioning by detectives,

this point a significant thing happened. Some of the members of the South task force questioned whether routine preventive patrol was effective, what police officers did while on preventive patrol duty, and what effect police visibility had on the community's feelings of security.

Out of these discussions came the proposal to conduct an experiment which would test the true impact of routine preventive patrol. The Police Foundation agreed to fund the experiment's evaluation.

As would be expected, considerable controversy surrounded the experiment, with the central question being whether long-range benefits outweighed short-term risks. The principal short-term risk was seen as the possibility that crime would increase drastically in the reactive beats; some officers felt the experiment would be tampering with citizens' lives and property.

The police officers expressing such reservations were no different from their counterparts in other departments. They tended to view patrol as one of the most important functions of policing, and in terms of time allocated, they felt that preventive patrol ranked on a par with investigating crimes and rendering assistance in emergencies. While some admitted that preventive patrol was probably less effective in preventing crime and more productive in enhancing citizen feelings of security, others insisted that the activities involved in preventive patrol (car, pedestrian and building checks) were instrumental in the capture of criminals and, through the police visibility associated with such activities, in the deterrence of crime. While there were ambiguities in these attitudes toward patrol and its effectiveness, all agreed it was a primary police function.

Within the South Patrol Division's 24-beat area, nine beats were eliminated from consideration as unrepresentative of the city's socioeconomic composition. The remaining 15-beat, 32-square mile experimental area encompassed a commercial-residential mixture, with a 1970 resident population of 148,395 persons and a density of 4,542 persons per square mile (significantly greater than that for Kansas City as a whole, which in 1970 with only 1,604 persons per square mile, was 45th in the nation). Racially, the beats within this area ranged from 78 percent black to 99 percent white. Median family income of residents ranged from a low of \$7,320 for one beat to a high of \$15,964 for another. On the average, residents of the experimental area tended to have been in their homes from 6.6 to 10.9 years.

Police officers assigned to the experimental area were those who had been patrolling it prior to the experiment, and tended to be white, relatively young, and somewhat new to the police department. In a sample of 101 officers in the experimental area taken across all three

what criminals are active in their beats and type and location of crimes which have occurred during the previous 24 hours. The officers are expected to be familiar with this information and use it during their non-committed time. Accordingly, routine preventive patrol includes being guided by this information while observing from police cars, checking on premises and suspicious citizens, serving warrants, checking abandoned vehicles, and executing other self-initiated police activities. Thus routine preventive patrol in Kansas City is informed activity based upon information gathered from a wide variety of sources. Whether Kansas City's method of preventive patrol is typical is hard to say with exactness. Clearly, some departments place more emphasis on pedestrian checks, car checks, and field interrogating than does Kansas City (experiments on some of these activities are now taking place elsewhere). Preventive patrol as practiced in Kansas City has some unique characteristics but for the most part is typical of preventive patrol in urban areas.

shifts, 9.9 percent of the officers were black, the average age of the officers was 27 years, and average time on the force was 3.2 years.

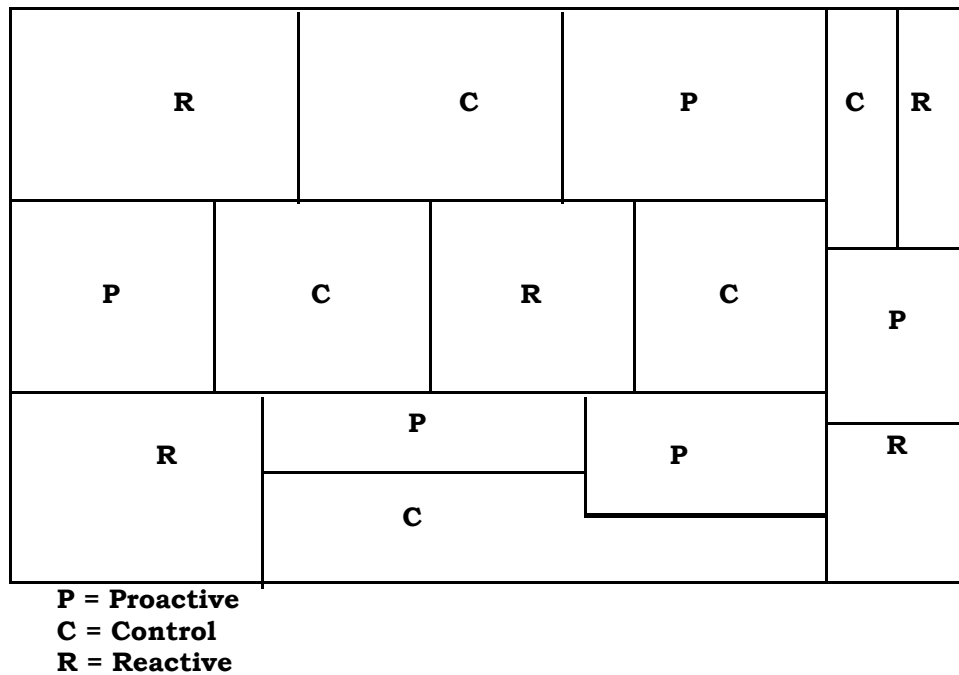
The 15 beats in the experimental area were computer matched on the basis of crime data, number of calls for service, ethnic composition, median income and transiency of population into five groups of three each. Within each group, one beat was designated reactive, one control, and one proactive. In the five reactive beats, there was no preventive patrol as such. Police vehicles assigned these beats entered them only in response to calls for service. Their noncommitted time (when not answering calls) was spent patrolling the boundaries of the reactive beats or patrolling in adjacent proactive beats. While police availability was closely maintained, police visibility was, in effect, withdrawn (except when police vehicles were seen while answering calls for service).

In the five control beats, the usual level of patrol was maintained at one car per beat. In the five proactive beats, the department increased police patrol visibility by two to three times its usual level both by the assignment of marked police vehicles to these beats and the presence of units from adjacent reactive beats.

Other than the restrictions placed upon officers in reactive beats (respond only to calls for service and patrol only the perimeter of the beat or in an adjacent proactive beat), no special instructions were given to police officers in the experimental area. Officers in control and proactive beats were to conduct preventive patrol as they normally would.

It should be noted, however, that the geographical distribution of beats (see Figure 1) avoided clustering reactive beats together or at an unacceptable distance from proactive beats. Such clustering could have resulted in lowered response time in the reactive beats.

Figure 1
SCHEMATIC REPRESENTATION OF THE 15-BEAT EXPERIMENTAL AREA



It should also be noted that patrol modification in the reactive and proactive beats involved only routine preventive patrol. Specialized units, such as tactical, helicopter and K-9, operated as usual in these beats but at a level consistent with the activity level established the preceding year. This level was chosen to prevent infringement of these specialized units upon experimental results.

Finally, it should be noted that to minimize any possible risk through the elimination of routine preventive patrol in the reactive beats, crime rate data were monitored on a weekly basis. It was agreed that if a noticeable increase in crime occurred within a reactive beat, the experiment would be suspended. This situation, however, never materialized.

While the Kansas City experiment began on July 19, 1972, both department and Police Foundation monitors recognized by mid-August that experimental conditions were not being maintained, and that several problems had arisen. Chief Kelley then saw to it that these problems were rectified during a suspension of the experiment.

One problem was manpower, which in the South Patrol Division had fallen to a dangerously low level for experimental purposes. To correct this problem additional police officers were assigned to the division and an adequate manpower level restored. A second problem involved violations of the project guidelines. Additional training sessions were held, and administrative emphasis brought to bear to ensure adherence to the guidelines. A third problem was boredom among officers assigned to reactive beats. To counter this, the guidelines were modified to allow an increased level of activity by reactive-assigned officers in

proactive beats. These revisions emphasized that an officer could take whatever action was deemed necessary, regardless of location, should a criminal incident be observed. The revised guidelines also stressed adherence to the spirit of the project rather than to unalterable rules.

On October 1, 1972, the experiment resumed. It continued successfully for 12 months, ending on September 30, 1973. Findings were produced in terms of the effect of experimental conditions on five categories of crimes traditionally considered to be deterrable through preventive patrol (burglary, auto theft, larceny—theft of auto accessories, robbery and vandalism) and on five other crime categories (including rape, assault, and other larcenies.) Additional findings concerned the effect of experimental conditions on citizen feelings of security and satisfaction with police service, on the amount and types of anti-crime protective measures taken by citizens and businessmen, on police response time and citizen satisfaction with response time, and on injury/fatality and non-injury traffic accidents. The experiment also produced data concerning police activities during tours of duty, and police officer attitudes toward preventive patrol.

III. DATA SOURCES

In measuring the effects of routine preventive patrol, it was decided to collect as wide a variety of data from as many diverse sources as possible. By so doing, it was felt that overwhelming evidence could be presented to prove or disprove the experimental hypotheses.

To measure the effects of the experimental conditions on crime, a victimization survey, departmental reported crime, departmental arrest data, and a survey of businesses were used. While reported crime has traditionally been considered the most important indicator of police effectiveness, the accuracy of both reported crime and arrest data as indicators of crime and police effectiveness has come under scrutiny in recent years. Both types of data are subject to wide degrees of conscious and unconscious manipulation, and to distortion and misrepresentation. Because of these, a criminal victimization survey was used as an additional source of data.

Victimization surveys were first used by the President's Commission on Law Enforcement and Administration of Justice. These surveys revealed that as much as 50 percent of crime was unreported by victims, either from neglect, embarrassment, or a feeling that the crimes were not worth reporting. Although victimization surveys also have their limitations, they can be an important way of measuring crime. Thus a victimization survey was used by the experiment to measure this key outcome variable.

To measure the impact of experimental conditions on community attitudes and fear, attitudinal surveys of both households and businesses (in conjunction with the victimization surveys) and a survey of those citizens experiencing direct encounters with the police were administered. Estimates of citizen satisfaction with police services were also recorded by participant observers.

Overall, in collecting data for the experiment, the following sources were used:

Surveys and Questionnaires

1. Community Survey victimization attitudes rates of reporting	5. Encounter Survey - Observers attitudes perceptions
2. Commercial Survey victimization attitudes rates of reporting	6. Noncommitted Time Survey
3. Encounter Survey - Citizens attitudes perceptions	7. Response Time Survey observers
4. Encounter Survey - Officers attitudes perceptions	8. Response Time Survey citizens
	9. HRD Survey
	10. Officer Questionnaire

Interviews and Recorded Observations

1. "Player" Observations	3. Participant Observer Interviews
2. Officer Interviews	4. Participant Observer Transaction Recordings

Departmental Data

1. Reported Crime	4. Computer Dispatch Data
2. Traffic Data	5. Officer Activity Analysis Data
3. Arrest Data	6. Personnel Records

Because many of these sources were used to monitor the degree to which experimental conditions were maintained or to identify unanticipated consequences of the experiment, only findings derived from the following data sources are presented in this report:

Community Survey

The community survey, which measured community victimization, attitudes and fear, was taken on a before and after basis. A sample of 1,200 households in the experimental area (approximately 80 per beat) was randomly selected and interviewed in September of 1972. In

September of 1973, 1,200 households were again surveyed, approximately 600 chosen from the same population as the 1972 survey (for a repeated sample) and 600 chosen randomly from the experimental area (for a non-repeated sample). Since 11 cases had to be excluded because of missing data, the 1973 sample totalled 1,189.

Commercial Survey

The commercial survey involved interviews conducted both in 1972 and 1973 with a random sample of 110 businesses in the experimental area to measure victimization rates and businessmen's perceptions of and satisfaction with police services.

Encounter Survey (both citizen and participant observers)

Because household surveys tend to interview relatively few citizens who have experienced actual contact with the police, citizens in the three experimental areas who experienced direct encounters with police officers were interviewed. Although three survey instruments were developed (one to elicit the response of the citizens, a second for the police officers, and a third for the observers riding with the officers), only the observer and citizen responses were analyzed. Identical questions were used as often as possible. The survey was conducted over a four-month period (July through October, 1973). Interviewed were 331 citizens who were involved in either an officer-initiated incident (car check, pedestrian check or a traffic violation) or citizen-initiated incident (one in which the citizen called for police service: burglary, robbery, larceny, assault, etc.).

Participant Observer Transaction Recordings

While the community encounter survey focused on the location of the police-citizen contact, the observer transaction recordings focused on police-citizen interactions in terms of the assignment of the officer involved (reactive, control or proactive beats). These data were obtained by observers while riding with officers assigned to the experimental area, and involved observer estimates of citizen satisfaction as a result of direct contact with the police. Observations covered all three watches in all 15 beats. As a result, 997 incidents of police-citizen transactions were systematically recorded.

Reported Crime

Monthly totals for reported crime by beat over the October 1968 through September 1972 (pre-experimental) period and over the October 1972 through September 1973 (experimental) period were retrieved from departmental records. Time-series analyses were then performed on these data to produce the findings.

Traffic Data

Two categories of traffic accidents were monitored: non-injury and injury/fatality. Monitoring was maintained over two time periods, October 1970 through September 1972 for the pre-experimental period, and October 1972 through September 1973 for the experimental period.

Arrest Data

Arrest data by month and beat for the experimental year and the three preceding years were obtained from departmental records.

Response Time Survey

Police response time in the experimental area was recorded between May and September 1973 through the use of a response time survey completed by the participant observers and those citizens who had called the police for service. In measuring the time taken by the police in responding to calls, emphasis was placed on field response time (i.e., the amount of time occurring between the time a police unit on the street received a call from the dispatcher and the time when that unit contacted the citizen involved). In measuring citizen satisfaction with response time, the entire range of time required for the police to answer a call was considered (i.e., including time spent talking with the police department operator, police dispatcher, plus field response time).

Methodology and Maintenance of Experimental Conditions

Because multiple dimensions of the possible effects of the experiment were examined, differing methods of analysis were applied to the data generated. Detailed discussions of these and other factors concerning the experiment's methodology, including a discussion of the sampling error, can be found in the technical report and its appendices. A discussion of the methods used to determine the extent to which desired levels of patrol coverage were achieved, the degree to which experimental conditions were maintained, and whether the criminal world realized that routine patrol strategies had been modified and to what extent patterns of behavior changed as a result can be found in Chapter III of the technical report. In summary, the data sources used to analyze these factors point to the overall maintenance of experimental conditions.

Spillover Effect

One major concern in an experiment of this type is the so-called spillover or displacement theory, i.e., that as crime decreases in one area due to increased police presence, it will increase in other, usually contiguous, areas. This would mean that the effect of the experiment within the experimental area would be offset by counter-effects in other areas. To test this, various correlations between contiguous beats were calculated and analyzed. Except for auto theft, there were no noticeable alterations in the correlations of crime levels. These results, combined with an examination of the actual monthly crime figures, tend to indicate that, in general, there was no spillover effect. Results of the calculations can be found in the appendices to the technical report.

IV. EXPERIMENTAL FINDINGS

The essential finding of the preventive patrol experiment is that decreasing or increasing routine preventive patrol within the range tested in this experiment had no effect on crime, citizen fear of crime, community attitudes toward the police on the delivery of police service, police response time, or traffic accidents. Given the large amount of data collected and the extremely diverse sources used, the evidence is overwhelming. Of the 648 comparisons made to produce the 13 major findings that follow, statistical significance occurred only 40 times between pairs, or in approximately 6 percent of the total. Of these 40, the change was greater 15 times in reactive beats, 19 times in control beats, and 6 times in proactive beats.

Findings of the experiment are presented in terms of the impact that the range of variation in preventive patrol used in this experiment had upon the following:

- community victimization
- departmental reported crime
- rates of reporting crime to the police
- arrest trends
- citizens' fear of crime
- protective measures used by citizens
- protective measures used by businesses
- community attitudes toward the police and the delivery of police services
- businessmen's attitudes toward the police and the delivery of police services
- citizen attitudes toward the police as a result of encounters with the police
- estimation of citizen-police transactions
- police response time
- traffic incidents

The tables used in this document to illustrate the findings are summary tables which compress elaborate amounts of data. Presentation of the data in this form presents numerous problems in that much information is lost in summary. For example, actual numbers, direction of the findings, and discussion of those methodologies used for analyses are not included. Because of this, the findings are considered in their most generalized form; the sole issues are statistical significance and whether or not routine preventive patrol, within the range of variation tested, had an impact on the experimental area. The details of that impact are not presented. Consequently, as mentioned earlier, the findings outlined here cannot be used for specific planning purposes.

On the other hand, presentation in this manner allows for an overview, and focuses on only the most significant findings. Given the importance of the issue and the difficulties inherent in proving the effects of such experiments, emphasis is placed on the large amounts of data collected from diverse sources, and the overwhelming tendency of the data to point in a single direction.

KEY TO TABLES

These tables present three kinds of information: (1) the matter being studied, (2) the probability that a finding is statistically significant (as opposed to numerically different by chance), and (3) if significance is found, the direction of that significance. Table A, for example, reports on findings in the area of citizen estimates of victimization by robbery with no distinction as to whether the robbery occurred inside or outside a structure:

Table A
VICTIMIZATION

(1)	(2)	(3)	(4)	(5)	(6)
Crime Type		Overall P	R,C	R,P	C,P
Robbery - No Distinction Between In or Outside	N R	p>.25 p>.25	R = C R = C	R=P R=P	C=P C=P

In Table A, column 1 indicates that citizens were asked whether they had been robbed, and that the robberies were subsequently categorized as “no distinction between inside and outside” since respondents were unable to, or did not, indicate whether the robbery had taken place inside or outside a structure.

The “N” and “R” in column 2 indicate whether the information was derived from the non-repeated sample (N) or the repeated sample (R).

Column 3 indicates overall “P” or probability value, i.e., how likely it is that differences of this size between pairs of experimental conditions could have been the result of happenstance rather than of the effects of the experimental conditions. Social science generally cites “.05” as the required level of significance, meaning that there is only a 5 percent likelihood that the results could have occurred by chance (or a 95 percent chance that the results were the effect of experimental conditions). Column 3, therefore, presents the overall P in terms of the statistical presentation p .25. Symbols > and < indicate which of two items in an equation is the larger. Just as “a=b” indicates that a and b equal each other, “a>b” shows that a is greater than b, while “a<b” shows that a is less than b. Thus the presentation p>.25 means that the probability that the findings could have occurred by chance is greater than 25 percent. Using the standard that a finding is “statistically significant” only when it could have occurred by chance no more than 5 percent of the time, this finding would not be considered significant.

Since there are so few findings of statistical significance in the results, it has been decided not to clutter the tables in this summary report with numerical values in this column except when significance is achieved. Therefore column 3 is left blank in all tables except when a statistically significant difference between pairs of experimental conditions was found.

A statistically significant finding can be found in Table 3 (page 19) under the category “Residence Burglaries” and appears in column 3 as follows:

$$.025 < p < .05$$

This means that the probability of the observed differences occurring by chance is greater than 2.5 out of a hundred but less than 5. Thus, the traditional level of statistical significance (.05) has been achieved, and it can be assumed that the observed differences

are not due to random fluctuations.

Columns 4, 5, and 6 in Table A present the statistical relationship between the three experimental conditions (reactive, control and proactive). Column 4 compares the findings in the reactive and control beats, column 5 compares the findings in the reactive and proactive beats, and column 6 compares findings in the control and proactive beats. Each column contains three possibilities. For example, in column 4, the following possibilities exist:

R=C (meaning that statistically speaking, changes in the reactive and control beats between 1972 and 1973 were the same)

R>C (meaning that statistically speaking, either the increase was greater or the decrease was smaller in the reactive beats than in the control beats)

R<C (meaning that statistically speaking, either the increase was smaller or the decrease was greater in the reactive beats than in the control beats)

EFFECTS ON CRIME, REPORTING, AND ARRESTS

Finding 1: Victimization

The Victimization Survey found no statistically significant differences in crime in any of the 69 comparisons made between reactive, control and proactive beats.

This finding would be expected for such categories as rape, homicide and common or aggravated assault. For one thing, these are typically impulsive crimes, usually taking place between persons known to each other. Furthermore, they most often take place inside a building, out of sight of an officer on routine preventive patrol. The spontaneity and lack of high visibility of these crimes therefore, make it unlikely that they would be much affected by variations in the level of preventive patrol.

Given traditional beliefs about patrol, however, it is surprising that statistically significant differences did not occur in such crimes as commercial burglaries, auto theft and robberies.

Nonetheless, as measured by the victimization survey, these crimes were not significantly affected by changes in the level of routine preventive patrol. Table 1 shows data and findings from the Community and Commercial Surveys in regard to victimization.

Finding 2: Departmental Reported Crime

Departmental Reported Crimes showed only one statistically significant difference among 51 comparisons drawn between reactive, control and proactive beats.

Statistical significance occurred only in the category of "Other Sex Crimes." This category, separate from "Rape," includes such offenses as molestation and exhibitionism. Since this category is not traditionally considered to be responsive to routine preventive patrol, however, it appears likely that this instance of significance was a statistically random occurrence. Table 2 presents reported crime data and findings.

**Table 1: VICTIMIZATION
Community and Commercial Survey**

Crime Type		Overall P	R,C	R,P	C,P
Robbery - No Distinction Between In or Outside	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Robbery - Inside (Commercial)	R		R=C	R=P	C=P
Common Assault	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Aggravated Assault	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Other Sex Crimes	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Residence Burglary	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Non-Residence Burglary (Commercial)	R		R=C	R=P	C=P
Auto Theft	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Vandalism (Community)	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Vandalism (Commercial)	R		R=C	R=P	C=P
Larceny - Auto Acc.	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Larceny - All Other	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
All Crimes Combined	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Rape	N R	Too few cases to justify statistical analysis			
Homicide	N R	Too few cases to justify statistical analysis			

Table 2: DEPARTMENTAL REPORTED CRIME

Crime Type	Overall P	R,C	R,P	C,P
Robbery - Inside		R=C	R=P	C=P
Robbery - Outside		R=C	R=P	C=P
Common Assault		R=C	R=P	C=P
Aggravated Assault		R=C	R=P	C=P
Larceny - Purse Snatch		R=C	R=P	C=P
Rape		R=C	R=P	C=P
Other Sex Crimes	.01<p<.025	R>C	R=P	C=P
Homicide		R=C	R=P	C=P
Residence Burglary		R=C	R=P	C=P
Non-Residence Burglary		R=C	R=P	C=P
Auto Theft		R=C	R=P	C=P
Vandalism		R=C	R=P	C=P
Larceny - Auto Accessory		R=C	R=P	C=P
Larceny - Theft from Auto		R=C	R=P	C=P
Larceny - Bicycle		R=C	R=P	C=P
Larceny - Shoplift		R=C	R=P	C=P
Larceny - Theft from Bldg.		R=C	R=P	C=P

Finding 3: Rates of Reporting Crime

Crimes which citizens and businessmen said they reported to the police showed statistically significant differences between reactive, control and proactive beats in only five of 48 comparisons, and these differences showed no consistent pattern.

Of the five instances of statistical significance, three involved vandalism and two residence burglary. But where statistical significance was found, no consistent pattern emerged. On two occasions the change was greater in the control beats, on two occasions greater in the proactive beats, and once it was greater in the reactive beats. Given the low number of statistically significant findings combined with a lack of consistent direction, the conclusion is that rates of reporting crimes by businessmen and citizens were unaffected by the experimental changes in levels of patrol.

Table 3 shows the data and findings.

Table 3: RATES OF REPORTING CRIMES
Community and Commercial Survey

Crime Type		Overall P	R,C	R,P	C,P
Robbery - No Distinction Between In or Outside	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Common Assault	N	**			
	R		R=C	R=P	C=P
Aggravated Assault	N	**			
	R	**			
Other Sex Crimes	N		R=C	R=P	C=P
	R	**			
Residence Burglary	N	.025<p<.05	R>C	R=P	C<P
	R		R=C	R=P	C=P
Non-Residence Burglary (Commercial)	R		R=C	R=P	C=P
Auto Theft	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Vandalism (Community)	N		R=C	R=P	C=P
	R	.001<p<.005	R<C	R<P	C>P
Vandalism (Commercial)	R		R=C	R=P	C=P
Larceny - Auto Accessory	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Larceny - All Other	N		R=C	R=P	C=P
	R		R=C	R=P	C=P

** Too few cases to justify statistical analysis

Finding 4: Arrest Patterns

Police arrests showed no statistically significant differences in the 27 comparisons made between reactive, control and proactive beats.

While arrest totals for 16 categories of crime were determined, it will be noted that in seven categories—common assault, larceny-purse snatch, homicide, non-residence burglary, auto theft, larceny-auto accessory, and larceny-bicycle—either the number of arrests was too small to allow for statistical analysis, or the pre-experimental pattern of arrests was so distorted that statistical significance could not be determined. On the basis of the comparisons that could be made, however, the conclusion is that arrest rates were not

significantly affected by changes in the level of patrol.

Table 4 shows the data and findings.

Table 4: ARRESTS

Crime Type	Overall P	R,C	R,P	C,P
Robbery - No Distinction Between In or Outside		R=C	R=P	C=P
Common Assault	**1			
Aggravated Assault		R=C	R=P	C=P
Larceny - Purse Snatch	**2			
Rape		R=C	R=P	C=P
Other Sex Crimes		R=C	R=P	C=P
Homicide	**2			
Residence Burglary		R=C	R=P	C=P
Non-Residence Burglary	**1			
Auto Theft	**1			
Vandalism		R=C	R=P	C=P
Larceny - Auto Accessory	**2			
Larceny - Theft from Auto		R=C	R=P	C=P
Larceny - Bicycle	**1			
Larceny - Shoplift		R=C	R=P	C=P
Larceny - Theft from Bldg.		R=C	R=P	C=P

**1 Not statistically analyzed because of the nature of the variations in the data in the pre-experiment period.

**2 Number of arrests is too small to allow for statistical analysis.

EFFECTS ON COMMUNITY ATTITUDES

Citizen Fear of Crime

The experiment measured community attitudes toward many aspects of crime and police performance to determine whether varying levels of routine preventive patrol—reactive, control, proactive—had any significant effect upon these attitudes. Previous investigators, including Roger Parks and Michael Maltz, have shown that citizens can recognize, or at least sense, changes in levels of service or innovations in policing.

Thus, through the Community and Commercial Surveys which provided the victimization information used in the previous section of this summary, citizen attitudes toward crime and police were also measured before and after the experiment.

The first attitude measured was citizen fear of crime, determined by (1) a series of questions in the Community Survey designed to probe levels of fear; (2) a series of questions in the Community Survey regarding protective and security measures taken by citizens; and (3) questions in the Commercial Survey about protective and security measures used by businessmen at their place of business.

Finding 5: Citizen Fear of Crime

Citizen fear of crime was not significantly affected by changes in the level of routine preventive patrol.

In the Community Survey, citizen estimates of neighborhood safety and perceptions of violent crimes were obtained. Citizens were then asked what they thought the probability was that they might be involved in various types of crime, including robbery, assault, rape, burglary and auto theft.

Of the 60 comparisons made between experimental areas, statistical significance was found in only five cases. Three involved the probability of being raped, one the probability of being robbed, and one the probability of being assaulted. The change in the level of fear was greater in reactive beats four times and greater in proactive beats once.

Yet when statistical significance is found, the patterns are inconsistent. For example, all cases in which the change in the reactive beats are significantly higher than in other beats are found in the repeated sample. These findings are not confirmed by the non-repeated sample, however. The one area in which control registered the higher change occurs in the non-repeated sample, but this is not confirmed by the repeated sample.

The findings thus lead to the conclusion that citizen fear is not affected by differences in the level of routine preventive patrol.

Table 5 shows the data and findings.

**Table 5: CITIZEN FEAR OF CRIME
Community Survey**

		Overall P	R,C	R,P	C,P
Estimate of Neighborhood Safety	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Perceptions of Violent Crimes	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Probability of Being Robbed	N	.01<p<.025	R=C	R=P	C<P
	R		R=C	R=P	C=P
Probability of Being Assaulted	N		R=C	R=P	C=P
	R	.01<p<.025	R=C	R>P	C=P
Probability of Being Raped on the Street	N		R=C	R=P	C=P
	R	p<.001	R>C	R>P	C=P
Probability of Being Raped in Residence	N		R=C	R=P	C=P
	R	p<.001	R=C	R>P	C=P
Resident Being Burglarized When Home	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Resident Being Burglarized When Absent	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Probability of Auto Theft	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Mean Probability of Being Victimized	N		R=C	R=P	C=P
	R		R=C	R=P	C=P

Finding 6: Protective Measures (Citizens)

Protective and security measures taken by citizens against the possibility of being involved in crime were not significantly affected by variations in the level of routine preventive patrol.

The questions asked of citizens in the Community Survey on this subject dealt with the installation of such devices as bars, alarms, locks and lighting, the keeping of various types of weapons or dogs for protection, and the taking of certain actions, such as staying inside, as preventive measures.

Here, 84 comparisons were made between experimental areas, with statistical significance occurring 11 times. The significance occurred most often (6 times) in those beats where preventive patrol had not changed, that is, in control beats. The change in the reactive

beats showed significance three times, and in the proactive beats twice. There is no apparent explanation for the fact that the use of protective measures supposedly increased in the control beats relative to the other two conditions. For the most part, the findings are inconsistent and occur either in the non-repeated sample or the repeated sample but never uniformly in both.

Thus, as measured by the use of protective and security measures, experimental preventive patrol conditions did not significantly affect citizen fear of crime.

Table 6 shows the data and findings.

Finding 7: Protective Measures (Businesses)

Protective and security measures taken by businesses in the experimental area to protect offices or other places of business did not show significant differences due to changes in the level of routine preventive patrol.

In the Commercial Survey, businessmen were asked such questions as whether they had installed alarm systems or reinforcing devices such as bars over windows, whether they had hired guards, or whether they kept watchdogs or firearms in their places of business.

All told, 21 comparisons were made and statistical significance was found once, where the change in the control beats was the greater as compared with the reactive beats.

Because this was a telephone survey, however, some problems with the findings were evident. Briefly, some businessmen were reluctant to talk about protective measures over the phone to persons unknown to them. This is discussed more fully in the technical report.

The conclusion remains, however, that preventive patrol variations seem to have little effect on fear of crime as indicated by protective measures taken by commercial establishments.

Table 7 shows the data and findings.

Table 6: PROTECTIVE MEASURES (CITIZENS)
Community Survey

		Overall P	R,C	R,P	C,P
Have you installed or do you have special or extra locks on doors?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Have you installed or do you have special locks or bars on windows?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Have you installed or do you have additional outside lighting?	N		R=C	R=P	C=P
	R	.025<p<.05	R>C	R>P	C=P
Have you installed or do you have burglary alarms or security alarms?	N	.025<p<.05	R<C	R<P	C>P
	R		R=C	R=P	C=P
Do you own a dog for protection?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Do you try not to go out during the daytime?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Do you try not to go out at night?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Do you have guns in the house?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Do you load guns that you have always had in the house?	N		R=C	R=P	C=P
	R	.01<p<.025	R>C	R=P	C<P
Do you carry a gun?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Do you carry a knife to protect yourself?	N	p=.001	R<C	R=P	C>P
	R		R=C	R=P	C=P
Do you carry a club, baseball bat, lead pipe or anything else like that?	N	.025<p<.05	R<C	R=P	C>P
	R		R=C	R=P	C=P
Do you carry a chemical repellent like tear gas or mace?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
All protective measures?	N		R=C	R=P	C=P
	R		R=C	R=P	C=P

Table 7: PROTECTIVE MEASURES (BUSINESSES)
Commercial Survey

Protective Measure	Overall P	R,C	R,P	C,P
Outside Alarm Systems		R=C	R=P	C=P
Central Alarm Systems		R=C	R=P	C=P
Reinforcing Measures		R=C	R=P	C=P
Guard or Watchman		R=C	R=P	C=P
Watchdog		R=C	R=P	C=P
Keeping Firearms in Place of Business		R=C	R=P	C=P
All Protective Measures	.025<p<.05	R=C	R=P	C=P

Citizen Attitudes Toward Police

In addition to investigating citizen fear of crime and criminals, the preventive patrol experiment delved into citizen attitudes toward the police. Residents in the experimental area were asked, for instance, about the need for more police officers, about variations in patrol, police officer reputations and effectiveness, police treatment of citizens, and about their satisfaction with police service.

The attitudes of businessmen toward police were studied in the course of the preventive patrol experiment for a variety of reasons. One was simply that businessmen's attitudes have seldom been studied in the past, although these people are often affected by crime in ways more crucial to their survival than are citizens in general. It is not only the businessman's personal comfort and safety that may be involved, but also the ability to remain in business, that may be affected by crime. At the same time, businessmen are often influential in their communities. For these reasons, assessing their attitudes is often crucial to the development of new policing programs. Therefore, businessmen were asked similar questions about police effectiveness, treatment of citizens and so forth.

While the study of such attitudes is valuable in obtaining the impressions of a significant cross-section of the community, most of the citizens and businessmen interviewed were unlikely to have experienced recent actual contact with the police. Thus, another part of the preventive patrol experiment focused on determining citizens' responses to actual encounters with police officers. To determine such responses, citizens themselves, the police with whom they came in contact, and trained observers were all asked to complete reports on the encounter. Citizens were interviewed as soon as possible after the incident. Separate questionnaires were used, depending on whether the encounter was initiated by an officer or by a citizen.

Finally, a fourth measure was used to determine citizen attitudes. Here, in what has been given the title "Police-Citizen Transactions," the trained observers focused on the outcome of police-citizen interactions in terms of the patrol assignment of the officer involved, that is, reactive, control or proactive.

The next findings deal with citizen attitudes toward police, businessmen's attitudes toward police, police-citizen encounters initiated either by citizens (calls for service) or police

(traffic arrests, suspect apprehension, etc.) and finally police-citizen transactions.

Finding 8: Citizen Attitudes Toward Police

Citizen attitudes toward police were not significantly affected by alterations in the level of preventive patrol.

A large number of questions in the Community Survey were designed to measure citizen attitudes toward the police. As a result, more comparisons were made here than in other cases and more instances of statistical significance were found. Altogether, 111 comparisons were made and statistical significance occurred 16 times. Items with significant differences included the need for more police officers in the city, the reputation of police officers, citizens' respect for police, police effectiveness, harassment, and change in neighborhood police officers.

Of the 16 instances of significance, the change in reactive beats was greater five times, in control beats ten times, and in proactive beats once, demonstrating no consistent pattern of statistical significance. The indication is that there was little correlation between level of patrol and citizen attitudes.

Table 8 shows the data and findings.

Table 8: CITIZEN ATTITUDES TOWARD POLICE

		Overall P	R,C	R,P	C,P
Need for more neighborhood police officers	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Need for more police officers in the entire city	N	.025<p<.05	R>C	R=P	C=P
	R		R=C	R=P	C=P
Perception of time neighborhood officers spend on car patrol	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Preference for amount of time police should patrol	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Perceived amount of time police spend on aggressive patrol	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Amount of time community prefers police spend on aggressive patrol	N	.001<p<.005	R<C	R=P	C=P
	R		R=C	R=P	C=P
Perception of neighborhood police-community relations	N		R<C	R=P	C=P
	R		R=C	R=P	C=P
Perception of neighborhood police officers' reputation	N	.025<p<.05	R<C	R=P	C=P

		Overall P	R,C	R,P	C,P
	R		R=C	R=P	C=P
Reputation of Kansas City police officers	N	0.25<p<.05	R=C	R=P	C>P
	R		R=C	R=P	C=P
Respect for neighborhood police	N	.001<p<.005	R<C	R=P	C>P
	R		R=C	R=P	C=P
Effectiveness of neighborhood officers in fighting crime	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Effectiveness of Kansas City police in fighting crime	N	.01<p<.025	R=C	R=P	C>P
	R		R=C	R=P	C=P
Police treatment of whites	N		R=C	R=P	C=P
	R	.025<p<.01	R=C	R=P	C<P
Police treatment of minorities	N		R=C	R=P	C=P
	R		R=C	R=P	C=P
Harassment by neighborhood police officers	N	.001<p<.005	R<C	R=P	C>P
	R	.001<p<.005	R<C	R=P	C=P
Harassment by Kansas City police officers	N	.01<p<.025	R>C	R=P	C=P
	R	.001<p<.005	R>C	R>P	C=P
Change in neighborhood police officers	N	.001<p<.005	R=C	R>P	C>P
	R		R=C	R=P	C=P
Satisfaction with police service	N		R=C	R=P	C=P
	R	**			
Neighbors' respect for neighborhood officers	N		R=C	R=P	C=P
	R		R=C	R=P	C=P

** Number of persons who called the police both years was too small for analysis

Finding 9: Businessmen's Attitudes Toward Police

Businessmen's attitudes toward police were not significantly affected by changes in the level of routine preventive patrol.

Like citizens in the Community Survey, businessmen in the Commercial survey were asked about their attitudes toward police. Some of the questions in the Commercial Survey were similar to those in the Community Survey and some specially selected with regard to businessmen's interests.

In all, 48 comparisons were made to measure differences in businessmen's attitudes, but no statistically significant differences were found or even approached. The clear indication here is that variations in the level of preventive patrol have no effect on businessmen's attitudes.

Table 9 shows the data and findings.

Table 9: BUSINESSMEN'S ATTITUDES TOWARD POLICE

	Overall P	R,C	R,P	C,P
Safety of neighborhood		R=C	R=P	C=P
Crime in neighborhood as compared to previous years		R=C	R=P	C=P
Effectiveness of Kansas City police in fighting crime		R=C	R=P	C=P
How good a job the neighborhood police are doing in fighting crime		R=C	R=P	C=P
Relationship between the police and businessmen in neighborhood		R=C	R=P	C=P
Reputation of police in neighborhood		R=C	R=P	C=P
Reputation of Kansas City police		R=C	R=P	C=P
Respect for neighborhood police		R=C	R=P	C=P
Number of police needed in neighborhood		R=C	R=P	C=P
Number of police needed in Kansas City		R=C	R=P	C=P
Amount of time spent by police in car patrol activities		R=C	R=P	C=P
Amount of time that should be spent by police in car patrol activities		R=C	R=P	C=P
Satisfaction with police investigation		R=C	R=P	C=P
Satisfaction with courtesy and concern during an investigation		R=C	R=P	C=P
Amount of time spent by police questioning and searching		R=C	R=P	C=P
Amount of time police should spend questioning and searching		R=C	R=P	C=P

Finding 10: Police-Citizen Encounters

Citizen attitudes toward police officers encountered through the initiative of either the citizen or the officer were not significantly affected by changes in patrol level.

Citizen attitudes were measured by both questions asked of citizens themselves and observations of trained observers. Citizens and observers alike were asked about such items as response time, characteristics of the encounter, the attitude and demeanor of officers in the encounter, and citizen satisfaction. Observers in officer-initiated encounters also recorded things not likely to be noted by citizens, including the number of officers and police vehicles present.

Including both citizen-initiated and officer-initiated encounters, a total of 63 comparisons were made and no statistically significant differences were found.

Tables 10-A and 10-B show the data and findings.

Table 10-A: POLICE-CITIZEN ENCOUNTERS
(Citizen-Initiated Encounters)

	Overall P	R,C	R,P	C,P
(Citizen Response)				
Response time evaluation		R=C	R=P	C=P
Demeanor of officer citizen spoke to most		R=C	R=P	C=P
Attitude of officer citizen spoke to most		R=C	R=P	C=P
Characteristics of the encounter		R=C	R=P	C=P
Satisfaction with encounter		R=C	R=P	C=P
Evaluation of Kansas City Police Dept.		R=C	R=P	C=P
(Observer Response)				
Response time evaluation		R=C	R=P	C=P
Demeanor of officer citizen spoke to most		R=C	R=P	C=P
Character of officer citizen spoke to most		R=C	R=P	C=P
Characteristics of the encounter		R=C	R=P	C=P

**Table 10-B: POLICE-CITIZEN ENCOUNTERS
(Officer-Initiated Encounters)**

	Overall P	R,C	R,P	C,P
(Citizen Response)				
Attitude of officer citizen spoke to most		R=C	R=P	C=P
Demeanor of officer citizen spoke to most		R=C	R=P	C=P
Characteristics of the encounter		R=C	R=P	C=P
Citizen general satisfaction with police		R=C	R=P	C=P
(Observer Response)				
Number of police vehicles at incident scene		R=C	R=P	C=P
Number of uniformed officers at the incident		R=C	R=P	C=P
Demeanor of officer citizen spoke to most		R=C	R=P	C=P
Attitude of officer citizen spoke to most		R=C	R=P	C=P
Character of the officer citizen spoke to most		R=C	R=P	C=P
Characteristics of the encounter		R=C	R=P	C=P
Satisfaction with the encounter		R=C	R=P	C=P

Finding 11: Police-Citizen Transactions

The behavior of police officers toward citizens was not significantly affected by the officers' assignment to a reactive, control or proactive beat.

The finding is distinct from the previous finding in that the focus here is upon the police-citizen interaction in terms of the beat assignment of the officer rather than on the location of the contact. (Many police contacts with citizens take place outside of the officer's beat.) Data were recorded by participant observers riding with the officers.

In all, 18 comparisons were made between experimental areas, and no statistically significant differences were found.

Table 11 shows the data and findings.

**Table 11: POLICE-CITIZEN TRANSACTIONS
(Observer Records)**

	Overall P	R,C	R,P	C,P
Citizen satisfaction with disposition of all transactions		R=C	R=P	C=P
Citizen satisfaction with officer in all transactions		R=C	R=P	C=P
Citizen satisfaction with disposition of officer-initiated transactions		R=C	R=P	C=P
Citizen satisfaction with disposition of citizen-initiated transactions		R=C	R=P	C=P
Citizen satisfaction with officer in citizen-initiated transactions		R=C	R=P	C=P
Citizen satisfaction with officer in citizen-initiated transactions		R=C	R=P	C=P

OTHER EFFECTS

Experimental Findings in Regard to Police Response Time

The time it takes police officers to respond to a citizen call for assistance is usually considered an important measure of patrol effectiveness. The general principle is that the lower the response time, the more efficiently the police are doing their job.

But there are difficulties in determining how to measure response time given the numerous possible segments involved. For instance, is the response time cycle complete when the first officer arrives at the scene? Or when the last of several officers dispatched reaches the scene? Or when the first officer contacts the person making the call? For the purposes of the preventive patrol experiment, response time was defined as the time between receipt of a call from a dispatcher to the point when that unit contacted the citizen involved. In measuring citizen satisfaction with response time, the entire range of time required was considered, beginning with the citizen's contact with the police switchboard operator.

Response time was studied to see if experimental conditions would have any effect on the amount of time taken by police in answering citizen calls for service. Before the experiment began, the hypothesis was that experimental conditions would affect response time, particularly in the proactive beats. It was believed that since more officers were assigned to proactive beats, response time would be significantly reduced in those beats.

Finding 12: Response Time

The amount of time taken by police in answering calls for service was not significantly affected by variations in the level of routine preventive patrol.

To obtain this finding, data were gathered on such matters as distance from police car to scene of incident, mean time from receipt of calls to start of call, mean time from receipt of

call to arrival at scene, and observer's estimate of patrol car speed. Citizen estimates of time and satisfaction were also measured.

In the area of response time, a total of 42 comparisons were made between patrol conditions. Statistical significance occurred only once: in the number of officers present at the scene of incidents in the reactive beats. The reason for this is unclear, but it can be theorized that police officers were exhibiting their concern for the safety of fellow officers and citizens in reactive beats.

While variations in the level of patrol did not significantly affect police response time, the Kansas City findings suggest that more research is necessary. It appears that response time is not only the result of rate of speed and distance, but also reflects the attitude of the officers involved and possibly other variables not investigated in this study.

Table 12 shows the data and findings.

Table 12: RESPONSE TIME

	Overall P	R,C	R,P	C,P
Distance from location where call was received to location of incident		R=C	R=P	C=P
Mean time from receipt of call to start of call		R=C	R=P	C=P
Mean time from receipt of call to arrival at incident		R=C	R=P	C=P
Mean time from receipt of call to arrival of second officer		R=C	R=P	C=P
Mean time from receipt of call to citizen contact		R=C	R=P	C=P
Observer's estimate of speed		R=C	R=P	C=P
Number of other officers present at incident scene	.025<p<.05	R=C	R>P	C=P
Citizen estimate of time spent speaking to police department operation		R=C	R=P	C=P
Citizen estimate of time spent speaking to police dispatcher		R=C	R=P	C=P
Citizen satisfaction with police dispatcher		R=C	R=P	C=P
Citizen estimate of time from call for service to arrival of patrol car		R=C	R=P	C=P
Citizen satisfaction with response time		R=C	R=P	C=P
Citizen estimate of time officer spent at incident		R=C	R=P	C=P
Citizen's overall satisfaction with job officer did		R=C	R=P	C=P

Experimental Findings in Regard to Traffic Accidents

Does police visibility through routine preventive patrol have an effect upon traffic accidents? A common hypothesis is that it does, that reduction in patrol, for instance, will be followed by an increase in traffic accidents. Therefore the preventive patrol experiment involved some study of the presumed relationship.

The finding in this area is presented with considerable caution, however, since traffic patterns played no role in the selection of the experimental beats. It is possible (and in fact likely, given the area involved) that traffic patterns in the experimental area are not representative, and thus would not allow for reliable findings. In addition, the findings involved only accidents reported to the department by citizens and do not take into account accidents which occurred but were not reported.

Finding 13: Traffic Accidents

Variations in the level of routine preventive patrol had no significant effect upon traffic accidents.

A total of six comparisons were made in this area, with statistical significance not occurring in any.

Table 13 shows the data and findings.

Table 13: TRAFFIC ACCIDENTS

	Overall P	R,C	R,P	C,P
Non-injury accidents		R=C	R=P	C=P
Injury and fatality accidents		R=C	R=P	C=P

SUMMARY AND CONCLUSION: EXPERIMENTAL FINDINGS

Of the 648 comparisons used to produce the major findings of the preventive patrol experiment, statistical significance between pairs occurred 40 times representing approximately 6 percent of the total. Of these 40 findings, the change in the reactive beats was greater 15 times, in the control beats 19 times, and in the proactive beats 6 times. Given the large amount of data collected and the extremely diverse sources used, the overwhelming evidence is that decreasing or increasing routine preventive patrol within the range tested in this experiment had no effect on crime, citizen fear of crime, community attitudes toward the police on the delivery of police service, police response time or traffic accidents.

V. POLICE USE OF NONCOMMITTED TIME

Since routine preventive patrol is conducted during noncommitted time (time available for answering calls for service), it was deemed important to determine how officers typically spend their noncommitted time. An observer survey was developed to measure use of noncommitted time and to assess the effects of experimental conditions upon officer allocation of noncommitted time. The survey classified activity during noncommitted time into “stationary,” “mobile,” and “contacting personnel in the field.” Each category was further divided between “police related” and “non-police related.”

Over a ten-week period (1,230 hours of observation), some 60 percent of the observed time was found to be noncommitted. This figure varied little from one experimental area to another (Table 14).

Table 14: COMMITTED AND NONCOMMITTED TIME BY TYPE OF PATROL

	Committed Time %	Noncommitted Time %
Reactive	37.73	62.27
Control	40.63	59.37
Proactive	40.69	59.31
All officers	39.69	60.31

Police patrol officers assigned to the reactive beats tended to spend more of their noncommitted time (22.1 percent) on non-police related mobile and stationary activities (e.g., eating, resting, girl watching, personal phone calls, driving to relieve boredom, pleasure riding) than did their proactive and control counterparts.

Examined in terms of individual police officers, the observations again revealed that regardless of experimental conditions, police officers spent approximately the same amount of their noncommitted time on non-police activities (25.5) as they spent on mobile police-related activities (23.5 percent). As indicated in Table 15, police officers did not typically spend all their time aggressively battling crime.

Table 15: POLICE OFFICER EXPENDITURES OF NONCOMMITTED TIME

Group	Expenditure	% of Non-committed Time	% Total Time
REACTIVE	Mobile Police Related	22.67%	14.11%
	Non-Police Related	29.49%	18.36%
	Stationary & Contact Personnel Pol. Rel.	27.15%	16.91%
	Residual	20.69%	12.89%
CONTROL	Mobile Police Related	23.39%	13.88%
	Non-Police Related	22.91%	13.60%
	Stationary & Contact Personnel Pol. Rel.	23.69%	14.07%
	Residual	30.01%	17.82%
PROACTIVE	Mobile Police Related	24.71%	14.66%
	Non-Police Related	23.07%	13.69%
	Stationary & Contact Personnel Pol. Rel.	26.81%	15.90%
	Residual	25.41%	15.06%
ALL OFFICERS	Mobile Police Related	23.54%	14.20%
	Non-Police Related	25.47%	15.36%
	Stationary & Contact Personnel Pol. Rel.	26.01%	15.69%
	Residual	24.98%	15.06%

Six general kinds of noncommitted time activity were noted and classified by the participant observers:

- *stationary police related* (report writing, waiting for tows, surveillance, traffic ordinance enforcement, etc.);
- *stationary non-police related* (eating, resting, reading, rest calls, girl watching, phone calls, visits, sleeping, watching movies or sporting events, etc.);
- *mobile police related* (looking for suspicious cars, people, stolen autos, traffic violations, training new patrol officers, watching buildings and residences, etc.);
- *mobile non-police related* (driving to relieve boredom, girl watching, personal errands, etc.);
- *contacting personnel in the field, police related* (exchanging information about crime suspects, discussing cases, policies, etc.);
- *contacting personnel in the field, non-police related* (general talk about hunting, cars, sex, vacations, jokes, etc.); and
- *residual* (traveling to and from station, court, garage, headquarters, repair, etc.).

VI. POLICE OFFICER ATTITUDES TOWARD PATROL

Because the primary goal of the preventive patrol experiment was to measure the effectiveness of routine patrol as a crime deterrent strategy, the experiment opened to question a traditionally held theory of policing. Like other departments across the country, the Kansas City Police Department strives to attain its objectives (reduction and prevention of crime, provision of services requested by the public, maintenance of citizen feelings of security, etc.), in large part through patrol activities, including heavy reliance on routine preventive patrol.

Many of the officers involved in the initial stages of the preventive patrol experiment reacted predictably to reduction in routine patrol, warning that the reduction would be quickly followed by increases in crime and citizen fear. Reaction from other officers outside the experimental area was similar.

It was felt, therefore, that an assessment of officer attitudes toward patrol and toward the experiment itself would provide valuable information and be highly relevant to the issues at hand. To gather information, a questionnaire was designed and distributed to all police officers assigned to the 15-beat experimental area.^{***} In addition, officer interviews, participant observer interviews, a human resources development questionnaire (administered department-wide by the Police Foundation and the department for general use) and discussions with Police Academy training personnel were also used.

Discussions with academy officials and Kansas City police officers lead to the conclusion that the tradition of preventive patrol is passed on to new officers in a very informal manner. A Kansas City police officer's initial exposure to the patrol concept occurs at the academy, where guest speakers from various units of the department incorporate the concept of routine patrol into their talks whenever relevant. This in itself tends to imply that routine preventive patrol is considered a primary method for apprehending criminals and reducing and preventing crime. No formal attempt, however, is made to provide police recruits with a systematic assessment of the value, methods or effectiveness of preventive patrol.

Kansas City police officers receive their first field experiences under the supervision of training officers, whose influence upon the recruits is clearly significant. For while recruits are receiving a practical field experience, the training officers are further reinforcing the perceived efficacy of routine preventive patrol through a myriad of informal techniques. This process fails, however, to provide recruits with a method of assessing the utility of individual patrol activities. It places the recruits in a position of having to determine for themselves the value of routine preventive patrol only after having been influenced by the duties and responsibilities already encountered in the field and as interpreted by their training officers.

The informal training given to recruits appears to stress the development of a "systematically unsystematic" approach to patrol. No alternative methods are suggested. As a result, the officer's only option lies in the choice of location of patrol (within an assigned boundary) rather than in method. The ambiguity in this approach results in varied orientations toward patrol among supervising sergeants as well as patrol officers.

^{***}A 90+ percent response rate was generated.

One source of data used to determine the importance attached to the patrol function by police officers was the Human Resources Development questionnaire, which asked, among other things, how respondents rated the patrol function in terms of its importance within the department, and how much time they felt the department should allocate to that function. Three-fourths of those surveyed in the South Patrol Division more than moderately agreed that routine patrol was the most important function of the department, while most officers then indicated that patrol, along with investigating crimes and assisting in emergencies, was the most important activity to which department time should be allocated (Tables 16 and 17).

But in-depth interviews with 18 police officers and the six observers revealed two distinct orientations toward patrol and an ambivalence toward patrol's value. On the one hand, many of the officers interviewed felt that patrol was less effective in preventing crime than it was in enhancing citizen feelings of security. (One possible reason for this could be the fact that few crimes-in-progress are come upon by patrolling officers, and thus "good" arrests—resulting in the clearance of a crime—rarely result from routine patrol activity.) On the other hand, many officers tended to feel that such basic preventive patrol activities as car, pedestrian and building checks were instrumental in the apprehension of criminals and the deterrence of crime, despite the infrequency of criminal arrests resulting from such checks. (Albert Reiss cites a New Orleans police study which found that only 15.5 percent of some 40,375 pedestrian checks resulted in arrests, while a 1972-1973 survey undertaken by the South Patrol Task Force in Kansas City found that only 6.1 percent of 1,002 patrol stops resulted in arrests.)

Table 16:
PATROL IS THE MOST IMPORTANT FUNCTION IN THE POLICE DEPARTMENT

Total Responding = 178 $\bar{X}$ = 1.94 S.D. = 1.05

Response of South Patrol Division Police Officers	
Strongly agree	42.2%
Moderately agree	32.8%
Slightly agree	1.7%
Slightly disagree	5.0%
Moderately disagree	0.6%
Strongly disagree	1.1%
No response	16.7%

Table 17:
HOW MUCH OF DEPARTMENTAL TIME DO YOU THINK
SHOULD BE SPENT ON EACH OF THESE ACTIVITIES?

Response of South Patrol Division Police Officers	% Assist Persons in Emergencies Total Responding = 177 0 = 1.81 S.D. = 1.10	% Investigating Crime Total Responding = 176 0 = 1.84 S.D. = .92	% Patrolling in Cars Total Responding = 180 0 = 1.89 S.D. = .82
Very much	52.8	41.7	42.2
Much	0	33.9	36.1
About half	25.6	18.9	18.3
Little	11.7	1.7	3.3
Very little	1.7	1.7	0
None	6.7	0	0
No response	1.7	1.7	0

A majority of the interviewed officers said the only way to increase patrol's deterrent effectiveness would be through the greater use of unmarked police vehicles, i.e., a move toward less visibility. Another change frequently favored was fewer uniformed and more plainclothes officers. Those surveyed seemed to feel that the police uniform was most useful as a symbolic tool for eliciting immediate response to authority in situations where deference to authority was the quickest path to order. But they cited the uniform's obvious disadvantage of affording criminals instant recognition of police presence. A similar viewpoint argued for the greater use of unmarked police vehicles. The officers felt that clearly marked police vehicles helped in the prevention of automobile accidents and tended to enhance citizen feelings of security. But on the other hand, many of the officers felt that marked cars militated against the apprehension of criminals by again affording instant recognition. The general consensus among those interviewed was that officers should be allowed to drive not only departmental unmarked cars (with spotlights and two-way radio antennas) but also their own personal vehicles or cars similar to those driven by civilians.

VII. AUTHORS' OBSERVATIONS AND CONCLUSIONS

The initial impetus behind the Kansas City preventive patrol experiment was the issue of time and staff resources. When the South Patrol Task Force began its deliberations, the concern was that any serious attempt to deal with priority problems would be confounded by the need to maintain established levels of routine patrol. Thus, in addition to testing the effect of various patrol strategies on such factors as crime, citizen fear and satisfaction, and response time, the experiment equally addressed the question of whether adequate time can be channeled to the development, testing and evaluation of new approaches to patrol.

From the beginning phases of this experiment, the evaluators formed hypotheses based upon certain assumptions. One primary assumption was that the police, as an institutionalized mechanism of social control, are seriously limited in their ability to both prevent crime and apprehend offenders once crimes have been committed. The reasons for these limitations are many and complex. But they include the very nature of the crime problem itself, the limits a democratic society places upon its police, the limited amount of resources available for crime prevention, and complexities within the entire criminal justice system.

As a result of these limitations, many have rightly suggested that we must now begin revising our expectations as to the police role in society.

Because there are programmatic implications in the findings of this experiment, several cautionary comments are offered.

During the course of the experiment a number of preliminary findings were reported initially and subsequently reprinted in and editorialized upon in many major newspapers. A weekly news magazine carried a brief and cryptic report on the experiment, suggesting that it had produced evidence that patrol officers were unnecessary. This was subsequently picked up by a television network and given further exposure. Public response to these stories was unfortunate, but predictable. Unfamiliar with the issues of the experiment, and yet highly sensitive to these issues, some saw the study as justification for limiting or reducing the level of policing. Many saw it as a justification for two-officer cars. Others, fearing some of the conclusions drawn above, simply rejected the study out of hand.

Such implications are unfortunate. Given the distinct possibility that the police may more effectively deal with the problems of crime if they work more closely and systematically with their communities, it may be that an increase rather than a decrease in the number of police is warranted. It may be that, given a different orientation and strategy, an increase in the number of police would increase chances for preventing crime. Those who drew manpower reduction conclusions from the preliminary findings assumed that if the crime prevention strategies currently being used did not work, no crime prevention strategies would work. This is not believed to be the case and such an implication is not supported by this study. Police serve a vital function in society, and their presence is of real and symbolic importance to citizens.

Nor does this study automatically lead to any conclusions about such programs as team policing, generalist-specialist models, minority recruitment, professionalization of the police or community relations programs. These are all package phrases embracing a wide

variety of programs. While some recent works attempt to define the exact nature of these programs, most such terms remain ambiguous and for some, offensive.

These programs are attempting to deal with particular problems in the field of policing, including police and citizen alienation, the fragmented nature of police work, the inability to provide adequate supervision for police officers, the inability to coordinate the activities of officers in a variety of areas, the inability to adequately transmit information from officer to officer, from beat to beat, and from watch to watch, and the antiquated, quasi-military organizational structure in predominant use. These problems exist, but they were not the concern of this study.

The relevance of this study is not that it solves or even attempts to address many of these issues which admittedly are interdependent and central to the ability of the police to deal with crime. Rather, the experiment has demonstrated that the time and staff resources do exist within police departments to test solutions to these problems. The next step, therefore, will be to use that time and these findings in the development of new approaches to both patrol and policing.

ABOUT THE AUTHORS

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