

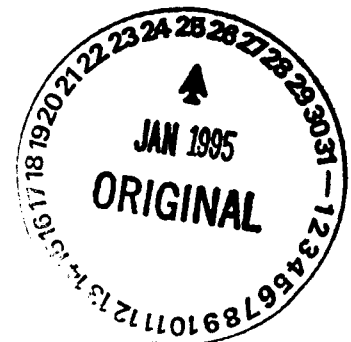
LAW ENFORCEMENT MANAGEMENT INSTITUTE

THE DETERRENT EFFECT OF POLICE PRESENCE:
AN EXAMINATION

A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE LAW ENFORCEMENT MANAGEMENT INSTITUTE

BY
KEITH E. REED B.S., M.S.

TEMPLE POLICE DEPARTMENT
TEMPLE, TEXAS
JANUARY, 1995



260

TABLE OF CONTENTS

I.	BACKGROUND & INTRODUCTION	1
	Deterrence Theory	5
	War on Crime: Round 1	6
	War on Crime: Round 2	8
II.	REVIEW OF RELATED RESEARCH	11
	Police Research	14
	Operation 25	14
	20th Precinct Experiment	14
	Subway Experiment	16
	The Kansas City Preventive Patrol Experiment	17
	Rand Study	20
	Cleveland Heights / New Haven Study	20
III.	CONCLUSION	21
IV.	BIBLIOGRAPHY.....	25

BACKGROUND AND INTRODUCTION

Crime statistics describing losses of life and property do not adequately portray the scope or the depth of the crime problem in this country. Each year millions of citizens feel the effects of crime directly, and still millions more experience a fear that is severely affecting their quality of life.

This fear is not confined to the large urban areas. Those who have deserted the cities have found little refuge in the suburbs and small towns where crime has risen most dramatically in recent years. Those who stay locked in their homes and apartments, those who no longer go out after dark, those who refuse to shop downtown are all the uncounted victims of crime who do not appear in the crime statistics.

Crimes occur because particular individuals have both the desire and the opportunity to commit crime. (Wilson 1972, 5) Crime prevention therefore has two aspects. First it seeks to eliminate the desire to commit a crime and then seeks to eliminate the opportunity.

Eliminating the desire to commit a crime requires long-term efforts aimed at changing those economic and social conditions that make crime an attractive option. The police

are neither equipped nor authorized by law to change society nor to reshape peoples' thinking and life styles. In short, the police, and for that matter, the total criminal justice system, are not very effective in that task. (Payton 1971, 2)

Recognizing these limitations, the police have concentrated their efforts on eliminating the opportunities to commit crimes essentially, these efforts are both reactive and preventive and are aimed at placing obstacles in the way of those who believe that crime is an attractive option.

Preventive enforcement falls under the heading of protection, and involves the prevention of crime through the noticeable presence of police vehicles and personnel as a form of deterrence. Prevention is the soundest of all criminological theories. (Payton 1971, 32) The cost of prevention when compared with the cost of crime is insignificant even when human suffering, injury and the loss of life are not weighed. Strictly from a monetary standpoint, society stands to lose greatly once a crime has occurred. There is the loss of taxes when the victim is injured and the perpetrator jailed. There is the increased cost of enforcement when crimes increase. There is the cost of jails and upkeep and the high cost of trials and prisons. These plus the financial loss to the victim are but part of the true cost to society when crimes occur. (Wilson 1972, 4)

The indicator for police presence is the number of patrol units per capita. This is clearly a more satisfactory indicator of police resources and activities than any other. The uniformed police officer or the marked patrol car is what the public uses plus the potential offenders to measure police presence. Indeed, to many citizens, the ever-present force of officers dispersed throughout the community, in uniform and armed, on call twenty four hours a day, is policing. All other police activities are service functions, necessary but of secondary importance to working the beat. This attitude is a bit extreme, yet there is truth to it. The patrol officer is the generalist of law enforcement, the source of a vast amount of police discretion, and the most visible embodiment of authority, of law and order, in our communities. There is little doubt that the success or failure of law enforcement, no matter what test is applied, depends in great part on the quality of patrol officers and the ways in which they fight the crime problems.

Through visibility the patrol officer can and does reduce criminal activity. On the average, in heavy traffic, a police car with its red lights on, that has stopped a motorist, is passed by more than 100 cars per minute. Each of those drivers becomes aware of law enforcement in that

area, and will drive more carefully for about half an hour.
(Payton, 1971, 3)

Patrol officers represent the full authority of police power and are expected to perform all the functions of general law enforcement plus achieving specific objectives of their departments. Regarding patrol officers, August Vollmer stated that they are "society's best defense against the criminal. The mere sight of uniformed officials diligently patrolling beats is often sufficient to deter the community's weaker members from committing legal infractions." (Vollmer 1936, 217)

A central issue in the organization of any criminal justice system is the concept of deterrence. Any system for dealing with crime must rest on the premise that crime either can or cannot be affected through the application of punitive sanctions.

Crime and its consequences are among the social problems most often discussed in the United States today. Ironically no one is sure how much crime actually occurs, where and when it takes place, nor how many criminals and victims exist nationwide.

Deterrence Theory

The history of the police shows that the police have been viewed mainly as crime fighters and that they can bring about a reduction of crime primarily through the deterrent effect of their presence.

Deterrence was first expressed as a component of the classical school of criminal law in the eighteenth and nineteenth centuries by Cesare Beccaria (1764) and Jeremy Bentham (1823). Beccaria argued it is the fear of punishment that keeps most people in check, and thus the severity, certainty, and speed of the criminal sanction is the controlling factor. He believed that the criminal justice system must be organized to ensure that punishment will deter crime, and, hence, he was most concerned that there be a rational link between the gravity of the crime and the severity of punishment. These reformers attempted to delineate rational and consistent penalties which could be included in a hedonistic calculation of the benefits and losses to be derived from their criminal acts. It was assumed that criminals had free will to choose, and, if the pain of punishment clearly outweighed non-criminal activity then crime would be deterred. As Beccaria stated in his essay On Crimes and Punishment;

The certainty of a punishment, even if it be moderate, will always make a stronger impression

than the fear of another which is more terrible but combined with the hope of impunity; even the least evils, when they are certain, always terrify men's minds, and hope, that heavenly gift which is often our sole recompense for everything, tends to keep the thought of greater evils remote from us, especially when its strength is increased by the idea of impunity which avarice and weakness only too often afford. (Beccaria, C. 1764, 8)

The Metropolitan Police Act of 1829 in England commonly referred to as the "Peelian Reform," fostered several major changes in the English police system which were later adopted in the United States. These changes have persisted as basic principles in our system which is that the police are a preventive force. Crime prevention was not the only factor contributing to the Peelian Reform but was the major officially recognized theme. Sir Robert Peel's philosophy is reflected in the original instruction issued by his first two Commissioners:

It should be understood, at the outset, that the principal object to be attained is the prevention of crime.

The absence of crime will be considered the best proof of the complete efficiency of the Police. (Lyman 1964, 141)

War on Crime: Round 1

The idea that the police were a preventive or a deterrent force lasted for nearly a century after the Peelian Reform. Crime again emerged as a public concern in the 1920's and

1930's. Two national commissions as well as state and local groups, studied the problem resulting in the evolution of a "war against crime" mentality. (Douthit 1975, 336) The two national commissions were the National Crime Commission in 1925 and the National Commission on Law Observance and Enforcement, also called the Wickersham Commission of 1929. The Illinois Association for Criminal Justice of 1929 and the Missouri Association for Criminal Justice of 1926 were the two state commissions. The implicit assumption of most of those involved in these inquiries was that the criminal justice system could do something about crime by becoming more efficient in the deterrent and apprehension roles.

August Vollmer's classic book on the police set out improvement thought necessary to make the police service more efficient. Regarding patrol, he said that it "is society's best defense against the criminal. The mere sight of uniformed officials diligently patrolling beats is often sufficient to deter the community's weaker members from committing legal infractions." (Vollmer 1936, 217)

O.W. Wilson based his theory on motivation or desire to commit a criminal act combined with the perceived opportunity. He stated that this desire plus the opportunity will produce a criminal act. He saw the basic police function as the prevention of crime by reducing the opportunity. This was to be achieved by the backbone of all

police agencies, the patrol division. He stated:

The elimination of the actual opportunity, or the belief in opportunity, for successful misconduct is the basic purpose of patrol. A thief's desire to steal is not diminished by the presence of a patrolman, but the opportunity for successful theft is.

The apparent likelihood of arrest influences the degree to which the potential offender is convinced that the opportunity for successful misconduct is absent. Patrol provides this favorable influence more completely than any other branch of police service. An impression of omnipresence is created by frequent and conspicuous patrol at every hour and in all sections of the community. Suitable patrol succeeds in effecting immediate apprehensions is spread by press, radio, and word of mouth. The potential offender is thus persuaded without the necessity of personal experience that the patrol is invulnerable. (Wilson and McLaren 1972, 320)

War on Crime: Round 2

In the 1960's crime again emerged as a public concern. A review of the Gallup Opinion Index reveals that crime had not even appeared as a significant public issue from the 1930's until that time. In 1965, it became a major issue and continued as a leading issue today. Because of public concern, most politicians incorporated a "law and order" theme in their platforms.

Important legislation was passed and many commissions were established, on the federal level to address the crime problem. The two most important pieces of legislation were the Law Enforcement Assistance Act of 1965 and the Omnibus

Crime Control and Safe Street Act of 1968. Among the more noteworthy national commissions were the President's Commission on Law Enforcement and Administration of Justice, The National Advisory Commission on Criminal Justice Standards and Goals, The National Commission on the Causes and Prevention of Violence, the Commission on Campus Unrest, and the National Advisory Commission on Civil Disorders. Two important ideas came from the reports of these commissions and the positions taken by leading authorities in the field of law enforcement. One of these ideas was the need for a systemic approach to criminal justice. A systems approach has been defined as a rational framework for solving problems and is therefore, oriented toward efficiency. The second major idea was the identification of the police as the weakest link in the criminal justice system. From these ideas, major efforts were undertaken to improve police efficiency on the assumption that more efficient policing leads to less crime. The Law Enforcement Assistance Administration used 80% of the funds allocated by the Omnibus Crime Control and Safe Streets Act of 1968, to improve police efficiency, training and equipment.

Leading authorities accepted conventional wisdom concerning police and deterrence. The President's Commission on Law Enforcement and Administration of Justice

reflected the views of O.W. Wilson:

The heart of the police effort against crime is patrol moving on foot or by vehicle around an assigned area, stopping to check buildings, to survey possible incidents, to question suspicious persons, or simply to converse with residents who may provide intelligence as to occurrences in the neighborhood.

The object of patrol is to disperse policemen in a way that will eliminate or reduce the opportunity for misconduct and to increase the likelihood that a criminal will be apprehended thereafter. The strong likelihood of apprehension will presumably have a strong deterrent effect on potential criminals. (Task Force Report: The Police 1967, 10)

Although the idea of the deterrent effect of police presence seem reasonable, some leading criminal justice officials expressed skepticism. The question was the deterrence assumption and the impact of police on crime. Early research on the role of police showed that they spend less than 20% of their time on tasks directly related to crime. (e.g., Cumming et al. 1965; Webster 1973) This raised questions about how much impact the police actually have on crime. The public's expectation for the police to prevent crime and apprehend all offenders is an impossible mandate.

In recent years, some claim that the police have had no discernible impact on crime. This skepticism along with an increase in criminal justice research has stimulated research on the deterrent effect of police presence.

REVIEW OF RELATED RESEARCH

The focus of most research falls within the topic of general deterrence which has been defined as "the inhibiting effect of sanctions on the criminal activity of people other than the sanctioned offender." (Blumstein et al., 1978, 3) Interest has also been placed on the certainty of the application of sanctions. It is certainty of punishment (whether real or perceived) that relates police presence to deterrence. The police are not involved in the official punishment of offenders but have been thought to increase the certainty of that punishment through their apprehension activities. It has also been argued that an arrest by the police is perceived by those arrested as punishment, even if not followed by official processing. (Tittle and Rowe 1974, 455)

The core of the police purpose is to prevent unlawful acts. (Wilson 1972, 4) Crime and misconduct of any type under police control result from the coexistence of the desire to commit the crime and the belief that the opportunity to do so exists. When either factor is absent, criminal acts will not be committed. (Wilson, 1972, 5) The presence of one factor alone, no matter how strong it may be, will not result in crime. The elimination or reduction of these two factors, therefore, is a basic police duty.

The elimination of the actual opportunity, or the belief in the opportunity, for successful misconduct is the basic purpose of patrol. The presence of a police officer does not diminish a thief's desire to steal, but the opportunity for a successful crime is. The apparent likelihood of arrest influences the degree to which the potential offender is convinced that the opportunity for successful misconduct is absent. (Payton 1971, 31) Patrol provides this favorable influence more completely than any other branch of police service. Frequent and conspicuous patrol creates an impression of omnipresence at every hour and in all sections of the community. (Wilson 1963, 6) Patrol succeeds in effecting immediate apprehensions and since nothing succeeds like success, a reputation for quick and certain arrest is spread by press, television, and word of mouth.

Professional criminals, especially burglars, will often admit that they avoid an area or community where their casing has shown heavy and thorough police patrols. (Payton 1971, 31) In some cases, this does not stop the crime itself-- it just changes the location of it. Yet in many crimes that are committed on impulse, the deterrent force of preventive enforcement has a great effect.

The effectiveness of patrol in minimizing belief in the existence of opportunity for misconduct, which is the basic police task, is in proportion to the apparent or observed

frequency of patrol. When uniformed officers are unobserved in unmarked patrol cars, regardless of the actual frequency of their patrol, there is no apparent patrol and thus no apparent police presence. Consequently, the patrol has little deterrent or preventive value. On the other hand, a patrol in conspicuous police vehicles, being more readily observed, has a deterrent effect on criminals. (Wilson 1963, 4) Citizens are impressed with the extent and frequency of patrol, which they observe, and feel that the police are efficient and readily available in case of need. O.W. Wilson reported in 1963 that the impression of police omnipresence created by conspicuous patrol thus satisfies the critical citizen, comforts the uneasy one, and deters the potential offender.

Deterrence is what routine patrol has traditionally been all about. It involves activities which are intended to convince potential criminals of the likelihood of being arrested. Police departments have used a variety of methods to increase police visibility and omnipresence. These include one-officer cars, foot and scooter patrols, and deployment based upon crime analysis. (National 1977, 11) All these activities are designed to increase the probability of apprehension, thereby intensifying the perceived risks of the crime and reducing its incidence.

Police Research

Major police changes in manpower allocation have been implemented within police agencies occasionally and evaluated by experimental or quasi-experimental designs. Relatively few studies of this nature have been conducted and they have serious methodological deficiencies.

Operation 25

An experiment referred to as Operation 25 was undertaken for a four month period in 1954 in the 25th Precinct of New York City. (New York City Police Department 1955, 206) The 25th Precinct comprises an area less than one square mile located at the northeastern tip of Manhattan Island. The area has traditionally been characterized by overcrowding, poverty, and a predominantly minority population with a high crime rate. The feeling of the police department was that the area was undermanned. It was divided into 55-foot beats with an average length of about ten straight blocks. Manpower levels were insufficient to allow coverage of all beats at any given time. When the experiment was started, the number of beats was increased from 9 to 55 and reducing their average length to approximately five blocks. The manpower was more than doubled within the area, allowing all

beats to be covered for all shifts. The experiment was

. . . based upon the premise that if a patrol post is limited in length and under the constant observation of the assigned patrolman, the patrolman should properly have knowledge of everything that occurs on his post. He thus could be held responsible for failing to prevent certain types of crime or failing to arrest perpetrators. (New York City Police Department 1955, 209)

The New York City Police Department concluded that Operation 25 was an "unqualified success" and that the "results were dramatic." These results included a 55.6% decrease in reported felonies compared to a 4.7% decrease for the city as a whole during that period. There was also an increase in the felony clearance rate from 20.2% to 65.6%. At the same time, several crime types which are of such a nature that they become known only if the police intervene (e.g., possession of narcotics) showed dramatic increases. Thus the experiment seemed to provide evidence that increases in police presence leads to increases in both deterrence and apprehension rates.

20th Precinct Experiment

Another study involved analysis of crime statistics collected over a five-year period (1963-1967) in the 20th Precinct of New York City following a 40% increase in the level of police presence. (Press, 1971) The increase was

primarily in foot patrols since the area is a densely populated section of Manhattan's West Side, described by Press as populated by "the very rich and the very poor" and by "many ethnic minorities." The analysis revealed a significant net reduction in crimes visible from the street after adjustments were made for displacement to contiguous areas and for non-police-related changes in crime within control areas. For example, outdoor robberies declined 33%; outdoor grand larceny dropped 49%; auto theft also was reduced by 49%.

Subway Experiment

Another quasi-experimental evaluation of an increase in police presence was conducted by Chaiken et al. (1974). In 1965, a decision was made in New York City to increase police presence on the subways and in the subway stations by 2.6%. The results of this manpower increase were analyzed for the period 1965-1973. Analysis revealed that there was a short-term reduction in the overall crime rate for the subway system, but that within a year it had surpassed the pre-experimental rate. However, as Wilson (1975) explains it, focusing on the overall crime rate hides a remarkable success story. Virtually all the increased police coverage was between the time of 8:00 p.m. and 4:00 a.m. and

analyzing the crime rate for just this period shows that the reduction was a permanent one. Thus the subway study suggests that increased police presence does have deterrent effect, but that any such effect extending beyond the actual time period for which the increase is implemented will be fleeting.

The Kansas City Preventive Patrol Experiment

The first systematic attempt to evaluate the effectiveness of routine preventive patrol was undertaken by the Kansas City, Missouri, Police Department in 1973. The study involved providing variations in the level of preventive patrol efforts in fifteen police beats in the city. The fifteen patrol beats were randomly divided into three groups or districts. In one district, routine preventive patrol was withdrawn entirely and patrol officers only entered the district in response to calls for service. In a control district, routine preventive patrol was maintained at its usual level. The remaining district, preventive patrol was intensified by two or three times its normal level.

Based on an analysis of citizen interviews, victimization surveys, and detailed police service and crime statistics, the following conclusions were drawn:

1. The experiment did not affect residential and

nonresidential burglaries, automobile thefts, larcenies involving automobile accessories, robberies, and vandalism.

2. There were few significant differences and no significant pattern of differences in terms of citizen attitudes toward police services.

3. Overall, citizen fear of crime was unchanged by the experimental conditions.

4. The experiment had no significant effect on police response time or on citizen satisfaction with police response time. (Kelling 1974, 39; Schnelle et al. 1975, 360)

Clearly, no one experiment in a single location will be the definitive work on a subject as complex as patrol. The Kansas City study remains the most comprehensive research available. While faulting the study on certain methodological issues, several critics have agreed that its findings suggest that resources presently available in patrol forces might be focused toward more specific assignments without an expected degradation of police service.

The most important issue of the Kansas City Study is the failure to give sufficient attention to the distinction of objective police presence and perceived police presence. Essential to deterrence theory is the proposition that the perception of potential offenders must be affected in order for deterrence to operate. (Andenaes, 1966; Gibbs, 1975; Henshel, 1978; Minor, 1978; Tittle and Logan, 1973; Zimring

and Hawkins, 1973) Thus unless changes in patrol levels result in a measurable change in the perception of the population, no measurable change in crime rates should be expected.

Another failure was that there was not a substantial reduction of police presence in the reactive beats. Davis and Knowles (1975) pointed to the significantly larger mean numbers of officers who responded to incidents in the reactive beats (1.58) and opposed to control (1.29) and proactive beats (1.15). By taking into consideration the increased number of units responding to calls, the additional mileage accumulated in returning to the perimeter of the beat, and adjustments for peak activity periods (summer evening tours when visibility should be higher) Larson (1975; 1976) has derived estimates which suggest that police visibility was not reduced nearly as much as intended in the reactive beats. In addition, he pointed to the 400 to 500% increase in the use of lights and/or sirens which almost certainly had some influence on citizen perception of police presence. Adding further to these suspicions is the fact that there was actually an increase in patrol-initiated contacts in the reactive beats during the experimental periods.

Despite the need for additional experimentation to replicate and build upon the Kansas City Police Patrol

Experiment, few studies have been undertaken since it was reported.

Rand Study

One of the more comprehensive analyses of police patrol and criminal investigative functions was conducted by the Rand Corporation with funding by the Law Enforcement Assistance Administration. The analysis, which was based on a review in detail of the investigative operations of twenty-five police agencies and a questionnaire completed by 153 jurisdictions, provided several findings. One of the findings was that the vast majority of clearance of crimes is produced by activities of patrol officers, by the availability of identification of the perpetrator at the scene of the crime, or by routine police procedures.

Cleveland Heights / New Haven Study

Although it is difficult, if not impossible, to measure the benefits of increased visibility upon deterrence, several departments have reported that lowered crime rates have accompanied increased deterrent patrol. (National 1977, 1) In a 1977 report for the Law Enforcement Assistance Administration by the National Institute of Law Enforcement and Criminal Justice on routine patrol reported that the

Cleveland Heights, Ohio, Police Department in efforts to increase the amount of police visibility, has put detectives in uniform and assigned them patrol responsibilities. This program has been associated with a decrease in criminal activity without damaging the investigative process. The study further reported that New Haven, Connecticut, by carefully analyzing crime patterns, has been able to concentrate the patrol patterns of officers in the higher crime areas of their beats, The program has been credited with reducing the targeted crimes.

Although the Kansas City Preventive Patrol Program has cast legitimate doubt upon the value of random preventive patrol, experiences in Cleveland Heights, New Haven and New York suggest that when patrol is focused upon specific problems to enhance police visibility, communities will experience a reduction in targeted crimes. (National 1977, 12)

Conclusion

The primary focus in the organization of any criminal justice program is the idea of deterrence. Any system for dealing with crime must accept the premise either that crime can-- or that it cannot-- be affected by deterrence measures. If we conclude that preventive measures can

control crime, then we need to identify the boundaries of the presumed deterrent effect.

If law enforcement is to deal with the crime problem effectively, prevention must be an integral part of the attack. Prevention has been the goal of law enforcement since the time of Sir Robert Peel and the Metropolitan Police Act of 1829. As far back as the time of John Fielding and British Police, it was said that it was much better to prevent even one man from being a rogue than apprehending and bringing forty men to justice. (Shanahan 1977, 2)

Bringing the guilty to justice is what the public demands. The police officer on the beat is what the public is cognizant of. As Wilson and Boland stated:

An offender may alter the rate at which he commits crime not because the actual chance of being caught has increased but because he perceives that it has, perhaps because he sees more officers than usual or more activity among them. (1978, 369)

The National Research Council panel on deterrence noted that,

Increases in police resources may increase actual apprehension risk by increasing police officers' ability to detect and apprehend offenders... Alternatively, increased levels of police resources may increase the visibility of the police in the community (through increased numbers of officers and patrol cars) without having any measurable effect on the actual apprehension risk. This increased visibility could deter potential offenders who mistakenly assume that the apprehension risks are indeed increased. (Blumstein et al., 1978, 44)

The evidence found in reviewing evaluations of variations in levels of police presence supports a conclusion that police do have an impact on crime rates under certain circumstances, a conclusion also drawn by other who have surveyed the results of experimental and quasi-experimental studies. (Blumstein et al., 1978; Chaiken, 1978; O'Connor and Gilman, 1978; Zimring, 1978) This conclusion was stated most concisely by Chaiken:

Research has answered several questions about the deterrent effects of police activity, yet more remains to be done. It now seems very likely that arrest probability has a deterrent effect for at least some types of crimes. We need a much firmer indication of the particular crimes for which the effect operates. Moreover, the magnitude of the effect has not yet been adequately explored. (1978, 130)

Theory and research suggest that police presence may differentially affect only certain types of crime. The idea of deterrence rests partially on an assumption that the presence of police will deter crimes committed overtly rather than covertly. Where the police are observed, a certain measure of deterrence is present also. A robbery, burglary, theft, auto theft or rape may take place in locations highly visible to the police. These street crimes, are therefore, subject to a deterrent effect of police presence.

While the mere presence of police may not be sufficient to deter all crime, the manner in which they approach their

task may make a difference. James Q. Wilson and Barbara Boland found that police departments using a proactive, aggressive law enforcement style may help reduce crime rates. Jurisdictions that encourage patrol officers to stop motor vehicles, to issue citations and to aggressively arrest and detain suspicious persons also experience lower crime rates than jurisdictions that do not follow such proactive policies. (Wilson & Boland 1978, 367) In a more recent analysis of police activities in 171 U.S. Cities, Robert Sampson and Jacqueline Cohen found that departments that more actively enforced disorderly conduct and traffic laws also experiences lower robbery rates.

The security of persons and property and the preservation of the public tranquillity can be better effected by prevention than by detection and punishment of the offenders after they have succeeded in committing crimes. The true test of a police force will be the absence of crime and a superior level of service to the community it serves.

BIBLIOGRAPHY

- Andenaes, J. (1966). "The General Preventive Effects of Punishment." University of Pennsylvania Law Review 114:949-83.
- Beccaria, C. (1764). On Crimes and Punishments. Translated by H. Paolucci, 1963. Indianapolis: Bobbs-Merrill.
- Blumstein, A., J. Cohen, and D. Nagin, eds. (1978) Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences.
- Chaiken, J.M. (1978). "What is Known about Deterrent Effects of Police Activities." pp. 109-35 in J.A. Cramer, ed., Preventing Crime. Beverly Hills: Sage Publications.
- Cumming, E., I. Cumming, and L. Edell. (1965) "Policeman As Philosopher, Guide and Friend." Social Problems 12:276-86.
- Davis, E.M., and L. Knowles. (1975). "An Evaluation of the Kansas City Preventive Patrol Experiment." The Police Chief (June): 22-7.
- Douthit, N. (1975). "Enforcement and Nonenforcement Roles in Policing: A Historical Inquiry." Journal of Police Science and Administration 3:336-45.
- Garmire, B.L. (1977). Local Government Police Management. Washington DC: International City Management Association.
- Gibbs, J.P. (1975). Crime, Punishment and Deterrence. New York: Elsevier.
- Goldstein, Herman (1976) "Policing a Free Society" Cambridge, Mass. : Ballinger.
- Greenwood, P.W. (1977). The Criminal Investigation Process. Lexington MA: D.C. Heath & Company.
- Henshel, R.L. (1978). "Considerations on the Deterrence and System Capacity Models." Criminology 16:35-45.

Keeling, G.L. (1974). The Kansas City Preventive Patrol Experiment: A Summary Report. Washington D.C.: Police Foundation.

Larson, R.C. (1975). "What Happened to Patrol Operations in Kansas City? A Review of the Kansas City Preventive Patrol Experiment." Journal of Criminal Justice 3:267-97.

Larson, R.C. (1976). "What Happened to Patrol Operations in Kansas City?" Evaluation 3:117-23.

Lyman, J.L. (1964). "The Metropolitan Police Act of 1829." Journal of Criminal Law, Criminology, and Police Science 55:141-54.

Manning, P. (1971). Police Work: The Social Organization of Policing. Massachusetts: The Massachusetts Institute of Technology Press.

Minor, W.W. (1978). "Deterrence Research: Problems of Theory and Method." pp. 21-45 in J.A. Cramer, ed., Preventing Crime. Beverly Hills: Sage Publications.

National Institute of Law Enforcement and Criminal Justice. (1977). Specialized Patrol Volume II (LEAA Grant No.76-NI-99-0055). Washington DC: U.S. Government Printing Office.

New York City Police Department. (1955). "Operation 25." pp.206-14 in S.G. Chapman, ed., Police Patrol Readings (1964). Illinois: Charles C. Thomas.

Nilsson, E.K. (1972). "Systems Analysis Applied to Law Enforcement." Allocation of Resources in the Chicago Police Department. Washington, D. C.: Law Enforcement Assistance Administration.

O'Connor, R.J., and B. Gilman. (1978). "The Police Role in Deterring Crime." pp. 75-108 in J.A. Cramer, ed., Preventing Crime. Beverly Hills: Sage Publications.

Payton, G.T. (1971). Patrol Procedure. Los Angeles CA: Legal Book Corporation.

President's Commission on Law Enforcement and Administration of Justice. (1967). Task Force Report: The Police. Washington, D.C.: U. S. Government Printing Office.

- Press, J. (1971). Some Effects of Increasing Police Manpower in the 20th Precinct in New York City. New York: The New York Rand Institute.
- Sampson, Robert. (1988). "Deterrent Effects of the Police on Crime: A Replication and Theoretical Extension," Law and Society Review 22 (1988):163-91
- Schnelle, J.F., R.E. Kirchner, M.P. McNees, and J.M. Lawler. 1975. "Social Evaluation Research: The Evaluation of Two Police Patrolling Strategies." Journal of Applied Behavior Analysis 8:353-65.
- Shanahan, D.T. (1977). Patrol Administration. Boston MA: Holbrook Press Incorporated.
- Tittle, C.R., and C.H. Logan. (1973). "Sanctions and Deviance: Evidence and Remaining Questions." Law and Society Review 7:371-92.
- Tittle, C.R., and A.R. Rowe. (1974). "Certainty of Arrest and Crime Rates: A Further Test of the Deterrence Hypotheses." Social Forces 20:488-98.
- Vollmer, A. 1936. The Police and Modern Society. Berkley: The University of California Press.
- Webster, J.A. (1973). The Realities of Police Work. Iowa: Kendall/Hunt Publishing Co.
- Weston, P.B. (1974). The Police Traffic Control Function: Springfield IL: Thomas Publishing.
- Wilson, O.W., and R.C. McLaren. (1972). Police Administration. 3rd ed. New York: McGraw-Hill
- Wilson, J.Q. (1975) Thinking About Crime. New York: Basic Books, Inc.
- Wilson, J.Q. and B. Boland. 1978. "The Effect of the Police on Crime." Law and Society Review 12:367-90.
- Zimring, F.E., and G.J. Hawkins. (1973). Deterrence. Chicago: University of Chicago Press.