National Criminal Justice Reference Service

ncjrs

This microfiche was produced from documents received for
inclusion in the NCJRS data base. Since NCJRS cannot exercise
control over the physical condition of the documents submitted,
the individual frame quality will vary. The resolution chart on
this frame may be used to evaluate the document quality.

1.0	4.5 5.0	2.8	2.5
		3.2	2.2
		3.6	
1.1	4.0		2.0
			1.8
1.25	1.4		1.6
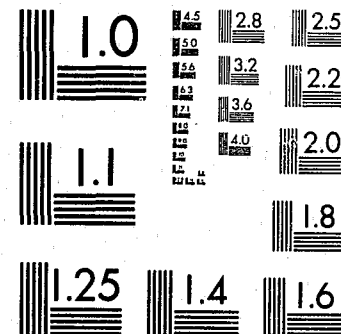
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Microfilming procedures used to create this fiche comply with
the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are
those of the author(s) and do not represent the official
position or policies of the U. S. Department of Justice.

National Institute of Justice
United States Department of Justice
Washington, D. C. 20531

Date Filmed

2/9/81

COMMUNITY SECURITY

Fred Heinzelmann, Ph.D., Lois Mock, Richard Titus, Ph.D.
Community Crime Prevention Division
National Institute of Justice

1979

70822

PART ONE: A FRAMEWORK FOR COMMUNITY SECURITY RESEARCH AND DEVELOPMENT

In this introductory Section, a detailed framework for research in the area of Community Security is presented, followed by a table utilizing this conceptual framework to describe the Institute's previous and current Community Security-related research and to suggest possible future research topics.

In describing the research framework, two general categories of research issues are addressed: those which focus on an increased understanding of the problem(s) relating to community security and those which focus on the development of effective solutions to these problems. The following framework is proposed as most effectively defining these two general categories:

A. Topics which Focus on the Characteristics of Community Security Problems

This category of research topics addresses the more basic research questions, with the goal of improving our knowledge and understanding of these issues. Included are research on:

1. Crime Characteristics, such as frequency, trends, patterns, and descriptive features of various types of community crime;

2. Offender Characteristics, such as age, race, criminal history, drug/alcohol addiction, family background, and method of operations;

3. Victim Characteristics, such as sex, age, race, socio-economic status, and behavior patterns;

4. Characteristics of the Physical Environmental Setting. The features of the physical environment which are associated with more or less crime and which influence behavior in various settings; and

5. Characteristics of the Social/Economic Setting. The features of the social, political, economic environment contributing to more or less crime, including such factors as poverty, unemployment, and social attitudes about crime and community security.

B. Topics which Focus on Solutions to Community Security Problems

This category examines various types of community security strategies in terms of their design, implementation, and assessment of impact. Topics include research on:

1. Individual Citizen Actions to avoid self-victimization, such as use of protective devices, operation ID, and cooperation with police and courts;

2. Collective Citizen Actions to reduce personal victimization and to increase neighborhood security by using group strategies such as citizen patrols and block watch crime reporting programs;

3. Institutional Activities to increase community security, including police and other criminal justice practices as well as activities of other social and municipal institutions which impact on crime;

4. Environmental/Technological Solutions to crime, such as increased street lighting, improving building security, and modifications in street traffic to reduce the flow of strangers through a neighborhood;

5. Implementation Methodology. This research addresses problems of implementing the various types of community security solutions in order to design feasible programs and develop methods to more effectively carry them out; and

6. Evaluation Methodology. This research is directed toward the development of valid and reliable methods for measuring the impacts of community security strategies in order to evaluate their effectiveness in reducing crime and fear and/or in achieving other program goals.

In subsequent sections of the chapter, this Research Framework will be used to discuss previous, current, and future Institute research, as follows:

Part Two: Summary of Previous Research Findings. Utilizing the Framework categories, this section will summarize previous research findings related to Community Security and will highlight their implications for program development. (A more detailed discussion may be found in the Appendices to this report). Because of this emphasis, only those Framework categories most relevant to program development will be addressed directly: the categories whose focus is on solutions to community security problems. These categories will be discussed in the following three subsections*:

A. Individual Citizen Actions, which will address the Framework category on "Individual Citizen Actions";

B. Collective Citizen Actions, which will discuss the three Framework categories on "Collective Citizen Actions", "Implementation Methodology," and "Evaluation Methodology"; and

C. Crime and the Environment, which will address the Framework category on "Environmental/Technological Solutions."

---

* Only five of the six Framework categories will be individually addressed. The sixth -- "Institutional Activities" -- will be discussed in all three subsections as they relate to the other types of Community Security solutions.

Part Three: Current Institute Research. This section will discuss current Institute research dealing with community security, including both ongoing research programs and those which are in the process of being funded. Subsections will follow Framework headings (and order) for all categories where current research exists.

Part Four: Possible Future Research Topics. The final section of Chapter II will demonstrate the utility of the proposed Research Framework by using Framework categories to suggest possible topics for future Institute research. Subsections will again follow Framework category headings and order.

In order to provide a context for the discussion sections, the following Table I presents in graphic form previous, current, and possible future research topics in Community Security. These are organized in terms of the Research Framework that has been outlined above.

Table I: Classification of Previous, Current and Possible Future Institute Research on Community Security

Research Framework Categories	Previous Research	Current Research	Future Research
Focus on Problems			
Crime Characteristics	Burglary, robbery, rape	Collective Disorders Weapons and Violent Crime Consumer Fraud Employee Theft	Arson and Homicide Government Benefit Fraud Crime Against Business
Offender Characteristics	Burglars, rapists	Alcohol/Drugs and Offender Behavior Career Criminals	Longitudinal Offender Studies Non-offenders in High Risk Settings Offenders/Displacement
Victim Characteristics	Rape victims Victims of crimes/CJS	Victim compensation/costs Victim involvement	Elderly Victims Multiple victimization
Physical Environmental Setting	Architectural Design Housing Project Stability Hartford Project CPTED	Synthesis of Past Research Perception of Environment Environmental Social Control	Secure and durable areas Land use and crime Strategy effectiveness
Social/Economic Setting	Economics and Crime	Reactions to Crime Incentives/Disincentives Neighborhood Decline/Crime	Business and Community Demography and Crime Home ownership and Crime Cross-cultural Comparisons
Focus on Solutions			
Individual Actions	Operation I.D. Security Surveys Small Business Security	Mass Media/Ad Campaign	Citizen Action Typology Public Perceptions of Crime Prevention
Collective Citizen Actions	Citizen Patrols Crime Reporting Projects Hartford Crime Control CPTED	Motivating Citizen Participation	Organizational variables Multi-action Programs
Institutional Activities	CJS Responses to Rape Gambling Enforcement Hartford Project CPTED	Community Anti-Crime and Area-Wide Evaluation Neighborhood Justice Ctrs.	Team policing and community Other CJS/community Interface Non-CJS Institutional Impact
Environmental/Technological Solutions	Street Lighting Door and Window Standards		Cost effectiveness studies Designer awareness "Passive" Technologies
Implementation Methodology	Hartford Crime Control CPTED NEP's in Crime Prevention		Recruitment Sponsorship Demography and Program Success
Evaluation Methodology	NEP's in Crime Prevention		Methodology Development

A. INDIVIDUAL CITIZEN ACTIONS

Introduction

There are several major categories of citizen action and behavior that are important to consider in this area. These include citizen actions directed at protecting person and property; citizen avoidance behavior which is intended to decrease exposure to the risk of victimization; citizen actions involving surveillance and reporting of crimes or suspicious behavior; and citizen cooperation with criminal justice personnel at the crime scene and as witnesses in court. Research relevant to each of these kinds of citizen behavior is summarized briefly below with a more detailed discussion presented in the Appendix.

1) #### Citizen protective behavior

Several studies have found that citizens can take relatively simple actions which help to reduce their vulnerability to crime in residential settings. These include actions to insure that premises appear to be occupied (particularly during the day and on weekends); efforts to secure premises using bolt locking doors and windows as well as lighting where appropriate; marking portable goods with some form of identification; and keeping limited cash and valuables on the premises. Institute studies on patterns of burglary and residential crime and security have emphasized the relevance of these kinds of citizen actions. The NEP Phase I Projects on Crime Prevention Security Surveys and Operation Identification suggest that when citizens carry out these actions, they can reduce their vulnerability to residential crime. Participants in programs that incorporate home security surveys, the marking of goods (and in some instances neighborhood watch) appear to have lower burglary rates than non-participants in these programs. This was found to be the case in several different cities around the country. It is not clear, however, whether the lower burglary rates are due primarily to the specific actions recommended in the programs, or whether the participants have become more responsive in general to the need for various forms of crime prevention actions and behavior.

2) #### Citizen avoidance behavior

This behavior is directed at decreasing exposure to the risks of victimization. Situations that are being avoided can be characterized in terms of location, time, particular persons or some combination of these. The research indicates that there are a significant number of people who report that they avoid certain areas because of the risk of victimization. These include certain streets, parks, subways, or situations or settings that involve large numbers of strangers. Avoiding specific activities such as night-time meetings or changing patterns of shopping and socializing because of the fear of crime have also been reported by many citizens. On almost any measure, women and older persons report more avoidance behavior than others.

The Hartford study on Neighborhood Crime Control and the Northwestern RAP on Reactions to Crime have found that some of the major determinants of fear of crime and avoidance behavior are factors such as abandoned houses, presence of drunks, prostitutes, and groups of youths who may occupy public areas used by citizens. Both the Northwestern RAP on Reactions to Crime and the study of Environmental Correlates of Crime Prevention Behavior are examining issues relating to fear of crime and avoidance behavior in greater detail. This research should provide a basis for more realistic assessments of risk in various settings and should also suggest more meaningful approaches for dealing with citizen fear of crime.

3) #### Citizen actions involving surveillance and reporting crimes or suspicious behavior

There are a number of issues that still need to be addressed in order to obtain a better understanding about the process of citizen surveillance and its relationship to citizen intervention and action in dealing with crime. Present evidence suggests that citizen intervention and action will be more likely when persons know one another or have at least had some previous contact. This suggests efforts to increase social cohesion and neighboring could be useful.

Research indicates that among victims of crime, only about one-third of the crimes that occur are reported to police. Little is known about the reporting behavior of persons who are witnesses to criminal events. Major reasons for not reporting crimes deal with the view that the incident is not important enough; that the police would not want to be bothered; or the person does not want to become involved with the criminal justice system. Citizen relationships with police have also been found to be relevant to the reporting of crime.

Research has also underscored the importance of prompt citizen action in calling the police: for example:

o Studies have found that the time lapse between a criminal incident and the call to police appears to be more critical than the time it takes police to respond to that call. When the incident and the call are concurrent, as in a burglary-in-progress call, there is a strong correlation between low response time and high arrest rate (i.e., burglary in-progress calls greatly increase the likelihood of apprehension).

o An Institute-sponsored study conducted by the Kansas City Police Department using civilian observers found that prompt citizen reporting is critical to realizing positive outcomes to criminal incidents in terms of arrest and witnesses availability. The study found that delays in citizen reporting tended to nullify the potential impact of rapid police response.

This research indicates that citizen action can influence police response and the subsequent outcome of actions taken in dealing with a crime.

4) Citizen cooperation with criminal justice personnel at the crime scene and as witnesses in court

Several studies have highlighted the importance of citizen action in this area. For example:

o A 1975 Rand study of criminal investigation procedures found that without the assistance of victims or witnesses in identifying a suspect, the chances of a successful investigation were slim.

o Other Institute research has highlighted the important role of citizens as witnesses in the prosecution of criminal cases. According to these studies, lay witnesses are the most important factors in obtaining convictions in the typical street crime offense. The greater the number of witnesses in incidents involving street crime, the greater the likelihood of conviction.

Once again, the importance of the citizen's role in providing information and assistance to the criminal justice system is emphasized. In turn, the effectiveness of the actions taken by police and prosecutors often depend directly on what it is citizens are able and willing to do in their role as a criminal justice resource and client of the system. Thus, citizen co-operation becomes a necessary (if not sufficient) condition for successful criminal justice operations.

Institute research has also examined some of the factors that influence citizen co-operation with the criminal justice system and found that victims and witnesses often view their involvement as a hardship because of repeated demands in their time, loss of income and inappropriate treatment as clients of the criminal justice system. As a result, citizens are often reluctant to participate and seek to avoid the personal and economic costs associated with such activity. The research has led to a number of recommendations for making the system more responsive to the needs and problems of victims and witnesses and to the development of programs and services that should encourage more useful citizen involvement in the criminal justice process.

Summary and Implications for Program Development

o The research findings indicate that citizen actions can help to reduce their vulnerability to residential crime and can also enhance

the operations of the criminal justice system. The importance of citizen actions in these areas needs to be emphasized with attention given to the role of the mass media and other mechanisms that can be used to educate and motivate citizens. The LEAA/Ad Council Campaign will provide a useful opportunity for this kind of program development.

o A major focus should be directed at enhancing neighborhood security along with private residential security since a neighborhood based approach should be more effective in dealing with the problem of displacement and is also more likely to be sustained. Thus, private security actions in and around the home should be encouraged in the context of more public-minded efforts designed to encourage natural surveillance, protective neighboring and bystander helpfulness.

o Program activities directed at promoting individual security actions (e.g., Operation Identification, Security Surveys, etc.) should be considered as part of a broader approach which encourages a neighborhood to examine its crime problems and then determine what solutions appear most appropriate and relevant in dealing with its problems. Emphasis should be given to both public-minded as well as private forms of citizen action.

o Some attention should also be given to informing citizens about the need to report certain crimes promptly recognizing that such action can influence police response and the subsequent outcome of actions taken in dealing with the crime. The expectations of both citizens and police need to be addressed, however, to insure that citizens are encouraged to act in ways that can be adequately responded to by police or that are based on realistic time frames. Information should also be provided indicating that citizen actions and behavior can play a vital role in influencing the criminal justice process as it relates to both investigation and prosecution.

o Continued efforts should be made to encourage the criminal justice system to be more responsive to the needs and problems of citizens as clients of the system. Programs and services to address victim and witness needs should be carefully evaluated and attention given to the possible field testing of several new approaches in this area.

B. COLLECTIVE CITIZEN ACTIONS[1]

Introduction

Although the individual citizen actions discussed in the preceding section are frequently achieved through programs directed at community groups, a number of other crime prevention activities are collective in nature, requiring groups of citizens to perform them together. Such "collective citizen action" programs will be discussed in this section. First, previous research findings will be presented for the two major types of collective programs: Citizen Patrol Programs and Surveillance/Crime Reporting Programs. This will be followed by a discussion of some of the research findings relating to Program Characteristics Facilitating Successful Implementation and to Program Evaluation, applicable not only across all collective citizen action programs, but to many individual and environmental programs as well. And finally, some Implications for Program Development suggested by these previous research findings will be briefly discussed.

Citizen Patrol Programs

There are two major types of citizen patrols: the Building Patrol (which performs screening and surveillance activities within a public housing project or other type of residential or commercial building) and the Neighborhood Patrol (which monitors and reports suspicious activity occurring on the streets and public spaces within a neighborhood or subneighborhood area).

Research findings[2] regarding program impact on crime, on citizen fear, and on police/community relations vary for the different types of patrols. The most positive impacts were found with non-public housing project Building Patrols, which appeared to be effective in reducing crime, increasing resident sense of security, and improving police/community relations. With Public Housing Project Patrols, however, only citizen/police interaction improved; crime and fear were not reduced, possibly because the patrol's screening activities could not keep out offenders who were often building residents themselves. Finally, Neighborhood Patrols were found to be least effective of all, with no evidence of positive impact on any of the three measures.

Citizen Surveillance and Crime Reporting Programs

There are two general categories of surveillance/reporting programs: Facilitative Programs (which encourage crime reporting by facilitating

---

[1] Subsection B discusses three Framework categories: "Collective Citizen Actions", "Implementation Methodology," and "Evaluation Methodology."

[2] Findings are only tentative and are taken primarily from the Institute's National Evaluation Program, Phase I Report on Citizen Patrol Projects (January, 1977).

its occurrence through the use of such devices as whistles, special telephone lines, and two-way radios) and Educative Programs (which encourage participation by educating the public about the value of collective surveillance and reporting as a crime prevention technique).

Although no definitive data have been collected on the long-term impacts of these programs on crime, fear, and citizen/police relations, some research findings do exist which relate to their more immediate impacts on the degree of surveillance and the number and quality of crime reports.[3] Of the three types of Facilitative Programs examined, two of them ("Whistlestop" projects and Special Telephone Lines) do not attempt to affect either the degree of collective surveillance or the quality of crime reports. However, although their single goal is to increase the number of crimes reported, there is no evidence of positive impact on frequency of reporting either. In contrast, the third type of Facilitative Program (Operation "Radio Watch") attempts to increase the level of surveillance and to improve both the quality and frequency of crime reporting carried out by drivers of taxis, trucks, and other radio-equipped vehicles. Suspicious activities are reported to the radio dispatcher who then informs police. Here the evidence is much more positive, showing increases in both the quality and number of crime reports received by police.

With respect to the Educative Programs which promote surveillance and crime reporting, positive impact seems to relate to the number of participants and their degree of personal interaction. In "Neighborhood Watch" programs, large numbers of residents are educated about surveillance and reporting through presentations made to civic or other groups, with little citizen involvement or interaction required after this initial presentation. These large-group, low-involvement programs show no sound evidence of successfully reducing crime, increasing resident sense of security, or improving police/community relations, nor do they substantially improve the frequency and quality of crime reporting. In contrast, in "Block Watch" programs, much smaller groups of neighbors are educated in face-to-face interactive settings, often with frequent follow-up meetings. Evidence suggests that these smaller, more intensive surveillance/reporting programs can have a more positive impact, resulting in improved crime reporting and even leading to improved police/community relations and reductions in crime and fear.

---

[3] Again, findings are only preliminary, relying primarily on the Institute's National Evaluation Program, Phase I Report on Citizen Crime Reporting Projects (April, 1977).

Program Characteristics Facilitating Successful Implementation

Research findings[4] suggest that certain program features contribute
to the successful implementation of collective citizen action projects
(and of individual and environmental programs as well). These imple-
mentation characteristics are discussed below.

1. Target Crime(s). Research suggests that programs which address
   specific crime targets tend to be more focussed in their activi-
   ties and generate more community interest than efforts directed
   against "crime in general."

2. Overall Program Goal(s). Area-specific crime problem analysis
   can be important in deciding on the program goal(s) appropriate
   for a particular target area. Undefined or all-encompassing
   goals are likely to lead to program failure. However, programs
   with a multi-problem focus can often be effective in attracting
   a wider range of participants and resources.

3. Program Objectives. Within each program goal, past research
   clearly shows the need for defining specific, realistic, and
   measurable program objectives which give focus to project
   activities and provide a standard against which to evaluate
   program success. Moreover, the adoption of short-term,
   immediate program objectives (such as "increased crime
   reporting" or "increased sense of security") in addition
   to the long-term, ultimate ends (e.g., "reduced crime")
   provide a more realistic focus for program activities and
   a more attainable measure of program success.

4. Sponsorship. Programs administered by police departments
   can call upon their "parent" organizations for financial
   and equipment resources, for professional expertise and
   technical assistance, for legitimization of their program
   activities, and for accountability. On the other hand,
   programs located in social agencies may also gain legitimacy
   and accountability, may command even greater financial re-
   sources, and are often able to increase their scope of
   activities to problems other than crime. And finally,
   since they are more highly-trusted by potential participants,
   programs administered by private citizens themselves may be
   most effective in recruiting new members from their local
   neighborhood communities.

5. Target Area. Regarding the geographical scope of program
   activities, a well-defined and limited target area is needed.
   For example, "the block" and "the building" are effective

geographical units for specific program activities (e.g.,
Block Watch and Building Patrols, respectively), while
"the neighborhood" is the most effective target area for
more comprehensive citizen action programs.

6. Recruitment. The most effective method for involving citizens
   in collective action programs is person-to-person contact between
   the program recruiter(s) and small, informal groups of neighbor-
   hood residents or businessmen. In larger, more formal group
   meetings, recruitment is less effective and mass media contact
   (when not used in conjunction with personal recruitment) is least
   effective of all.

7. Scope of Activities. Most successful citizen crime prevention
   programs combine a variety of collective and individual actions
   into multi-strategy program designs. In addition to their more
   efficient use of limited resources, such "umbrella" programs
   can attract residents interested in a variety of anti-crime
   activities and can be expanded to address an even wider range
   of social problems, thus increasing program utility.

Program Evaluation

Previous National Evaluation Program research consistently found that
the individual and collective citizen action projects they studied
had not been adequately evaluated. Many projects did not attempt
to assess the effect of their activities at all, while others based
their evaluations on incomplete, inappropriate, or inaccurate data.
Furthermore, many projects had chosen goals which were entirely
unrealistic, given program resources, or which were impossible to
measure within the time frame of the evaluation. Therefore, with
respect to all four Community Security programs studied (Operation
I.D., Security Surveys, Citizen Patrols, and Citizen Crime Reporting),
the findings clearly indicate a need for methodological research which
would examine procedures for obtaining accurate and useful program evaluation
measures with limited financial resources and expertise.

Implications for Program Development

Past research suggests that three of the collective citizen action programs
discussed in the preceding sections would provide potentially useful subjects
for program development, testing, and evaluation. These include:

Building Patrol Programs, excluding public housing project patrols.
Previous research findings suggest that -- properly designed and
implemented -- such programs could contribute to crime and fear
reduction and have a positive impact on relations between citizens
and police;

Radio Watch Programs. Where data exist, there is evidence that
these programs are both easy and economical to implement and can
improve the frequency and quality of crimes reported to police; and

---

[4] Findings are taken from a number of previous research sources, including.
(a) four Institute NEP Phase I Reports (on Operation I.D., Security Survey,
Citizen Patrol, and Crime Reporting Projects); (b) the Hartford Residential
Neighborhood Crime Control Program; and (c) several Exemplary Project
reports.

Block Watch Programs. Evidence suggests that, while larger neighborhood-wide programs are less successful, small face-to-face block groups, meeting on a regular basis, can be successful in improving crime reporting and police/community relations and in decreasing crime and fear within the area encompassed by the Block Watch program.

More important than these specific program testing recommendations, however, would be the development and testing of a program implementation model for carrying out a comprehensive community security program. The model should include the facilitating features of the five program characteristics (out of seven listed in the preceding section) for which preliminary research data exists: target crime(s), overall program goal(s), program objectives, target area, and scope of activities. A model of the implementation process used in the Hartford Residential Neighborhood Crime Control project would be well suited for this test since all five program features were carefully designed to utilize the recommended characteristics. Specifically, the "Hartford process" involved the implementation and evaluation of a precisely focussed crime control program, designed specifically to address particular target neighborhood crime problems and employing a variety of program activities (collective and individual citizen actions as well as team policing and physical design strategies) to reach both immediate objectives (such as reduction in fear and increased reporting) and long-term goals (of crime-reduction and neighborhood economic revitalization).

C. CRIME AND THE ENVIRONMENT*

Introduction

Perhaps the oldest tradition in criminology -- dating at least from the early part of the last century -- is the attempt to discover relations behind environment and crime. The bulk of this work, as Jeffrey points out, has emphasized offender areas (where criminals live), over offense areas (where crimes are committed). The first essentially asks the question "Why do people become criminals?", while the second asks "What converts a potential criminal into an offender at a specific time and place"? Either emphasis is appropriate to crime prevention, though most of the research that will be reported on here relates to offense areas.

NILECJ's crime-environment research activities began in 1969 and have since investigated the following: (1) The effects of public housing design on crime and fear, (2) The operations of burglars, and environmental factors which increase or lessen vulnerability to burglary, (3) Effects of street lighting on crime and fear, (4) The design and utilization of building alarm systems, and (5) Pilot studies of environmental influences on commercial and street robbery. Most of this research was funded in the early years of the program. In 1973, the emphasis shifted from knowledge-building to field applications; since that time the Hartford and Westinghouse demonstrations, and completion of the Newman work in public housing, have absorbed almost all NILECJ expenditures in the crime-environment area. Thus it is that much of the research work to be reported on here was not funded by NILECJ, and the findings, while highly provocative, are of uncertain validity given the modest scope of the research efforts. What this work may perhaps lack in quality it more than makes up for in quantity, however, so this review of it must be sketchy. A fuller treatment is included in the Appendix.

Residential Burglary

A large portion of crime-environment research has focussed on residential areas, a great deal of this has focussed on the crime of residential burglary. Factors influencing a neighborhood's vulnerability to burglary include distance from the metropolitan core, proportion of home ownership, neighborhood cohesiveness, neighborhood remoteness or accessibility, and amount of daytime occupancy. At the scale of the building site, vulnerability is influenced by block location, presence of alleyways, lighting, trees and shrubs, and ease of visual and acoustic surveillance. At the building scale, vulnerability is influenced by such factors as the number and location of ground floor doors and windows, security

---

* Subsection C discusses the Framework category "Environmental/ Technological Solutions."

provisions as available and used on these doors and windows, type of dwelling unit and number of floors, interior layouts and circulation, etc. As to the offenders, they tend to employ the simplest of skills and tools; younger offenders act more on impulse, closer to home, more often with accomplices.

There have been a number of demonstrations or field tests conducted in a variety of residential environments. Those having to do with security surveys, operation I.D., and block watch are reported on elsewhere. A 24-hour professional security guard controlling access to the lobby and to the building reduced fear, victimization, and vacancies in the Cabrini-Green housing project more than guards posted for 16 or 8 hours, more than no guard at all, and more than the citywide decrease. Lobby access control was defeated by tenants during hours of guard absence; a system to control internal movement between floors was similarly defeated. In the Bronxdale housing project, TV cameras in lobbies, elevators, and playgrounds could be viewed by all tenants in their apartments; the procedure was not effective in increasing reporting or reducing crime. In four Seattle walk-up housing projects, improvements to door and window security produced a 50% reduction in burglary. In a Cincinnatti townhouse project, door and window security improvements were combined with aesthetic improvements and walling of front and back yards; considerable improvements were noted in vandalism, burglaries and burglary attempts, and fear of assault. Comparable results were obtained in a similar project in New York.

NILECJ has conducted some residential demonstrations to test these approaches in real-life settings. All the demonstrations have certain characteristics in common. They begin with problem analysis and definition based on crime records and other data surveys, field reconnaissance, and interviews with representatives of all classes of actors. The process then moves through development of appropriate programs and activities, implementation of these programs, and ends with evaluation of their effectiveness. The programs involve physical changes, but also include management or institutional change, community organization, economic development, or other strategies as appropriate. The initial demonstration was in Hartford, Connecticut. Emphasis was placed upon the development of a "Neighborhood Enclave" model which employs access control, such as cul-de-sacing interior streets, and channels non-residents into pre-selected areas where police and residents' surveillance can be concentrated. A number of community techniques are also being used in addition to employing the police in innovative ways to complement and support the other basic strategies. The evaluation shows that burglary decreased in the study area while increasing in the rest of the city. A residential demonstration is also being conducted in Minneapolis, Minnesota. The Minneapolis effort is in its early stages and an evaluation of it at this time is not possible. The Portland demonstration was primarily commercial but included two residential blocks on each side in its programs. The evaluation results show that there was a 14% drop in residential burglary from February, 1976 to September, 1977 and a drop in the percentage of residents saying they plan or expect to move.

Crime in Commercial Settings

Research on commercial burglary and robbery is much more limited than the residential research. Robbery occurs most often between 6:00 p.m. and midnight which for most stores is near closing time; burglary occurs during closing hours almost exclusively. Vulnerable locations are said to be those on corners and locations which are near major streets but on a lightly travelled street, are surrounded by residential or vacant land uses, and have few immediately adjacent commercial neighbors or neighbors which generate low traffic. Microfeatures of the site itself which increase robbery vulnerability are primarily those which reduce or eliminate surveillance from the adjacent street(s), and the ability of store personnel to observe the exterior. These include parked cars, advertisements and displays in the windows, poor lighting, etc. Concealed or poorly lighted rear entrances increase burglary vulnerability; entry is most often forced with doors entered more than windows. Alarms malfunction or are defeated 50% of the time.

NILECJ has been involved in two commercial security demonstrations. In one involving convenience stores, employee training was a large part of the program. Physical modifications recommended included drop safes, keeping windows clear of merchandise and displays, lighting to provide visibility from outside, and no parking nearby anywhere except directly in front and visible from the counter. The evaluation effort, however, was difficult since implementation was left to individual store managers; there appears to have been some reduction in robbery, however. A commercial demonstration was conducted in Portland, Oregon along a declining commercial strip. Accomplishments were mostly in the area of street lighting, premise security surveys, and public transportation; extensive work has also been done with business groups, local government, and the media. Commercial burglary almost halved between February, 1976 and September, 1977; however, the businessmen perceived a reduction in crime since the early 1970's but not in the previous six months: Fewer of them plan or expect to move in the next two years.

Other Robbery

There is some limited research to report on spatial or environmental aspects of robbery. Fifty percent of robbery occurs in street, parking lots, parks, and other outside areas; 25% occurs in business or other non-residential buildings. The remainder is divided evenly between vehicles, residences, and other places. Of the residential robberies, two-thirds occur outside the dwelling unit in stairs, halls, etc., most occur in multiple dwellings rather than in single family units. Residential robbery by definition has to occur when people are home, or just arriving home, which appears to be a frequently chosen time. Adult robbers more often set out with the intention of committing a robbery than do juveniles.

Offender Travel, Streets, etc.

By examining simultaneously where offenses occur and where offenders

live, we can look for the same sort of distance decay and destination selection phenomena that we find in e.g., consumer shopping and entertainment trips. The principle is that while terrain closest to home is most familiar, it is also most quickly over-exploited since opportunities in theory increase as the square of the distance. Moreover, while the terrain is most familiar, so is the offender, creating problems of witnesses or retaliation; so also is the material goods, creating problems of subsequent recognition by the rightful owner, Thus, for home-based trips, factors tending to decrease distance are convenience, knowledge of opportunities, knowledge of escape routes and hiding places, and knowledge of the activity patterns of police and potential victims; factors tending to increase distance include recognizability of the offender in personal crimes and of the goods in property crimes, as well as the exponential increase in opportunities mentioned above.

The subject of offender travel leads to the question of the influence of street layout and accessibility on crime. In a journalistic study of the 12 safest neighborhoods in metropolitan Washington, D.C., distance from offender populations was an important factor but not the only one. Safe areas tended to enjoy access control by being bordered by expressways, parks, and the like, and by a small number of clearly defined entry points. They were away from main roadways, had little through traffic, and had confusing street layouts with numerous dead-ends. Other research has found less residential burglary along dead-end, cul-de-sac, and "L" type streets than on "T" or through streets, and more residential burglary on four-lane than on two-lane streets. Dwellings closer to arterials have higher rates than those two or more blocks away.

A number of studies have examined the relation between amounts of street traffic (vehicular and/or pedestrian) and the perceived safety of those streets from crime. More people on the sidewalks increase perceived safety unless most of them are strangers or outsiders. More vehicular traffic may decrease perceived safety by decreasing the use of sidewalks by residents. Street-closings are advocated by some as a way to increase the use and defense of an area by its residents, but at present the evidence is not at all conclusive. Street lighting is advocated by some for similar reasons; the evidence shows a reduction in perceived but perhaps not in actual danger.

Land Use Planning and Crime

The land use planning and zoning tradition holds that certain land uses are incompatible in close proximity to each other while other land uses benefit from such proximity; the dimensions of "incompatibility" have generally had to do with nuisance, ease of access, and economic factors. The impact on crime has received little attention. Some land uses may be said to breed or attract crime. Historically, tenements are an example of the first category and public baths, transient lodgings,

and monasteries of the second. Porno shops, massage parlors, and methadone clinics are contemporary examples. One study found disproportionate amounts of crime within 1/10 mile of bars; another found more residential burglary in blocks closest to commercial strips. Schools and parks attract offenders and increase crime in the vicinity of and along main travel paths to them. In other cases, the problem appears to be one of incompatible land use mixtures. Some evidence shows that the elderly ought not to be housed in the same buildings as poor teenagers; other data shows that moderate income units experience more fear, vandalism, and turnover when located in proximity to high-rise public housing. A very good predictor of violent crime levels in a community area was residential proximity of poor and middleclass families. More affluent dwellings within an area generally had higher rates of residential burglary. The strengths of negative correlations between income and victimization was lower for blacks than for whites in Philadelphia for robbery and in San Jose and Dayton for burglary; the presumed reason being that the operation of metropolitan housing markets makes it more difficult for blacks than for whites to locate away from offender populations as income rises.

Police Programs

Some have argued for the participation of the police in review of plans for buildings and neighborhoods to provide comments on environmental security aspects. One jurisdiction has produced a handbook of Crime Prevention Bulletins dealing with the design of residential, institutional, commercial, recreational, and industrial environments. Limited evidence is that police do not always agree with offenders and citizens on dimensions of environmental vulnerability; in fact citizens and offenders seem to agree more than police and offenders. Police contributions to design reviews would also be increased if more environmental information about crime scenes were routinely collected in incident reports and victimization surveys. It is not certain that analysis of vulnerable environments will enable us to design safe ones, but incident reports will of necessity be descriptions of where crimes occurred, not where they didn't.

School Security

The Broward County Schools Demonstration involved four high schools experiencing such crime problems as larceny, assault, burglary, and vandalism. Changes to parking lots, courtyards, teacher offices, and locker rooms attempted to increase natural surveillance of vulnerable areas. Scheduling and bus loading changes were intended to reduce congestion and potential conflict. Decorative changes were intended to increase sense of ownership. These changes have been installed; the evaluation results will not be available until June of this year.

Implications for Program Development

The research reported on above, as noted earlier, is in general modest in scope. Reported findings should therefore be viewed cautiously, especially as the basis for program implementation. Nonetheless, some suggestions can be made, as follows:

1. The Ad Council Campaign should make widely known what the homeowner can do against residential burglary, including the installation and use of door and window hardware, pruning of plant materials, design of walls and fences, neighborhood watch, etc.

2. There is some evidence from Portland that crime prevention security surveys can be effective in reducing commercial burglary, especially if combined with the organization of businessmen's groups. Small field tests of this approach may be warranted.

3. Street-closings may be a valuable technique against crime committed mainly by outsiders, especially when combined with e.g., neighborhood watch and similar programs. Many cities are closing streets for traffic diversion purposes. With minimal additional cost, field evaluations of the crime impact (with or without anti-crime programs) can be conducted.

4. The CPTED Demonstrations have utilized a process of problem analysis and strategy implementation which will be summarized and explained in the forthcoming CPTED Program Manual and Technical Guidelines. But field tests of these approaches and materials would be costly and time consuming based on past experience involving program implementation activities. Therefore, it appears that NILECJ efforts in this area would best focus on evaluation rather than the funding or conduct of tests. This evaluation would examine the extent to which communities have made use of the CPTED documents, and of the extent to which programs based on them have been effective.

The Research Framework presented earlier will be used to discuss current Institute research dealing with community security. The major topic categories presented in the Framework will be addressed, with attention given to the linkages between previous and current research in this area as well as new issues that are currently being examined for the first time.

Crime Characteristics

Past Institute research on crime primarily addressed burglary, robbery and rape. The greatest amount of attention has been given to the patterns and characteristics of burglary in order to provide a better understanding of the nature of this crime and means of preventing it. The focus on robbery and rape, while more limited, has also given attention to the criminal justice system response to these crimes of violence. Current Institute research on crime as it relates to community security is continuing to give attention to crimes that involve violence and which engender public fear. In addition, those crimes that have serious economic consequences for the individual and the community are also being addressed. These white collar crimes are based on guile and deceit and involve violations of trust with respect to the public, the business community and government. Both of these types of crimes (violent and economic) can have a significant impact on the quality of life in the community.

With regard to violent crime, collective violence is being addressed in terms of the nature and patterns of these incidents, with an effort being made to increase our knowledge and understanding about the descriptive, dynamic, causal and strategic aspects of various kinds of collective disorders. The purpose of this research is to learn more about the causes and incidence of collective disorders as a basis for developing strategies for prevention and control. In addition, research attention is being directed at the relationship between weapons and violent crime, examining such issues as weapons availability and determinants of use by offender and victims. This is an important area since handguns have accounted for a significant increase in the total number of homicides and serious crime-related injuries over the past ten years.

White collar crimes are being addressed because of their economic impact and because they generate lack of public trust and reduce social cohesion in the community. Attention is being given to crimes involving the public, business, and government. Included here is research on consumer fraud, employee theft, corporate illegalities, and fraud and abuse in government benefit programs. In addition, the Institute is supporting a Research Agreements Program at Yale University which is concerned with white collar crime. A NEP Phase I assessment of program activities dealing with shoplifting and employee theft is also being initiated. In each of these areas, the effort is directed at providing a better understanding of the nature and patterns of these kinds of offenses, the conditions that promote or constrain such activities and the role of agencies and organizations

in both the public and private sectors of the community whose policies and practices can have an impact on the prevention and control of these crimes.

Offender Characteristics

Current Institute research on the offender includes the Research Agreements Program with RAND dealing with the problem of career criminals - their characteristics, their criminal behavior and their interaction with criminal justice agencies. Some preliminary research efforts are also underway examining the relationship of drugs and alcohol to criminal behavior. The research on offender behavior is also giving attention to the motivations for various kinds of criminal activity - including a focus on employment and crime which is being examined through a Research Agreements Program with the Vera Institute.

Victim Characteristics

Past research on victims examined their experiences with crime and the criminal justice system. The research highlighted some of the major problems and needs of victims and also underlined the importance of examining various community mechanisms for assisting citizens who have been victimized and for dealing more meaningfully with victims as clients of the criminal justice process. Current Institute research on victims includes an analysis of the economic losses incurred by victims of assaultive crimes along with an assessment of the impact of compensation - both public and private - on victim behavior. An NEP Phase I assessment of various victim compensation programs is also being initiated. Other current research is directed at victim involvement in the adjudication process as well as the use of community mechanisms for resolving disputes. These community mechanisms are viewed as neighborhood alternatives to formal criminal justice procedures.

Physical Environmental Setting

Current Institute research on issues relating to physical environmental settings includes a study of Environmental Correlates of Crime and Crime Prevention Behaviors. Earlier NILECJ research, primarily in burglary, highlighted the value of a multidimensional approach; for example, the Reppetto, Scarr, Luedtke, and Malt studies used various combinations of police and victimization data; offender, citizen, and police interviews; and crime scene analysis. But only in the Reppetto residential burglary study were sample sizes and research methods adequate. It was decided, therefore, to employ a similar approach to the study of other forms of street crime, and to examine how offenders perceive and use the environment in the process of committing crimes, with a verification of this information based on an analysis of crime reports and crime scenes. These environmental indicators of risk and safety will be compared with citizen and police perceptions on the subject. The findings should have important implications for environmental design, police training, and citizen information and action programs dealing with crime prevention.

A Synthesis of Research on Environmental Factors Relevant to Crime and

Crime Prevention Behaviors will also be carried out. There is a considerable body of research in the crime-environment area, much of it funded by NILECJ, much not. None of this work has been subjected to independent replication, and the validity of some of it has been questioned by various authorities. For this reason, it was considered important to examine the methodological and conceptual soundness of previous research in the field, synthesize the results of these efforts, and indicate areas of strongest and weakest empirical support for current operating assumptions and postulates concerning the relationship between the environment and crime. This research will provide an independent and objective assessment of the relevant studies and their findings along with an indication of what the high-yield approaches have been in producing sound knowledge in the field.

Attention is also being given to the Relationship of Environmental Features to Informal Social Control Mechanisms and Crime Prevention. What has been called "defensible space" theory contains a large number of postulates on how environmental design can affect people's ability and willingness to exercise some measure of control over the areas they inhabit or frequent. Supporting research does not provide direct evidence for the occurrence of and effectiveness of the informal social control processes and behaviors that have been postulated, and/or for the specific environmental features which support these processes and behaviors and influence their effectiveness. There is clearly a need to examine the relationship of environmental factors to the operation of the informal social control mechanisms and processes which lead to individual and collective actions to insure safety and security. This research will utilize relevant social science literatures and findings to deepen our understanding of environmental influences on a variety of citizen mutual-aid behaviors. The research will have applicability for environmental design and citizen-oriented crime prevention activities.

Finally, the Relationship of Crime/Factors to the Process of Neighborhood Decline and Abandonement is also being addressed. This is a new research area for NILECJ, predicated on the need to understand better the process of urban blight since it so often is associated with intractible crime problems. This study will examine leading indicators of environmental change in the process of neighborhood decline and abandonment, and how these indicators relate to changes in the level of crime in the same neighborhoods. This research will enlarge our understanding of the abandonment process and the role that various community agencies in the public and private sector may be able to play in arresting it.

Social/Economic Setting

The Institute's past research has shown the importance of obtaining a better understanding of the various factors that provide a context for crime prevention activities. These needs are currently being addressed by the Northwestern RAP on Reactions to Crime and by a preliminary examination of societal Incentives and Disincentives for Crime Prevention Behavior.

The Northwestern RAP on Reactions to Crime is exploring the urban locales that are the settings for various kinds of crime prevention activities. Attention is being given to the types of crime prevention strategies selected by particular kinds of neighborhoods and organizations, the relationship of police services to various forms of collective citizen response, and the relationship between individual reactions to crime and participation in neighborhood programs.

While only preliminary findings are available at this time, Northwestern University's research on community reactions to crime indicates that it is important to consider the neighborhood context in which crime prevention activities are carried out. The research also highlights the relevance of informal social control in preventing crime and increasing security. This is consistent with experiences in Hartford and Seattle in which neighboring as well as private security actions influenced community security.

The planning study of Incentices and Disincentives of Crime Prevention Behavior is examining those factors that serve to promote or constrain crime prevention behavior in terms of policies, practices or regulations relevant to such behavior. These factors are being considered from an economic, legal and behavioral perspective.

Individual and Collective Citizen Action

The Institute's previous research on citizen action highlighted the need to learn more about the mechanisms for promoting and maintaining citizen involvement in various crime prevention activities. This need is currently being addressed in several new Institute projects. One of the studies will examine the use of the mass media in promoting citizen action with other research directed at the factors that influence citizen participation in crime prevention activities including the reporting of crime.

Research on the Media and Crime Prevention Behavior will examine issues relating to the role of the media, including an evaluation of the LEAA/Ad Council National Campaign that is being planned in this area. The evaluation will consider public exposure to the content presented, understanding of the various messages and their effects on behavior. Research on Citizen Participation in Crime Prevention Activities will examine citizen action in other areas that may be relevant to criminal justice and will devote particular attention to problem of maintaining effective citizen involvement. In addition, the Institute will examine the factors that account for delay in Citizen Crime Reporting in order to learn how to influence this process more effectively.

Institutional Activities

Institute research is currently examining a number of different institutional arrangements for dealing with crime prevention and community security issues. This includes research and evaluation efforts addressing Community Anti-Crime Programs and Area-Wide Crime Prevention activities which involve a variety of institutions and agencies in both the public and private sectors of the community. Attention is also being given to an evaluation of Neighborhood Justice Centers as alternative mechanisms for resolving community problems.

The Research Framework will be used to outline a number of problems and issues that relate to the major topic areas considered relevant to community security. The purpose is to suggest areas in which we need to increase our level of knowledge and understanding and to provide examples of some of the key questions that might be addressed.

Crime Characteristics

Both arson and homicide are crimes that appear to be increasing in frequency. Very little is currently known about the nature and patterns of various forms of arson as well as the characteristics of these crimes and trends in the incidence of arson over time. Likewise, more knowledge is needed about the various types of homicide and the patterns that exist involving the use of different weapons and the relationship of homicide to other crimes and forms of violence.

A recent LEAA sponsored Workshop on White Collar Crime emphasized the need to examine the nature and patterns of various forms of economic crime and the conditions that facilitate or constrain their prevention and control in the community. For example, attention needs to be given to computer-related crimes and the opportunities for illegal behavior that will emerge with the development of electronic fund transfer and other forms of new technology. More research addressing factors relevant to fraud and abuse in government benefit programs should also be carried out, with consideration given to the implications of these research efforts for other programs currently in operation or those being planned such as a national health program.

Offender Characteristics

More systematic research is needed concerning the relationship between physiological factors and offender behavior as well as more definitive studies dealing with the influence of drug and alcohol on the actions and response of different kinds of offenders. Longitudinal studies should help to provide answers about some of the relationships between offender behavior and the developmental influences of the family, peer groups and particular educational experiences.

While we clearly need to know a great deal more about the career criminal, we also must learn more about persons from high-offender areas who do not become criminals. What is different in their lives and the manner in which they respond to the problems they experience in their social and physical environment? These issues are worthy of consideration as well as the positive influences on the behavior of those persons who don't become offenders in neighborhoods and settings where many do.

Any discussion of crime prevention and community security brings up the displacement question: offenders can respond to obstacles by shifting times, locations, methods, victims, crimes, etc. One question is how offenders develop their understanding of the locations, opportunities and

techniques associated with their crimes of choice and possible alternatives. A better knowledge of this process should lead to the design of crime preventing programs which reduce displacement whenever possible.

Victim Characteristics

A focus on special groups of victims (such as the elderly) appears appropriate as well as studies of persons who experience multiple forms of victimization in order to learn more about the conditions that influence their victimization and the impact of crime on their lives. It would be useful to know, for example, if the elderly are in fact less frequent victims of crime in terms of the actual time they may be exposed to the risk of victimization in their homes or in public areas. We also need to know more about the factors that account for various kinds of multiple victimization if we are to prevent the recurrence of these events. Other types of victimization that occur in the home which result in child or spouse abuse merit attention in relation to the efforts being made to identify these victims and provide them with relevant forms of service and assistance.

More research is also needed on the involvement of victims in the criminal justice process in terms of procedures that are meaningful and useful to victims of crime. Participation in the process of adjudication merits special attention both as it influences the administration of justice and victim satisfaction and willingness to cooperate with criminal justice personnel in the future. Victim reactions to various community alternatives to formal criminal justice procedures continue to merit research attention as well as the effects of these approaches in reducing more serious forms of victimization that may occur if problems and disputes are not resolved.

Physical Environmental Setting

The Institute's future efforts in the crime-environment area will continue the shift away from costly field demonstrations toward focussed research explorations aimed at building knowledge of important relationships between environment, behavior, and crime. One part of this effort will be to make full utilization of appropriate formulations and literatures in relevant social science disciplines, so as to insure an adequate conceptual base for our research.

One area of interest would be to examine the conditions which define the applicability of our environmental security precepts. For the most part they were developed with respect to high-density low-income housing environments and we need to test their applicability to environments which differ along socioeconomic and architectural lines. A somewhat related research issue stems from the fact that some critics of the early Newman work reported knowing of examples which lacked many of the desirable environmental security features and/or had many undesirable ones, had the same general types of populations

and locations as the Newman examples, yet had acceptably low crime rates. If sufficient numbers of such exceptions can be found, an examination of them should yield a fuller understanding of the workings of environmental security processes and of its limits of applicability. On another related topic, past research has suggested that some dimensions of residential buildings influence safety. These include their relation to outdoor storage and activity areas, location of windows with respect to approach paths and outdoor areas, location of buildings with respect to eachother, details of door and window location and configuration, details of balconies and walls, entries and interior circulation arrangements, etc. Larger studies than those conducted to date should be conducted to give us a clearer idea of the importance of these design details than we now have, and of the conditions that influence their applicability. Finally, at the same time that we conduct research to examine the applicability of current defensible space precepts, it would be valuable to investigate the state of knowledge that clients, environmental designers, and planners currently have of environmental security strategies and practices. To what extent do they think about security at all? If they do attempt to address it in their projects, designs, and plans, what problems seem to be most important to them and how do they address them? To what extent do they conform to what we currently consider to be good practice, what are some key areas of neglect, etc.?

At a larger scale, a number of related research topics deal with environmental factors at the neighborhood level which may impact on safety and security. We are just now initiating research to identify structural factors and precursors of neighborhood decline and abandonment. Yet we know anecdotally that some neighborhoods, with no immediately apparent environmental advantages, do not fall prey to abandonment but instead endure for generations. Why are they considered worth saving, and defending if necessary, by their inhabitants? Are there significant features of building design and construction, and/or are there differences at the block, neighborhood, or city sector level that are associated with stability? What about such factors as patterns of ownership, locally-available employment, public and semipublic facilities, environmental amenities, accessibility vs. control, etc.? What is it about these neighborhoods which helps explain their durability? Or, to ask a slightly different question, some studies referred to earlier suggest that if we plot and then examine metropolitan crime maps, certain neighborhoods are seen to have unexpectedly low crime rates vis-a-vis their neighbors' rates. Some research indicates that environmental factors play a role, that these safe neighborhoods have some of the characteristics of a strategic enclave: clear boundaries, access control, isolation, internal visibility, etc. It would be well to look for more such examples and examine them more closely. They may contain valuable and tested design lessons. At the same time, we ought to determine whether they are pleasant places to live as well as safe ones; the notion of strategic enclaves is a militaristic one and suggests that the residents may become the prisoners of their own security measures. Still at the scale of the neighborhood, we are this year beginning to examine informal social control processes among populations

tions large proportions of whom are known to each other. These types of settings, in which so much of our time is spent, have received insufficient research attention in the past. At some point, however, we may also wish to examine those environments composed almost entirely of strangers, to determine what, if any, informal social control processes are at work in them, and to what extent, if any, they are affected by such environmental factors as surveillability, density, circulation flows, etc. These would be predominantly non-residential environments (e.g., shopping districts, transportation terminals, etc.), though some residential environments may be appropriate for inclusion also (e.g., the so-called "gold coast" apartment districts where residents may be partial or total strangers to each other).

Above the scale of the neighborhood is the scale of the city or metropolitan sector. We have earlier referred to some findings that suggest that land-use and transportation planners may influence crime by the way they mix land uses and affect transportation accessibilities. Research in residential areas has highlighted such factors as: accessbility, through traffic, boundary definition, proximity to nonresidential uses, presence of nonresidential uses, etc. In the nonresidential area, research has highlighted such factors as: accessibility, cluster vs. strip layouts, and character of surrounding residential areas. An examination of these and other questions of intrametropolitan crime patterns should provide a grasp of the effects on crime of land use and transportation planning decisions at the intrametropolitan scale, with hypotheses for closer examination in subsequent research.

One last environmental research area pertains to the need for better data. Tom Reppetto has said that investigating officers ought to collect more environmental information at crime scenes; victimization surveys might do so also. The difficulty is that the focus of the crime investigative process is directed much more at apprehension and conviction than it is at prevention. The immediate question that is raised is: What would be the yield, and at what cost? Immediate yields would be to crime analysis unit inputs to police allocation and deployment decisions. Longer range yields would be to researchers; a body of crime-environment information would be available for analysis that does not now exist. Our Environmental Correlates research grant will give us a better grasp of some of those questions; further consideration of research into environmental aspects of crime analysis should also be given. More generally, we ought to give thought to whether we have some data needs that can properly be incorporated into NCJISS activities. Perhaps more detailed environmental items can be added to our victimization surveys, but first research would be needed to suggest which items would be most preductive of research findings. Important areas would include physical environment characteristics of crime scenes and their relation to victim characteristics, travel patterns, and behavior. Finally, at the most general level, we may wish to recommend to other federal agencies that they consider inclusion of certain items in their own data collection efforts. For example, our Neighborhood Decline and Abandonment research grant may suggest important indicators which might be made available from HUD or Commerce as part of the various censuses and reports that they conduct or require. What valuable hypotheses can we not now test because the data are unavailable?

Social/Economic Setting

Few criminal justice system programs and operations are carried out in isolation; even as "closed" a system as Corrections must take cognizance of the environments into which the ex-offender is to be released. The socio-economic dimensions of communities, as they may influence the generation, prevention or resolution of crime problems, is an area that the Institute plans to devote more attention to. Our research efforts in this area are really just beginning, with such projects as neighborhood Abandonment, Unemployment and Crime, Reactions to Crime, etc. We need to know much more about the socio-economic milieu with which we will interact with our programs.

We need to start with the realization that "the community" is not static, but in fact is continually being modified by external events. Of special interest is the effect of government policies and expenditures, and judicial decisions, which together have vast influence on the operations of business, the movements of populations, the allocation of purchasing power, the use of land, and the structure of incentives and sanctions under which all of us operate. NILECJ will be giving a pilot look at some of these questions in its ten-year retrospective study of four cities, examining the relationship between various federal programs and other major political and economic events. Future research might take a more intensive look at the effect of all government and judicial activities at all levels (federal, state, local), and focus on effects in the communities experiencing serious crime problems or high rates of increase in crime.

The demographic composition of communities is another aspect that the criminal justice system ought to be more aware of, but facts are hard to come by. One hears, for example, discussions of "the" white ethnic, black, and hispanic communities, but it is far from clear that these typologies represent useful cultural and subcultural distinctions that are independent of e.g., social class and environmental settings. This would be an important research area for NILECJ. Some questions we might address are these: Does the demographic composition of communities vary systematically with the degree and type of crime problems in a way that could, if understood, lead to better crime prevention programs? Do communities vary demographically in their tolerance for crime and their response to and cooperation with crime prevention programs and if so, how can these differences be taken into account in the design and implementation of programs? Do communities vary demographically in the ability to prevent crime and maintain a sense of security and what can these "success" communities, if any, teach us that may lead to better programs. Do communities vary in the affection, cooperation, and sense of trust and mutual obligation that members feel for each other and what, if anything, might criminal justice system programs (e.g., Neighborhood Justice Centers) do to reduce animosities and increase cohesiveness? Ought we to consider different crime prevention prescriptions and approaches for demographically different communities, e.g., those with most adults at work, with many children, with many elderly, etc.?

One important aspect of community is its relationship with the nearby businesses that provide it with goods, services, and employment. While the relationship ought to be symbiotic, it often is characterized by charges of economic exploitation on the one hand and theft, robbery, and vandalism on the other. Since crime often appears to be part of the picture, NILECJ has an interest in determining if possible the conditions under which satisfactory relationships can exist between a community and nearby businesses, as well as conditions under which they do not. We are supporting the evaluation of a pilot demonstration in industrial security in Chicago, but more intensive research activity in the future may be warranted.

Our view of the socio-economic structure of communities and crime prevention should perhaps not be limited to consideration of the American experience. We might perhaps conduct comparative studies of community crime prevention processes and programs in a number of other nations, looking for commonalities and differences which might increase our understanding of these processes and improve our ability to design and implement programs. One case of special interest might be Mexico or Puerto Rico; by examining the operation of social control processes before and after migration to the United States, we might very well increase our understanding of these processes and what maintains them. This would be of general theoretical interest as well as of direct use in designing programs and approaches to our rapidly growing hispanic communities.

The crime prevention value of home ownership gets frequent mention and has also been incorporated implicitly into some HUD neighborhood stabilization programs. The topic is a timely one for research: conversion of apartment buildings to condominiums and a sizeable stock of rental single-family housing should provide a substantial data base for comparison. It should become clear whether, and if so through what processes, ownership can affect stability and crime.

Individual and Collective Citizen Actions

In suggesting possible future research topics, these two framework categories will be discussed together since many of the same research questions apply to both individual and collective citizen actions to increase community security. Several examples of potential research topics for future Institute study are outlined below:

Previous research has shown the difficulty of recruiting and maintaining the involvement of citizens in both individual and collective crime prevention activities. Therefore, a study which examined the relationship between a person's crime-related experiences, knowledge, attitudes, and behavior (including behavior involving community security actions) could suggest reasons why citizens differ in their participation and identify methods for increasing their involvement.

Past findings suggest that broadly-based community security programs (i.e., those targeted on multiple crime problems and/or encompassing a number of security actions) attract more participants and are of more lasting duration than those focussing on one problem or strategy alone. Further research could attempt to identify those combinations of crime and non-crime problems and/or of community security strategies which would be most successfully implemented and have the greatest positive impact on crime and fear.

Sponsorship for community security programs could also be a fruitful topic for future Institute research. Such a study might examine, for example, the relative effectiveness of police, social institution, and private citizen sponsorship for various types of collective and individual action programs.

A typology of citizen responses to crime might be developed which would enable the various individual and collective community security actions to be classified within a larger framework of crime reactions. This could show the relationship (if any) between the many different types of citizen responses to crime, permitting comparisons based on the typology classification (e.g., collective versus individual, defensive versus aggressive, and/or punishing versus rehabilitative). Knowing which patterns of responses often occur together could help program implementers target their recruitment efforts on the most likely program participants and could contribute to the development of optimum combined or multi-action programs.

Institutional Activities

Future research might also focus on strategies and practices of criminal justice and other social and civic institutions which impact on community security. For example:

Neighborhood team policing could be examined in detail in order to identify the specific program features (if any) which are critical to improving police effectiveness and relationship to residents in a variety of different neighborhoods. Although team policing programs have been evaluated in general for a number of cities, previous research findings have shown inconsistencies, suggesting that program features may vary in their effectiveness, especially if implemented in different types of communities. Therefore, future research which would study these issues could contribute to our understanding of how the police (as a criminal justice institution in the community) can most effectively impact on its security.

Similarly, research which would examine other criminal justice procedures or programs which require participation of or interaction with citizens could also increase our understanding of the criminal justice institutional impact on community security. Examples of topics which might be studied are victim/witness court procedures and community correctional programs.

Finally, future research which would examine the security-related policies and practices of non-criminal justice institutions could also contribute to our understanding of this "Institutional Activities" component of the research framework. For example, future research might examine such community institutions as the school, the church, the local government, the social service agency, and the insurance industry in order to determine if their formal and/or informal policies and actions can have a positive or negative impact on community security. Such research questions as the following might be addressed: Do these institutions support or undermine criminal justice and citizen efforts to reduce crime and increase the safety of community residents and users? Are there any institutional programs in practice which have provided an effective channel for community security activities? What (if any) structural and operating features of institutions are associated with a positive (or negative) impact on crime?

Environmental/Technological Solutions

We are and will be engaging in a variety of efforts to increase citizen participation in individual and organized crime prevention activities. We nonetheless are mindful of the limitations of this approach and plan to explore other avenues as well, for two reasons:

1. People often show considerable indifference to their own well-being. Participation in Operation I.D. type programs was modest, many refuse to use seat belts, many ignore cancer warnings on cigarette packs, many drive while drunk, unwed pregnancies continue to rise despite easily available contraceptive devices, etc.

2. Some of our notable successes in crime prevention have involved technological solutions: automobile anti-theft devices (at least for amateurs), bus drop-safes (combined with exact fare rules), airport metal detectors, dead-bolt lock ordinances, door and window standards, etc.

Both of these issues have been brought to the fore in the current controversies over (a) crash helmets for motorcyclists, and (b) air bags for automobiles. Both are frequently seen as attempts by government to force safety onto people at a cost (dollars and inconvenience) that they consider to be unacceptable; there appear to be distinct limits to people's tolerance of government regulations and intrusions for their own safety. But against this must be set the obvious advantages of technological/environmental arrangements which -- once in place -- operate continuously and effectively to provide increased security.

There are a number of topics which could be researched. One of these would attempt to assess the cost-effectiveness of increased expenditures of a given countermeasure to a given threat. We can evaluate the worth of incremental layers of body-armor material in terms of the protection afforded against the numbers and calibers of handguns used by criminals; can we do something similar for e.g., height and construction of fencing, sophistication of alarm systems, strength of building components, etc.? Another topic might be to see whether Operation I.D. types of procedures could be initiated "passively," either at the factory or at the point of sale, even for second and third owners as is accomplished in automobile recall campaigns. A third topic concerns whether we are making fullest use of available technology in the detection of fraud against government benefit programs. And a final topic is to seek out the optimal combination of technology and policing (public and private) for those neighborhoods where adults are at work or are elderly, and thus not amenable to defensible space approaches.

Implementation Methodology

Although a number of program implementation features have been studied sufficiently to enable program development and testing (see previous section on Implications for Program Development), others require further examination and could provide topics for future research. Several examples of such Implementation Methodology research topics are listed below:

> Program recruitment and sponsorship are two features which have not been sufficiently studied to justify proceeding with program development and testing. Further research could be conducted on each of these to identify those characteristics which are critical to successful implementation, given different types of community security programs, different types of program participants, different types of communities, and/or different types of crime problems.*

> Previous research findings have sometimes suggested that features of the target community might be more important in determining the success of program implementation than the features of the program itself. Future research might address this issue by examining whether different types of communities differ in their success at implementing all types of community security (and other) programs and -- if so -- by studying what (and how) characteristics of the community and/or its residents facilitate or hinder effective implementation.

---

* Program recruitment and sponsorship have also been discussed as possible future research topics in the section dealing with Individual and Collective Citizen Action.

Evaluation Methodology

Perhaps the most critical problem for future research is the development of effective Program Evaluation Methodology. The reliability and utility of all other community security program research findings depend on our ability to accurately and feasibly measure program effects.

Assessment of community security programs is a monumentally difficult task and can be accomplished imperfectly at best. The reasons for this include the following:

o   CS*programs occur in a "real world" setting, with uncontrollable occurrences which may impede or facilitate program impact in an unspecifiable way;

o   CS programs depend upon the voluntary activities of citizens which cannot be forced to conform to a particular experimental design for their initiation, intensity, or manner of execution. Thus, program evaluators must assess the impact of these activities without being able to control what they will be or how and when they will be implemented;

o   The ultimate CS program goal is to prevent an event (crime), and it is notoriously difficult to evaluate a non-occurrence;

o   Since many CS programs attempt to increase citizen surveillance and reporting to police, the most readily available measure of ultimate program impact -- (reduction in) reported crime -- cannot be used to assess program success within the short-term time period given to most evaluations;

o   At the same time, however, the more accurate measure of ultimate program impact on crime -- (reduction in) victimization -- requires a population survey, which is too expensive and technically complicated to be accessible to most program evaluators;

o   A complete evaluation of program impact requires an assessment of crime displacement in order to determine whether a reduction in target area crime following program implementation is actually due to successful crime prevention or whether it merely reflects a displacement to a different location or type of offense. Unfortunately, measuring displacement significantly increases the complexity and expense of program evaluation since crime rates must be measured in multiple geographical locations and for multiple categories of offense;

o   And finally, crime is a "rare event" and small, neighborhood-based CS programs often do not cover a large enough population to generate a statistically reliable number of occurrences for

---

* "CS" stands for "Community Security".

measuring crime rate changes within the local neighborhood target area itself. Moreover, the population covered would also be so small in comparison with total city size that even a large program reduction in target area crime would not significantly lower the overall city rates. This "rare event" problem is particularly severe for programs which limit their focus to certain types of crime, since this decreases even further the number of crime occurrences that can be included in an evaluation measure.

Given the problems outlined above (some of which cannot be avoided even in the best-designed and best-funded research), community security program assessment can probably never meet the standards required for a "perfect" evaluation. However, future research could attempt to identify assessment methods which would eliminate some and minimize other evaluation inaccuracies, thereby greatly improving the quality of our current program assessments.

END