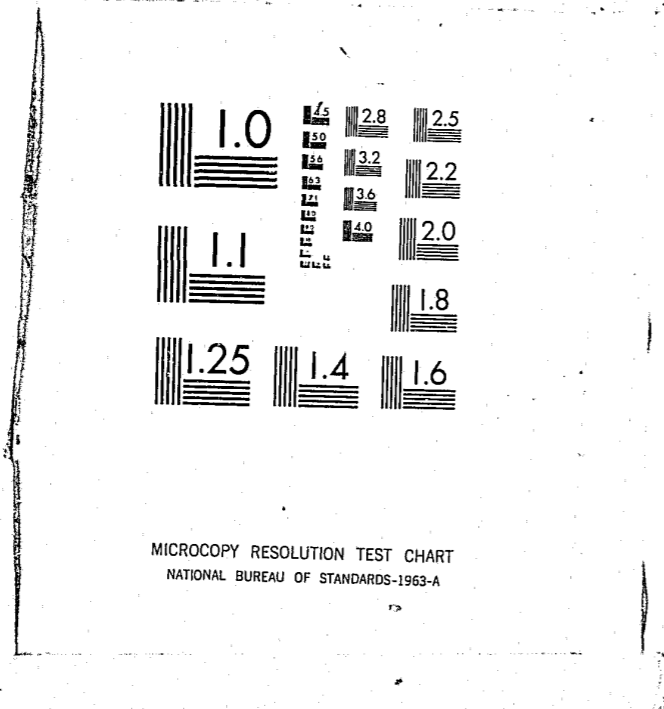


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Crime Prevention Through Environmental Design

An Operational Handbook

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Harry M. Bratt
Acting Director

Crime Prevention Through Environmental Design: An Operational Handbook

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National Institute of Justice

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INTRODUCTION

Our physical environment can have a dramatic effect upon our feelings and behavior -- and upon the way in which we view the behavior of others. Consider how you feel when walking down a dimly-lit street at night, as compared to your reaction to the same street at midday. Or how you react to a group of boisterous young people in a dilapidated neighborhood, as opposed to a similar group emerging from a college football game. Your reactions are apt to be very different, in large part because the settings are so different. In much the same way, most of us can recall occasions when we behaved in a manner that would have caused us acute embarrassment (or worse) if the surroundings were altered.

Does the physical environment therefore affect the crime rate? Even more significant -- since our surroundings are constantly changing, as a result of society's changing demands upon them -- is it possible to introduce security considerations into this process of change, as a cost-effective way of reducing crime and the fear of crime?

In fact, environmental design has been used for precisely this purpose throughout history. In the Middle Ages, the moats and gates around European cities were intended not only for military defense, but also to control access to the city by potential criminals, among others. When street lighting was introduced to Paris in the seventeenth century, it was designed in part to reduce crime in that city. Two hundred years later, the great boulevards of Paris were constructed in order to improve surveillance of criminal activity, as well as to improve the flow of traffic.

Interest in the environmental approach to crime prevention was stimulated by the writings of Jane Jacobs and Elizabeth Woods in the early 1960s. In her influential book, The Death and Life of Great American Cities, Jacobs argued that the basis for community security is a strong sense of social cohesion and a feeling of control over one's "home turf." Conversely, she suggested, an area is less attractive

to criminals when the streets are bustling with activity and opportunities for surveillance.

Elizabeth Woods was particularly interested in public housing. She observed that paid surveillance, whether by police or private guards, could never exert the control provided by an involved and interested community. The physical design of a project, she wrote, should encourage surveillance and enhance the ability of a family to identify with and defend its dwelling and nearby shared areas.

In 1969, the National Institute of Law Enforcement and Criminal Justice -- now the National Institute of Justice -- began a series of research projects to assess the relationship between the physical environment and the citizen's vulnerability to crime. An early result of this effort was Oscar Newman's Architectural Guidelines for Crime Prevention, published in 1971. Newman suggested that the design of public housing affects both the rate at which residents are victimized and the public perception of the project's security. Among the significant design features: building height (the lower the better), the number of apartments sharing a common hallway (the fewer the better), lobby visibility, entrance design, and site layout. Newman argued that physical design can encourage residents to assume the behavior necessary for deterring crime, and he coined the term "defensible space" to describe this phenomenon.

In order to test and refine the assumptions of the environmental design approach, the National Institute then sponsored a series of demonstration projects, which were complemented by the work of other Federal agencies and by projects developed at State and municipal levels. Thus, in 1973, the Institute funded the Hartford (Connecticut) Neighborhood Crime Prevention Program (1). This project had two concerns: the role played by the physical environment in reducing criminal opportunity, and the relationship of the environmental design strategy to more traditional approaches (such as police and citizen crime prevention efforts). The Hartford project included an evaluation of its effects on crime, fear, and citizen attitudes toward the police. An especially valuable by-product was practical knowledge on how to analyze crime-environment problems and how to evaluate this kind of multi-strategied crime prevention program.

(1) For a description of this project, see Reducing Residential Crime and Fear: the Hartford Neighborhood Crime Prevention Program, available through the National Criminal Justice Reference Service, PO Box 6000, Rockville MD 20850. A follow-up evaluation is planned for publication in 1981.

In 1974, the National Institute began a program of Crime Prevention Through Environmental Design -- CPTED, as it came to be called. The program was conducted by a consortium headed by the Westinghouse National Issues Center. Again, the purpose was twofold: to expand our knowledge of how to implement these projects, and to examine the utility of the environmental design approach in diverse settings. The CPTED demonstrations included a residential neighborhood in Minneapolis, Minnesota; public schools in Broward County (Fort Lauderdale), Florida; and an urban commercial strip in Portland, Oregon (2). As in Hartford, these demonstrations involved a range of strategies -- such as citizen, managerial, and law enforcement efforts -- in addition to physical changes. The demonstrations were also subject to careful (though short-term) evaluation.

The results were mixed but generally encouraging. The Portland commercial demonstration achieved a significant reduction in target crimes and in the level of fear expressed by legitimate users of the area. The Broward County schools demonstration also seems to have achieved some of its targeted reductions, although evaluation problems do not permit a more confident statement than that. The Minneapolis residential demonstration had disappointing results, but other projects in the same city, as well as the Hartford Neighborhood Crime Prevention Program, support the usefulness of the environmental design approach in residential settings. It should be stressed, however, that the CPTED approach is still new and not yet thoroughly understood with regard to its implementation and effectiveness.

The CPTED Process

CPTED is an attempt to reduce crime and fear in a target setting by 1) reducing criminal opportunity and 2) fostering positive social interaction among the legitimate users of that setting. The emphasis is on prevention rather than on apprehension and punishment. CPTED is therefore distinct from the more

(2) For descriptions of these projects, see three documents published under the general title of Crime Prevention Through Environmental Design, and respectively subtitled Final Report on Residential Demonstration: Minneapolis; The Portland Commercial Demonstration; and The Broward County Schools Demonstration, all available on loan from the National Criminal Justice Reference Service. Executive Summaries of the Broward and Portland demonstrations, and a reevaluation of the latter, are also available from NCJRS. See also Evaluation of the Minneapolis Community Crime Prevention Demonstration: Executive Summary, available from the Minnesota Crime Control Planning Board.

traditional approaches to crime control, which generally seek to discourage the development of criminal behavior -- or, failing that, to apprehend criminals and remove them from free society. Like preventive medicine, then, CPTED takes a "proactive" rather than a "reactive" approach to the problem.

A principal means by which CPTED attempts to achieve this goal is by modifying the physical features of the target setting. For example, it offers methods for designing or redesigning buildings, commercial areas, institutions, and even entire neighborhoods in order to reduce crime and fear. These methods may be as sophisticated as Oscar Newman's design directives for public housing projects, or as simple as a street-lighting program.

However, CPTED is not limited to physical changes. Modifications to the physical setting can have their greatest impact when they are designed and implemented with the active support of those individuals, organizations, and businesses who use the target setting. In the CPTED approach, then, "environment" includes not only the physical aspects of the setting, but social programs, managerial approaches, and law enforcement efforts as well.

Because CPTED is specific to the setting in which it is applied, each such program must be designed to suit local problems and resources. Nevertheless, all CPTED projects are alike in that they are based on a common process. In the first place, the approach is cross-disciplinary, involving community organizers, criminal justice and city planners, urban designers, and criminologists. It is also a participatory process, for it not only brings these various specialists together, but the users of the environment as well.

Furthermore, CPTED is a flexible process. It can focus on a single block or an entire neighborhood. It can address the problems of a commercial strip, a residential area, a school district, or (presumably) a transportation network. CPTED projects can begin at the grassroots, as when a tenant group decides that something must be done about crime and fear in a housing project; or they can be initiated at the top, as when the mayor's office chooses this approach as the basis for a crime-prevention program.

Finally, CPTED is an iterative process -- that is, it proceeds from a preliminary assessment of the problems and options to an ever-more-accurate appraisal of them. Each new level of analysis, combined with an evaluation of completed actions, can lead to a better understanding of the project's strategies and objectives.

Designing a CPTED Project

Another element common to most CPTED programs is that they go through several distinct stages, which may be identified as:

- 1) The initiation phase, in which the decision is made that the crime-environment approach is appropriate to the target setting.
- 2) The analysis phase, in which local problems and resources are subject to a rigorous study.
- 3) The planning phase, in which appropriate CPTED strategies and tactics are selected, funding sources identified, and personnel recruited to carry out the project.
- 4) The implementation phase, which is the culmination of the entire process.
- 5) The evaluation phase, which may or may not be included, but which is generally a part of any large CPTED project.

This handbook follows the sequence of a typical CPTED project, from initiation to evaluation. However, it would not be possible to study each section of the handbook as if it were an assembly manual for a bicycle or a television set. The several stages can usefully be regarded as following one another in time, but aspects of each of them can be found in almost all the others. Analysis, for example, occurs from start to finish -- tentatively at first, then with greater rigor. Similarly, evaluation appears last in the sequence, but the decision to evaluate must be made early, and the data for the evaluation must be gathered during the intermediate stages. CPTED planners will therefore find it essential to refresh themselves from time to time as to where they have been and where, exactly, they hope to go.

Phase One:

PROJECT INITIATION

CRIME AND OPPORTUNITY

Schlomo Angel noted that street crimes in Oakland, California, tended to occur in areas with enough pedestrians to provide a choice of targets -- but not so many as to greatly increase the offender's risk of being recognized or apprehended (1). In more general terms, offenders choose their targets through a decision-making process in which they weigh effort and risk against the potential payoff. Because opportunities for crime are not equally favorable in all environments, certain areas suffer from a higher rate of crime than others. This explanation of the distribution of crime is called the "opportunity hypothesis."

Research offers some insights into the dimensions of opportunity as perceived by the potential criminal. These include the distance from the offender's residence to the target, the ease of access to the target, the land-use mixture to be found there, and the time of day or week.

* Distance. Research into the geography of crime concludes that offenders, in the aggregate, minimize the distance between their place of residence and the location of their victims. Several factors support a choice of nearby targets, including convenience, familiarity with the opportunities there, and knowledge of access and escape routes. (Other factors make nearby targets less attractive, of course, notably the greater likelihood that the offender will be recognized and that the area may be over-exploited.)

* Ease of movement. The incidence of crime in an area also seems to be related to the ease with which an offender can move to it and through it. A study in Minneapolis, for example,

(1) Schlomo Angel, Discouraging Crime Through City Planning, College of Environmental Design, University of California, Berkeley, 1968.

showed less residential burglary along dead-end and "L" streets than on "T" or through intersections.

* Land Use. Certain land uses are also associated with crime. An isolated commercial establishment (such as a grocery store in a residential area) seems to be more vulnerable than a similar establishment in commercial areas. Porno shops, massage parlors, and methadone clinics also seem to be magnets for crime. One study found a disproportionate amount of crime within a tenth-mile radius of bars; another found a higher concentration of residential burglaries in blocks close to commercial streets. Schools and parks also seem to increase the amount of crime in their vicinity and along their access routes.

* Time. Commercial robberies, street robberies, and stranger-to-stranger assaults occur with greater frequency at night, particularly in the late evening hours. Commercial burglaries occur more frequently on weekends, when most of these establishments are closed. Purse-snatching is more common during the middle of the week, when housewives tend to do their shopping.

The perception of target characteristics is not always straightforward, since one aspect of the setting may make it an appealing target while another militates against that choice. Criminal opportunity is the result of a complex set of evaluations, including not only the weighing of positive and negative factors, but also the experience of the individual offender and his or her motivation for the present act.

The "opportunity hypothesis" is the basis for all CPTED programs. If crime is significantly influenced by the opportunities available in a particular setting, then it should be possible to affect the crime rate by modifying the opportunity structure. This goal can be achieved either by increasing the perceived risk or effort necessary to commit the crime, or by reducing the number of available targets.

LEGITIMATE USERS OF THE ENVIRONMENT

The same environmental factors which are seen by offenders as supporting opportunities for crime will probably be seen by legitimate users of the setting as increasing their risk of becoming victims. People tend to be more afraid at night, for example. These perceptions can lead to changes in behavior, intended to reduce the risk of victimization but actually working to make the area more dangerous: when people avoid a setting, they remove an element of surveillance from it, and thereby increase the likelihood that criminals will

find it a congenial environment for victimizing those who do use the area.

Again, the equation is not always straightforward. Citizens may perceive an area to be dangerous while the police regard it as relatively safe. The reason may be "incivilities" -- drunkenness, rowdy behavior, or untidiness -- as opposed to actual crime. Or a particular population may feel itself to be threatened by another population: teenagers loitering on street corners, for example, are especially threatening to the elderly. A third possibility is that the neighborhood is undergoing changes in its ethnic or racial composition.

Areas in which social networks are strong seem to have lower levels of crime and fear. Certain environmental features encourage the development of social cohesion and helping behavior: clearly defined communal areas, for example, tend to promote surveillance and also set the stage for interpersonal contacts. (On the other hand, when facilities are shared by too many people, they can have the opposite effect, adding to the distrust and anonymity which their users feel.)

DIMENSIONS OF OPPORTUNITY CHANGE

A crime-prevention program which makes offenses more difficult to commit, but which at the same time increases fear among the legitimate users of an environment, will probably be self-defeating. It is therefore appropriate to think of CPTED as affecting the "opportunity structure" of the environment as a whole, rather than merely reducing opportunities for crime.

There are four general approaches to opportunity change: movement control, surveillance, activity support, and motivational reinforcement. (These categories will appear again as the principal CPTED strategies in part three, Project Planning.) Each approach involves the actions and perceptions of both the potential offender and the legitimate users of a setting.

* Movement control. As stated above, offenders tend to choose targets that are nearby and which offer several routes of escape. These research findings suggest that criminal opportunity can be reduced -- i.e., the perceived risk to offenders increased -- if movement in a setting is restricted or controlled. This can be done by limiting the use of streets, paths, and corridors to their regular and legitimate users. Real or symbolic barriers can inform outsiders that the environment is restricted; doormen or guards can screen admission.

Movement control can also be achieved through the use of hardware, such as locks or gates. Regardless of its form, the objective is to put offenders at greater risk of detection and apprehension if they should attempt to engage in crime.

* Surveillance. The effect of surveillance is to put the offender under threat of being observed, and therefore identified and apprehended. Surveillance can be formal, as when police or private security guards perform regular checks of an area. It can be accomplished by mechanical means, as when closed-circuit TV is used to monitor commercial establishments, residential lobbies, or even public streets. It can also be informal, as when the legitimate users take note of strangers and perhaps inquire as to their business. (All three forms of surveillance can also occur simultaneously, supporting one another.) Surveillance can be enhanced by appropriate architecture and site design. Keeping store windows free of clutter, installing windows in lobby areas, positioning elevators near entry doors -- these and other techniques can aid in the observation of an area by any of the means mentioned above. Of course, these techniques cannot guarantee that people will actually engage in surveillance -- or that, if they do, they will intervene in person or by reporting suspicious behavior to the police.

* Activity support. Encouraging existing activities, or introducing new ones, helps legitimate users to become acquainted with each other and therefore better able to notice strangers. Activities can also encourage legitimate users to develop a sense of proprietary "right" to the area. This in turn may affect the offender's perception of risk.

* Motivation reinforcement. Jane Jacobs observed that surveillance is an ineffective deterrent unless observers actually intervene when they observe a crime or suspicious event. Positive motivation can be encouraged by activities and management techniques that alter the scale of large, impersonal environments and give individuals a sense of authority over a smaller domain. Economic and social incentives -- such as reduced insurance premiums for those who adopt certain security measures -- also come under this heading. Finally, motivation can be supported when people are educated as to the effect of their own activities and behavior upon the crime rate.

These "dimensions" or strategies do not operate in isolation. Natural surveillance is reinforced by activities which bring legitimate users into contact with each other; it is similarly supported by a system of movement control that channels strangers along designated paths, rather than giving them access to all areas; and by social programs which enhance the users' responsibility for and authority over a particular domain. Moreover, the effect of several opportunity-reduction

measures is not simply additive. Rather, such measures may enhance each other, providing a synergistic effect -- one in which the sum of efforts is far greater than the total effect of individual efforts taken singly.

MECHANISMS FOR CHANGE

Another useful way to categorize changes in the opportunity structure is to determine whether they are physical or not -- and, if non-physical, whether they are rooted in the social structure, in management policy, or in law enforcement activities. (Again, these labels will be used in part three to help categorize specific tactics for the CPTED planner.)

* Physical. Many CPTED measures are intended to create, eliminate, or otherwise alter some physical aspect of the environment, in order to change its opportunity structure. These may be directed toward movement control (closing streets to through traffic), surveillance (better lighting, larger windows), activity support (tot lots, laundries, seating areas), or even motivation reinforcement (public housing designed in a manner calculated to instill pride in its occupants).

* Social. These are changes which encourage the legitimate users to interact and follow appropriate behavior. A fundamental example is to involve citizens in the CPTED program itself -- the crime-prevention program thus becomes an activity which brings people together in a constructive way. Social measures can also promote surveillance and movement control, as when "house-watch" or "whistle-stop" programs organize people to take responsibility for their neighbors' property and personal safety.

* Management. Other changes involve some management or administrative agency that is responsible for a particular setting. Since streets are under municipal control, changes in their design necessarily involves city departments. Municipal authorities can also incorporate security standards in the local building code, or adapt zoning ordinances to achieve a more desirable land-use mixture. Other management structures, both public and private, may be in a position to motivate citizens to comply with crime-prevention recommendations. Finally, management practices can influence the crime-opportunity structure by changing the number of people who use the setting at certain periods of time -- for example, by modifying work schedules or classroom periods.

* Law enforcement. A fourth group of changes involves the police, private security guards, or some component of the

criminal justice system. For example, cooperation between citizens and law enforcement authorities can greatly enhance surveillance, either through a formal crime-reporting program or simply by assuring citizens that their problems will receive attention.

Of course, these physical, social, managerial, and law enforcement approaches are often combined in a specific CPTED project. What is essentially a physical mechanism -- such as "hardening" the rear access to commercial establishments by installing improved locks and bolts -- may involve other approaches as well. The recommendation to pursue target-hardening may come from the police department as part of a security survey, or it might be inspired by municipal authorities as a result of a new security ordinance. Insurance companies might provide economic incentives for compliance, or a business organization might use its purchasing power to acquire and install the recommended hardware at a lower cost. Finally, implementation of the target-hardening approach might well involve employee training, to ensure that the new hardware is used to best advantage.

The overlapping of change mechanisms serves to illustrate the interactive nature of a CPTED program, which must deal with the total setting rather than with a single problem or issue. Furthermore, while objectives and solutions are suggested here from time to time, the planner must always remember that each CPTED program is specific to its setting. Two communities may have the same crime problem -- residential burglary, say -- but the same solution may not be appropriate for both. The pattern of crimes may differ, as may the communities' resources to combat the problem. Successfully applying the CPTED approach depends on recognizing and utilizing the particular circumstances at the site.

APPROPRIATE CRIMES AND SETTINGS

CPTED operates by altering the opportunity structure of an environment. Obviously, certain crimes are more amenable than others to this approach. Several characteristics of the crime and fear problems must therefore be considered before deciding on a CPTED-based strategy. First, do the target crimes involve strangers? In cases of rape, the offender is often acquainted with his victim; the choice of victim may therefore be unaffected by environmental factors (although such factors may indeed affect the time and place of the assault). Similarly, CPTED strategies may be more effective in controlling outside intruders, and less effective when the offenders are themselves residents of the building or neighborhood in question.

Second, is there a range of targets for these crimes? Commercial burglaries can usually be committed in several different establishments; the criminal's choice may therefore be strongly influenced by environmental features. By contrast, the professional arsonist is limited to a particular target -- the building he or she is hired to burn -- and is much less likely to be influenced by deadend streets or even improved hardware.

Finally, do the crimes involve an element of spontaneity? A carefully planned attack on a specific target may be less affected by CPTED strategies.

In general, crimes that are specific to one particular victim, setting, or time are less amenable to the CPTED approach than are crimes which could just as easily be committed against a variety of targets or over a broad range of time. The environment must also be taken into account. A large, undifferentiated setting, populated mostly by strangers, is not as appropriate to the CPTED approach as one containing regular users, for whom a sense of proprietary right can be established or enhanced. It may also be the case that both the crimes and the setting are appropriate but the users are not. In an area suffering from high unemployment or major physical deterioration, for example, the idea of organizing to prevent specific crimes may strike the residents as having a low priority. Similarly, where relations between citizens and the police are tense, a program based on police-community relations will have an uphill fight just to get started. In choosing a project site, then, consideration should be given to the entire range of opportunities and difficulties which it presents.

THE PROBLEM OF CRIME DISPLACEMENT

If the opportunity to commit residential burglaries is reduced, won't offenders simply switch to a different neighborhood or to a different kind of crime? Just this kind of displacement foiled a New York City Transit Authority effort to make subway change booths more difficult to rob. There was indeed a decline in subway robberies -- and a simultaneous increase in robberies on transit busses.

The opportunity model of crime reduction does not overlook the possibility of displacement. However, it assumes that a certain unspecified (but presumably significant) amount of crime would not occur at all if opportunities were not readily available. For example, teenagers engaging in vandalism might look to other, less destructive pursuits if the areas they defaced had better surveillance or were perceived to be the territory of specific tenants.

The possibility of displacement, however, should serve as a caution: environmental strategies implemented today with effective results may have decreasing efficacy over time. CPTED is not a recipe for crime prevention or a set of formulas whose implementation will assure lower crime rates, now and forever. Rather, it is a process designed to reduce criminal opportunity by enabling a community to identify its problems of crime and fear, to respond to those problems, and to evaluate the effectiveness of its response so that even better programs can emerge in the future.

ORGANIZING A CPTED PROJECT

Five distinct activities take place during the initiation phase -- though once again, they overlap and interact in practice. The first task is to review the CPTED concept and decide whether it holds promise in the local situation. A site must then be chosen for the project, and its scope and goals must be clearly set forth. That done, a preliminary work plan can be drafted. The final task in this phase is to prepare a detailed management plan.

REVIEWING THE CONCEPT

The most fundamental decision to be made is whether or not CPTED is a valid approach to the crimes and the setting which concern the originators of the project. As suggested in the last chapter, CPTED is directed at crimes of opportunity. It works, in large part, by motivating and supporting the legitimate users of the environment. It is therefore unlikely to be effective against deliberate, calculated crimes; nor is it likely to be effective against crimes that occur when the users of the setting are absent from it. To assess the applicability of CPTED may therefore require a careful (if preliminary) study of the crimes occurring in the target site, as well as the behavior of the site's legitimate users.

Furthermore, CPTED requires a considerable, sustained community organization. Typically, it involves cooperation between agencies and departments which do not have an established service relationship with one another. It also requires cooperation (or at least interaction) between community groups which may feel themselves to be competitors. Finally, it requires a great deal of police-community interaction. It may be possible to create all the necessary relationships through the program, but sometimes the effort is simply too great.

Clearly, CPTED is not the only approach to crime

prevention. Given a particular problem or setting, other preventive programs may be more expedient; these alternative approaches should be identified, and their cost and potential effectiveness reviewed. In doing so, the planner should consider ancillary benefits as well. Thus, a CPTED project may serve as a catalyst to strengthen local organizations, and to build relationships between them and various funding agencies. It may also provide a means to cut across agency boundaries and develop a cross-disciplinary approach to urban problem-solving. Finally, since CPTED involves multiple strategies and objectives, it may be more readily integrated with existing or planned neighborhood improvement projects.

SELECTING A SITE

If the CPTED project was initiated by a local user group, then the setting was probably determined at the outset. Otherwise a target site must now be selected. Certain practical considerations may influence this selection, including the type of crimes (or crime-related problems) to be found within it; the potential for local community support; the existence of related programs, operating or planned; and the availability of data on crime and environmental conditions.

* Type of crime. As stated above, crimes occurring in the proposed site must be amenable to the CPTED approach. Alternative settings should be compared in terms of the type and severity of crimes (for example, the incidence of street muggings or commercial burglaries) and in terms of the size of the population at risk. Local perceptions of the crime problem should also be considered, as should the direct and indirect impact of crime on the area's quality of life.

* Local support. It is not enough to observe that there is a high incidence of crime at the site, in order to conclude that crime is therefore perceived as significant by the users. Citizens may actually place a relatively low priority on crime reduction. Furthermore, their attitudes toward the causes and prevention of crime may differ significantly from those of the planners -- for example, that keeping children off the street is a more potent response than closing that street to vehicular traffic. Project initiators might very well consider an educational program to build community support, but they will probably find it easier to work with a population that is already receptive to this approach to crime prevention.

As important as citizen perceptions is the local organizational structure. Do local decisionmakers support crime prevention efforts? Have local organizations already taken

part in some kind of prevention program? And, more generally, what kind of neighborhood improvement activities have these organizations been involved in? Research shows that, while a relatively small number of people may join community organizations, it is these organizations and their members that are likely to engage in collective crime-prevention activities. Therefore the strength and quantity of local organizations should be considered when choosing a target site.

* Related programs. Other programs, existing or planned, can provide funding assistance and expand the scope of CPTED strategies. The presence of such programs may also provide evidence of the community's ability to organize for crime-prevention activities.

* Availability of data. Since CPTED is based on careful analysis of crime-environment data, sites in which this data is already available (and available in some analyzed form) are greatly to be preferred. Attention should also be given to the geographical scale at which the data is reported -- by census tract, police precinct, city ward, or whatever. Data which fits over the same geographical area is easier to integrate into the overall analysis. Finally, the accessibility of the data to the planning group must be considered.

When one or more potential sites have been identified, a preliminary analysis of them should be conducted. The first step is to collect reports of municipal departments and other organizations, including census data, police summaries, reports of city agencies such as health and welfare, and urban design information such as traffic counts and land-use patterns. (Note that this kind of material may have already been collected and analyzed by urban redevelopment planners or some other earlier planning effort.)

This information relates to the objective characteristics of the site. Sources of subjective information should also be exploited, in order to discover what perceptions the users of the setting may have of its problems, and what they believe are the salient issues to be addressed in improving the environment. A list of key persons and organizations should be prepared. Perhaps the easiest way to do this is to start with one community group, asking its members to list other relevant groups and organizations; these will be solicited in turn for additional names. As the list grows, certain individuals and organizations will appear more frequently than others. Meetings are then scheduled with these key persons and organizations, both to assess their perceptions of the issues and to solicit their eventual support. The same meetings can serve to explain the nature and objectives of the CPTED effort, and what outcomes can reasonably be expected from it.

Perhaps the most critical issue to be faced in a large-scale project is the availability of the resources -- money, personnel, and facilities -- for planning and implementing the crime-prevention strategies. In most communities, there will be one or more related programs which can be enlisted in this effort. A survey of them should now be made, detailing their objectives, time schedules, manpower, and equipment. In addition to direct support, such programs can also be used to develop and extend the CPTED effort, perhaps even by modifying their objectives to include security considerations.

Finally, the planning team should begin funding inquiries at this stage. CPTED projects often involve physical modifications that are both costly and time-consuming; if the funding process does not begin now, the project is likely to experience excessive delays between approval and implementation. Physical, social, economic, and other conditions may change significantly in the meantime. In particular, a prolonged delay can erode the community interest which is essential to the success of the project.

DEFINING SCOPE AND GOALS

The preliminary analysis may suggest that the boundaries of the target site should be adjusted. In the Hartford residential demonstration, efforts were concentrated in the northern portion of the chosen neighborhood; in Portland, the commercial strip was divided into three sub-areas, each receiving a somewhat different emphasis. The geography of a project can be modified for a number of different reasons -- funding considerations, the availability of data, or the existence of a planning or service district. In addition, any project which attempts to reduce crime has the potential for displacing that crime to adjacent areas. Should representatives from these areas be brought into the planning process? Clearly, one of the issues in setting a project's boundaries is the mandate to make the project as inclusive as possible, as balanced against the need to keep the working groups to a manageable size.

Along with geographical scope, the temporal boundaries of the project must be established. Time limits for specific tasks should be agreed upon, so that the participants can assess the effort that is expected of them. Project funds will usually have specific time periods attached to them; if several different sources are used, their various award periods will impose additional constraints upon the planners. Finally, when physical modifications are involved, a lengthy period of implementation can be expected. Consideration should then be given to a set of intermediate objectives, whose attainment

will show participants that their efforts are making progress.

A CPTED project will have several goals, the most basic being a reduction in the level of specific crimes and in the fear experienced by users. Paradoxically, planners must expect (and should prepare the affected citizens to expect) an increase in crime reporting as the project gets underway. If citizens do not understand the relationship between the crime-prevention effort and the increased level of reporting, they might well turn against the project. Similarly, fear might also increase as a result of the new reporting levels and the citizens' heightened awareness of the crime problem.

Planners should also assess the implications of the project's indirect goals, which might include improving neighborhood appearance, reducing traffic congestion and noise, providing better leisure-time facilities, or improving social interaction. Some of these indirect goals may be significant enough to justify an application to alternate funding sources, or to tie the CPTED effort to other projects in the target area. For example, a reduction in the fear of crime could help stabilize the area's population, and thus attract support from agencies and institutions concerned with local real-estate values. Or a municipal street-improvement program, already planned for the neighborhood, might be modified to increase surveillance opportunities or to reduce the ease with which outsiders can pass through the neighborhood.

An important task of CPTED planners is to translate citizen objectives into a workable plan. To accomplish this, it may be necessary to give specific expression to concerns that are vaguely or broadly stated. If citizens are afraid to walk the streets at night, the planners must determine exactly what inspires this fear -- poor lighting, the absence of other people, the presence of loitering teenagers, or whatever. In the same way, planners may find themselves investigating assumptions about the causes of crime. Thus, if citizens want to prevent teenagers from loitering in the streets, they may be assuming that these young people are responsible for crimes in the area.

Since different groups are likely to take part in the planning effort, differing expectations are sure to arise. The planner must therefore arrive at a set of prioritized goals that all or most participants can agree upon. A useful technique is to ask each participant to list all the goals he or she would like the project to achieve. A comprehensive list is then drawn up, and the participants asked to rank the various goals, so that a numerical consensus can be reached. The priorities thus established can then be presented to the group for further discussion and a vote on the final ranking.

A final consideration at this stage is whether an evaluation of the project will be conducted. If one of the goals is to test the applicability of CPTED to a city-wide program in crime prevention, evaluation will obviously be needed. Similarly, if certain funding agencies are to be approached, and it is known that they require evaluation in the projects they support, then this step should now be planned for.

THE WORK PLAN

The work plan is an operational document defining the tasks, approaches, resources, and schedules for carrying out the project planning stage. In preparing this document, the team should review the data and information that might be useful in later stages of the project. For example, if the team intends to use computer techniques, the data needed for the computer program must exist; if it does not, then an alternative method must be considered or the work plan should include a data-compilation task.

The completed work plan should include:

- * A description of planning tasks and activities.
- * Schedules for completing these tasks.
- * Personnel requirements and cost estimates.
- * A list of survey instruments and methods.
- * Assignment of responsibility for developing the crime-environment survey.
- * A list of products to come out of the project planning stage, such as a list of expected physical improvements.

THE MANAGEMENT PLAN

Local circumstances will determine the exact management functions of a project, but these are some of the management activities that might be involved in planning and implementing a large CPTED project:

- * Directing the project's analysis and planning activities.
- * Developing and maintaining the work plan.

- * Coordinating community participation and involvement.
- * Identifying, securing, and managing fiscal resources.
- * Interagency coordination, to ensure that resources are made available in a timely manner.
- * Coordination with law enforcement agencies.
- * Preparing progress reports, evaluating the planning and implementation process, and disseminating public information.
- * Identifying legal requirements and securing timely approvals from the appropriate agencies.

Some of these activities fall mostly in the planning phase of the project, others in the implementation phase. Executing them should be clearly assigned to specific individuals or teams.

Depending on the size of the project and the characteristics of the target site, two teams may be desirable. Project planning requires analytical capabilities, plus the ability to synthesize crime-environment strategies into a workable plan. Once that plan is completed, however, a different set of requirements may arise. If physical design changes are recommended, there will be a need for experience in final planning, bidding, construction, and construction management. Sometimes these responsibilities can be assigned to existing agencies -- modifications to a school might be assigned to the school's director of physical plant; streetscape changes could be assigned to the department of public works; housing modifications might be assigned to the public housing agency. If it is expected that implementation will be handled in this manner, representatives of the affected agencies should be included in the planning team. This will ensure that technical requirements are adequately considered during the planning phase.

In some settings the management framework may already be defined -- in a high school, for example. Responsibilities are much more difficult to ascertain in an open environment such as a residential neighborhood. The preliminary analysis, however, will have brought the project initiators into contact with a number of groups and individuals with an interest in and a commitment to the target site. Based on interviews and other information, a determination can be made as to which groups should be directly involved in planning and implementing the project (city planners, law enforcement officials, architects, etc.) and which should have a supporting role (residents, civic organizations, State and Federal agencies, etc.). If the community has several strong local organizations, one group must

not be given a management position while other groups are ignored. Uneven representation can alienate segments of the population and jeopardize the project.

Additionally, management responsibilities should be vested in a group or agencies with the resources to carry out the objectives of the project; the legislative and legal authority to do so; the necessary access to decisionmakers; and the organization, interest, and motivation to take on the task. The final management structure will depend on local considerations, but these are the options that might be considered:

* An existing agency or department. Possibilities include the municipal planning agency, the police department, the city manager's office, and the criminal justice planning agency.

* A new division of an existing agency. For example, a crime prevention bureau in the police department or a special division in the comprehensive planning agency.

* A new and separate agency.

In some projects, a manager may have been designated to head the project during the initiation phase. If not, a manager should now be sought. This individual should have strong organizational skills, and should be able to work effectively with diverse organizations and individuals. He or she should also have direct access to key decisionmakers. Ideally, the manager will be located in an organizational hierarchy that transcends agency boundaries -- in the mayor's office, for example, if the jurisdiction has a strong-mayor form of government.

Phase Two:

PROBLEM ANALYSIS

THE ANALYTIC QUESTIONS

The result of the analysis phase will be a set of crime-environment problem statements. In effect, they will be answers to several fundamental questions -- the what?, how?, when?, where?, and why? of the crimes occurring at the target site.

WHAT ARE THE CRIME PROBLEMS?

Identifying the significant problems at the target site requires several types of information, which must be interpreted together. The first step is to single out the most frequently reported crimes. Local ordinances usually require law enforcement agencies to produce a fiscal-year report; a second compilation, tailored to the FBI's Uniform Crime Reports, aggregates this information according to the calendar year. These records should now be examined. Data elements which merit study include the distribution of crime, trends over time, and crime density by census tract. The analyst should verify percentages and totals and should determine whether the tables and graphs support other sources. Probably he or she will have to go back to primary sources (such as offense reports) to extract the most useful information. For example, if this further analysis shows that most of the reported assaults were family disturbances, then CPTED strategies will probably be of limited use.

Periodic reports indicate the frequency of specific crimes. The analyst may also wish to know what those frequencies mean in terms of the risk of being a victim. If two reporting areas have the same number of residential burglaries, but one has more dwelling units than the other, then the "opportunity rate" is clearly different. Table 2-1 shows the number of crimes and the opportunity rate for one target site.

The analyst may also wish to consider the severity of the incidents. Rape may well be perceived as more significant

than auto theft, though the latter occurs more often. Similarly, the manner in which a robbery is committed may be more serious in one instance than in another. The Sellin and Wolfgang Crime Seriousness Index is one system for differentiating between similarly classified offenses (1). For instance, a robbery involving verbal or physical intimidation is given a score of 2 points; the use of a weapon increases the score to 4 points; if the victim is hospitalized, the score rises to 11 points. Through the use of such variables, it becomes possible to compare the relative seriousness of particular incidents.

<u>Crime</u>	<u># Incidents</u>	<u>Population</u>	<u>Opportunity Rate</u>
Street robbery	32	8,800 residents	0.4
Aggravated assault	35	8,800 residents	0.4
Simple assault	105	8,800 residents	1.2
Residential burglary	249	2,775 dwellings	9.0
Commercial burglary	41	(not available)	--
Purse-snatch	26	2,900 women	0.9
Larceny	140	8,800 residents	1.6
Residential robbery	6	2,775 dwellings	0.2
Commercial robbery	9	(not available)	--
Rape	9	2,900 women	0.3
Auto theft	85	(not available)	--

(Opportunity Rate = incidents per 1,000 population)

2-1 - Reported Crime by Type and Rate (Minneapolis)

A still more accurate indication of the crime problems at a site is a direct survey of the users. A victimization

(1) T. Sellin and M. Wolfgang, The Measurement of Delinquency, Patterson Smith, Montclair, N.J. (1978).

survey might include such questions as these:

* Did anyone break into or somehow illegally get into your home or apartment, your garage, or other building on your property last year?

* Did you have your pocket picked or purse snatched any time last year?

* Was anything stolen from you while at work or somewhere else, such as in a theater or restaurant, or while traveling?

* How safe do you feel being out alone in your neighborhood at night?

* Has anything ever happened to you in your neighborhood or to someone you know that makes you afraid to be on the streets around here?

* Do you think that most people in this neighborhood limit or change their activities because they are afraid of crime? (2)

Victimization surveys are expensive and time-consuming, and the analyst may therefore interview selected users instead. While less reliable than a full-scale survey, key-informant interviews should reveal the major problems at a site. The choice of informants depends on the site being studied; in the case of a public housing project, they might include the project manager, security officers, maintenance personnel, and members of the tenant council.

If the analysis does not include a victimization survey or key-informant interviews, local concern of crime can be measured indirectly. Such an assessment might include the police department's log of calls-for-service. A study of these calls -- which include suspicious events, noisy disturbances, and the like -- can indicate citizen concern with crime, as well as differences in department and citizen perceptions of what constitutes a crime. Another manifestation of concern is the measures that are taken by citizens to secure their property. It is relatively simple to survey the burglar alarms in the area, and the extent to which bars are used on windows or extra locks on doors; however, the conclusions are highly inferential. In general, these indirect measures are best employed in

(2) Adapted from "Pilot Cities Victimization Survey, 1971," in Crimes and Victims: a Report on the Dayton-San Jose Pilot Survey of Victimization, LEAA, 1974.

conjunction with other surveys.

Table 2-5 (shown later) summarizes the data sources that can contribute to an understanding of the significant crime and fear problems at the target site.

HOW ARE THE CRIMES COMMITTED?

The reason for considering modus operandi is to determine what risks the offender faced and the effort he or she devoted to committing the offense. The answers can suggest whether strategies to increase risk or effort might help reduce that particular crime. Table 2-2 summarizes the findings of a study of crime patterns in Minneapolis. Patterns have been identified in the locale of offenses, time of occurrence, environmental features involved, victim characteristics, and offender characteristics.

Information on the pattern of criminal offenses is available from several sources, notably the police department's offense reports and arrest reports. The former generally include type of crime, location and time, descriptions of the victim and any suspects, and a description of how the crime was committed. Arrest reports generally include a description of the suspect, name, offense, accomplices if any, location of arrest, place of residence, and modus operandi. Either kind of report may show whether the crimes occurring at a particular site follow similar patterns of execution. In commercial burglaries, for example, the reports may show that entry is usually gained at the rear of the premises, through an unsecured window or skylight. Often it is the narrative section of the report that indicates the environmental features involved in the offense.

For a variety of reasons, law enforcement records may not offer sufficiently detailed information on how crimes were committed. Interviews with those responsible for investigating crimes can remedy this deficiency by identifying report-filing procedures (such as the amount of detail expected) and departmental policy regarding particular calls (such as responses to burglar alarms). If time permits, the analyst should also consider riding along with officers on their investigations. These ride-alongs will provide insights into police response procedures, and can also be used to gather information on environmental features such as lighting conditions, opportunities for natural surveillance, and vehicular accessibility.

Official crime reports are necessarily limited to reported crimes. To get at the how? of unreported crime, the analyst might want to develop a special section in the

	<u>Residential burglary</u>	<u>Commercial burglary</u>	<u>Commercial robbery</u>
Location	27% of burglaries committed within 1 block of offender's home, 55% within ½ mile of home. Most suspects work within own neighborhood.	50% of establishments located on commercial strip; 66% of offenders travel less than 1 mile to target. Majority of suspects burglarize within own community.	70% of establishments located on commercial strip; 66% of suspects traveled over 1 mile. Only 26% committed offenses in own community.
Time	Offenses more common in warmer months. Time of day variations cannot accurately be determined.	No seasonal variation, but more frequent on Friday and Saturday.	Most frequent between October and December. Over half occur 6 pm - midnight.
Environmental features	Risk highest in single-family units. 33% of offenses involved unforced entry. Entry most frequently through the front.	51% of entries through doors; 40% through windows. More door than window entries are unforced. Most entries are through the front.	No particular environmental features indicated.
Victim	Only 12% of victims were home. 50% chance that offender acquainted with victim.	Most frequent targets were hotels, motels, gas stations. Less than 1% of premises are occupied. Most suspects did not know victims.	Most frequent targets are grocery stores, gas stations, and drug stores.
Offender	12% clearance rate. Almost half of suspects are juveniles. 85% under 31 years of age.	13% clearance rate. Most suspects are male, aged 18-30 years.	12% clearance rate. Suspects mostly male. Over 70% aged 18-25 years.

2-2 -- Crime Pattern Characteristics (Minneapolis)

victimization survey, if one is planned. The information gained from such a survey can also show how the pattern of criminal behavior at the site is influenced by victim behavior. (If most residential burglaries involve unforced entry, it might be conjectured that an effective preventive strategy would be to educate residents to use the available security hardware.)

In addition to questioning the victims, the CPTED analyst might wish to question known offenders, especially those convicted of offenses at the target site (3). The utility of offender interviews will depend on the amount and kind of information available from other sources, the sophistication and experience of the analysis team, and the cooperation of law enforcement officials. Many projects will not have the resources or expertise to interview offenders. In such cases, the analyst should at least review reports of research into the behavior of offenders engaged in the crimes of concern at the target site (4).

The data sources for determining how the problem crimes are perpetrated are summarized in table 2-5. (Many of the same techniques are employed in investigating what crimes occur at the target site; the most efficient collection of data will therefore result from considering all the analytic issues together.)

The problems at the site may include fear of crime, as well as crime itself. (Fear is a problem when its level is significantly higher than would be expected, given the empirical rate of crime.) A number of environment factors are associated with fear, and the analyst should consider whether, and to what extent, these features are present at the site. A littered environment, for example, suggests local indifference or inability to cope with adverse behavior; abandoned buildings and empty lots may add to that impression. People unfamiliar with an area may also be afraid to enter it if it is poorly lighted. It makes little difference that crime seldom occurs there: if the area has the appearance of offering poor surveillance, it may develop the reputation for being dangerous.

Social characteristics can also account for high levels

(3) See, for example, "Offender Interviews," in Crime in Minneapolis, Governor's Commission on Crime Prevention and Control, St. Paul, Minn. (1977).

(4) A central clearing house for such information is the National Criminal Justice Reference Service, PO Box 6000, Rockville, MD 20850 (301/251-5500).

of fear. The area may be frequented by panhandlers, hustlers, prostitutes, and derelicts. The presence of different racial, ethnic, or age groups may be threatening to certain users because their behavior is alien, though perhaps innocent of criminal intent. On the other hand, the absence of street activity can also be fear-provoking. Business areas, especially, often assume an empty and forbidding air after six o'clock in the evening.

In assessing the environmental and social correlates of fear, the analyst may utilize several different methods. Site observations may reveal physical conditions associated with fear; questionnaires and interviews may establish that users do in fact perceive these conditions as fear-provoking; and a review of local newspapers may suggest that crime in this area has been sensationalized or that fear has been provoked by stories encouraging distrust of minorities.

WHERE AND WHEN DO CRIMES OCCUR?

Here again, the purpose is to determine whether the target crimes are susceptible to CPTED strategies. If the offenses are "crimes of opportunity," then their commission will be influenced by such factors as:

- * Environmental features at the individual building and for the entire site.
- * The behavior of victims and offenders.
- * The behavior of law enforcement officers and other security personnel.

Information on the where? and when? of reported offenses is available on offense and arrest reports. In the case of property crimes, however, the time must often be estimated (as when a burglary occurs during a family vacation, or a school is vandalized over the weekend). Similarly, street crimes are often localized according to the nearest street intersection; the exact spot along the street where offenses are taking place may be difficult to pinpoint.

Collecting data on the temporal and geographic patterns of crime is much easier when law enforcement authorities have computerized records, with offense and arrest reports coded by address. Lacking this kind of access, manual retrieval may be the most efficient approach if the site is small; or the analyst might consult the precinct "pin map." Figure 2-3 shows residential and commercial burglaries in and around the Portland

commercial strip, with information taken from a pin map.

Offense and arrest reports will probably not provide enough information on the characteristics of the crime site. The analyst will therefore want to consult other sources, such as:

* "Sanborn maps" are produced privately for most major and many smaller cities. They provide detailed information on buildings -- height, structure, site plan, roof access, basement, etc. They will give the analyst information on the layout of the premises, perhaps the surveillability of interior space by pedestrians and motorists, and perhaps also the pattern of vehicular and pedestrian circulation.

* City Traffic Department. This department (or the city engineer's office) will have maps and tabular data on traffic density and flow, including origin-and-destination studies which show how much traffic is local and how much is transient.

* City Engineer's Office. Information on the general pattern and level of street lighting should be available from this office, which may also have maps showing topography, streams, and other obstacles which may influence the safety of the target site.

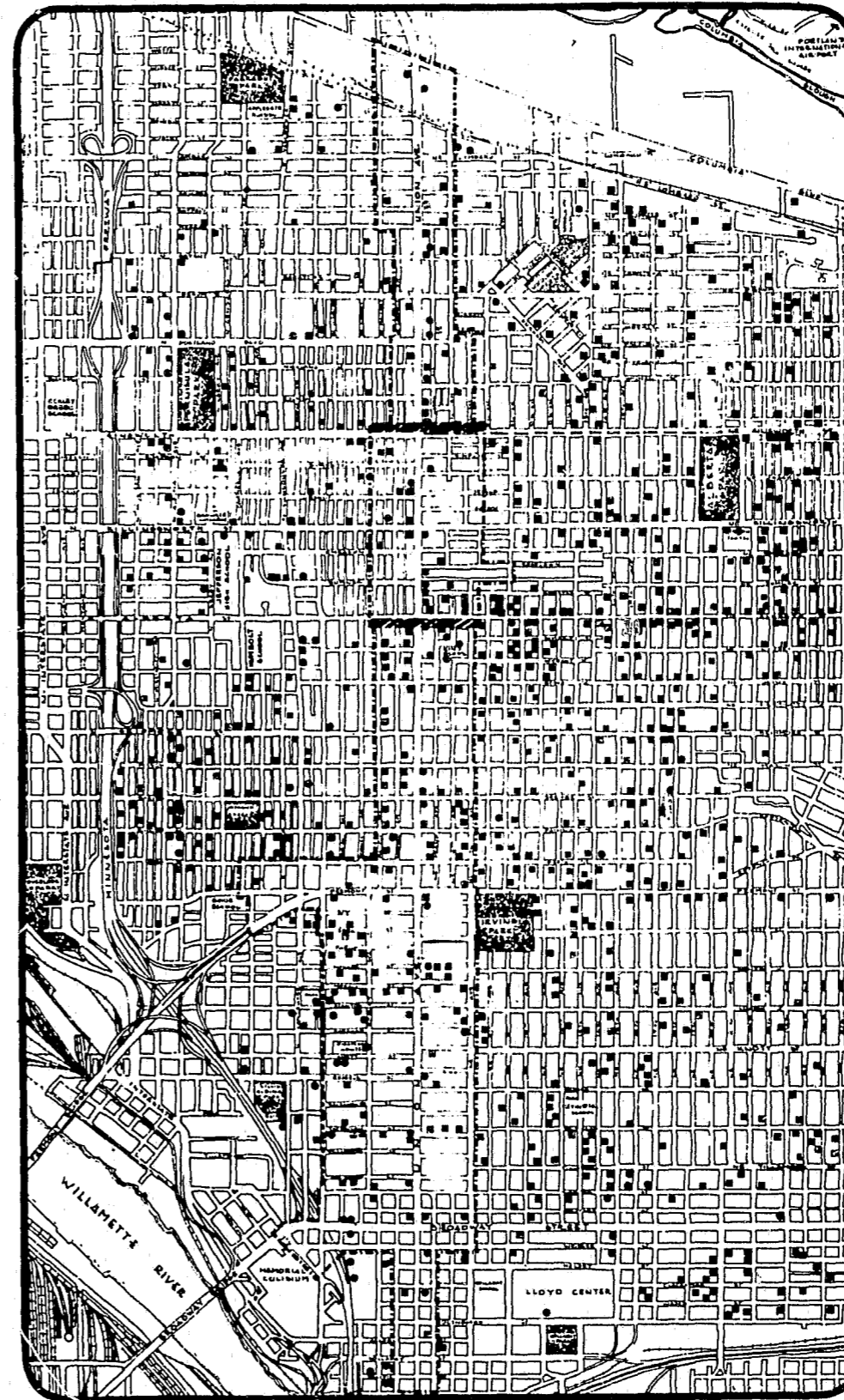
* Planning Office. Zoning and land-use maps should be available here -- but note that zoning maps show permitted use, which may not correspond to actual usage at the site. Land-use maps should show the location of functional areas and facilities, including those (like hospitals) that generate curbside traffic.

* Parks and Recreation Department. This department should have plans of recreation facilities, showing pedestrian paths and special structures. It may also have information on the location of trees, vegetation, and other barriers to surveillance.

* Transit Authority. The mass-transit or transportation agency will have maps of routes, and may also provide information on the number of trips generated at specific spots by time of day.

In considering the influence of physical features on where and when crimes occur, it is necessary to consider the setting as a whole. A useful way to do this is through maps and transparent overlays; another technique is on-site observations and surveys.

The behavior of site users also influences where and



LEAA:
Crime
Prevention
Through
Environmental
Design

UNION AVENUE CORRIDOR

----- Union Ave. Corridor
----- Primary Target Area
■ Residential Burglary
● Commercial Burglary

Sample = 1 out of 3 incidents for
the one-year period from
October 1973-September 1974.

Data Compiled from Portland Police
(Strike Force) pin maps by Urban
Systems Research and Engineering, Inc.

art 1

Prepared for
Westinghouse Electric Company
by
Baron Aschman Associates, Inc.
November, 1974



2-3 -- Residential and Commercial Burglary (Portland)

when crimes occur. If purse-snatchings take place during the hours when older women do their shopping, and if these women are indeed the most frequent victims of that offense, then the analyst might consider how their behavior might be altered to make them less tempting as targets. Conversely, activities which keep people in public areas may pose a deterrent to crime, and these activities likewise depend on established patterns of user behavior -- patterns which very possibly can be modified.

Information on the behavior of site users can be gathered through questionnaires and key-informant interviews, but the best source is direct observation. Unfortunately, observation is costly and time-consuming. It may be justified in projects where a major objective is to evaluate strategies intended to alter the behavior of site users.

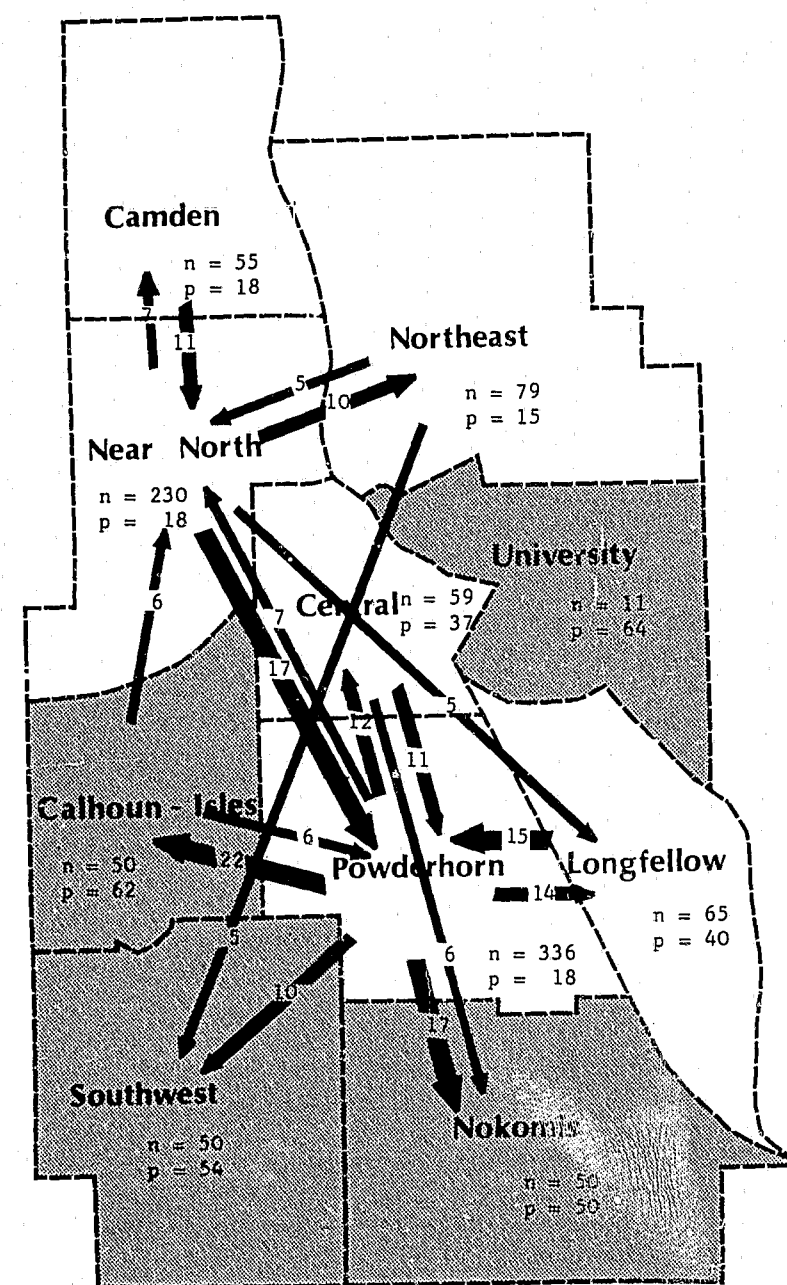
The residence of offenders is yet another influence on where and when offenses are committed. Since offenders engaged in burglary and street robbery tend to choose targets close to home, data indicating where known offenders reside may help in understanding where they commit their crimes, as shown in figure 2-4. Such information is available from arrest reports. (Arrest reports, however, do not indicate conviction. Moreover, the clearance rate for some target offenses is so low as to make generalizations about geographical relationships fairly speculative.)

One final group whose behavior should be considered is the police. The analyst will be interested in how they patrol the target site -- whether on foot or in vehicles, individually or in teams -- and in how they respond to certain types of calls, such as burglar alarms, calls-for-service, and 911 calls. This information can be obtained through interviews with key personnel, questionnaires or interviews with street officers, and observation of actual patrol and dispatch activities. It is desirable to use all three techniques, since department policy may not explicitly define significant law enforcement behavior. The decision to use multiple methods and sources will of course depend on the money, time, and personnel available.

Table 2-7 summarizes the data sources and methods that may be used in determining where and when offenses occur.

WHO ARE THE OFFENDERS AND THE VICTIMS?

Here again, knowledge of offender and victim characteristics can reveal patterns of behavior based on the opportunity structure at the site -- behavior which may be open to alteration. Alternatively, the analysis may show that the



2-4 -- Suspect Mobility (Minneapolis)

Arrows connect the offenders' home community with that in which offenses were committed; numbers indicate the frequency of incidents. Shaded communities are those in which more than half the crimes were committed by suspects living in other communities. (From D. W. Frisbie, *Crime in Minneapolis*, Governor's Commission on Crime Prevention and Control, St. Paul, 1977.)

victims and the offenders knew each other, and that premeditation rather than opportunity directed the crime.

The offenders can be identified, in part, by analyzing arrest reports. These show the offender's age, race, and place of residence, as well as the place where the offense occurred. They can be considered only as partial, however, since the clearance rate is relatively low for most CPTED offenses. Even more important, only about half of all offenses are reported, and the rate may be considerably lower for the target crime and the target site.

Another source of information is the offense records (including juvenile records) of known offenders in the target site. In California and other states, the courts require a folder of such information before passing sentence on an offender.

In reviewing the information on known offenders, the analyst should consider the following questions:

* What is the age and criminal experience of the offenders?

* What is the distance between their residences and the sites of the reported crimes? What physical features intervene?

* What are the demographic characteristics -- race, socio-economic status -- of the offenders as compared to the neighborhood in which the offenses occurred?

* Did the offenders know their victims before the offense, and what was the nature of this relationship?

Identifying the victim is somewhat easier. Information available from offense and arrest reports includes occupation, age, race, sex, and place of residence, and these official reports can be supplemented with information from victimization surveys. In reviewing information on victims, the analyst should consider the following issues:

* Is a particular user group (as defined by age, sex, race, or occupation) being disproportionately victimized?

* Is there a concentration of victims from a particular location?

* What prior knowledge did the victims have of the offenders?

The analyst should be alert to behavior patterns which

provide opportunities for victimization. If elderly women in a low-income neighborhood receive Social Security checks on a certain day, and immediately cash those checks at a bank, this routine might provide the opportunity for purse-snatching. Offense reports can provide some basis for identifying this kind of victim routine, but it may have to be supplemented by questions on a victimization survey. Direct observations and behavioral mapping can also help identify patterns of activity that offer opportunities for crime.

Table 2-8 summarizes the data collection methods and sources which may be employed to identify offenders and victims.

OTHER CONTRIBUTING FACTORS

While we are concerned here primarily with the opportunity structure which supports crime at the target site, we must also deal with the resources available to alter that structure. They include:

* Police-community relations. The first resource to be assessed is the law enforcement agency itself, notably the state of police-community relations. Such knowledge may explain why some offenses are not reported. It may also reveal tensions between the police and the community, which might affect preventive strategies that require cooperation. Interviews with key informants on both sides can provide insights into this situation, and a victimization survey might well include items on police performance. Finally, local newspapers or the newsletters of local organizations might contain information on police-community relations, tensions, and cooperative efforts.

* Community cohesiveness. A second resource which should be considered is the general social cohesion of the target site and its different user groups. Since CPTED depends heavily on local cooperation and support, a community in which cohesion is lacking may provide significant obstacles to the project. This assessment might involve specific items on a victimization survey, intended to gauge the kind and extent of social participation and the attitudes and commitment of individuals toward the site. These survey items should be considered together with a demographic profile of the area, showing age and income distribution, ethnic composition, and the like.

* Significance of crime vs. other problems. A final resource which should be considered, and one strongly related to social cohesiveness, is the concern which site users feel toward problems other than crime. It may well be that these other problems are even more pressing. In the Hartford demonstration, one of the two neighborhoods originally selected

had to be dropped, partly because citizens perceived crime prevention as less important than the basic physical maintenance of the neighborhood.

<u>Type of Data</u>	<u>Source</u>	<u>Utility and Limitations</u>
Periodic reports: * annual reports * FBI/UCR	Local law enforcement and security agencies	Concise picture of the frequency of selected crimes. Reporting areas may not correspond to site boundaries.
Other crime reports: * offense reports * arrest reports	Local law enforcement and security agencies	Information on location and characteristics of reported offenses. Retrieval may be time-consuming. Permission for access may be required.
Victimization survey	Random or selected sample of site users	Good instrument for estimating the "dark figure" of unreported crime and for determining local concern and fear of crime. Expensive and time-consuming.
Key-person interviews	Selected site users such as community leaders, police, etc.	Less expensive than a victimization survey, but more open to bias in the form of non-representative opinions.
Indirect	Selected file data, such as records of calls-for-service; observations of the presence of security hardware.	Weak measures taken alone, but help support and interpret findings from other sources.

2-5 -- Data for Determining Crime Problems at the Site

<u>Type of Data</u>	<u>Source</u>	<u>Utility and Limitations</u>
Crime reports * offense reports * arrest reports Reports from private security services.	Local law enforcement and security agencies	Reports vary in utility, depending on detail required and circumstances of the offense. Special permission for access may be required.
Victimization survey	Random or selected sample of site users	Usually not designed to provide information on how crimes are committed. Can be employed to locate victims of unreported crime and information on circumstances of their victimization.
Key-person interviews	Detectives and other investigative officers, convicted offenders.	Interviews with detective officers may help define modus operandi. Consider insurance investigators in cases of commercial burglary and arson. Interviews with offenders require considerable experience. Access may be difficult.
Site observations	Direct, systematic observation of crime scenes and environments.	May be useful in identifying environmental features which provide opportunities for crime (generally not included in official reports): lighting conditions, obstructions to visibility, patterns of access.

2-6 -- Data for Determining How Crimes Are Committed

<u>Type of Data</u>	<u>Source</u>	<u>Utility and Limitations</u>
Crime reports * offense reports * arrest reports	Local law enforcement agencies	Accuracy of temporal information varies with type of crime--whether victim was present or some sensing device recorded the time. The reports may provide specific but limited information on environmental features, notably the characteristics of entry in cases of burglary.
Other archival data	Municipal and private organization records: * land-use maps * traffic counts * lighting maps * etc.	Accurate information, often in mapped form, of the location of various physical features. Reports summarizing a variety of information may be available at the local planning authority.
Site observations	Direct, systematic observation with photographic and graphic documentation	Best means for determining how physical features provide a setting for crime. Observations must be used in conjunction with information on where and when crimes are occurring.
Key-person interviews	Interviews or questionnaires	Useful in establishing pattern of law enforcement behavior. May be open to bias in the form of non-representative opinion.

2-7 -- Data for Determining Where and When Crimes Occur

<u>Type of Data</u>	<u>Source</u>	<u>Utility and Limitations</u>
Crime reports * offense reports * arrest reports	Local law enforcement agencies	The most readily accessible information on offenders and victims. Should be regarded as partial since it does not include unreported crimes or unapprehended criminals.
Other criminal justice records	Prosecution or correction system reports	Provide a record of the past activities of offenders convicted of engaging in crimes at the target site.
Victimization surveys	Random or selected sample of site users	Perhaps the best way to get at the "dark figure" of unreported crime. Expensive to administer, but may reveal if there is a particular group over-victimized and tending not to report victimization.
Behavioral observations	Systematic mapping of routine behavior at the site	May help identify patterns of behavior, particularly for over-victimized groups, that might be altered to reduce their risk.

2-8 -- Data for Determining Who Are Victims and Offenders

the review of archival records should usually span several years -- three years in the case of police records. This will ensure that the observed trends are relatively stable and do not reflect one-time events such as a racial disturbance or the closing of a major store.

Since an enormous volume of records may have to be reviewed, archival research is greatly simplified when the information is stored in a computer, or when it has already been tabulated in a form useful to the analyst.

Survey Methods

These methods include questionnaires and interviews. The former typically involve written responses to a set of printed questions, while the latter usually involve some form of interaction between the interviewer and the respondent. Interviews therefore permit questions to be clarified, and they afford more flexibility in the way the questions are presented. The information that can be obtained through either method is almost unlimited:

- * Information about the respondent, such as age, sex, income, and membership in organizations.
- * Information about past, present, and even future behavior, such as whether the respondent is planning to move.
- * Information about the respondent's perceptions, especially whether he or she believes an area to be safe.
- * Information about the respondent's attitudes, such as how he or she feels about the existing and future possibilities of a particular site.
- * Information about the respondent's underlying beliefs, behaviors, and attitudes, such as what he or she perceives to be a citizen's responsibility for improving the local environment.

Most CPTED projects will include key-person interviews in the early stage of problem analysis. More extensive (and more expensive) methods might come later, after the analysis of file data indicates that there might be significant utility in a victimization survey, for example.

The cost of a survey is largely dependent on the size of the sample, which in turn is largely dependent on the size of the population of the target site.

Observational Methods

These are systematic techniques for observing and recording the behavior patterns and the organization of physical features at the target site. Observation generally begins in an informal way, perhaps with the impression that more people are out at night on well-lighted streets than on those that are poorly lighted; this may lead to a more systematic study in which two streets with different levels of lighting are compared over a period of time. Systematic observation requires a method for coding and recording the aspects that are being observed. It also requires a schedule by which these observations will be made, and a time-frame which establishes the sample.

Observation avoids the biases that can be introduced by survey techniques, which require the respondent to report on his or her behavior. Observational data can thus be used to validate self-report responses -- and to validate data from archival sources as well.

In general, observational techniques are costly in terms of manpower. They also require meticulous training and continuous supervision of the observers, in order not to compromise the quality and consistency of the data. In particular, steps must be taken to ensure that the behavior or the events under observation are truly representative, and are not attributable to the weather, time of day, day of the week, a holiday or similar event, a unique location, or other special circumstance.

CHOOSING THE INSTRUMENTS

The analyst is trying to answer several different but interrelated questions, at the same time and with a variety of research instruments. A useful way to think about the analysis is as a "recursive structure." The same questions are posed over and over again, but each time their formulation is more precise, and each time the answer is more specific. The initial methods of data collection should be those which are least costly and which provide the quickest impression of the problems at the target site. More precise (and usually more costly) techniques may then be used to flesh out these preliminary impressions. In this manner, the more expensive techniques are avoided until they prove necessary, and until the analyst has gained enough insight about the target site and its problems to make an appropriate selection and modification of the data instruments.

For example: the planning team familiarizes itself with the target site by walking through it. In a residential

neighborhood or commercial strip, this walk-through would have them inspect the environment with an eye to identifying potential crime targets in terms of risk, effort, and reward. At the same time, police summary reports and census records are reviewed for background information on crime rates and demographic characteristics. Newspaper articles, community newsletters, and other social archives are likewise reviewed, to provide an impression of the problems and issues that are important to the various populations of the target site.

Key-person interviews are then conducted. These structured interviews are set up after informal talks with residents, shopkeepers, patrol officers, and others who can suggest knowledgeable individuals. The objectives here are a) to identify the crime and fear targets that warrant detailed crime-environment analysis, and b) to assess the feasibility of the CPTED approach as opposed to alternative crime-prevention programs. Coordinated with the key-person interviews is an examination of police offense reports, which will provide data on the location of crimes and the methods employed by the criminal.

As specific crime problems are identified and localized, more precise analytic techniques are employed. If the preliminary investigation reveals a fear problem at the site, then the CPTED team might consider a survey to assess the nature, extent, and causes of fear. A victimization survey might also be justified if data is lacking on offense reports, or if permission to use police files cannot be obtained. Similarly, if the preliminary analysis reveals over-victimization of a particular user group, an analysis of the daily routine of this group through questionnaires and direct observation might be appropriate.

Problems can be diagnosed at minimum cost if the activities amount to little more than face-to-face interviews with a few key individuals. If more rigorous data collection is necessary, costs will increase sharply. Thus it is important that the data-collection objectives be clearly articulated before community resources are tapped. For example, if an objective is to evaluate the overall effectiveness of the CPTED project, then the cost of analysis will probably be higher than for a program in which this phase is intended only to guide the selection of preventive strategies.

A useful way to estimate costs is to list the various data collection and analytic steps, and to make a judgment about how much time and how many people are required for each. For example, a fear-of-crime survey might involve the following steps:

- 1) Design the analytic plan.

- 2) Develop a survey instrument, or modify an existing one.
- 3) Select the sample population.
- 4) Hire research consultants to review the plan and the instruments.
- 5) Establish procedures for coding and analyzing the data.
- 6) Hire the coders.
- 7) Perform the statistical analysis and interpret the findings.

The final techniques used in analyzing the crime-environment situation must, of course, be specific enough to provide the foundation for formulating the desired crime-environment problem statements.

GAINING ACCESS TO THE DATA

A common problem for CPTED projects is gaining access to files. Take the case of police data: some departments will not allow outsiders to use anything more than Uniform Crime Report data, while others will readily permit the researcher to collect all the information deemed necessary. Obtaining permission takes time -- perhaps as long as two weeks. The analyst should begin this task by contacting the head of the department's planning division, to ascertain whose permission is needed and what information about the CPTED project will have to be furnished. At the same time, the planning division head can provide information about the quality and completeness of the records, as well as copies of the department's periodic reports. He or she can also provide information about the data elements contained in various reports, and whether any of them can be retrieved through a computer. Typically, the CPTED project manager will have to submit a written assurance that the confidentiality of records will not be violated.

Some police departments restrict access to their own personnel. It may be possible to have CPTED staffers temporarily assigned to the department as unsalaried assistants, if the department is amenable and if such a step does not violate the ethics of the situation.

In using police files, the analyst should begin with a careful examination of annual and other periodic reports. From these, he or she should be able to determine the most

common offenses in the target site, how they are distributed geographically, and whether they are increasing or decreasing as compared to previous years. After reviewing the general reports, the analyst will want to consider reports providing detailed information on specific crimes. Consultation with the police planning department will help identify which forms contain the desired information, and whether they are filed by reporting district, by address, or by name.

The process of data retrieval can be greatly facilitated if the records are stored in a computer. Nevertheless, the problems of using the computer may exceed its advantages. In many cases, permission to use the computer must be separately obtained. The department may have programmers who will help retrieve data, but in other cases the CPTED team may have to employ their own programmer for this purpose. Then, too, the printout format of the computer may or may not be in a form adapted to the needs of the project, and obtaining the printout may be a lengthy process. Most jurisdictions are already overburdened with requests for information, and it is likely that the CPTED request will be assigned a low priority.

If a computer search is not possible, the data will have to be retrieved manually from reports. This step may be necessary even in an otherwise computerized operation -- for example, the narrative sections of offense and arrest reports may not be stored in the computer. These sections may well contain information that is particularly important to the analyst, such as the point of entry in a burglary, whether a weapon was used in a robbery, and whether entry was forced or unforced.

Some computerized files may be available through sources outside the municipal government. Tapes of census information may be available through the state or a local university; surveys of real estate transactions may be available from a business school. It should be worth the analyst's time to investigate these alternate sources of information.

Before data collection actually begins, thought should be given to the form in which it will be recorded. Figure 2-10 shows a form designed for the collection of police data. It allows the analyst to record all the information relevant to the CPTED approach; and it has the additional advantage of gathering that information in the way that will be useful for performing cross-tabulation analysis.

Another approach is to gather information in mapped form. Much of the data will pertain to a specific address or location; other information is essentially non-spatial, but nevertheless will have a spatial component. (Fear of crime, for example, can be mapped by the areas which people perceive

Case No.	1	2	3	<u>n</u>
Exact location of offense				
Use of weapon and type				
Property or premises secured (how secured?)				
Point of entry				
Other relevant information				

2-10 -- Sample Data Collection Form

to be safe or unsafe.) Even some computer-retrievable information can be obtained in the form of a map printout. The analyst should investigate whether this capability is available, so that other mapped information can follow the same format.

SAMPLING DATA

It is rarely possible for the analyst to gather all the available information -- the time and expense are prohibitive. Consequently, a sampling must be utilized. The basic principle behind a sample is that it must represent the situation under investigation: if the analyst is sampling attitudes on crime held by site users, then it is necessary to survey enough users that the entire range of opinions present at the site are expressed. A sample may be either randomly or systematically chosen. In surveying the residents of a housing project, the analyst might decide to survey the occupants of every third apartment on every other floor. Where offense reports indicate that a specific group is over-victimized, the sample will be drawn only from members of that group, and it will be necessary for the analyst to obtain a list of their names and addresses. In other cases the analyst may wish to match two samples, as when he believes that persons living on well-lighted streets feel safer than those on poorly lighted streets.

A sample's ability to represent the population depends on its size and composition. If a housing project is the target site, and there are 10,000 residents in the project, the sample must be large enough to expose the range of opinions likely to be found in a population of that size. The matter of determining sample size involves the techniques of drawing statistical inferences, which are covered in either of the following works:

* Leslie Kish, Survey Sampling, John Wiley & Sons, 1965.

* Robert Plutchik, Foundations of Experimental Research, Harper & Row, 1974.

The CPTED team might also make use of expert help from consultants or universities in determining the size and composition of samples in a specific situation.

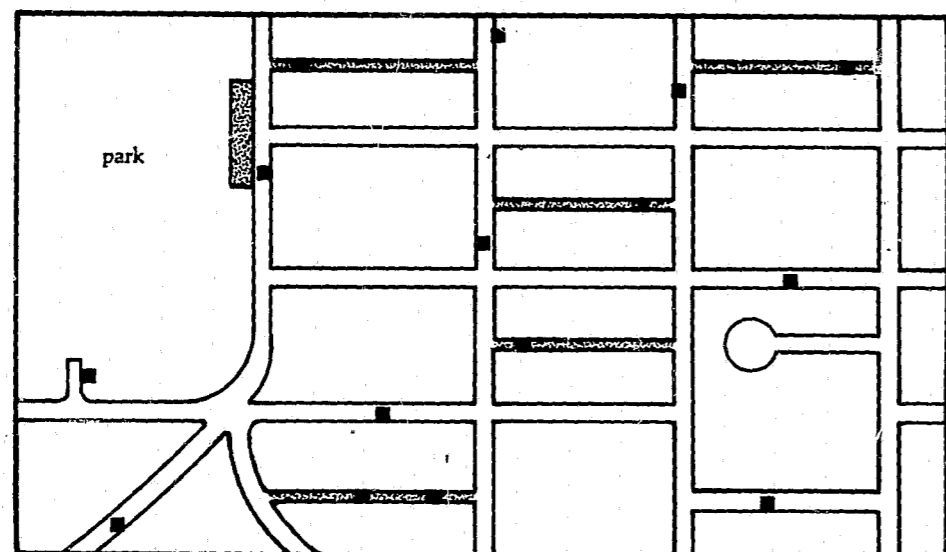
ANALYZING THE DATA

The challenge in data analysis is to determine what information is significant and to identify the relationships between the variables in a situation. Much of the data of interest to the CPTED analyst is location-specific; this can be placed on a map, where the confluence of different factors may become apparent. Other data is essentially quantitative, requiring statistical analysis before relationships can be identified.

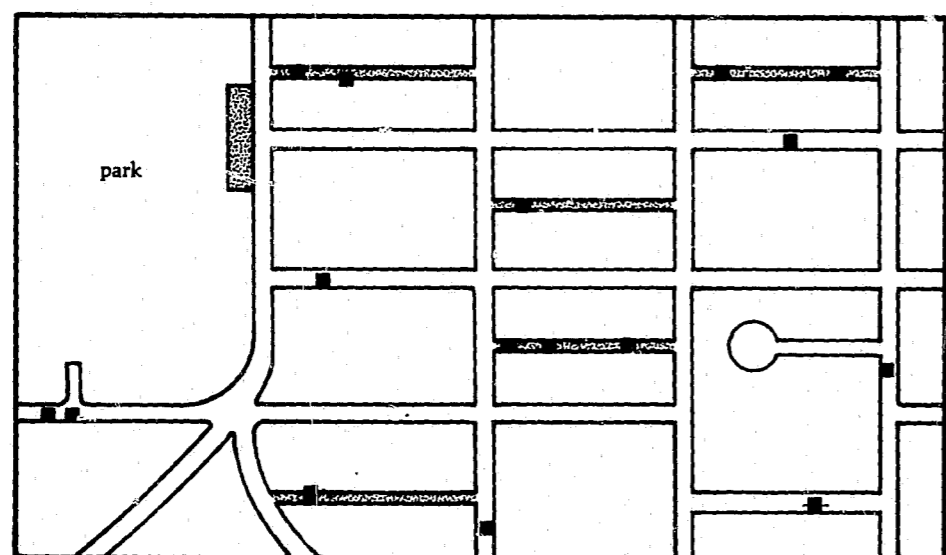
MAPPING CRIME-ENVIRONMENT RELATIONSHIPS

Consider the two crime-environment maps depicted in figure 2-11. The points on each map represent the burglaries that occurred in a hypothetical neighborhood over the period of one year. Map A shows a relatively random distribution, with each area about as likely to be victimized as any other. Map B indicates that the western portion of the neighborhood, particularly the blocks near the park, experience much more burglary than other areas. On-site observations by the CPTED team, and interviews with residents and the police, might show that burglars can use the park both as a convenient spot from which to monitor certain households and as an escape route afterward. It may also appear that burglaries of certain homes are facilitated by the lack of adequate fences between them and the park.

As illustrated by this hypothetical neighborhood, mapping provides a descriptive picture of where crime is occurring and what environment factors may be contributing to that distribution. This allows the CPTED team to formulate crime-prevention strategies designed specifically for the environment at hand. Mapping can also be valuable when assessing the problem of fear, since a crime-environment map will show whether high crime rates actually characterize the high-fear areas, or whether the team should investigate environmental factors to



Map A
 ——— Street
 - - - - - Alley



Map B

account for the problem. Finally, mapping has the advantage of showing relationships that are difficult -- perhaps impossible -- to quantify by purely statistical means. Examples are the degree of cover provided by trees and shrubs, and the ease of escape through a neighborhood.

Constructing the Base Map

A large, detailed base map is essential to crime-environment mapping. In a housing project, a detailed site plan is probably available from the management office. In a residential neighborhood or a commercial site, various city departments may have the necessary maps, or a "Sanborn map" of the site may be available from the private firm that provides this service. Aerial photographs are sometimes available, both of commercial and residential environments, and are especially valuable in providing information on informal parking, vegetation, pedestrian access, and other real-life factors.

Too much information can make the base map difficult to use and understand. To avoid this problem, specific environmental information can be located on a series of transparent overlays. This practice keeps the base map free of clutter and also allows the systematic examination of each environmental factor in turn, as the appropriate overlay is placed on the base map in conjunction with the crime pattern being analyzed.

Crime Overlays

The analyst should plot all offenses which might become target crimes. A frequency of about two crimes per residential block will provide an adequate density for analysis; as the density drops below this guideline, it becomes increasingly difficult to spot crime-environment problems on the map. Burglary, larceny, auto theft, and vandalism usually occur with sufficient frequency to permit meaningful mapping analysis. Unless circumstances in the target site suggest otherwise, data for these crimes should be collected. Each incident should be coded with respect to location; time of day, week, and year; age of offender and victim; and any other information that may have special meaning in the environment in question. Data for at least three successive years (beginning with the most recent full year) is necessary before valid crime-environment relationships can be documented.

Crime-environment mapping requires a minimal commitment of time and money.

Environmental Overlays

The analyst is interested in environmental features which support opportunities for crime -- features that impede natural surveillance, encourage free circulation through the site, or hinder the defense of social territories. Overlays showing any or all of these features may be appropriate.

A map identifying lighting patterns may be useful in cases where the target crime is concentrated in the evening hours. A map showing vehicular circulation and parking (particularly one distinguishing through traffic from local traffic) can help in developing a movement-control program; identifying paths of pedestrian circulation can likewise be important. Finally, a residential environment may contain numerous land uses -- educational, light industrial, retail commercial, and institutional. Analyzing relationships between crime and land use will be facilitated by the use of color-coded overlays.

Attitudinal and Social Overlays

Overlays based on user attitudes can also be informative. In conducting interviews, for example, a map may be employed on which the respondent is asked to circle areas regarded as safe or unsafe. By creating a composite map from these individual responses, the analyst can produce an overlay of the perceived safety levels in the target site. This overlay will then be compared with those for violent crimes and for environmental features which may be associated with fear.

Another attitude which might be useful to map is what the residents perceive as the spaces over which they have territorial control. By mapping territories, the analyst may be able to find ways to strengthen the actual and apparent boundaries between these territories, and thus encourage their defense.

Social factors may also be important. For example, if the elderly are over-victimized in street crime, an overlay showing the residences of older people and the location of street crimes may be useful.

ANALYZING CRIME-ENVIRONMENT MAPS

Once the base map and overlays have been prepared, the analytic phase begins. Each crime overlay is placed on the base map and examined by itself and in conjunction with each environmental and social overlay that has been prepared. The objective is to identify the subareas that are high in crime, and to associate them with environmental or other features. This

process is simple in concept but demanding in practice. One looks for relationships between the location of criminal incidents (as shown by the distribution of symbols on the crime overlay) and the design, structure, and use of the physical environment. Any factor used to define or describe the physical environment can serve as the basis of a crime-environment relationship. These factors include streets, alleys, sidewalks, residential blocks, position of dwellings on a block, single vs. multi-family dwellings, abandoned houses, parking areas and parking lots, informal pathways, functional areas of the environment, traffic flow patterns, and the existence of barriers such as fences, walls, gullies, and thick vegetation.

As the characteristics of the physical environment are examined, the observer should ask: "Where does the opportunity for crime lie? What are the available targets? Is the risk of apprehension low or high, and why? Does anything indicate that the crimes can be committed with minimal effort on the part of the criminal? Are the payoffs particularly large in this area?"

The area immediately adjacent to the CPTED target site should also be examined for possible causes of crime. For example, a large population of potential offenders might be found at a high school just outside the target site.

Through systematic examination of this body of information, many hypotheses concerning crime-environment relationships can be tested. For example: are crime patterns related to the type and location of lighting fixtures? Do crimes cluster in commercial areas or in those characterized by multi-family dwellings? Do low-crime areas contain many barriers and few informal pathways?

After the information on the base map and overlays has been exhausted, mapping analysis should move into the on-site observation phase. The CPTED team should visit those subareas with high and low crime rates. Team members must gather as much information as possible and try to determine why crimes of a certain type tend to occur in certain subareas and not in others.

Before going into the field, the CPTED analyst may want to return to the police data and obtain more precise information about the crimes of interest. This will allow a more thorough and accurate on-site assessment. The additional data might include a more precise location of each crime, the exact time of day, the modus operandi of the criminal, and other potentially valuable information.

As problems are identified through the analysis of maps, and confirmed by statistical evidence and direct observation, the analyst can begin to construct a composite map

showing the various problem areas which have been identified. Figure 2-12 shows a problem map developed for the Hartford residential demonstration.

GRAPHS AND TABLES

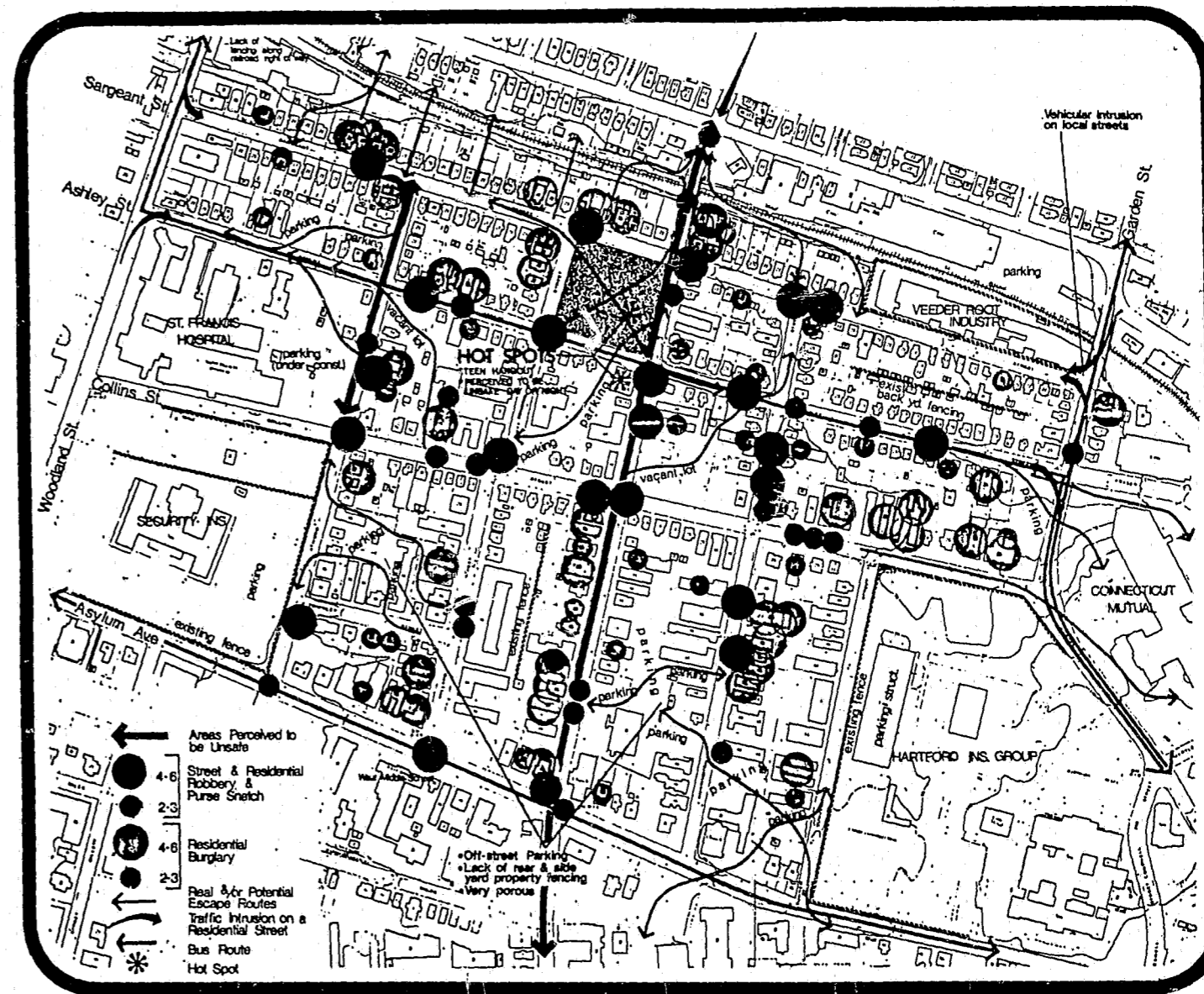
Data that is essentially quantitative will require statistical analysis, which generally results in a table or graph -- familiar to readers of annual reports or weekly news-magazines. Essentially, these are shorthand methods for summarizing data. They present this information in such a way that relationships or trends can quickly be spotted.

For example, the analyst may wish to compare the frequency of two variables, such as the distribution of residential burglaries by time of year. This can easily be done with a graph known as a frequency distribution, which can take a variety of forms as shown in figure 2-13. In all of them, however, one variable is plotted on the vertical axis and the other on the horizontal axis. Such a representation may show that burglaries are more common during certain months -- July and August, in the examples shown. More elaborately, the analyst can plot the relationship over a period of two or more years. Figure 2-13 also shows a "histogram" of burglaries indicating that the month-to-month distribution of these crimes has remained stable from one year to the next.

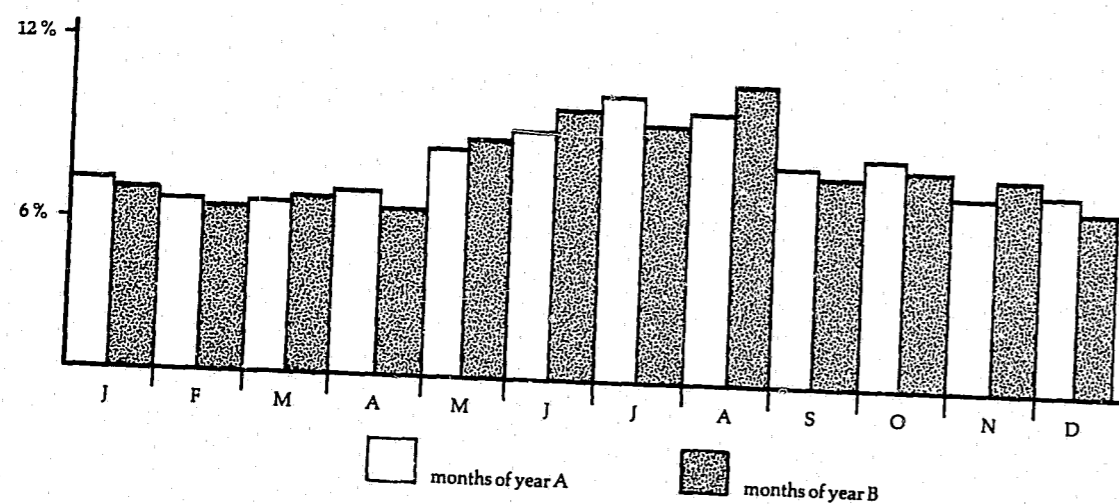
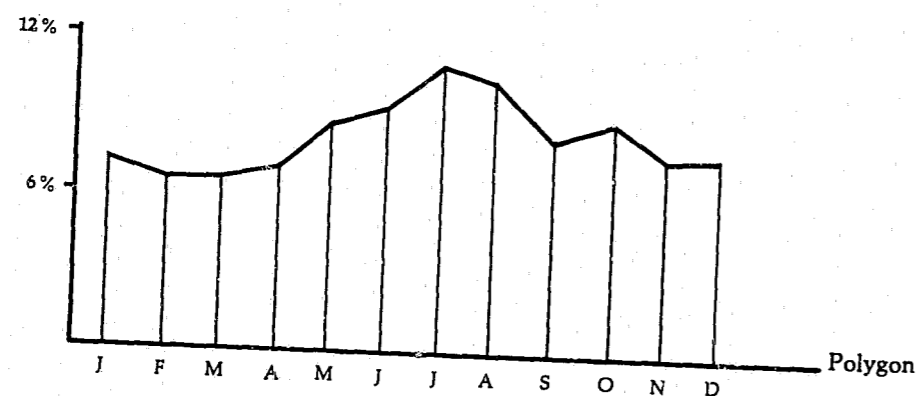
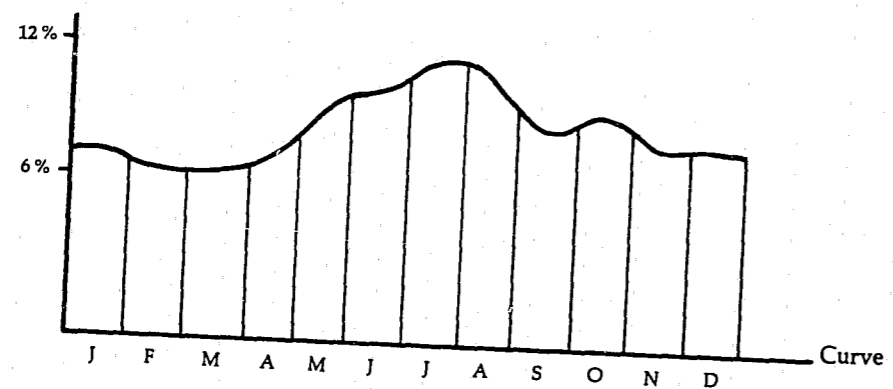
As the number of variables increases, the use of a cross-tabulated table may be a more convenient way to identify relationships. Figure 2-14 shows eight types of crime, tabulated by census tract. Note that relative frequencies can also be extracted from such a table. More than 6,000 cases of larceny are shown in the example; the magnitude of this number is more obvious when it is compared to the total number of incidents -- larceny, in the example, represents 53 percent of all criminal incidents, as shown in the pie graph on the same figure.

Comparing different distributions of the same crime may provide the analyst with a sense of its rate, hence its relative severity. If two areas each report 19 assaults, but one has a population of 4,500 and the other 8,500, then the respective rates would be 4.22 and 2.23 per thousand of population. A comparison with national figures shows that the first rate is high, while the second is normal.

In making such comparisons, it should be noted that not all persons are equally vulnerable to all crimes -- women are the targets of purse-snatching, while dwellings are the targets of residential burglary. The rates of these crimes should

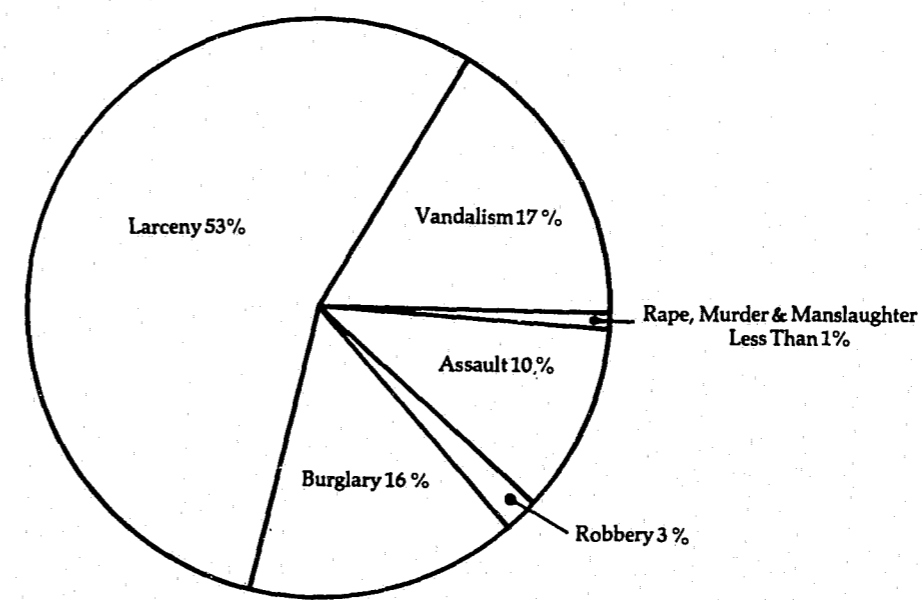


2-12 -- Problem Map: North Asylum Hill Area of Hartford



2-13 -- Graphic Representations of a Frequency Distribution

TRACT	HOMICIDE	MANSLAUGHTER	RAPE	ASSAULT	ROBBERY	BURGLARY	LARCENY	VANDALISM	TOTAL
1	0	0	0	19	6	18	96	20	159
2	0	1	0	24	3	50	138	82	298
3	0	0	0	13	0	43	77	85	218
4	0	1	0	5	0	23	56	31	116
5	0	1	1	16	5	35	122	68	248
6	0	0	1	13	4	17	93	47	175
7	0	0	0	25	7	71	159	68	330
8	0	0	0	17	11	19	59	17	123
9	0	1	1	48	4	40	133	43	270
10	0	0	0	12	3	32	75	30	152
11	0	0	0	22	6	25	84	60	197
12	0	0	0	6	7	12	50	23	98
13	1	2	3	33	4	55	163	120	381
14	0	0	1	58	15	115	418	127	734
15	0	0	2	36	9	57	236	82	422
16	1	1	2	43	16	105	484	86	738
17	1	0	7	43	29	79	278	58	494
18	1	0	6	142	18	72	479	128	846
19	0	1	0	15	2	21	146	40	225
20	0	0	1	44	18	115	237	96	511
21	0	0	0	8	2	15	59	33	117
22	2	0	2	67	16	53	200	85	425
23	0	0	1	42	3	38	106	47	237
24	1	0	1	41	3	34	150	104	334
25	0	0	1	36	13	37	226	91	404
26	0	0	1	24	8	30	109	34	206
27	0	0	1	21	2	25	82	27	158
28	0	0	4	55	6	49	161	53	328
29	1	0	5	71	32	193	302	82	686
30	0	0	0	11	2	41	65	14	133
31	0	0	1	72	14	68	93	48	296
32	0	1	2	37	15	66	214	50	385
33	0	1	0	6	1	22	33	8	71
34	1	2	1	28	26	53	348	35	494
35	0	1	0	12	15	35	167	32	262
36	1	1	1	26	21	46	183	35	314
37	0	0	0	11	4	38	96	18	167
38	0	0	1	36	13	42	166	31	289
TOTAL	10	14	47	1237	363	1889	6343	2138	12041



2-14 -- Tabular and Graphic Representations of Crime by Census Tract

be calculated according to their respective target populations. This process of calculating rates is often referred to as the opportunity index. Table 2-1 (shown earlier) provides an example based on data from the Willard-Homewood site in Minneapolis.

Another useful approach is to take the city itself as a frame of reference. Table 2-15 compares crime rates between Willard-Homewood and the city of Minneapolis as a whole. It shows that 2.3 percent of the violent crimes in Minneapolis occurred in the target site, although this neighborhood contained only 2.1 percent of the city's population. In contrast, only 1.5 percent of the property crimes occurred in the target site. The conclusion: Willard-Homewood sustained slightly higher violent crime rates and considerably lower property crime (due to larceny) than did the city as a whole.

MATHEMATICAL DESCRIPTIONS

Graphs and tables will identify some of the major characteristics of a distribution, but a mathematical description can add precision to the analysis. There are two common ways of describing a distribution in mathematical terms:

* Central tendency. The measures of central tendency are mean, median, and mode. In a normal distribution, all three values are the same; if the distribution is skewed to one side or another, they will vary. The mean is the arithmetical average of all the values; the median is the value which divides the distribution in half (that is, there are as many data points on one side as on the other); and the mode is the value that occurs most frequently.

* Distribution. Another way to describe a distribution is by how dispersed its values are. There are two common measures of dispersion: variance, which is a measure of the average deviation of individual data points from the mathematical center of the distribution; and standard deviation, which is the square of the variance. Standard deviation is a more useful measure in most statistical calculations.

Any introductory text on statistics (several are cited at the end of this section) will describe the mathematics for arriving at these measures.

Thus far, the analyst has been focusing on one dimension at a time. If he or she wished to examine the correspondence between two variables, correlational techniques would be used. Correlations are useful because, if two variables are highly associated, knowing the statistical characteristics of one variable allows us to predict the other with some accuracy.

Crime Type	Rate/1,000 Persons		% of Crimes/% of Population
	City of Minneapolis	Willard-Homewood	(Willard-Homewood to Minneapolis)
Aggravated Assault	3.4	4.0	2.4/2.1
Robbery	4.8	5.5	2.3/2.1
Burglary	24.9	32.9	2.7/2.1
Larceny	35.5	18.8	1.2/2.1
Total Violent Crime	9.1	9.5	2.3/2.1
Total Property Crime	69.8	51.8	1.5/2.1
Total All Crimes	78.9	61.1	1.9/2.1

Based on 1974 UCR data for Minneapolis and 1974 police incident reports for the Willard-Homewood neighborhood.

Suppose the analyst wished to know the association between residential burglaries and the number of houses left unoccupied during the day. We could begin by computing the burglary rate and the percentage of unoccupied units for each census tract, as in table 2-16, where r shows the extent to which the variance of one item can be attributed to the variance of the other. In this example, $r = .30$, which means that there is an association, but not a strong one. Now, if r is squared, the resulting value can be interpreted as the predictability of the variance in terms of a percentage figure. In the example, we can say that the variance of one dimension accounts for only 9 percent of the other ($.30 \times .30 = .09$).

More elaborate correlational techniques are available to measure the relationship between three or more variables -- for example, between the incidence of residential burglary, the number of public housing projects, and the number of families on welfare.

Another useful statistic is time series analysis. Here the frequencies of a given event are examined over a period of time. Figure 2-17 shows the incidence of burglary in Arlington County, Virginia, for a period of thirty-four months. For each month, the analyst plots the average number of burglaries and inserts the data into an equation; this equation in turn provides the information necessary to plot a trend line. This line gives us an idea of what has happened in the recent past, and permits us to project the average number of burglaries over the next several months -- assuming no change in the contributory conditions.

INFERENTIAL STATISTICS

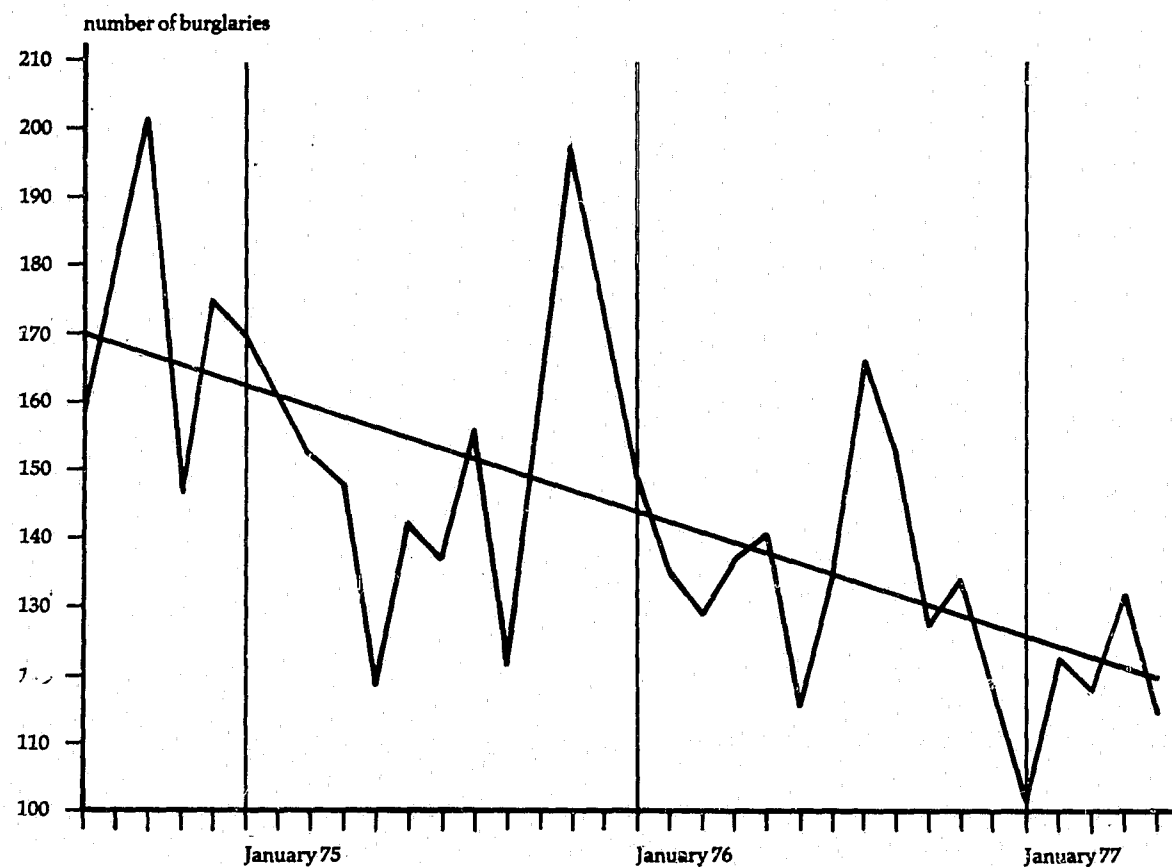
Inferential techniques are used to analyze data based on a sampling of the population. The analyst's task is to evaluate the sample in order to make a statistical statement about the entire population. In addition, two or more samples can be compared with respect to a hypothesis about the relationship between them. For example, a study might focus on the number of pedestrians before and after a street-lighting program. The investigator might select, on a random basis, ten evenings during the months before and ten evenings during the month after the installation of street lights. Table 2-18 shows the hypothetical results. It indicates an increase in pedestrian use after the streets were lighted -- but the investigator must now ask whether the difference is statistically significant (i.e., is it due to chance, or is it a real difference that may be due to the lighting program?) and whether it would be found in a larger sample.

Census Tract	Burglary Rate per 1,000 Dwellings	Percentage of Unoccupied Units During Working Hours
1	6.39	80.9
2	7.56	76.3
3	35.58	61.2
4	7.65	49.2
5	8.61	67.9
6	12.69	63.5
7	13.86	85.9
8	15.57	22.8
9	19.29	89.7
10	20.10	86.7
11	4.59	51.3
12	4.61	33.5
13	31.14	86.8

$$r = .30$$

$$r^2 = .09$$

2-16 -- Use of Product-Moment Correlation Coefficient "r"



2-17 — Trend Line of Burglaries

2-17 -- Trend Line of Burglaries

The analyst in this example could test the difference between the two means -- 663 and 690 -- to see if it is significant.

<u>Day Sample</u>	<u>Before</u>	<u>After</u>
1	680	690
2	660	670
3	620	680
4	670	650
5	650	730
6	730	660
7	690	720
8	590	690
9	660	660
10	680	580
Total	6,630	6,900
Mean Average	663	690

2-18 -- Number of Persons Observed on the Streets

(Hypothetical Street-Lighting Program)

The t-test would be appropriate here, since the distribution is normal (other tests would be used for a skewed distribution). Taking a level of 5 percent as significant -- i.e., five chances out of one hundred that the observed difference is due only to chance instead of the street-lighting program -- the researcher would find that the difference is not significant. He or she must conclude that, for this measure at least, lighting seems to have no effect on the level of street activity.

Often the researcher wishes to compare the values of more than two samples. Analysis of variance is an appropriate technique; it is suitable for establishing whether, and to what degree, a given strategy works in different settings. Related measures include multivariate analysis of variance, dummy

variable regression analysis, and contingency table analysis. For a complete discussion of these and other statistical measures, refer to a text such as one of the following:

* Hubert M. Blalock, Social Statistics, McGraw-Hill, 1972.

* Allen L. Edwards, Statistical Methods, Holt, Rinehart, and Winston, 1967.

* William L. Hays, Statistics for Psychologists, Holt, Rinehart, and Winston, 1963.

Analyzing a wide range of statistics is greatly simplified by the use of a computer. Translating data into computer-readable form is time-consuming, but a variety of different tests can then be quickly performed. Today, most computation centers offer "packaged" statistical programs; these programs are already written and require that only a few control cards be used for analyzing a set of data.

The use of a statistical consultant is advisable when selecting tests and interpreting the results, if this kind of expertise is not available on the staff.

THE CRIME-ENVIRONMENT PROBLEM STATEMENTS

When completed, the analysis forms the basis for the desired crime-environment problem statements, which in turn will be used to select CPTED strategies. Once the contributing factors to a crime or fear problem have been determined, the analyst can select the factors to be modified or manipulated.

In generating these problem statements, the analyst may find voids in the data. For example, the clearance rate for burglary may be too low to provide information on offender behavior. If there are such voids, the planner may want to conduct additional analytic studies before proceeding further.

The recommended classification system for the problem statements is based on the analytic questions posed at the beginning of this chapter -- the what?, how?, when?, where?, and who? of crime and fear in the target setting. Table 2-19 shows two of the crime-environment problem statements prepared for the Willard-Homewood site in Minneapolis. Such statements are a concise presentation of the information developed in the Problem Analysis phase, and will guide the Project Planning phase that is to follow.

<u>Description</u>	<u>Method</u>	<u>Setting</u>
RESIDENTIAL BURGLARY - - - - -		
Unlawful entry of a structure to commit a felony or theft, even if no force is used. By all accounts, the primary crime problem in the neighborhood. Residential burglary constituted 34% of all crimes in 1974; on the average, 9 out of 100 dwelling units were burglarized.	Residential burglaries tend to be more numerous during the summer (though January is a peak month); fairly evenly distributed during the week (with a high on Tuesday and low on Sunday); and more numerous between noon-3 p.m. and 6-9 p.m. Entry most often on ground floor and from alley side. Forceful entry in about two-thirds of cases. Most windows and doors are poorly maintained and have inadequate locks.	Alleyways provide a better approach to target than does the street. Buildings and fences (rather than vegetation) provide cover for approach. Burglaries scattered fairly evenly through the neighborhood, with an above-average clustering in census tract 27 (bounded by Plymouth, Penn, Golden Valley, and Xerxes).
AGGRAVATED ASSAULT - - - - -		
Unlawful attack by one person upon another for the purpose of inflicting severe bodily harm, usually with a weapon. Though violent and fear-producing, aggravated assault is relatively rare: 5% of total crimes; .4 out of 100 for the opportunity index. Aggravated assaults tend not to be stranger-to-stranger crimes, hence may not be amenable to CPTED approach.	Aggravated assaults tend to be evenly distributed by month and day of week. More than twice as many occur at night than during the day; the peak period is 6-9 p.m.; a firearm is involved in more than half the cases.	Almost two-thirds of aggravated assaults occur in or near a private residence. Next most frequent site is a private vehicle. (These observations relate closely to offender and victim characteristics.) Almost three-fourths of aggravated assaults are distributed between Plymouth and 16th avenues.

Phase Three:

PROJECT PLANNING

DEVELOPING THE PROJECT PLAN

The third phase of the CPTED project requires the planner to select specific crime-prevention strategies and to develop a plan for implementing them.

As a result of the analysis that has taken place, the project's goals and objectives should now be redefined. If the crime-environment problem statements have been well developed, it may be possible to drop certain crimes from consideration -- the rate of shoplifting, for example, may not be high enough for a meaningful strategy to be developed, or the pattern of assaults in the target site may show them to be the result of family stress rather than stranger-to-stranger street crime. In the same manner, the analysis may have shown that certain problems are linked, and that the goals and objectives applied to these problems should also be linked.

Fresh difficulties can arise in the planning stage, as was illustrated by a CPTED project in lower Manhattan. Here the goal was to reduce street crime; the objectives were to improve street lighting and close off dead-end streets. The residents agreed with the crime-reduction aspect of the project, but they perceived its impact in somewhat different terms. Some rental units in the area had recently been upgraded and their tenants displaced by newcomers with more money to pay. The residents now feared (with some justification) that the CPTED improvements would accelerate this process by making their neighborhood more attractive to middle-income renters. The project was rejected, apparently because the residents were troubled less by crime than by the prospect of losing their homes.

Conflicts can also exist in the priorities assigned to various objectives. In the Minneapolis residential demonstration, the goal of improving public safety was defined in terms of a) controlling vehicular access to certain alleyways and b) improving street lighting. The first objective affected relatively few residents; the second affected a great many. Placing them in priority order helped elicit broader support for

the project.

These examples suggest two cautions when defining project goals and objectives. First, the goals (and the assumptions underlying them) must be made as explicit as possible. Serious and perhaps crippling misunderstandings may otherwise emerge. Second, the process of redefining goals and objectives must involve a wide range of affected groups and individuals. Their involvement will help bring conflicting perceptions to the surface, and will also help identify latent assumptions and expectations.

SELECTING STRATEGIES AND TACTICS

The CPTED team is now ready to begin the most difficult and creative stage of project development -- that of selecting the actual strategies and tactics to reduce crime and fear. These terms should now be redefined.

A strategy is a general approach to crime prevention. If the problem is residential burglary, an appropriate response is to attempt to keep the burglar out of the dwelling. In chapter one, four "dimensions of opportunity change" were identified as useful in crime control:

* Surveillance: a strategy of reducing crime by putting the offender under a greater threat of being observed, identified, and reported to the authorities.

* Movement control: a strategy of restricting the offender's access to a particular building, street, or area.

* Activity support: a strategy of encouraging the legitimate users of the target setting to mingle, become acquainted with one another, and make fuller use of the area.

* Motivation reinforcement: a strategy of providing incentives for individuals and organizations to engage in crime-preventing behavior.

CPTED strategies are likely to overlap, of course. The purpose of activity support may be to flood neighborhood streets with people, or to populate an otherwise empty park, which is merely another way to implement a surveillance strategy. It is also possible for strategies to conflict. In pursuing a policy of movement control, for example, the planner must be careful not to discourage legitimate users of the setting, and thereby reduce the surveillance which they provide.

If a strategy is a general approach to the problem, a

tactic is a specific activity for implementing that approach. Again, in chapter one, four "change mechanisms" were identified, and these are useful ways to categorize CPTED tactics:

* Physical: tactics which create, eliminate, or alter some physical feature of the target setting.

* Social: tactics which encourage appropriate behavior on the part of the setting's legitimate users.

* Management: tactics involving some administrative agency or organization.

* Law enforcement: tactics involving the police, private security guards, or components of the criminal justice system.

Again, there is no absolute distinction between the various kinds of tactics. Suppose the CPTED team decides to follow a movement-control strategy by converting certain through streets to cul-de-sacs. Permanent barriers would of course be a physical tactic. If the barriers were put in place only during peak traffic hours, they would still be physical, but the tactic would now involve law enforcement behavior as well. Yet another way to control movement in the target setting is to restrict on-street parking to vehicles displaying a resident sticker -- a management approach which likewise involves law enforcement behavior.

CPTED tactics are virtually unlimited. Some, such as the installation of deadbolt locks and other security hardware, are so self-evident that they hardly require the intervention of a planning team. Other, more sophisticated tactics have been developed in the course of the residential, commercial, and school demonstrations described in the introduction. Yet other tactics may occur to the planner in response to challenges at the site.

The chapter that follows is a catalog of tactics drawn from previous CPTED programs; this will constitute a valuable first source of ideas for the planner. The bibliography to this volume suggests several reference works that can flesh out these ideas. Finally, information on recently developed crime-prevention tactics is available from the National Criminal Justice Reference Service. NCJRS will perform computerized key-word searches on topics of interest; if evaluations of feasibility and effectiveness have been conducted, these references will also be included. Requests to NCJRS should indicate the target crime and the type of setting.

From these and other sources, the planner will be able to identify a range of possible tactics to carry out the chosen

strategy. But how are the most promising tactics to be selected? These are the elements that should be considered:

* Effectiveness. How well does the tactic work in terms of meeting the stated objective?

* Implementability. Does the CPTED team have the equipment and the expertise to carry out the tactic?

* Compatibility. Does the tactic fit in with existing and proposed activities in the target site?

* Operability. Does the tactic meet the needs of management and users of the target site?

* Cost-benefit. How does the tactic compare with other approaches in terms of its ancillary benefits (such as improving the area's appearance) and possible negative side-effects?

If numerical values can be assigned to each of these attributes, the task of comparing tactics and choosing between them is greatly simplified. In practice, numerical values must often be estimated. In this situation, it may be useful to ask various user groups to assign a value to each tactic, then to average their values and construct a table of weighted tactical attributes, as shown in figure 3-1. Here, tactics 1, 2, and 5 have the greatest number of "high" ratings; one way to proceed would be to eliminate the other two tactics from further consideration. Alternately, the planner might eliminate any tactic which has an unacceptably low rating on any given attribute; in the example, tactics 2 and 4 would be eliminated by this method. Or the analyst might consider the composite score of the tactics across all attributes, a method which leaves tactics 1 and 5 as the most desirable.

Such a procedure has the advantage of weighing the opinions of different user groups in a rational and systematic manner. It must be cautioned, however, that it will not necessarily resolve the differences of opinion among those groups.

For purposes of the illustration, tactics have been considered in isolation from one another. In practice, however, the planner will be looking for "synergism" -- that is, a situation in which the combined effect of two or more tactics is greater than the effect of each tactic implemented by itself.

DEVELOPING THE PROJECT PLAN

A draft project plan is now prepared, describing the

TACTICS	ATTRIBUTES					Total
	Effectiveness	Implementability	Compatibility	Operability	Cost-benefit	
1 - Youth service program	2	2	3	3	3	13
2 - Target hardening	3	2	3	3	1	12
3 - Blockwatch	3	2	2	2	3	12
4 - Alleyway	2	1	2	2	2	9
5 - Victim education	2	3	3	3	2	13
(1 = low, 2 = medium, 3 = high)						

3-1 -- Weighting of Tactical Alternatives

proposed strategies and the tactics by which they will be implemented. The draft plan should contain general statements of a) selected crime-environment problems, b) probable contributing factors to those problems, c) the environmental variables that are to be manipulated, d) the suggested CPTED strategies, e) the recommended tactics, f) the responsibility for their implementation, g) the approximate cost and source of funds for each strategy, h) evaluation guidelines if appropriate, and i) a tentative schedule of activities.

The draft plan should be presented to the fullest possible range of project participants. In the Hartford residential demonstration, one of the tactics involved closing off several streets in order to control movement and enhance surveillance. When the proposal was made public, city departments objected that the proposed barriers would hinder the work of emergency and service vehicles; merchants feared the loss of drop-in trade; and residents argued that the closed-off streets might actually assist a burglar who was casing targets. These objections were eventually overcome through persuasion and compromise. The project director concluded: "A community is more

likely to be receptive to a program in the design of which it has played a significant role. . . . Compromises between the program model and the implemented program should be expected. The program model should be sufficiently strong and sufficiently flexible to allow for compromises without destroying the intent and ultimate effectiveness of the program."

The draft will thus be helpful in obtaining a consensus as to the project's scope and direction, before a detailed plan is written. It may also be helpful for soliciting funds from public and private sources. Thirdly, the draft may expedite the process of obtaining the many approvals -- legal, technical, political, and financial -- that will be required before the project actually begins. Finally, the draft will assist the planners in evaluating various strategies and tactics, and in deciding who will be responsible for implementing them.

After the draft plan has been reviewed and modified, the final plan can be prepared. It should contain at least the following elements:

- * Statement of the overall problem at the target site.
- * Description of the site and its physical, social, and economic features.
- * Statement of the crime-environment problems to be overcome.
- * Statement of the project's goals and objectives.
- * Description of the CPTED strategies that will be applied to the crime-environment problems.
- * Schedule of specific tactics.
- * Cost estimates and list of funding sources.
- * Description of program participants and their functions and responsibilities.
- * Timeframe for executing program activities.
- * Evaluation guidelines if appropriate.

The final plan closely parallels the draft, but the level of detail is necessarily greater. This is the document that will be used to obtain final approvals from elected officials, site users, affected organizations and agencies, and potential funding sources. Once these approvals have been obtained, a summary of the plan should be distributed to the community through its schools, civic organizations, or newspapers

and other media. This effort will help inform the citizen, before the program actually gets underway, as to its objectives and activities.

CONTINUED

1 OF 3

A CATALOG OF TACTICS

In developing a project plan, the CPTED team will probably review the experience of earlier crime-prevention programs. This "catalog" is intended to simplify that process. While most of these tactics were drawn from the demonstration programs in Hartford (a residential setting), Minneapolis (also residential), Portland (an urban commercial strip), and Broward County (schools), the editors have attempted to give each of them its widest possible application. However, it should be noted that a tactic that succeeded in one environment will not necessarily succeed in another -- and that the effectiveness of some of these techniques has yet to be proven.

For convenience, the tactics have been grouped under the headings of surveillance, movement control, activity support, and motivation reinforcement. It would also have been feasible to group them by type -- that is, whether the tactic operates by altering the physical setting, by affecting the community's social fabric, by modifying law enforcement procedures, or by changing managerial policies and actions.

As a reference aid, each tactic is preceded by a letter and number code, in which "S" stands for surveillance, "M" for movement control, "A" for activity support, and "R" for motivation reinforcement. To the right of the heading is a statement to the effect that the tactic is primarily physical, social, law enforcement, or managerial in nature. No bibliographic sources have been included. Interested readers will be able to locate these sources in most cases from Volume Two, CPTED Strategies and Directives Manual, in the multi-volume CPTED Program Manual published in April 1978. This document is available on loan from the National Criminal Justice Reference Service, PO Box 6000, Rockville, MD 20850.

SURVEILLANCE TACTICS

The crime-environment analysis may well suggest that poor surveillance is contributing to the problems at the target site. For example, assaults occurring on the grounds of a housing complex may be concentrated in areas away from the street, toward the interior of the site. A variety of techniques come to mind: improving the lighting, stepping up police patrol, inaugurating a tenant patrol, or installing phone booths with a toll-free emergency line. The chosen tactics will depend upon the characteristics of the environment, the modus operandi of the offenders, the resources available, and the objectives of the program.

Surveillance tactics can be subdivided into observation, identification, and reporting.

* OBSERVATION. These tactics are intended to improve the ability of people to observe activities in the setting, in person or through mechanical devices, casually or as a result of their assigned tasks.

S-1. Improve interior lighting. (Physical)

Where interior spaces are visible through doors or windows, improved lighting will enhance opportunities for casual or formal surveillance. Lighting should be even, without deep shadows in which an intruder might hide. Store windows should not be blocked by advertising or other displays. Where lighting fixtures are accessible to passers-by (as in schools and housing projects) these fixtures should be vandal-proof. Consideration might also be given to an alarm which signals when the lights are switched off.

Advice on lighting may be available from the local electric utility.

S-2. Improve outdoor lighting. (Physical)

Street lights, perimeter lights along fences and walls, and the illumination of outdoor facilities -- all serve to increase opportunities for surveillance. In addition, a lighting program may encourage the use of outdoor areas and help channel pedestrians along selected paths. Such a program is most effective when it is combined with other tactics, such as target hardening and movement control.

When planning a lighting program, local concerns and opinions should be accommodated. Where citizens are fearful of crime, high-intensity lights may be welcomed; in a

neighborhood where the fear is less -- though crime may be equal -- they may object to the color or the intensity of the lights. Fixtures are now available which provide good color balance and make efficient use of electricity.

S-3. Remove interior blind spots. (Physical)

Vestibules and alcoves are obstacles to surveillance, creating vulnerable areas that should be eliminated where possible. Alternately, parabolic mirrors can be used to improve surveillance in these blind spots. (Many cities have ordinances requiring mirrors in elevators; they are also widely used in stores and other commercial establishments.) A building security code might well require that new public facilities and multi-family housing be designed to enhance interior surveillance.

S-4. Remove exterior blind spots. (Physical)

A program to improve outdoor surveillance might include trimming or removing trees and shrubs, demolishing and clearing derelict structures, relocating parking spaces to improve the view of building entrances, and (in commercial districts) prohibiting on-street parking at night in order to improve police surveillance.

Surveillance is greatly enhanced by well-planned landscaping. Borders and trees should be located well back from pedestrian paths, and should be trimmed so that their foliage does not block the view. The visual focus of a pedestrian is about 35 feet; people therefore feel most comfortable when their field of view extends at least that far ahead. Pathway corners and intersections are especially critical and should be free of all visual obstructions. In high-crime areas, plantings might well be restricted to dense shrubs not more than two feet tall, to eliminate the fear that an offender might be concealed among them. Doors and ground-floor windows should likewise be clear of vegetation.

Demolishing derelict buildings is another way to eliminate potential hiding spaces. Federal funds may be available for such a program; consult the local office of the U.S. Department of Housing and Urban Development.

S-5. Add windows to interior spaces. (Physical)

Rooms, stairwells, and elevators can be opened to two-way surveillance by installing windows in partitions or doors. This tactic was used in Broward County, Fla., where large windows were installed in classroom walls. Such windows deter criminal activity within the vulnerable space; they also have a deterrent effect on activities in the corridor outside. (In the school demonstration, some teachers apparently resented the

interior windows or regarded them as a distraction, for they were covered with maps or other opaque materials in about half the cases monitored.)

Ideally, interior windows should be fashioned of Lexan MR4000, SecurLite, or other vandal-resistant material. Where privacy is a consideration, one-way reflective glass might be employed. Another variation is to use open grillwork to combine surveillance with physical security.

Interior windows should be considered in combination with a program to improve interior lighting (see S-1 above), and both tactics should be designed with security guard routines in mind.

- S-6. Locate vulnerable areas near those which are actively used. (Physical)

A parking lot should be visible to the occupants of the building it serves, thus making it subject to constant natural surveillance. Items likely to be stolen should be kept in areas visible to employees as they go about their routine tasks. And emergency exits (which often become a means of unauthorized entry) should be located where they open onto supervised activity areas.

Conversely, it may be possible to relocate activity areas in order to provide the desired surveillance. School officials, for example, might designate new sites for study, socializing, or recreation. Sometimes the introduction of a few simple amenities -- benches, say, or a basketball hoop -- suffices to encourage activity in an area and thereby enhance surveillance.

- S-7. Locate key personnel where they can supervise a specific area or activity. (Managerial)

In this tactic, surveillance becomes formal rather than casual, but the intent is the same as in the tactic above (S-6). Typically, it would involve relocating an office -- that of a building manager, school administrator, or maintenance supervisor -- near an entrance or other vulnerable space. To be an effective deterrent, the relocated office should be equipped with windows which enable its occupants to look out, and which signal the presence of observers to a potential intruder.

In a store, cashiers should be located where they can supervise both the display area and the entrance. Merchandise that is especially vulnerable to shoplifting would be placed near the cash register.

- S-8. Provide living quarters for a security person. (Physical)

In many settings there are hours or days when the facility is empty. In such cases a live-in manager or security person, with quarters located near a key entry point, can provide surveillance without the need for employing additional personnel. This tactic has been used by school districts in Florida, California, and Hawaii. In some schools, the district provides only a site and the necessary utilities; the security person is responsible for providing the mobile home that serves as living quarters.

- S-9. Provide guard kiosks at major access points. (Physical)

In other settings, surveillance must be conducted on a more formal basis, with the security guard stationed in a protected shelter. Such kiosks may be especially appropriate at factory entrances, or in residential facilities with a history of assaults upon security personnel. The kiosk should provide a safe haven for the guard, and should be equipped with a telephone or alarm system for summoning help.

- S-10. Install surveillance devices. (Physical)

Though not as effective as in-person surveillance, closed-circuit television (CCTV) has the advantage of providing a 24-hour view of a designated area. CCTV has been used for street surveillance by police departments in Baltimore and other cities. It has also been used in housing projects, to aid security personnel and to allow tenants to screen visitors or watch children playing in remote areas.

Other surveillance devices include burglary alarms and motion-detection systems. The latter are sometimes used in commercial establishments, but are relatively expensive. The most effective alarm system may be that which is set off inconspicuously by an employee, and which directly signals a police station. A potential problem with alarm systems is that, due to a high rate of false calls, police may place a low priority on responding to them. For this and other reasons, local law enforcement authorities should be consulted before installing any alarm system.

- S-11. Encourage the removal of visual obstructions in streets and public areas. (Managerial)

Municipal authorities can be asked to trim trees and shrubs, or to establish an ordinance to control signs and billboards. The purpose of such measures is twofold: first, to enhance opportunities for surveillance; and second, to improve the appearance of the site. (The relationship between crime and the appearance of an area has not been clearly established, but there is a demonstrated relationship between appearance and the fear of

crime. Poor maintenance characterizes a lack of concern for and identity with the site, and therefore a low level of proprietary behavior.) Note, however, that the wholesale removal of trees and shrubs can be counterproductive, if it makes the area seem less inviting and thereby discourages public use of it.

S-12. Coordinate business hours. (Managerial)

Uniform hours permit business establishments to make the most efficient use of security services, increase the number of witnesses in case an incident does take place, and lessen the chance that employees will be left alone in an isolated area.

S-13. Employ volunteer or paid security guards. (Managerial)

Increasingly, private security personnel are being employed by institutions, industries, or groups of businesses. In some cases these security forces achieve paraprofessional status. In California, law enforcement students were used to patrol college campuses; in Philadelphia, 15 former police officers were hired to patrol school grounds at night in unmarked cars.

Self-policing programs may be feasible in institutional and residential settings. In such a program, local youths might be employed to monitor after-school activity areas. Or volunteers from the faculty, staff, or student body might be assigned to school parking lots when these vulnerable areas are in use.

S-14. Initiate blockwatch programs. (Social)

Blockwatch and Neighborhood Alert programs are widely used, both in the inner city and in suburban areas. Such programs vary greatly as to the formality of their structure and the extent of police cooperation. However, all blockwatch programs include organized, scheduled surveillance among their activities. Perhaps an individual is assigned to monitor a fixed number of residences or business establishments; less elaborately, a "buddy system" may be implemented only during vacation periods.

Crime reporting is an integral part of a blockwatch program, whose effectiveness is further enhanced when it is combined with other crime-control activities, such as security surveys and property-marking projects. Blockwatch also requires a high level of citizen involvement. It should be noted that individuals who take part in club and other social activities are more likely to take part in crime-prevention activities; the same is true for neighborhoods as a whole.

S-15. Organize tenant patrols. (Social)

In an apartment complex, tenant patrols can contribute to security by screening visitors, inspecting halls, and checking on the elderly and infirm. (Indeed, services for shut-ins can be the origin of a tenant patrol, since the same "natural helpers" who assist other residents may provide the nucleus of a more widely based security system.) Such a program should have high visibility, with signs indicating that the patrol is functioning, while members wear some sort of identifying badge or armband.

Patrol activities must be coordinated with local law enforcement authorities. This precaution will increase their effectiveness, since civilian and police patrols can then supplement each other; it will also tend to discourage a "vigilante" mentality which might bring the citizen patrol into conflict with the police. Trespass and liability laws are other factors to be considered when establishing a citizen patrol.

S-16. Modify patrol levels and procedures. (Law Enforcement)

A strong police presence can deter crime, and patrol activities should therefore be increased during peak crime hours. Effective tactics include: 1) foot patrols, which have the additional advantage of strengthening police-community relations; 2) mixed teams of civilians and police officers, which can be a cost-effective way of putting more patrols on the street during high-crime periods; 3) providing a show of force by flooding a high-crime area with extra patrols; and 4) equipping officers with bicycles or motor scooters to patrol areas not accessible to cars.

Jurisdictional boundaries can hinder police response, and the crime-control program may require that they be redrawn. For example, a boundary that falls in the center of a commercial strip can increase response time by creating confusion as to which unit should answer a call.

* IDENTIFICATION. These tactics are intended to enhance the ability to recognize whether someone observed in the area is a legitimate user, whether he or she is engaged in illegal activity, and whether goods in his or her possession were stolen.

S-17. Implement a property-marking project. (Physical)

Under such names as Operation Identification, Crime TRAP (Total Registration of All Property), and Project Theft Guard, property-marking projects exist in law enforcement agencies throughout the United States. They usually involve a sponsor who supplies an electric etching pencil for marking personal property; identifying numbers are then filed with the law

enforcement agency. Similar programs can be used in institutional environments as well. In this case, property marking can be combined with inventory control, with each piece of equipment numbered and marked with the institution's name. Equipment that is easily portable should be conspicuously marked or colored so that it is readily identifiable -- and correspondingly difficult to fence.

An evaluation of such projects shows that they should be incorporated into a wider set of crime-control tactics, in order to lessen the cost of recruiting each household. Wide participation is an essential element in a property-marking project. As noted above, the necessary level of participation is most easily achieved in neighborhoods with a high level of social organization.

S-18. Mark merchandise in retail stores. (Physical)

Again, the logic of marking retail goods is to make them easier to identify, and thus to increase the shoplifter's perceived sense of risk. Many different marking systems are commercially available, varying widely in cost, ease of use, and effectiveness.

S-19. Install screening devices at entryways. (Physical)

The simplest screening device is a wide-angle viewer which allows an occupant to look into a hallway without opening the door; such viewers are required in multi-family dwellings by a model ordinance in Oakland, Calif. A case-hardened chain lock serves much the same purpose, by allowing the door to open only a few inches, but a chain can be broken by a determined intruder.

Lobby doors should provide a clear view into the lobby from the street or path outside.

Intercom systems provide a technique for screening visitors before they move past the lobby. Only after an occupant has spoken to the visitor over the intercom will he or she press a lock-releasing button. In practice, these systems are entirely dependent upon the care exercised by the residents when answering their buzzers. An intercom system should therefore be considered in conjunction with a program of tenant education. (Note that the cost of refitting a building with intercoms may be high. Consult the local telephone company to see if it can provide such a service over existing telephone lines.)

S-20. Establish territorial domains. (Physical)

The intent here is to divide interior and exterior spaces into small, easily identified areas that are associated with a specific dwelling or group of individuals. The tactic

is based on the belief that people are more likely to defend areas that are clearly assigned to them. Both architectural and landscape features may be used to define these territories, and the barriers may be real or merely symbolic.

An important element is to limit the number of individuals who share a particular space. When a laundry room or toddler play area is shared by too many families, their sense of responsibility for its maintenance and their ability to defend it from intruders are both diminished.

Establishing territorial domains is a tactic especially appropriate in multi-family housing, but is not limited to that environment. In neighborhoods consisting of single-family and row houses, streets can be modified to increase territorial identification. In a school, an area such as an outdoor patio can be assigned to a particular class. In commercial areas, the construction of mini-parks and small seating areas can break large areas into spaces that can be more easily controlled by their regular users.

S-21. Increase the visibility of detection devices. (Physical)

Trespass and other surveillance devices serve two distinct functions: 1) aiding in the apprehension of criminals and 2) increasing the offender's perceived risk. The deterrent effect of such devices can be heightened by making them visible to potential intruders, and even by posting signs announcing that they are in use.

S-22. Identify buildings in alleyways. (Physical)

When the name and street number of a building is posted in alleys, police will be assisted when approaching from the rear. This tactic should be considered in combination with other techniques -- lighting, access control, alarms, and security surveys -- when the crime-environment analysis reveals alleys as a problem area.

S-23. Establish a house-sitting program. (Social)

Like blockwatch and Neighborhood Alert programs (see Tactic S-14), this tactic organizes residents to take part in formal surveillance. House-sitting is typically a reciprocal arrangement between neighbors, but can be formalized through the use of a community group as a clearinghouse for the names of people interested in exchanging services in this way. In some cases, the "sitter" may actually reside in the dwelling at a reduced or waived rent in exchange for surveillance and maintenance services.

S-24. Establish "safe haven" homes. (Social)

A safe haven is a dwelling in which victims of crime can find shelter and assistance. Such dwellings may also have a deterrent effect, since they signal to the offender that this is an area in which the residents support one another. Not much is known about such programs, but they might certainly be considered for their surveillance value alone -- the host family, in an area of single-family or semi-detached homes, provides some of the same surveillance functions as a tenant patrol in a housing project.

A safe-haven program may also be developed to assist the victims of personal crimes such as wife beating and child abuse.

S-25. Schedule the use of sub-environments. (Managerial)

When there is free access to an area throughout the day, surveillance and identification are made more difficult. These sub-environments -- locker rooms, supply and equipment areas, parking lots, and the like -- might usefully have their access restricted to scheduled hours. As an extension of this tactic, sub-environments might be color-coded to time of day. If certain lockers in a school, for example, are used by morning-session students and others by those in the afternoon session, the two areas may be physically separate and colored differently.

S-26. Require identification procedures. (Managerial)

The use of passes and identification cards is an effective way to screen the users of an environment, but may be costly to implement since it requires supervisory personnel or electronic devices. Such a system can be supplemented by a sign-in procedure during off hours. The use of security guards to check identification has been used in housing projects in Baltimore and other cities, and in many public high schools.

To be effective, I.D. screening must be accompanied by good access control in the building, with all windows and secondary entrances secured.

S-27. Assign officers on a neighborhood basis. (Law Enforcement)

When police officers and security guards are regularly assigned to a particular neighborhood or project, they have the opportunity to become familiar with the people and the problems of the area. "Team policing" has been implemented in San Diego, Rochester (N.Y.), and other cities with encouraging results. In this approach, the team is organized to serve a particular neighborhood on a 24-hour basis, with training tailored to the

particular needs of that neighborhood.

Private security forces can also be organized on a neighborhood basis. Some housing authorities prefer to have guards change assignments on a weekly basis, on the theory that frequent rotation avoids fraternization between the guards (usually male) and the tenants (often female heads-of-household). Unfortunately, such a schedule hinders the ability of security personnel to recognize whether an individual is a tenant or an intruder. It also discourages the rapport that would increase the reporting of offenses -- especially when the offenders are also residents.

S-28. Locate precincts and substations in highly visible areas. (Law Enforcement)

Several metropolitan police departments have experimented with the use of small stations and even portable stations, the latter being a specially equipped mobile home. The same tactic may be appropriate to public housing and school settings. In Broward County, Fla., a mobile home was located at one high school to serve as a police substation; the original plan called for the trailer to be moved to different schools as the year progressed.

Visibility of police and security guards can readily be increased by having them wear uniforms to and from their posts.

* REPORTING. These tactics are intended to encourage citizens to report criminal or suspicious acts to the appropriate authorities, to simplify the reporting procedure, and to ensure that the authorities respond in a manner calculated to encourage more of the same.

S-29. Provide call systems for remote locations. (Physical)

Inexpensive and unobtrusive call devices are commercially available. Those with a one-way signal are less costly and, if used only to signal emergencies, may be adequate. Many public transit systems are now equipped with two-way radios, which are used for traffic and accident reports as well as to report crime.

S-30. Provide toll-free emergency telephones. (Physical)

Telephone companies and cities can join in a program to install dial-free or toll-free features in telephones at strategic locations, thus enabling citizens to report emergencies with a minimum of fuss. In the District of Columbia,

pay-phone users are generally able to dial the operator without inserting a coin; the operator knows that the call is from a pay phone and is trained in how to respond. Eventually this feature will be available nationwide.

The universal "911" emergency number has been adopted by several cities, but the cost in equipment and personnel is high.

S-31. Initiate a Whistle Stop program. (Social)

Whistle Stop is a useful supplement to a blockwatch program (see Tactic S-14). Area residents are given whistles to be blown when they fear for their personal safety, or if they witness a crime or suspicious behavior. Other residents are expected to respond by coming out of their homes, often blowing their own whistles to frighten the offender.

S-32. Train individuals in crime reporting. (Managerial)

Studies of police response time indicate that many victims wait a considerable length of time before reporting a crime, thus ensuring a cold trail when the police arrive. Accordingly, many crime-prevention programs include some form of training in which citizens (or the personnel of a building or organization) are taught how to observe and report suspicious behavior or criminal incidents.

S-33. Assess police response practices. (Law Enforcement)

Crime reporting can often be improved by a study of how the police respond to different types of calls, and whether there are discrepancies between community expectations and police priorities.

MOVEMENT CONTROL TACTICS.

As a crime-control strategy, movement control works both directly and indirectly. The direct effect is to reduce the ease with which strangers can move through the setting (by means of door locks, window latches, gates, and other target-hardening measures). Indirectly, this strategy deters crime and reduces fear by enhancing the possibilities for surveillance (usually by altering the amount or direction of traffic through an area).

Movement-control tactics should be selected after an analysis of crime-environment problems and existing movement patterns. Changes in traffic patterns during the day or week, the origin and destination of those who move through the site, the activities in various sub-environments, who are the legitimate users of the site, and who has (or should have) control over access -- all these factors should be considered by the analyst.

Movement-control tactics must be considered in relationship to those of surveillance, activity support, and motivational reinforcement. Channeling traffic along a selected route, for example, may affect a street-lighting program, the location of protected bus stops, and the installation of toll-free telephones; the tactic may also be used in conjunction with a program to concentrate pedestrians along the same route by providing them with benches and mini-parks, and by coordinating the hours at which stores open and close.

M-1. Reduce the number of entrances. (Physical)

The number of entrances to the interior of a building or site should be minimized, with the remaining entrances clearly identified as to their function. Provision should also be made for securing specific entrances when areas are not in use. This tactic helps channel traffic past points where casual or formal surveillance can occur. (See Tactic M-2, M-7, and M-8.)

M-2. Designate pedestrian access corridors. (Physical)

Circulation paths around or through the site should channel traffic past activity areas (such as a volleyball court or a patio) where users can engage in casual surveillance. Such paths should be as short and direct as possible, without alcoves or cul-de-sacs.

M-3. Provide keyed access to sub-environments. (Physical)

Laundry rooms, storage areas, elevators, and even corridors can be locked off, with building occupants provided with

keys. This kind of limited access makes it much easier to identify the legitimate users of an area, while greatly increasing the effort necessary for an offender to gain access to it. The success of the tactic necessarily depends on a strict key control policy and, in part, on limiting the number of people who share the sub-environment.

Locks should be the deadbolt variety, mortised into the frame rather than screwed to the surface.

M-4. Limit the number of apartments sharing a corridor. (Physical)

Neighbor interaction and the identification of strangers is encouraged by restricting the number of apartments off a common corridor. (This tactic is a variation of S-20, calling for the establishment of territorial domains. The objective in both cases is to increase the occupants' control over a public or semi-public space.)

M-5. Reduce congestion on stairways. (Physical, Managerial)

Crowded stairways are a frequent cause of accidents and fights in institutional settings, especially high schools. By increasing the size of stairways and providing separate "up" and "down" routes, conflicts during scheduled change periods can be reduced. The same objective can be achieved through a managerial tactic, that of staggering class-change times.

M-6. Use moveable barriers in corridors and restrooms. (Physical)

Buildings should be designed or modified so that areas not in use can be secured. Collapsible gates may be a cost-effective alternative in existing buildings; such gates are recommended for all multi-story schools in Hawaii by the department of education, to close off upper levels after hours. Such barriers are also appropriate for closing off vulnerable facilities such as restrooms when they are not in use.

M-7. Control access from firestairs and emergency exits. (Physical)

Emergency stairs and exits should be restricted to their intended use by providing them with alarm-connected panic bars. Firestairs should be locked from the corridor side on all but the exterior exit level; exterior exits should be provided with self-closing and self-locking doors. Such an alarm system might well be tied into the local police station where it can be monitored continuously. (See Tactic S-10.)

In any program calling for the modification of fire

exits, local fire safety codes and authorities must be consulted.

M-8. Install barriers on vulnerable openings. (Physical)

Ground-floor windows, exterior firestairs, roof openings, and skylights are all vulnerable to unauthorized access; they should be secured by grills, metal bars, or heavy screening. In general, it is necessary to secure any opening larger than 96 square inches.

Since a fixed barrier renders the opening useless for access, the option of sealing it altogether might also be considered. Many school districts have reduced the number or size of windows, or have even eliminated them altogether. Again, local fire safety codes must be considered.

M-9. Fence off problem areas. (Physical)

Fences can prevent unauthorized access or channel movement along selected paths. This tactic can be used to provide barriers to movement through exterior spaces, into a building, or within the building itself; it is especially appropriate for problem areas between or behind buildings that are not intended for public use. However, fences can give a fortress-like appearance to a facility. If possible, social needs should be balanced with security considerations -- for example, by incorporating landscape materials into proposed barriers.

In remote locations, fences should be constructed of 11 gauge or heavier wire, should be at least seven feet tall, should begin no more than two inches above the ground, and should be provided with top guards or overhangs to discourage scaling.

M-10. Provide lockable security areas. (Physical)

Portable items, and those which are stored out of the range of casual surveillance, should be secured in a locked area. Again, the security hardware should be of high quality and strict key control must be practiced. In bicycle and other personal storage areas, users should be trained in the need to secure goods and close access doors or gates.

M-11. Strengthen access-point hardware. (Physical)

The construction of access points to a facility can generally be upgraded by sturdy door and window frames. Guidelines are available both for new construction and for refitting existing buildings.

M-12. Convert streets to pedestrian use. (Physical)

Sometimes a commercial street can be closed off and used for a pedestrian arcade, mall, or park. This tactic accomplishes the dual purpose of limiting access and concentrating pedestrians for casual surveillance. (In some areas, merchants may object to the loss of drop-in customers or "carriage trade." An alternative for such areas is to devise a plan that will slow down traffic, thus making it possible for pedestrians and vehicles to coexist.) Access for emergency and service vehicles must be considered whenever a street is closed for traffic, and care must be taken to avoid a fortress-like appearance that will discourage new customers instead of attracting them to the area.

M-13. Close off residential streets. (Physical)

Residential neighborhoods may suffer from a volume of through traffic that impedes the ability of residents to identify the legitimate users of their environment. For example, a vehicle parked at the curb may belong to a resident or to someone working outside the area who simply finds it a convenient place to park.

Residents may object to the closing of streets, either because it restricts their own access or because they regard it as a prelude to the "gentrification" of the neighborhood (making it attractive to middle-income people who move back to the city, restore the housing stock, and displace lower-income residents). In such cases it may be desirable to test this tactic by using moveable barriers at the outset.

M-14. Control access to the neighborhood. (Physical)

Barriers such as fences may be used to control access to public streets, so that movement is channeled across areas where casual surveillance can occur (see Tactic M-9).

M-15. Provide front-and-rear access to commercial strips to facilitate police patrol. (Physical)

Since this tactic violates some of the principles of movement control, it should only be used in conjunction with a system for screening identification (see Tactic S-26).

M-16. Locate vulnerable areas near sources of natural surveillance. (Physical)

Ideally, a parking lot should be situated where its users can monitor it through the day or night (as when the lot is visible from classroom windows). Alternately, the lot may be sited near a pedestrian corridor or any other facility that provides natural surveillance. In the case of a complex of institutional buildings, the cluster should be designed so that

one building overlooks another; in an existing complex, it may be possible to provide surveillance by creating new amenities or activity areas. (Also see Tactic S-6.)

M-17. Locate remote parking lots in well-lighted, regularly used corridors. (Physical)

The objective here is to create safe routes for people who must travel to their final destination from a remote parking lot. Where necessary, vehicular or pedestrian traffic can be channeled along the selected corridor. This tactic should be used in conjunction with improved street lighting (Tactic S-2), protective bus stops, and toll-free emergency phones (S-30).

M-18. Control parking lot access by means of gates and passes. (Physical)

Where the intent is to restrict unauthorized use of a parking lot, the use of automatic gate-closing devices may suffice. However, fences, gates, or security guards may be necessary to deter person-to-person crime in such areas.

M-19. Reduce bus-stop congestion. (Managerial)

Overcrowded loading zones or transfer areas pose a dual threat to security: formal surveillance is hampered and disturbances can spread through a large group. Such conditions can be avoided by rescheduling the hours of loading or by designating additional loading zones. In a Florida high school, for example, a new bus loading zone was created in an area subject to surveillance. It was limited to four or five busses at a time and was located as far as possible from student parking lots, thus reducing congestion and confusion when students left the building.

M-20. Issue parking stickers. (Managerial)

Taking a different approach from Tactic M-19, this tactic employs decals rather than fences and gates to discourage unauthorized use of parking areas. It requires the patrolling of the areas and the issuance of tickets if it is to be effective.

In residential areas close to commercial or institutional facilities, parking by non-residents can be a security problem, making it difficult for residents to maintain surveillance over the neighborhood. A solution adopted in many areas is to post signs indicating that only cars with resident stickers will be allowed to park during designated hours.

M-21. Schedule activities to avoid congestion. (Managerial)

This approach is an extension of Tactic M-19, avoiding congestion that makes an area difficult to supervise and vulnerable to confusion and conflict. There are numerous situations in which the same conditions apply. In schools and other institutional settings, for example, lunch hours can be staggered in order to keep the number of people in a cafeteria within the capacity for supervision. Similar techniques can be used in office buildings and entertainment facilities.

M-22. Lock store entrances during peak robbery hours. (Managerial)

In small retail establishments that are vulnerable to robbery, such as jewelry and liquor stores, employees can be trained to lock the door during high-crime periods, admitting individual customers by the use of a button-activated lock or other device. The same tactic might also be appropriate in a professional office which serves people at off-traffic hours, especially when the office is likely to contain drugs or amounts of cash.

M-23. Institute a courtesy patrol. (Social)

A courtesy patrol escorts vulnerable people, generally the elderly and the infirm, to their destinations in order to lessen their fear of mugging or purse-snatching. Such a patrol might be a voluntary social service, or it might employ local youths in an effort to change their image from a threatening presence to a helpful one.

M-24. Implement security surveys. (Law Enforcement)

Security surveys are a joint citizen-police activity that can be oriented toward single- or multi-family residences, or commercial or industrial establishments. The police provide the expertise for an inspection at the owner's request, identifying the site's vulnerable characteristics, opportunities for surveillance, and barriers to illegal entry. Often information is provided about the merits, installation, and use of various security hardware. It is vital that a follow-up survey be included, to improve compliance. It may also be appropriate to conduct such surveys under the auspices of a local community or business group, and to utilize peer pressure within that group, to increase compliance with the survey recommendations.

ACTIVITY SUPPORT TACTICS

If observations reveal a low level of activity in public and semi-public spaces, programs to increase the use of these spaces might enhance the identification of legitimate users and promote casual surveillance. Some "activity support" tactics involve the introduction of new activities or facilities into an area, thus providing opportunities for increased social interaction. Others involve juxtaposing -- in time and space -- activities that are compatible with one another, in order to achieve a greater density of users at specific times of the day and week. Conversely, incompatible activities may be isolated from one another, in order to avoid conflicts between different user groups.

Population size is always a factor in activity support tactics. For example, if a playground is introduced in order to increase residents' identification with the neighborhood, the tactic may be counterproductive if too many families share the new facility, or if it attracts outsiders.

A-1. Create indoor activity areas. (Physical)

In a multi-family residence, a secure lounge area might be provided off the lobby, where residents can socialize and at the same time provide surveillance of people entering and leaving the building or congregating by the mailboxes. (The lounge in turn might be designed so that it can be seen from an outdoor activity area or from some of the apartments of the building.) Similar activity areas can be created in institutional and commercial settings. They should be secure and attractive, and the number of people using any one facility should be limited to enhance the users' sense of control.

A-2. Create outdoor activity areas. (Physical)

The location and type of activity selected for a particular area is based on attracting the kind of user most likely to provide the needed surveillance. Providing benches in front of a multi-family building, for example, may encourage older residents or those with young children to congregate there. Facilities could also be planned to encourage resident pedestrian traffic. Again, smaller is often better, especially in residential settings: facilities should be designed for a limited number of users so that they will develop a sense of identification with and control over the area. Even in commercial and institutional settings, where the users change frequently, breaking large activity areas into smaller ones may achieve the same positive effect.

In residential areas, allotment gardens might be a useful activity, not only promoting social interaction but upgrading the appearance of the site. Such gardens can transform a vacant lot -- often sinister and always suggesting neighborhood deterioration -- into a showplace of neighborhood involvement and cooperation.

- A-3. Design facilities for specific age groups. (Physical)

In order to avoid conflicts and enhance the identification of different user groups with the facility, it may be necessary to separate various age groups. In a renovation of the public grounds in a Manhattan housing project, landscape architect M. Paul Friedberg created distinct areas for toddlers, adults, teenagers, and the elderly -- not by managerial fiat but by providing specific equipment such as chess tables or play equipment that was likely to attract particular users. Age-group areas were separated by landscape barriers such as low earth berms and plantings, so that the elderly, for example, could watch nearby children at play without the danger of having their shins knocked by them.

- A-4. Provide information kiosks and historical markers. (Physical)

A community information center -- located, for example, in a supermarket -- provides a place for announcing activities, offering services, and exchanging other kinds of information. The purpose of a historical-marker program is to inform residents of the heritage of the area in which they live, perhaps promoting their pride in it.

- A-5. Provide a display area. (Physical)

A school or other institution, a residential complex, or a commercial strip might provide space for the display of local crafts or talents. Here again the object is to promote the residents' pride in the area in which they live. A related tactic is to invite local children or teenagers to decorate fire hydrants and garbage containers in a commercial strip, thus providing an outlet for their creative energies, brightening the environment, and improving relations between the merchants and the youngsters. It has also been suggested that street art can increase local pride in, and defense of, the environment.

- A-6. Provide activity areas at bus stops. (Physical)

The premise here is that city streets have been increasingly designed as "hard" environments to resist vandalism and abuse -- which has the perverse result of challenging the vandal

to destroy them. Such streets can be humanized by providing a pleasant sitting area or child play area at bus stops. Such areas should be secure and located near other centers of activity. (In some cases, it may be possible to relocate the bus stop closer to existing activity areas.)

- A-7. Provide a portable theater or cinema. (Physical)

Recreation departments in many cities maintain portable theaters that are moved from neighborhood to neighborhood through the summer, to provide activity centers in streets, parks, or other public areas. Such a program may be funded from private foundations or a state or local endowment for the arts.

- A-8. Cluster commercial establishments with similar operating hours. (Physical)

In developing a commercial plaza or mall, the location of specific businesses should be based in part on their operating hours. A newsstand, coffee shop, or other establishment may have early opening hours; a restaurant, bar, or movie theater may stay open until late. Clustering early-opening or late-opening establishments can increase the density of users at hours which might otherwise be vulnerable to criminal activity. In an enclosed mall, this kind of clustering provides an opportunity to close off unused sections of the facility, thus affording additional protection.

- A-9. Diversify land use along a commercial strip. (Physical)

The objective here is to provide a range of business establishments, attracting different types of users at different hours, and thus encouraging a continual flow of pedestrians through the day and evening. When implementing this tactic, care must be exercised that the mix of establishments will attract enough pedestrians at any given time to provide each other with protection (see the preceding tactic).

- A-10. Make special provision for facilities that attract undesirables. (Physical)

Facilities that attract rowdy teenagers, unemployed males, alcoholics and drug addicts, prostitutes, purveyors of pornography, and the like should be located where other citizens can avoid them if they choose. Such facilities should be well lighted and easily viewed and patrolled by police, whether isolated in a "combat zone" or mixed with other activities.

- A-11. Provide "activity decoys" in empty houses. (Physical)

An activity decoy is any device or practice that gives a potential burglar the impression that people are inside an empty house. Timers which switch lights on and off at pre-set hours, employing someone to cut the grass, stopping home deliveries when leaving for a vacation, etc. are decoys any household-er can employ.

A-12. Coordinate business hours. (Managerial)

Uniform opening and closing hours, previously suggested as an aid to surveillance (see Tactic S-12), has equal application in activity support.

A-13. Extend the use of school facilities. (Managerial)

Schools, libraries, and other institutional facilities are apt to be vacant at high-crime hours of the night. In these settings, random scheduling of after-hours activities may serve to discourage vandalism. In Los Angeles, for example, the county school district found that adult-education classes increased the security of school buildings in the evening hours; the archdiocese of San Francisco found a high correlation between school services to the community and the absence of vandalism in inner-city schools. (Note that such services may have the effect of providing a positive image for the school, thus making it a less obvious target for vandalism, in addition to the deterrent effect of after-hours activity support.) Another advantage to extended schedules is to make more efficient use of the fuel which heats the building while normal maintenance is going on.

A-14. Zone the community to eliminate security hazards. (Managerial)

Incompatible land uses (such as the taverns, teenage hangouts, and porno shops discussed in Tactic A-10) can jeopardize the security of a neighborhood. Zoning ordinances are a potent tool to control such hazards and achieving desirable patterns of development.

A-15. Develop no-cash procedures. (Managerial)

The victims of street robbery are typically chosen because they are believed to be carrying money -- a presumption which can be strengthened by their routine behavior, as when elderly people go to the bank early each month to deposit Social Security checks, or when housewives go to the store carrying a string bag or pushing a shopping cart. In higher-income areas, a no-cash policy is easily implemented by encouraging residents to use checks or credit cards for their local purchases; the same advantage may not be available to lower-income areas. Direct deposit service for Social Security checks, guarantee cards which encourage merchants to accept personal checks, and bill-

payer savings accounts are increasing in popularity, however.

A-16. Sponsor get-acquainted activities. (Social)

Social activities can help area residents to know one another and thereby develop a sense of responsibility for their neighbors and the area in which they live. An incidental advantage is that the sponsoring agency itself is shown in a positive light -- a public-relations aspect that should be of interest to the management of a public housing project, for example.

A-17. Sponsor group excursions. (Social)

Shopping trips and special tours might be arranged for the elderly or other groups who are afraid to use public transportation. Often enough, such programs already exist as a social service in the community; the CPTED planner should look for these programs and support or extend their efforts.

A-18. Hold police-sponsored activities for children. (Law Enforcement)

After-school and summer activities for neighborhood children, sponsored by the police department, serve the dual purpose of providing activities for a particular user group and enhancing the image of the department.

MOTIVATIONAL REINFORCEMENT TACTICS

Physical changes which improve the ability of people to engage in casual surveillance may not, in themselves, have an effect on crime unless the people feel motivated to engage in surveillance and report any suspicious behavior they may see. Similarly, the success of tactics involving cooperation between the police and citizens depends upon establishing a sense of trust that will allow and support such cooperation.

Motivational reinforcement can take a variety of directions, depending on the objective the planner has in mind:

* To increase the sense of pride which users have in an area, in order to enhance their identification with it and their desire to defend it.

* To increase the involvement of citizens with the area and with each other.

* To improve police-community relations by increasing the awareness of each in their mutual responsibility for developing and maintaining local crime-prevention efforts.

Motivational incentives may be positive in nature (lower insurance premiums for implementing security measures; increased control over one's immediate environment) or they may be negative (a fine when one's property is not maintained to the required standard; loss of privileges when a facility is abused).

R-1. Improve the appearance of the environment. (Physical)

The assumption here is that when people are provided with an attractive environment they will take pride in it and consequently want to use it, improve it, and defend it. Too often, public housing projects have been designed to be vandal-proof, with the result that they are merely ugly, and not a bit safer. More recently, designers have attempted to make these and other public facilities more attractive and to give their users more control over their appearance. It should be noted that, while the attractive environment may cost more initially, reduced vandalism -- and maintenance -- may prove it to be the cheaper alternative over time.

In an existing setting (schools, housing projects, parks, commercial strips) the introduction of new lighting, street furniture, and fixtures can create a brighter and more cheerful environment. Interior and exterior walls can be

enlivened by graphic art. (See also Tactic A-2, A-5, A-6, and R-3.)

R-2. Subdivide large areas. (Physical)

Large, undifferentiated spaces can be reduced in scale by landscaping and other physical features. The smaller spaces should have a clear relationship to private areas, or should be clearly intended for the use of specific groups such as toddlers or the elderly. (See the discussion under Tactic S-20.)

R-3. Personalize the environment. (Physical)

Some psychologists believe that institutional and public environments encourage hostility because they lack any sign of personal expression or involvement in the setting. Hence the tactic of personalization -- providing opportunities for people to decorate or otherwise enhance their own personal space or areas immediately adjacent to it. In Broward County, Fla., students designed and painted a large mural in one of the high schools. In many "vest-pocket" urban parks, area residents are similarly encouraged to provide murals on otherwise blank walls. The concept is hardly new: in 19th-century Shaker communities and in 20th-century Israeli kibbutzim, children have been given trees to plant and care for, in order to foster their identification with the environment.

R-4. Develop minimum security standards. (Managerial)

The security of an environment can be enhanced by the passage of an ordinance requiring doors and windows to meet minimum performance specifications. Some communities have also amended their building codes to include anti-intrusion devices. Model security codes have been drafted by the International Association of Chiefs of Police and the International Conference of Building Officials; the latter code is readily adaptable to existing ordinances.

Provision for enforcement should be part of any security code.

R-5. Encourage private security initiatives. (Managerial)

Economic incentives can be provided for citizens who implement the recommendations of a security survey or for retailers who join a collective security program. For example, a merchants' association might negotiate with suppliers to provide recommended security hardware at greatly reduced cost, and the same organization might lobby for reduced insurance premiums for member businesses which comply with security recommendations. A residential area might apply for a capital-improvement grant or loan related to a project to improve security.

- R-6. Encourage businessmen to pool resources. (Managerial)

Even when a police department has personnel trained to make security surveys, it may be desirable to encourage the merchants in a mall or commercial strip to pool their resources and hire their own consultant. (A consultant is especially appropriate when the group is considering the purchase of expensive security equipment or the hiring of a private security service.) Businessmen may also find it useful to share in the cost of area-wide surveillance improvements, such as a closed-circuit television system which can monitor streets and alleys as well as the stores themselves.

- R-7. Encourage authorities to maintain public areas. (Managerial)

City departments should be continually urged to maintain neighborhood streets, lighting, and other public service to the required standard -- no small step toward preserving the stability of the area. (Indeed, some cities have programs for increased maintenance in neighborhoods that are likely to decline. New York City, for example, designates such areas for neighborhood conservation programs.) Utility companies can also be enlisted in this effort: they generally trim trees along their electric or telephone lines, and may agree to extend this service to foliage that obscures visibility and thus hinders surveillance.

- R-8. Provide employees with training and incentives to follow security procedures. (Managerial)

New employees should be trained in routine security measures, including the proper handling of cash, surveillance of customers, and locking storerooms, rear entrances, and display cases. Economic and other incentives can be provided to employees who follow prescribed security procedures, or who become involved in community activities.

- R-9. Develop community educational programs. (Social)

The objective of educational programs is twofold: to raise the level of community awareness about crime and its prevention, and to train people in measures they can take to reduce crime. Such a program might involve the distribution of crime-prevention literature by a civic or commercial group in cooperation with the police. Another approach is to sponsor seminars and meetings led by outside experts (who tend to improve attendance). Many school systems have introduced crime-prevention materials into the classroom, ranging from teaching

youngsters how to use a "911" emergency telephone system to publishing articles in the school newspaper about school and neighborhood crime prevention. In residential neighborhoods, a "Welcome Wagon" or other system for providing information to newcomers might incorporate information on crime-prevention programs among its materials. (Also see Tactic R-13 and R-14.)

- R-10. Involve site users in developing and carrying out security programs. (Social)

In a public housing project, the tenants' organization can be involved in establishing priorities for security. The "turf reclamation" approach attempts to increase the residents' control over the project by establishing a steering committee to define community norms and goals -- thus encouraging the residents to perceive that they are responsible for policing those norms.

Programs which include physical improvements might well enlist local residents to carry them out. In Portland, Ore., CETA youths were employed to install locks in dwellings where security surveys had been conducted. In Broward County, Fla., students were hired to carry out renovations in the school buildings. (Against the advantages of using local labor in this manner must be set the additional time and poorer workmanship that may result from employing inexperienced personnel.)

- R-11. Improve police-community relations. (Law Enforcement)

Police-community relations can be fostered by the "store-front" approach, which brings officers and citizens together in a pleasant, informal atmosphere; through formal neighborhood meetings in which officers and community groups discuss crime problems and solutions; or by a "Buzz with the Fuzz" program, which encourages citizens to ride along with police officers on routine tours of duty. All such programs are intended to involve the citizens in a cooperative effort to prevent and report crime.

- R-12. Involve citizens in setting police priorities. (Law Enforcement)

Community control of schools suggests a model for a community board which meets with the police at the precinct or station level, helping establish priorities for the allocation of manpower and the selection of target crimes. Boston has experimented with this approach to crime prevention. Such an arrangement works both ways: the police can explain to the citizenry, through the board, how police priorities are established and what constraints they are working under; and the board can provide feedback on how the community views police performance.

- R-13. Establish police outreach programs. (Law Enforcement)

Police-community relations can be improved by developing an awareness program in the schools and by encouraging officers to become involved in community affairs. Police boys' clubs, drum and bugle corps, motorcycle drill teams, marksmanship teams, gun-safety classes, police-sponsored athletic teams -- all have been used successfully by police departments in different parts of the country. Some departments recognize the importance of such programs by extending released time to officers who take part in them. Such programs can also involve a one-to-one approach, as in the metropolitan police department which supplies patrol officers with baseball cards, imprinted with information about the local athletic team on one side and crime prevention on the other, to be distributed to neighborhood children. (Also see Tactic R-9.)

- R-14. Involve the police in crime-prevention media campaigns. (Law Enforcement)

Crime prevention information -- including procedures for reporting crime -- can be distributed through an astonishing variety of outlets. Mass-transit systems often provide free space for public-service announcements; advertising companies may also donate their services to such a campaign. Supermarkets may allow crime-prevention information to be printed on shopping bags, and a dairy may provide space on its milk cartons. The National Criminal Justice Reference Service (NCJRS) has a packet of brochures which have been used in local media campaigns. (Also see Tactic S-32.)

- R-15. Train officers to work with citizens. (Law Enforcement)

Improving police-community relations requires a high degree of sensitivity on the part of officers, especially on the part of those (often the youngest officers) who are assigned to areas with high rates of crime. These officers should be provided with special training courses or enrolled in university courses to help them learn how to work more effectively with citizens.

Phase Four:

PROJECT IMPLEMENTATION

CARRYING OUT THE CPTED TACTICS

The fourth step in the CPTED process is to construct or alter the physical features of the plan, and to carry out the tactics that are based on social, managerial, or law enforcement changes. An implementation team oversees this task. Often enough, the individuals who carry out a project are not the same people who designed it; one of the major jobs of the implementation team will therefore be to transfer responsibility to the agency or group that will actually implement the CPTED plan. The team may be headed by the original planners, but very likely will include architects, specialists in community organization, physical planners, and the agency and community officials who will be responsible for carrying out specific tactics.

OBTAINING FUNDS

By now, many of the financial questions will have been resolved, but a review of funding sources is nevertheless in order at this stage. Social tactics generally cost the least and have the most varied sources of money. Physical tactics, on the other hand, may require substantial expenditures, which might be underwritten by the building's owner, a local public utility, or a government agency. Each potential funding source requires a different approach and a different period for approval. These are some of the sources that might be investigated:

* Federal agencies and programs. These include the Economic Development Administration, public works programs, community development block grants, HUD Federal Crime Insurance Program, Department of Labor Comprehensive Employment and Training Act (CETA), Small Business Administration, LEAA programs, Department of Transportation, HEW Administration on Aging, and DOE Safe Schools Act.

* Private agencies. These might include citizen groups, professional organizations, and local business groups; financial institutions; private foundations; insurance companies and their related foundations; national chain stores; and public-interest groups.

* State, regional, and local agencies. These might include the State crime prevention and planning agency or human resources program, public works programs, capital improvement programs, redevelopment and revitalization programs, parks and recreation programs, transportation programs, school and education programs, social programs, and planning programs.

The implementation team should draw up a list, matching project activities with potential funding sources, as shown in table 4-1. If the community has access to a lobbyist or public-interest group in Washington, D.C., such as the League of Cities, the funding list should be coordinated with them. Similar coordination should take place at the State level as well. Finally, each potential source of money should be investigated with the most authoritative local source. When this process is finished, the team will know what funds are available for what tactics or groups of activities.

The process of obtaining funds will usually be lengthy. In the CPTED demonstration projects, major support was received from the Law Enforcement Assistance Administration and the Department of Housing and Urban Development. In each case, preparing the request took four months; from formal submission to receipt of funds required four to six months more. Thus the time required, after firm identification of the funding sources, was close to one year.

THE PARTICIPATION STRUCTURE

A preliminary determination must now be made as to what agencies and organizations will play a major role in the implementation process. The sponsor for each tactic should be clearly identified -- in most cases, preliminary meetings have already been held with them in the planning phase, and a participation structure has already evolved. However, this structure will no doubt change during the implementation process.

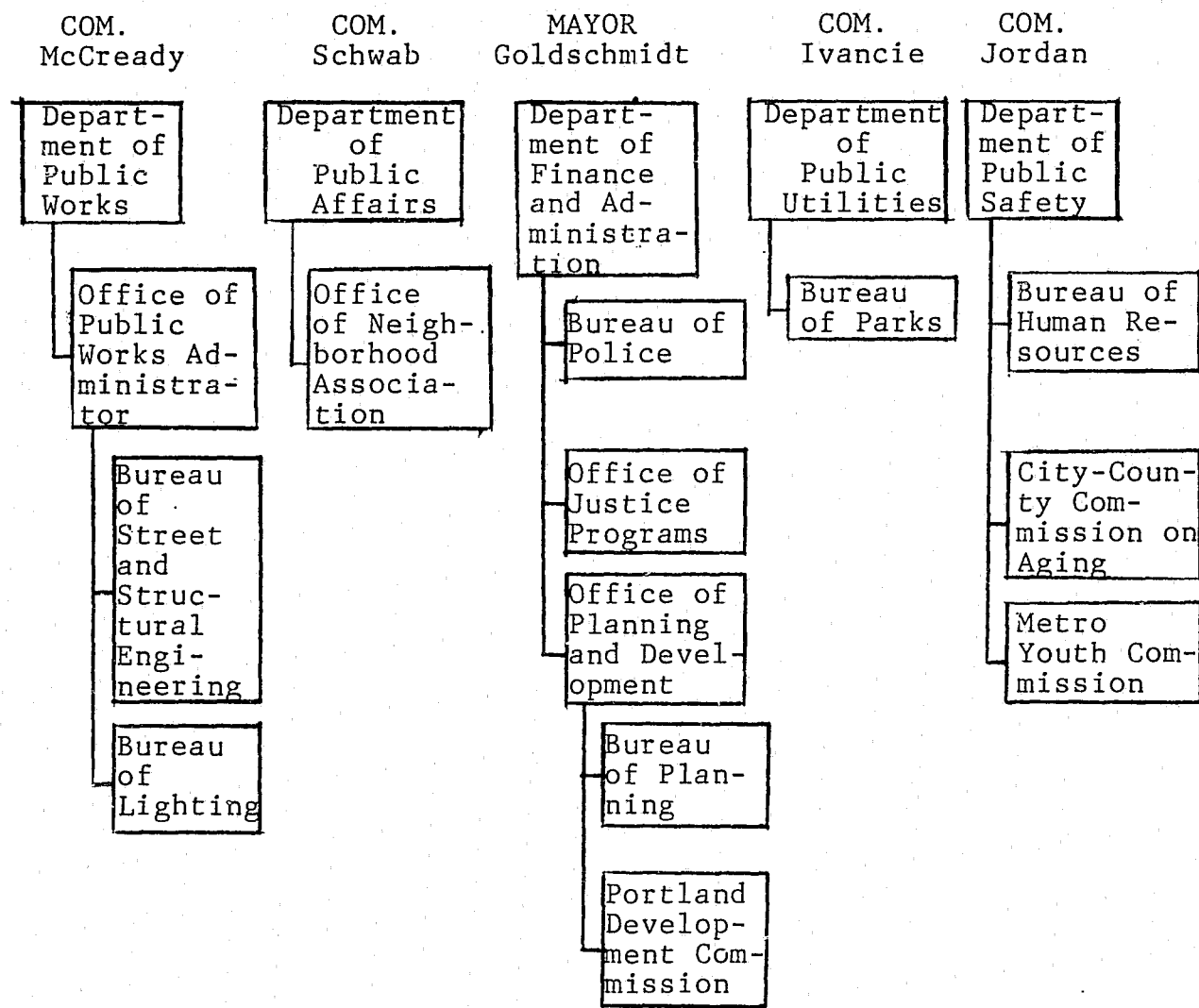
Figure 4-2 shows an organization chart developed for the Portland commercial demonstration. Regular contact with the appropriate public agencies is of great importance to a CPTED project, since they will be the source of most or all of the necessary approvals and funds. The contact list should include all the agencies identified in the funding list already

<u>PROJECT</u>	<u>POTENTIAL FUNDING</u>
Commercial rehabilitation loans	HCD* eligible
Albina Family Service * rehabilitation and site improvements	HCD eligible (historic structure)
Economic feasibility study * identify actions for neighborhood commercial center	HCD eligible (Area 4 Neighborhood Commercial Center)
Traffic and roadway improvements * Completion of Area 1 improvements including planted median, underground lighting, curb cuts, removal of on-street parking * Area 4 improvements including planted median, underground lighting, curb cuts, removal of on-street parking.	HCD eligible; LEAA** lighting grant (sodium vapor/major portion of Area 2 improvements budgeted as part of first year) (same as above)
Public parking lots * for areas where on-street is precluded	HCD eligible (assessment district)
Demolition loan fund * for clearance of abandoned structures	HCD eligible
ID projects * Area 4; Grand Street	HCD eligible
Acquire one parcel for North Precinct	HCD eligible; EDA*** public works grant

4-1 -- Matching Project Activities with Funding Sources

- *HCD - Housing and Community Development
- **LEAA - Law Enforcement Assistance Administration
- ***EDA - Economic Development Administration

CITY COUNCIL



COM. - COMMISSIONER

4-2 -- City Organizations Involved in a CPTED Project (Portland)

developed (see table 4-1), plus any agency that might be involved in any stage of the implementation process.

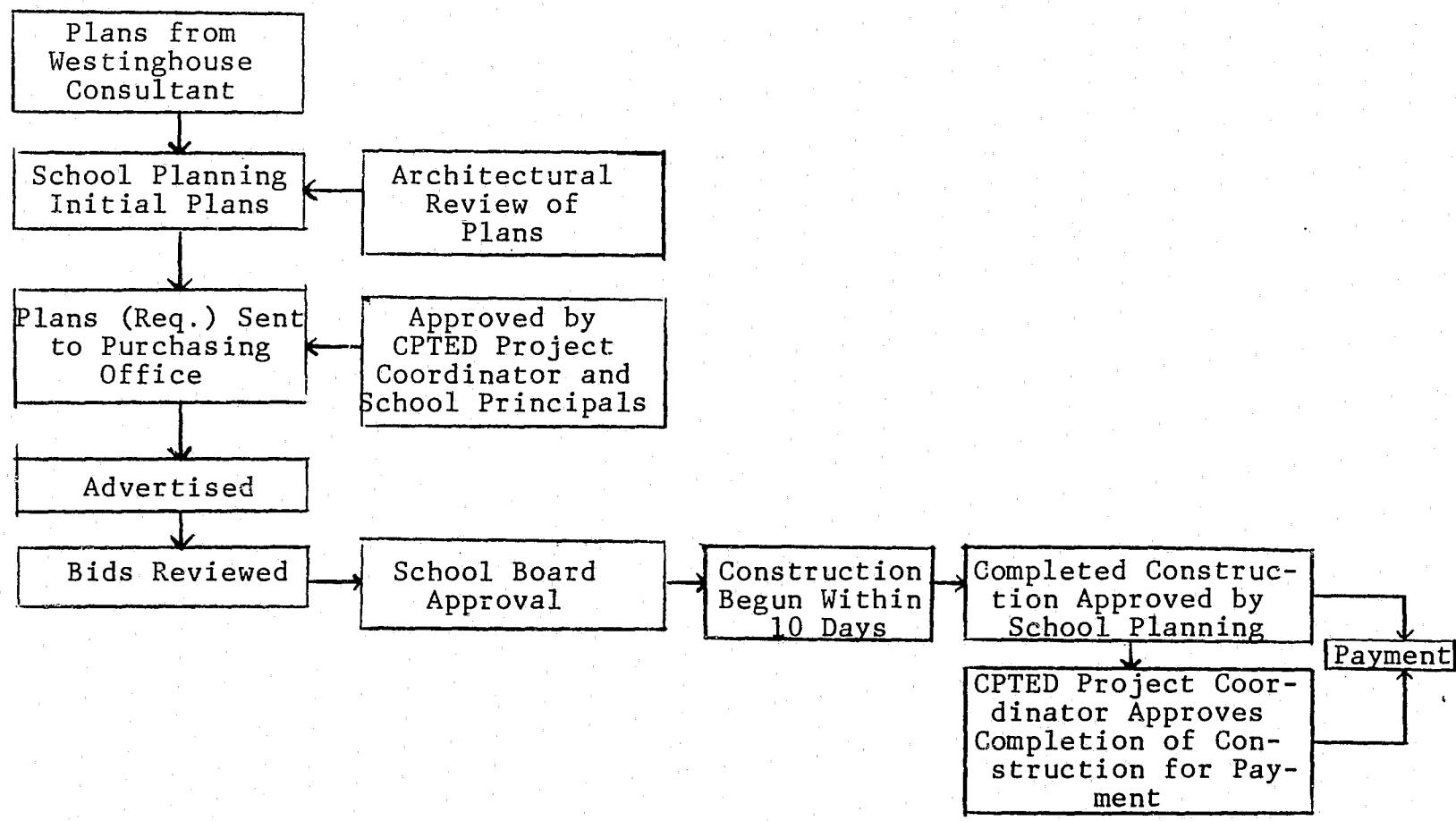
As to the organization of this body of participants, that will depend on the groupings of interest, authority, and responsibility that were identified in the project plan. There might be one large, interactive group; a number of subcommittees with a central council; or some combination of these two approaches. In any event, it is desirable that the core of the operating group be small and, if possible, that they be full-time personnel. These individuals will conduct the day-to-day activities on behalf of the larger committee. The full committee in turn should include representatives of all the major tasks that are being undertaken, and they should have the authority to speak for the particular agency or group. For larger projects, a steering committee might be beneficial, with meetings scheduled periodically.

IMPLEMENTING THE PLAN

Implementation is a creative process, in which the team responds to the delays and difficulties which inevitably emerge in any large social project. Typically, the CPTED effort will consist of many different activities progressing at the same time, each in a varying degree of completion. Coordinating them is not simply a matter of keeping specific tasks on schedule, but also to ensure that they interact to the greatest possible extent. In the Hartford demonstration, for example, physical tactics were crucial to the plan. Because of delays in the approval process, the physical changes were not in place until a year after the tactics designed to complement them. Fortunately, funding for these complementary tactics could be maintained so that the total program was operating at one time and could be evaluated as a whole.

Delays in physical tactics usually are the most troublesome. In the Broward County schools demonstration, one of the components was to construct "mini-plazas" as a form of activity support. These outdoor plazas were supposed to be completed during summer vacation. The actual average time for completion was about twenty months; construction took a little more than eight months, but obtaining the necessary approvals took about a year! (The stages in the process are illustrated in figure 4-3.) Another source of delay in carrying out physical tactics is the labor that is used. A CETA grant from the Department of Labor has been a popular way of funding such projects, but CETA workers are unskilled, and training time and perhaps time for redoing some of the work must therefore be factored into the schedule. Similarly, in one of the Broward County schools, student labor was used with the result that

4-3 -- The Approval Process (Broward County Mini-Plazas)



modifications there took longer than similar work at the other schools. (Of course, there may be ancillary benefits to the use of CETA or student labor that will outweigh their disadvantages.)

Social tactics are subject to delays of a different kind. Frequently, such techniques as blockwatch or safe-haven homes are implemented by local groups; where there is more than one strong community organization, the team must be careful not to work exclusively through one group, thus risking the alienation of others. With most social tactics, the site user is being asked to adopt new behavior. The willingness to make such a change can depend as much on the credibility of the local sponsor as it does on the efficacy of the tactic itself.

Working through law enforcement agencies presents somewhat different problems. Here the project team is addressing a well-defined bureaucracy. If the project spreads across two precincts, the team will have to ensure that both precinct captains follow the same program. At other times a site may involve only part of a jurisdiction, and it may be difficult to obtain special police programs for that area alone. Another potential problem is that a funding agency (LEAA is an example) may not allow its money to pay for municipal personnel; if police overtime is necessary to the project, the team should decide in advance where the money is to come from. Finally, the police department may hew to a narrow definition of law enforcement. CPTED depends on integrating police work with other strategies, and it may be advisable for the officers involved in the program to have special training in CPTED concepts and the objectives of the project.

Similar problems may arise with managerial tactics, whether they involve municipal or private agencies. The project team must understand the decisionmaking structure, jurisdictional boundaries, and mandated functions of all such agencies. Even with that understanding, the implementation of a large-scale, long-term project may suffer delays as these agencies go through routine changes -- notably the election or appointment of new officials.

As these and other problems arise, the team must be ready to compromise without affecting the integrity of the project plan. In part, their freedom of maneuver will depend on the flexibility of the plan itself, which must be designed so that its objectives are not jeopardized by changes and delays.

PUBLIC RELATIONS

Anything that serves to decrease crime is newsworthy,

and the CPTED project will receive publicity whether the team wants it or not. If the project is well conceived and properly presented, the publicity will probably be favorable. However, even a well-disposed news report can have an adverse effect if the timing is wrong. Public relations is thus an important task for the implementation team.

The result of dissemination activities is public awareness of the project, its goals, and its accomplishments. (Note, however, that nothing can foster criticism more than unrealistic expectations. The team must not promise to deliver more than it can, nor claim to accomplish more than it has.) The public can be reached through a variety of media, including:

- * Newspapers, television, and radio.
- * Group public-interest meetings.
- * Handouts and mailings.
- * Government meetings (city council, etc.).
- * Signs ("This Improvement Sponsored by . . .").
- * Schools.

At the minimum, the team should prepare a written description of the project, attractively printed and available to be handed out or mailed whenever an opportunity arises. Better yet, several such publications would be available, each targeted to a specific audience (an attractive pamphlet for the general public and a more straightforward "background" for the press, for example.) An audio-visual presentation, with slides or other visual aids, is invaluable when making presentations to the city council, a neighborhood group, or other interested audience. Note that English may not be the primary language for all members of the target audience -- translations should be prepared if they are appropriate.

RECORDS AND REPORTS

As in any complex and continuing enterprise, the CPTED project will generate reports to fulfill legal requirements, to provide a basis for evaluating the project's accomplishments, to enable those accomplishments to be replicated elsewhere, and to put agreements and discussions on record.

These reports can also be used to inform CPTED participants about the current status of the project. By circulating

them as they become available, the team will derive multiple benefits:

- * Providing information and guidelines to individuals who are assigned to the project.
- * Allowing team members to check for consistency and errors in data collection.
- * Providing a mechanism to monitor secondary and unpredicted events.
- * Obtaining feedback on the effectiveness of the planning and implementation of the project, and especially of its crime-prevention tactics.
- * Allowing procedures to be revised as a result of that feedback.

If evaluation is part of the project, evaluation reports should be prepared on a regular basis and the results furnished to all interested parties. Community participants should also provide periodic reports to the evaluator as to citizen reaction, changes in underlying conditions, and other variables that may affect the project. As a result of this kind of evaluation and feedback, the implementation team will be constantly reevaluating the project. Strategies will be refined, amended, or changed if necessary, depending on their effectiveness in achieving the project's goals and objectives.

Phase Five:
EVALUATION

EVALUATING THE CPTED PROJECT

The decision to evaluate a project may be made at the very beginning. When a CPTED project is to serve as a model for a city-wide crime prevention program, it might be designed as an experiment whose results will determine whether the program will be adopted at other sites. In another case the decision to evaluate may come late in the planning phase, perhaps as the result of identifying a funding source which requires project evaluation as a condition of support.

Regardless of when or why the decision to evaluate is made, the gathering of baseline data should start before the project actually goes into effect (i.e., before the implementation phase). This means that the responsibility for conducting the evaluation -- as well as its design -- must be determined during the planning phase or earlier.

There are several advantages to making the earliest possible decision. Most evaluations must document project activities; the early activities are most easily documented as they take place. Then, too, project goals may change, and an ongoing evaluation can help identify and trace these changes. Finally, data gathered for the crime-environment analysis can be developed to provide baseline data for the evaluation as well.

It is also useful to make an early determination of who will conduct the study. This decision depends in part on the type of evaluation to be performed. If it consists solely of monitoring project activities, then the CPTED implementation team might appropriately undertake the mission. But if the goal is to assess the project's impact on crime and fear, then a group unassociated with the project may have more credibility in the task. At the same time, since CPTED is a complex process, the evaluators should be familiar with the characteristics of this approach to crime prevention.

TYPES OF EVALUATION

The Law Enforcement Assistance Administration distinguishes three different types of evaluation, corresponding to the three functions an evaluation may serve: monitoring, process evaluation, and impact assessment (1). The first two functions can provide information about a project while it is actually underway -- suggesting, for example, that increased effort should be devoted to a particular strategy, or that certain activities are having little effect and should be altered or canceled. Evaluations providing this kind of front-end information are called "formative," since they can affect the way in which the project is conducted. Impact assessment, by contrast, is "summative." Since it is meant to summarize the project's effect upon target crimes or the fear of crime, the project must be well advanced (or even concluded) before this kind of evaluation can take place.

A given evaluation might serve all three functions or only one of them. Alternately, independent evaluations might be undertaken to satisfy different functions. The CPTED team, for example, might want a monitoring or process evaluation in order to gauge their progress; a funding agency might be more interested in impact evaluation, in order to decide whether to fund such projects in the future.

Before discussing the three kinds of evaluation in detail, it may be useful to define some of the terms that will be used:

* Program inputs -- items such as funding, community or organizational involvement, and operating guidelines.

* Activities -- anything done with these resources by project personnel or site users operating under the influence of project programs.

* Results -- the immediate consequences of project activities, which may or may not be related to the project's goals.

* Outcomes -- the ultimate consequences of the project in terms of achieving its stated goals for reducing target crimes and the fear of crime.

(1) See A. Schneider, Handbook of Resources for Criminal Justice Evaluators, LEAA, 1978.

Monitoring Evaluation

The simplest kind of evaluation, it consists of assessing the relationship between inputs and activities. The function is formative, indicating to project administrators and funding sources what resources are being applied to the planned activities. Monitoring indicators for CPTED might include the number of street lights installed or the number of homes or businesses surveyed. Basically these measures focus on the activities of the CPTED staff and other supporting personnel, not on the results of their activities. Monitoring provides useful information to administrators and sponsors in terms of auditing activities and expenditures. In itself, however, it does not provide a sense of whether the project is achieving its objectives.

Process Evaluation

This type of evaluation reviews the relationship of both project inputs and activities in realizing immediate project results. If an activity is the holding of block meetings, then a monitoring evaluation might report the number of meetings held, while the process evaluation would go on to consider the number of persons who attended and whether they continued to meet and deal with crime-prevention activities without the leadership of the CPTED team. Like monitoring, process evaluation has a formative function. Its findings should be transmitted to administrators and others involved with the project while it is taking place, so that the effectiveness of project activities can be assessed and perhaps changed.

A relatively simple process evaluation would involve a clear description of project activities, identification of the CPTED target area and users, specification of the time period involved, and documentation of intended and unintended results. A more elaborate study might try to establish the relationship between specific results and particular project activities. Without a process evaluation, any attempt to attribute CPTED goal attainment to project efforts would be largely speculative.

Process evaluation may also assess the relative efficiency of the CPTED tactics employed. Efficiency may be measured in terms of cost-effectiveness -- given a stated effect, what was the cost per unit of achieving it, and what is the comparative cost for other tactics which could have achieved the same result? Since CPTED projects involve many qualitative factors, determining the efficiency of producing certain results may be difficult. When a project involves activities like target hardening, however, such comparisons can more readily be made.

Impact Assessment

Most elaborate of all is an evaluation of whether a project is achieving its ultimate goal of reducing crime and fear. The impact of a project typically cannot be assessed until its activities are well underway. (Indeed, measuring impact during a project's start-up period may introduce the "Hawthorn effect" -- the confounding effect which results from interest in the project, apart from its particular activities. Once the novelty has worn off, these immediate effects may disappear.) This is the most difficult type of evaluation to perform, and usually the most costly. To assure the validity of the findings, multiple data sources are desirable (2). In addition, data must be gathered over a sufficiently long period of time to assure that observed effects are enduring. In the Hartford demonstration, for example, the post-project evaluation period was to span three years.

One of the significant difficulties in the design and cost of impact assessment is the problem of displacement. A project may reduce crime in the target area, while crime in surrounding areas increases proportionately. If that increase can be traced to project activities, the effort was clearly not a success. Similarly, if the effect of displacement were not measured, then any apparent success of a project would have to be taken as a qualified finding. Displacement is a costly and difficult effect to measure. It involves not only shifts in the locations where crimes occur, but changes in the criminal's modus operandi. Few projects have the funding available to treat displacement adequately, but the possibility must nonetheless be considered in designing for impact assessment.

RESEARCH DESIGNS FOR EVALUATION

An adequate evaluation design allows the evaluator to state with confidence that the observed attainment of the project goal is actually due to the activities of the project, not to some other event. Such an evaluation is referred to as "internally valid." For example, if increased street lighting had been found to result in more pedestrian traffic at night, the increase might be traced to the street-lighting activities of the project (high internal validity) or to some extraneous factor such as a change in the weather (low internal validity).

(2) See F. Fowler, Reducing Residential Crime and Fear: the Hartford Neighborhood Crime Prevention Program, LEAA, 1979.

There are at least seven threats to internal validity that researchers consider when designing an evaluation:

* History. Differences in measures taken at two different times can result from events that have occurred in the interim. For example, some other social action program may have been introduced at the site, and its effects may be confounded with those of the CPTED project. Awareness of such events is necessary to avoid drawing false conclusions about program impact.

* Maturation. Another consequence of the passage of time between measurements is changes in the conditions of the study. People may become interested or uninterested in a project for reasons that are independent of the project itself.

* Testing. As a consequence of being tested on one occasion, a subject's response to the items on that test in the future may be altered. In effect, exposure to the questions may sensitize the subject to the issues.

* Instrumentation. Changes over time can also occur in terms of how measures are made. Interviewers can become careless, items on a questionnaire can become outdated, police departments can change their recordkeeping procedures, and so on. Such changes can result in a false impression of program impact.

* Regression. Because of random fluctuations, some changes will appear to occur regardless of the presence or absence of a program. This problem is particularly acute when one is dealing with extremes. For example, if a school is chosen as the site of a demonstration project, and the school has a much higher rate of crime than others in the district, it is possible that future measures of crime will show a reduction simply because it was so far above the norm to begin with.

* Selection. When measures for two or more groups of people are compared, differences between them could be due to the procedures for selecting the groups, rather than to the conditions of the project. Selection occurs when the sample chosen does not represent the target population. For example, a survey concerned with citizen participation in crime-prevention activities might provide an inaccurate estimate of that participation if it only reached persons on the active rolls of community organizations, rather than sampling citizens at random.

* Mortality. A final distortion may result from the loss of subjects or other sources of data between two measurement points. For example, in a study designed to take "before" and "after" measures on the same sample, the loss of subjects in the experimental group and not in the control group might

suggest effects which are not in fact due to the project.

Designs which consider "external validity" are also desirable. External validity refers to the extent to which the results of a project can be generalized to future CPTED projects. If a project works in one neighborhood or city, will it work in other locations? The most direct way of determining external validity is to undertake a CPTED project elsewhere, under other circumstances, and see if similar results are achieved. In general, the external validity of action program evaluations is low. The environments in which such programs are executed have so many variables that they are impossible to control for and difficult to generalize about.

Most of the research designs discussed in the literature on evaluation methodology concern impact assessment. There are many excellent descriptions of designs; consequently, only brief descriptions will be given here of six such designs, to provide some background and orientation to the technical literature.

Design One: Controlled Experiments

This design controls for factors jeopardizing internal validity by comparing changes in evaluation criteria at the test site with those at an equivalent site or in an equivalent population. The CPTED site or population is the "experimental group"; the equivalent site or population is the "control group." The areas or populations assigned to each group should be selected at random to minimize selection bias. Since controlled experimentation requires that the available population or area be divided into several segments (so that randomly-assigned groups may be selected), both target and control groups should contain more than one segment, preferably more than five. Thus this kind of design is best implemented in large geographic units.

While controlled experimentation is an excellent design for controlling for threats to internal validity, it can be an expensive and technically difficult design, for it requires that extensive data be collected at both the experimental and the control site. It is likely that most CPTED projects will employ some form of quasi-experimental design in evaluation, rather than a true experimental design. (Designs two through four are quasi-experimental.)

Design Two: Pre-Test/Post-Test With Nonequivalent Groups

This design is similar to experimental design, since it involves the collection of "before" and "after" data at the

CPTED site and at a comparison area. The major structural difference is that the CPTED and the non-CPTED areas are not chosen at random, but rather are matched on selected characteristics such as population demographics, land-use patterns, and the like. Since they are not randomly assigned, the researcher cannot be as sure that factors jeopardizing internal validity have not been introduced.

Consider a case where two sites have been matched for income, race, and family structure. Tenure (whether residents are owners or renters of their housing) is not considered. Depending on the specific tactics employed by the CPTED project, tenure may turn out to be an important influence upon the effectiveness of those tactics. Since the control group was not matched on this dimension, the validity of the conclusions drawn from the evaluation are in doubt. Thus it is important to match the CPTED and non-CPTED areas as accurately as possible with respect to characteristics which might influence the effects of project activities.

Design Three: Multiple-Time Series

Often the data elements, such as crime statistics relevant to a CPTED project, may have been collected regularly over a long period. If this is the case, a time series design may be employed: measuring selected variables at the same interval of time before the CPTED activities were implemented and after they are implemented. For example, a street-lighting program might utilize monthly offense report summaries to see if the trend of crime for the months preceding the project was higher than the trend for the months following its implementation.

In order to control for possible threats to the validity of the evaluation, the period of data collection on either side of implementation should be long enough to allow for seasonal variations in crime trends. Many sources of jeopardy are controlled by including trend measures for several comparison sites -- thus the name, multiple-time series. As in design two, these sites must be matched with the project site on characteristics which might influence response to project activities.

Design Four: Time Series

When no equivalent area is available to compare with trends in the CPTED area, the time series design uses the target population or site as its own comparison. That is, the measures of variables before implementation are compared with the measures after, for the CPTED site alone. This design does not allow the evaluator to rule out error resulting from history

or maturation. Otherwise, recommendations for multiple-time series apply to single-time series as well.

Design Five: Before and After Comparisons

This design consists of taking measures of evaluation variables, at the site, before and after implementation of a CPTED program. If measures change, it attempts to attribute the change to program activities. This design is the simplest and least expensive of those presented here. As such, it is the most common design utilized in evaluation research; unfortunately, it also provides the least control over threats to internal validity. That is, the evaluator has no way of knowing if the changes would have occurred even without CPTED. Only a systematic comparison with a non-CPTED site, as in experimental and quasi-experimental designs, offers the basis for drawing a more definite conclusion.

Design Six: Case Study Approach

A case-study evaluation involves careful documentation of the evaluation criteria after the CPTED project has been operational for a given period of time. The data collected on post-implementation measures is compared with the level expected if no project had been implemented. In this approach it is not possible to rule out alternative explanations for observed levels; thus the case study approach is not recommended for impact evaluation. It may, however, form the basis for a process evaluation.

POTENTIAL PROBLEMS

In addition to the problems which threaten the validity of all pieces of evaluation research, there are others peculiar to the evaluation of social action programs like CPTED. Some of these problems result from the dynamic character of such programs. For example, the decisionmakers may be changed during the course of the project. New persons in policy positions may alter the objectives of the project or even establish new objectives for the evaluation component itself. Indeed, one of the problems in evaluating social action programs is that the goals are often vague, difficult to operationalize in terms of evaluation measures, and subject to change from a variety of sources.

In the face of such changes, the evaluators may try to persuade project administrators to keep a project operating as originally planned. Here the structural relationship between

the evaluation team and the implementation team may become an issue: if outside evaluators were selected in order to avoid bias, their attempt now to influence changes in the project's implementation may compromise their objectivity.

It must also be recognized that some of the measures desirable to include in a CPTED evaluation are difficult to obtain, and that techniques for their assessment are still experimental. Measuring fear of crime, for example, is still in an experimental state, since the concept of "fear" is not consistent across all studies. Further, a fundamental aspect of the CPTED approach is the attempt to affect the offender's perception of opportunity at the target site. It would therefore be desirable to measure these changes in perception, but the methods for assessing environmental perception -- along with the difficulties of sampling an offender population! -- make this measurement extremely difficult.

Among the measurement difficulties which the evaluator must expect to face are problems associated with the characteristics of data files. As suggested earlier, the records which the evaluator wants to use may suffer from inconsistent or inadequate recording procedures, or from changes in policy. Problems with data may delay evaluation efforts or jeopardize the validity of the findings.

These problems highlight some of the difficulties of conducting evaluation research. To be sure, it is an imperfect art. Nevertheless, evaluations can yield useful results, and program administrators should be encouraged to use them despite the difficulties involved.

FOR FURTHER INFORMATION

The following texts will provide further information on evaluation design and terminology:

* Donald Campbell and Julian Stanley, Experimental and Quasi-Experimental Designs for Research, Rand McNally, 1976.

* Marcia Guttentag, Handbook of Evaluation Research, Vol. One, Russell Sage, 1975.

* Anne Schneider, Handbook of Resources for Criminal Justice Evaluators, LEAA, 1978.

* E. A. Suchman, Evaluation Research: Principles and Practice in Public Service and Social Action Programs, Russell Sage, 1967.

* Carol Weiss, Evaluation Research, Prentice Hall, 1972.

The reader may also find it useful to review some criminal justice evaluations to gain a better sense of their design, application, and difficulties. The following reports are available through the National Criminal Justice Reference Service:

* F. Fowler, Reducing Residential Crime and Fear: the Hartford Neighborhood Crime Prevention Program. Also see the Executive Summary for the same project, especially Appendix B, "The Evaluation of the Hartford Experiment."

* A. Schneider (work cited above). Section four summarizes six evaluation studies.

* LEAA, CPTED Commercial Demonstration: Portland, Oregon. Also see the LEAA series of publications produced under the National Evaluation Program of the National Institute of Justice.

SELECTED SOURCES

SELECTED SOURCES

(NIJ publications are available from the National Criminal Justice Reference Service at the address below.)

CLEARINGHOUSES

National Criminal Justice Reference Service, PO Box 6000,
Rockville, MD 20850. Telephone (301) 251-5500.

Profile Information Service -- Office of Justice Assistance,
Research, and Statistics, 633 Indiana Ave. NW, Washington,
DC 20531. Telephone (202) 633-4842.

HUD User, PO Box 280, Germantown, MD 20767. Telephone (301)
251-5154.

Council of Planning Librarians Exchange Bibliographies,
PO Box 229, Monticello, IL 21856. Telephone (217) 762-3831.

BASIC REFERENCE DOCUMENTS

Citizen Crime Prevention Tactics, NIJ (1980).

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Directory of Criminal Justice Information Sources, third edition, NIJ (1979).

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SNI Documents: 1972-1978, A Comprehensive Bibliography, NIJ (1980).

SNI Documents: 1979, A Comprehensive Bibliography, NIJ (1980).

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Corruption in Land Use and Building Regulation, Vol. One, NIJ (1979).

Crime Prevention Handbook for Senior Citizens, NIJ (1977).

Crime Prevention through Environmental Design: The School Demonstration in Broward County, Florida (Executive Summary), NIJ (1981).

Crime Prevention Through Environmental Design: The Commercial Demonstration in Portland, Oregon (Executive Summary), NIJ (1981).

Criminal Justice Planning for Local Governments, NIJ (1980).

Design for Safe Neighborhoods, NIJ (1978).

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Jacobs, J., The Death and Life of Great American Cities, Vintage (New York, 1961).

Jeffrey, C. R., Crime Prevention Through Environmental Design, second edition, Sage Press (Beverly Hills, 1977).

National Evaluation Program

---Citizen Crime Reporting Projects, NIJ (1977).

---Citizen Patrol Projects, NIJ (1977).

---Crime Analysis in Support of Patrol, NIJ (1977).

---Crime Prevention Security Surveys, NIJ (1977).

---Neighborhood Team Policing, NIJ (1977)

---Operation Identification Projects, NIJ (1975).

---Policing Urban Mass Transit Systems, NIJ (1979).

---Street Lighting Projects, NIJ (1979).

Neighborhood Justice Centers (Program Model), NIJ (1980).

Newman, O., Defensible Space, Macmillan (New York, 1972).

Planning for Housing Security (Site Elements Manual and Site Security Manual), HUD (1979) (available from HUD User).

Rape: Guidelines for a Community Response (Program Model), NIJ (1980).

Reactions to Crime: A Critical Review of the Literature, NIJ (1979).

Reducing Residential Crime and Fear (Hartford Demonstration), NIJ (1979).

Repetto, T., Residential Crime, Ballinger (Cambridge, Mass., 1973).

Security and the Small Business Retailer, NIJ (1979).

Team Policing: Recommended Approaches, NIJ (1979).

The Link Between Crime and the Built Environment: The Current State of Knowledge, Volume One, NIJ (1981)

Victim-Witness Assistance (Monograph), NIJ (1979).

Ward, C. (ed.), Vandalism, Architectural Press (London, 1973).

Whyte, W. H., The Social Life of Small Urban Spaces, Conservation Foundation (Washington, 1980).

DATA COLLECTION METHODS

LIST OF FORMS AND FIGURES

- A - Portland Key Person Interview / 144
- B - Broward County Key Person Interview / 148
- C - National Crime Survey Victimization Form / 156
- D - Victimization Survey Short Form / 174
- E - Broward County Student Incident Survey / 179
- F - Portland Resident Attitude Survey / 195
- G - Portland Businessman Interview / 206
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- L - Broward County Behavioral Mapping Form / 230

DATA COLLECTION METHODS

In analyzing crime-environment problems and evaluating the effectiveness of tactics, the CPTED analyst is concerned with collecting different kinds of data. This data includes items relating to attitudes, beliefs, and opinions (e.g., whether a respondent feels that an area is improving or on a decline); items relating to behavior (e.g., how often a respondent utilizes particular facilities in an area); and items relating to environmental characteristics (e.g., the level of street lighting on a site). Some of the required data is available from existing records or archival sources. Other data must be obtained through surveys, such as interviews or questionnaires, or through field observations. These methods of data collection were briefly discussed in the text. The purpose of this section is to present examples of data collection instruments, and to discuss in detail some of the issues involved in their construction and use.

The instruments presented here are designed specifically for crime-environment problem analysis. They were developed in conjunction with a CPTED demonstration project or some other piece of criminal justice research. However, the general methods (of which these instruments are examples) are widely used in the social sciences. Many excellent texts are available discussing survey research and field observation techniques. The reader should consult these texts for a more detailed treatment of the methods.*

Three data collection methods were discussed in the text: archival, survey, and field observation research. Archival methods are not discussed here, since the principal issues involved in that kind of data have been treated already.

*See, for example, The Handbook of Social Psychology, by Lindsay and Aronson. Also, Research Methods in Social Relations, by Selltitz, Jahoda, Deutsch, and Cook.

This appendix is therefore divided into two sections. The first discusses survey techniques, the second discusses field observation.

SURVEY RESEARCH METHODS

Three types of survey instruments are typically employed in the CPTED crime-environment analysis: key person interviews, victimization surveys, and surveys assessing the attitudes, opinions, and beliefs of site users.

KEY PERSON INTERVIEWS. Key person interviews are typically employed at the outset of a crime-environment analysis. They provide a relatively inexpensive way of gaining a general impression of the concerns, attitudes, and expectations of project area users. Key person interviews may also be used in conjunction with a process evaluation, to determine if a project is responsive to user needs and is on schedule. The persons who might be included in key person interviews are community leaders, members of community organizations, typical site users, police officers, and members of municipal agencies who might be involved in implementing a CPTED project. These people are selected because they have special knowledge of the project site or because they represent major users groups in the project site.

The key person interview lasts approximately 30 minutes. Longer interviews may be conducted, but respondents can become fatigued, jeopardizing the reliability of their responses. Most of the items on the interview form are open-ended. The interviewer records a narrative response, which is coded later so that the responses of different individuals can be compared. Questions on the key person interview are often restructured in a focused or fixed format for use in a larger survey of site users.

Questions included in the interview should be concerned with:

- * Perceptions of area qualities.
- * Perceptions of area needs.
- * Perception of crime.
- * Assessment of area characteristics (citizen involvement/attractiveness).
- * Value of crime prevention and area improvement projects.

Two sample interview forms are included here. The first form (A) was employed in the Portland CPTED Commercial Demonstration. The second (B) was used in the Broward County CPTED School Demonstration in conjunction with a process evaluation.

FORM A

PORTLAND CPTED KEY-PERSON INTERVIEW

Interviewee _____ Date _____

Knowledge Base _____

1. How would you rate the present quality of life in UAC?*

2. How nice a place is UAC to live and work (from the perspective of residents and businessmen)? Is it . . .

- _____ Very nice
- _____ Nice
- _____ Just o.k.
- _____ OK

3. Has the quality of life in UAC changed since 1973-74? (If yes, in what ways?)

4. How would you rate the present degree of security ("Target hardness", "access control", surveillability")?

*UAC = Union Avenue Corridor

5. Has the degree of security in UAC changed since 1973-74? (If yes, in what ways?)

6. How motivated are UAC residents to use their neighborhood for daily activities, e.g., shopping and recreation?

7. Has there been any change in residents' use of their neighborhood since 1973-74? (If yes, in what ways?)

8. How attractive an area is UAC? Would you say. . .

- _____ Very attractive
- _____ Somewhat attractive
- _____ Somewhat unattractive
- _____ Very unattractive
- _____ OK

9. Has the attractiveness of UAC changed since 1973-74? (If yes, in what ways?)

10. How much community spirit exists in UAC?

11. Has the level of community spirit in UAC changed since 1973-74? (If yes, in what ways?)

12. What major community problems currently exist in UAC?

13. What reputation does UAC have for crime and fear of crime?

14. Has the reputation for crime and fear of crime in UAC changed since 1973-74? (If yes, in what ways?)

15. How would you describe the current level of crime in UAC?

16. To what extent is UAC's current crime rate a problem to the residents and businessmen who work and live there? Is it a:

- _____ Severe problem
- _____ Moderate problem
- _____ Slight problem
- _____ Not a problem
- _____ OK

17. Has the level of crime in UAC changed since 1973-74?
(If yes, in what ways?)

18. Has the level of fear of crime in UAC changed since 1973-74? (If yes, in what ways?)

19. What effect has the city's revitalization efforts had on the UAC?

20. In five years, what do you think UAC will be like to live and work in? Do you think it will be . . .

- _____ Better
- _____ No change
- _____ Worse
- _____ OK

BROWARD COUNTY KEY-PERSON INTERVIEW

Interviewee: _____ Date: _____

1. What do you think were some of the advantages of CPTED?

2. What were some of the disadvantages of CPTED?

3. Can you comment on how CPTED was implemented: efficiently? involvement of students, faculty administration? timeliness?

4. Was there any difference in the way the CPTED program was implemented as compared to any other (a) school program and/or (b) building program?

5. Do you think CPTED had some effect on any or all of the following, and if so, how?

Crime _____

Fear of Crime _____

Student Morale _____

Faculty Morale _____

Use of Space _____

6. Is there anything that happened in the past two years, other than CPTED, which could have affected any of the above, for example, change in school administration, composition of student population, discipline, other rules and regulations?

Crime _____

Fear of Crime _____

Student Morale _____

Faculty Morale _____

Use of Space _____

7. Principals: How would you rate the degree of safety and security in your school?

How attractive do you think your school is? _____

What do you see as the major crime and safety problems which currently exist? _____

What sort of reputation do you think your school has? _____

In five years, do you think this school will be:

a better place _____

no change _____

a worse place _____

8. What aspects of CPTED will remain in each (your) school?

9. What do you think will be adopted by other schools? _____

10. If the CPTED program was to be done in some other school system, what would you suggest they should do?

11. Do you think a CPTED program should be started in (a) other schools in the county and/or (b) schools elsewhere?

VICTIMIZATION SURVEYS. Victimization surveys are employed to get a more accurate assessment of the type and frequency of crimes occurring at a site than may be obtained through crime reports. Previous research on national and local victimization surveys indicates that only about half of all crimes are reported. Since the rate of underreporting varies by type of crime (e.g. rape, resident-against-resident crime) and type of victim (e.g., the elderly, children) it is not possible to multiply reported crimes by a factor of two to determine the actual crime rate of any specific crime.

Since 1971, the National Criminal Justice Information and Statistical Service (NCJIS) of LEAA has been conducting periodic comparative surveys of victimization. The survey is called the National Crime Survey, and it is administered by the U.S. Census Bureau. These surveys provide an excellent source of comparative information and interpretation of victimization experiences. The questions used on the survey have proven reliable. For these reasons, the questions on the National Crime Survey (NCS) form are often employed in local victimization surveys, (see Form C).

The NCS Household survey consists of two forms: a screening form to identify if anyone in a household has been the victim of crime, and a probe form to obtain details about any victimization experienced. The screening survey contains the following types of questions:

- * Household characteristics
- * Household attitudes
- * Individual attitudes
- * Victimization screening questions

The probe form contains the following types of questions, both for personal crimes and for property crimes:

- * Time of occurrence
- * Place
- * Victim(s)
- * Damage
- * Injury
- * Reporting

Frequently a victimization survey is included in a

larger survey instrument containing items of interest to the CPTED analyst: e.g., fear of crime, reports of preventive activities, involvement in community organizations, and so on. Since there is a limit to how long a questionnaire may run before fatigue sets in (about 45 minutes) it may be necessary to limit the length of the victimization portion of the survey. A shortened form of the NCS is provided here (see form D). Demographic and household characteristics are not contained in this form, but would be incorporated in a larger survey form.

FORM NCS-1 AND NCS-2
 U.S. DEPARTMENT OF COMMERCE
 BUREAU OF THE CENSUS
 ACTING AS COLLECTING AGENT FOR THE
 BUREAU OF JUSTICE STATISTICS
 U.S. DEPARTMENT OF JUSTICE

NATIONAL CRIME SURVEY
 NCS-1 - BASIC SCREEN QUESTIONNAIRE
 NCS-2 - CRIME INCIDENT REPORT

NOTICE - Your report to the Census Bureau is confidential by law (U.S. Code 42, Section 3771). All identifiable information will be used only by persons engaged in and for the purposes of the survey, and may not be disclosed or released to others for any purpose.

Sample (cc 3) Control number (cc 4) HH No. (cc 5)

PSU Segment CK Serial

ITEMS FILLED AT START OF INTERVIEW

1. Interviewer identification
 Code Name

2. Unit Status
 Unit in sample the previous enumeration period - Fill 3
 Unit in sample first time this period - SKIP to 4

3. Household Status - Mark first box that applies
 Same household interviewed the previous enumeration
 Replacement household since the previous enumeration
 Noninterview the previous enumeration
 Other - Specify

4. Line number of household respondent (cc 12)
 013

TRANSCRIPTION ITEMS FROM CONTROL CARD

5. Special place type code (cc 6c)
 016

6. Tenure (cc 8)
 Owned or being bought
 Rented for cash
 No cash rent

7. Land Use (cc 9-10)
 014

8. Farm Sales (cc 11)
 017
 Item blank/URBAN in cc 9

9. Type of living quarters (cc 15)
Housing unit
 House, apartment, flat
 HU in nontransient hotel, motel, etc.
 HU - Permanent in transient hotel, motel, etc.
 HU in rooming house
 Mobile home or trailer
 HU not specified above - Describe
OTHER Unit
 Quarters not HU in rooming or boarding house
 Unit not permanent in transient hotel, motel, etc.
 Vacant tent site or trailer site
 Not specified above - Describe

Use of telephone (refer to cc 26a-d)

10a. Location of phone - Mark first box that applies
 Phone in unit
 Phone in common area (hallway, etc.)
 Phone in another unit (neighbor, friend, etc.)
 Work/office phone
 No phone - SKIP to 11

b. Is phone interview acceptable?
 Yes
 No
 Refused to give number in 26c

TRANSCRIPTION ITEMS FROM CONTROL CARD - Con.

11. Number of housing units in structure (cc 27)
 1
 2
 3
 4
 5-9
 10+
 Mobile home or trailer
 Only OTHER units

12. Family income (cc 28)
 (a) Under \$3,000
 (b) \$3,000 to 4,999
 (c) 5,000 to 5,999
 (d) 6,000 to 7,499
 (e) 7,500 to 9,999
 (f) 10,000 to 11,999
 (g) 12,000 to 12,999
 (h) 13,000 to 14,999
 (i) 15,000 to 17,499
 (j) 17,500 to 19,999
 (k) 20,000 to 24,999
 (l) 25,000 to 29,999
 (m) 30,000 to 49,999
 (n) 50,000 and over

ITEMS FILLED AFTER INTERVIEW

13. Date last household member completed
 Month Day

14. Proxy information - Fill for all proxy interviews
 a. Proxy interview obtained for Line No. b. Proxy respondent Name Line No. c. Reason (Enter code)

030 031 032
 033 034 035
 036 037 038
 039 040 041

Codes for item 14c:
 1 - Under 14
 2 - 14+ and physically/mentally unable to answer
 3 - 14+ and TA, won't return before closeout } FILL INTER-COMM

15. Type Z noninterview
 a. Interview not obtained for Line No. b. Reason (Enter code)

042 043
 044 045
 046 047
 048 049

Codes for item 15b:
 1 - Never available
 2 - Refused
 3 - Physically/mentally unable to answer - no proxy available
 4 - TA and no proxy available
 5 - Other
 6 - Office use only } FILL INTER-COMM

Complete 18-29 for each Line No. in 15a.

16a. Household members 12 years of age and OVER
 050 Total number

b. Household members UNDER 12 years of age
 051 Total number
 None

17. Crime Incident Reports filled
 052 Total number - Fill BOUNDING INFORMATION (cc 32)
 None

Notes

053 054 055 056 057 058

NCS-1 and 2

PERSONAL CHARACTERISTICS

18. NAME (of household respondent)
 Last First

19. TYPE OF INTERVIEW
 025 Per. - Self-respondent
 026 Tel. - Self-respondent
 027 Per. - Proxy
 028 Tel. - Proxy
 029 NI - Fill 20-29 and 15 on cover page

20. LINE NO. (cc 12)
 024

21. RELATIONSHIP TO REFERENCE PERSON (cc 13b)
 027 Ref. person
 028 Husband
 029 Wife
 030 Own child
 031 Parent
 032 Bro./Sis.
 033 Other relative
 034 Non-relative

22. AGE LAST BIRTH-DAY (cc 17)
 Age

23. MARITAL STATUS (cc 18)
 027 M.
 028 Wd.
 029 Sep.
 030 NM

24. SEX (cc 19)
 027 M.
 028 F.

25. ARMED FORCES MEMBER (cc 20)
 029 Yes
 030 No

26. Education - highest grade (cc 21)
 Grade

27. Education - complete that year? (cc 22)
 029 Yes
 030 No

28. RACE (cc 23)
 031 White
 032 Black
 033 American Indian, Aleut, Eskimo
 034 Asian, Pacific Islander
 035 Other - Specify

29. ORIGIN (cc 24)
 Origin

INTERVIEWER: If respondent 12-15 go to Check Item A. If 16+ read 7, then go to Check Item A.
 Before we get to the crime questions, I have a few (additional) items that are useful in studying why people may or may not become victims of crime.

CHECK ITEM A
 Look at item 3 on cover page. Is box 1 marked?
 No - Ask 30
 Yes - Is this person a new household member?
 1 Yes - Ask 30
 2 No - SKIP to Check Item C

30. How long have you lived at this address?
 101 Months (If more than 11 months, leave blank and enter 1 year below.)
 102 Years (Round to nearest whole year)

CHECK ITEM B
 Is entry in 30 -
 5 years or more? - SKIP to Check Item C
 Less than 5 years? - Ask 31

31. Altogether, how many times have you moved in the last 5 years, that is, since 197 (Mo. of Int.) 197 (5 yrs. ago)?
 103 Number of times

CHECK ITEM C
 Is this person 16 years old or older?
 Yes - Ask 32a
 No - SKIP to 37a

32a. What were you doing most of LAST WEEK - (working, keeping house, going to school) or something else?
 104 Working - SKIP to 32c
 2 With a job but not at work
 3 Looking for work
 4 Keeping house
 5 Going to school
 6 Unable to work - SKIP to 35
 7 Retired
 8 Armed Forces - SKIP to 36a
 9 Other - Specify

b. Did you do any work at all LAST WEEK, not counting work around the house? (Note: If farm or business operator in HHL, ask about unpaid work.)
 105 Yes
 2 No - SKIP to 33a

c. How many hours did you work LAST WEEK at all jobs?
 106 Hours - SKIP to 36a

33a. If "with a job but not at work" in 32a, SKIP to 33b. Did you have a job or business from which you were temporarily absent or on layoff LAST WEEK?
 107 Yes
 2 No - SKIP to 34a

b. Why were you absent from work LAST WEEK?
 108 Layoff - SKIP to 34c
 2 New job to begin within 30 days - SKIP to 36c
 3 Other - Specify } SKIP to 36a

34a. If "looking for work" in 32a, SKIP to 34b. Have you been looking for work during the past 4 weeks?
 109 Yes
 2 No - SKIP to 35

b. What have you been doing in the last 4 weeks to find work? Anything else?
 Mark all methods used. Do not read list.
 Checked with -
 1 Public employment agency
 2 Private employment agency
 3 Employer directly
 4 Friends or relatives
 5 Placed or answered ads
 6 Other - Specify (e.g., CETA, union or professional register, etc.)
 7 Nothing - SKIP to 35

c. Is there any reason why you could not take a job LAST WEEK?
 110 No
 Yes -
 2 Already had a job
 3 Temporary illness
 4 Going to school
 5 Other - Specify

35. If "layoff" in 33b, SKIP to 36a. When did you last work at a full-time job or business lasting 2 consecutive weeks or more?
 112 1 6 months ago or less
 2 More than 6 months but less than 5 years
 3 5 or more years ago
 4 Never worked full time 2 weeks or more } SKIP to 37a
 5 Never worked at all

36a. For whom did you (last) work? (Name of company, business, organization or other employer)
 113

b. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm)
 114

c. What kind of work were you doing? (e.g., electrical engineer, stock clerk, typist, farmer, Armed Forces)
 115

d. What were your most important activities or duties? (e.g., typing, keeping account books, selling cars, finishing concrete, Armed Forces)

e. Were you -
 1 An employee of a PRIVATE company, business, or individual for wages, salary, or commissions?
 2 A GOVERNMENT employee (Federal, State, county, or local)?
 SELF-EMPLOYED in OWN business, professional practice, or farm? If yes -
 Is the business incorporated?
 3 Yes
 4 No (or farm)
 5 Working WITHOUT PAY in family business or farm?

37a. (Other than the . . . business) does anyone in this household operate a business from this address? **(116)**
 b. What kind of business is that? **INTERVIEWER:** Enter unrecognizable business only
 1 Yes - Ask b
 2 No - SKIP to 38

HOUSEHOLD SCREEN QUESTIONS

38. Now I'd like to ask some questions about crime. They refer only to the last 6 months - between _____, 19____ and _____, 19____. During the last 6 months, did anyone break into or somehow illegally get into your (apartment/home), garage, or another building on your property?
 Yes - How many times? _____
 No

39. (Other than the incident(s) just mentioned) Did you find a door jimmied, a lock forced, or any other signs of an ATTEMPTED break in?
 Yes - How many times? _____
 No

40. Was anything at all stolen that is kept outside your home, or happened to be left out, such as a bicycle, a garden hose, or lawn furniture? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

41. Did anyone take something belonging to you or to any member of this household, from a place where you or they were temporarily staying, such as a friend's or relative's home, a hotel or motel, or a vacation home?
 Yes - How many times? _____
 No

42. What was the TOTAL number of motor vehicles (cars, trucks, motorcycles, etc.) owned by you or any other member of this household during the last 6 months? Include those you no longer own.
 None - SKIP to 45
 1
 2
 3
 4 or more

43. Did anyone steal, TRY to steal, or use (it/any of them) without permission?
 Yes - How many times? _____
 No

44. Did anyone steal or TRY to steal parts attached to (it/any of them), such as a battery, hubcaps, tape-deck, etc.?
 Yes - How many times? _____
 No

INDIVIDUAL SCREEN QUESTIONS

45. The following questions refer only to things that happened to YOU during the last 6 months - between _____, 19____ and _____, 19____. Did you have your (pocket picked/purse snatched)?
 Yes - How many times? _____
 No

46. Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?
 Yes - How many times? _____
 No

47. Did anyone TRY to rob you by using force or threatening to harm you? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

48. Did anyone beat you up, attack you or hit you with something, such as a rock or bottle? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

49. Were you knifed, shot at, or attacked with some other weapon by anyone at all? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

50. Did anyone THREATEN to beat you up or THREATEN you with a knife, gun, or some other weapon, NOT including telephone threats? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

51. Did anyone TRY to attack you in some other way? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

52. During the last 6 months, did anyone steal things that belonged to you from inside ANY car or truck, such as packages or clothing?
 Yes - How many times? _____
 No

53. Was anything stolen from you while you were away from home, for instance at work, in a theater or restaurant, or while traveling?
 Yes - How many times? _____
 No

54. (Other than any incidents you've already mentioned) was anything (else) at all stolen from you during the last 6 months?
 Yes - How many times? _____
 No

55. Did you find any evidence that someone ATTEMPTED to steal something that belonged to you? (other than any incidents already mentioned)
 Yes - How many times? _____
 No

56. Did you call the police during the last 6 months to report something that happened to YOU which you thought was a crime? (Do not count any calls made to the police concerning the incidents you have just told me about.)
 No - SKIP to 57
 Yes - What happened? _____

57. Did anything happen to YOU during the last 6 months which you thought was a crime, but did NOT report to the police? (other than any incidents already mentioned)
 No - SKIP to Check Item F
 Yes - What happened? _____

Do any of the screen questions contain any entries for "How many times?"
 Yes - Fill Crime Incident Reports.
 No - Interview next HHL member. End interview if last respondent.

PERSONAL CHARACTERISTICS

18. NAME	19. TYPE OF INTERVIEW	20. LINE NO.	21. RELATIONSHIP TO REFERENCE PERSON	22. AGE LAST BIRTH-DAY (cc 17)	23. MARITAL STATUS (cc 18)	24. SEX (cc 19)	25. ARMED FORCES MEMBER (cc 20)	26. Education - highest grade (cc 21)	27. Education - complete that year? (cc 22)	28. RACE (cc 23)	29. ORIGIN (cc 24)
Last	(083) 1 <input type="checkbox"/> Per. - Self-respondent 2 <input type="checkbox"/> Tel. - Self-respondent 3 <input type="checkbox"/> Per. - Proxy <i>F111 14 on cover page</i> 4 <input type="checkbox"/> Tel. - Proxy <i>cover page</i> 5 <input type="checkbox"/> NI - <i>F111 20-29 and 15 on cover page</i>	(084) Line No. _____	(087) 1 <input type="checkbox"/> Ref. person 2 <input type="checkbox"/> Husband 3 <input type="checkbox"/> Wife 4 <input type="checkbox"/> Own child 5 <input type="checkbox"/> Parent 6 <input type="checkbox"/> Bro./Sis. 7 <input type="checkbox"/> Other relative 8 <input type="checkbox"/> Non-relative	(088) Age _____	(089) 1 <input type="checkbox"/> M. 2 <input type="checkbox"/> Wd. 3 <input type="checkbox"/> D. 4 <input type="checkbox"/> Sep. 5 <input type="checkbox"/> NM	(090) 6 <input type="checkbox"/> M 7 <input type="checkbox"/> F	(091) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	(092) Grade _____	(093) 6 <input type="checkbox"/> Yes 7 <input type="checkbox"/> No	(094) 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> American Indian, Aleut, Eskimo 4 <input type="checkbox"/> Asian, Pacific Islander 5 <input type="checkbox"/> Other - Specify _____	(095) Origin _____

INTERVIEWER: If respondent 12-15 go to Check Item A. If 16+ read 2, then go to Check Item A.
 Before we get to the crime questions, I have a few (additional) items that are useful in studying why people may or may not become victims of crime.

CHECK ITEM A Look at item 3 on cover page. Is box I marked?
 No - Ask 30
 Yes - Is this person a new household member?
 Yes - Ask 30
 No - SKIP to Check Item C

P G M S **(100)**

30. How long have you lived at this address?
 Months (If more than 11 months, leave blank and enter 1 year below.)
 Years (Round to nearest whole year)

CHECK ITEM B Is entry in 30 -
 5 years or more? - SKIP to Check Item C
 Less than 5 years? - Ask 31

31. Altogether, how many times have you moved in the last 5 years, that is, since _____, 19____? (Mo. of Int.) (5 yrs. ago)
 Number of times

CHECK ITEM C Is this person 16 years old or older?
 Yes - Ask 32a
 No - SKIP to 45

32a. What were you doing most of LAST WEEK - (working, keeping house, going to school) or something else?
 Working - SKIP to 32c
 Unable to work - SKIP to 35
 With a job but not at work
 Retired
 Looking for work
 Armed Forces - SKIP to 36a
 Keeping house
 Other - Specify _____
 Going to school

b. Did you do any work at all LAST WEEK, not counting work around the house? (Note: If farm or business operator in HHL, ask about unpaid work.)
 Yes
 No - SKIP to 33a

c. How many hours did you work LAST WEEK at all jobs?
 Hours - SKIP to 36a

33a. If "with a job but not at work" in 32a, SKIP to 33b. Did you have a job or business from which you were temporarily absent or on layoff LAST WEEK?
 Yes
 No - SKIP to 34a

b. Why were you absent from work LAST WEEK?
 Layoff - SKIP to 34c
 New job to begin within 30 days - SKIP to 34c
 Other - Specify _____ } SKIP to 36a

34a. If "looking for work" in 32a, SKIP to 34b. Have you been looking for work during the past 4 weeks?
 Yes
 No - SKIP to 35

b. What have you been doing in the last 4 weeks to find work? Anything else?
 Mark all methods used. Do not read list.
 Checked with -
 Public employment agency
 Private employment agency
 Employer directly
 Friends or relatives
 Placed or answered ads
 Other - Specify (e.g., CETA, union or professional register, etc.) _____

7 Nothing - SKIP to 35

c. Is there any reason why you could not take a job LAST WEEK?
 No
 Yes - 2 Already had a job
 3 Temporary illness
 4 Going to school
 5 Other - Specify _____

35. If "layoff" in 33b, SKIP to 36a. When did you last work at a full-time job or business lasting 2 consecutive weeks or more?
 6 months ago or less
 More than 6 months but less than 5 years
 5 or more years ago
 Never worked full time 2 weeks or more
 Never worked at all } SKIP to 45

36a. For whom did you (last) work? (Name of company, business, organization or other employer)

b. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm)

c. What kind of work were you doing? (e.g., electrical engineer, stock clerk, typist, farmer, Armed Forces)

d. What were your most important activities or duties? (e.g., typing, keeping account books, selling cars, finishing concrete, Armed Forces)

e. Were you -
 An employee of a PRIVATE company, business, or individual for wages, salary, or commissions?
 A GOVERNMENT employee (Federal, State, county, or local)?
 SELF-EMPLOYED in OWN business, professional practice, or farm? If yes -
 Is the business incorporated?
 Yes
 No (or farm)
 Working WITHOUT PAY in family business or farm?

INDIVIDUAL SCREEN QUESTIONS		
45. The following questions refer only to things that happened to YOU during the last 6 months - between _____, 19__ and _____, 19__ - Did you have your (pocket picked/purse snatched)?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	55. Did you find any evidence that someone ATTEMPTED to steal something that belonged to you? (other than any incidents already mentioned)
46. Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	56. Did you call the police during the last 6 months to report something that happened to YOU which you thought was a crime? (Do not count any calls made to the police concerning the incidents you have just told me about.) <input type="checkbox"/> No - SKIP to 57 <input type="checkbox"/> Yes - What happened? _____
47. Did anyone TRY to rob you by using force or threatening to harm you? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
48. Did anyone beat you up, attack you or hit you with something, such as a rock or bottle? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
49. Were you knifed, shot at, or attacked with some other weapon by anyone at all? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Look at 56. Was HHL D member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her? <input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
50. Did anyone THREATEN to beat you up or THREATEN you with a knife, gun, or some other weapon, NOT including telephone threats? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	57. Did anything happen to YOU during the last 6 months which you thought was a crime, but did NOT report to the police? (other than any incidents already mentioned) <input type="checkbox"/> No - SKIP to Check Item F <input type="checkbox"/> Yes - What happened? _____
51. Did anyone TRY to attack you in some other way? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
52. During the last 6 months, did anyone steal things that belonged to you from inside ANY car or truck, such as packages or clothing?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
53. Was anything stolen from you while you were away from home, for instance at work, in a theater or restaurant, or while traveling?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Look at 57. Was HHL D member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her? <input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
54. (Other than any incidents you've already mentioned) was anything (else) at all stolen from you during the last 6 months?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Do any of the screen questions contain any entries for "How many times?" <input type="checkbox"/> Yes - Fill Crime Incident Reports. <input type="checkbox"/> No - Interview next HHL D member. End interview if last respondent.
Notes		

PERSONAL CHARACTERISTICS											
18. NAME	19. TYPE OF INTERVIEW	20. LINE NO.	21. RELATIONSHIP TO REFERENCE PERSON	22. AGE LAST BIRTHDAY (cc 17)	23. MARITAL STATUS (cc 18)	24. SEX (cc 19)	25. ARMED FORCES MEMBER (cc 20)	26. Education - highest grade (cc 21)	27. Education - complete that year? (cc 22)	28. RACE (cc 23)	29. ORIGIN (cc 24)
Last	PGM 4 1 <input type="checkbox"/> Per. - Self-respondent 2 <input type="checkbox"/> Tel. - Self-respondent 3 <input type="checkbox"/> Per. - Proxy } Fill 14 on cover page 4 <input type="checkbox"/> Tel. - Proxy } 5 <input type="checkbox"/> NI - Fill 20-29 and 15 on cover page	(cc 12)	1 <input type="checkbox"/> Ref. person 2 <input type="checkbox"/> Husband 3 <input type="checkbox"/> Wife 4 <input type="checkbox"/> Own child 5 <input type="checkbox"/> Parent 6 <input type="checkbox"/> Bro./Sis. 7 <input type="checkbox"/> Other relative 8 <input type="checkbox"/> Non-relative	Age	1 <input type="checkbox"/> M. 2 <input type="checkbox"/> Wd. 3 <input type="checkbox"/> D. 4 <input type="checkbox"/> Sep. 5 <input type="checkbox"/> NM	6 <input type="checkbox"/> M 7 <input type="checkbox"/> F	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	Grade	6 <input type="checkbox"/> Yes 7 <input type="checkbox"/> No	1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> American Indian, Aleut, Eskimo Islander 4 <input type="checkbox"/> Asian, Pacific Islander 5 <input type="checkbox"/> Other - Specify _____	Origin
<p>INTERVIEWER: If respondent 12-15 go to Check Item A. If 16+ read, then go to Check Item A.</p> <p>Before we get to the crime questions, I have a few (additional) items that are useful in studying why people may or may not become victims of crime.</p> <p>Look at item 3 on cover page. Is box 1 marked? <input type="checkbox"/> No - Ask 30 Yes - Is this person a new household member? 1 <input type="checkbox"/> Yes - Ask 30 2 <input type="checkbox"/> No - SKIP to Check Item C</p> <p>30. How long have you lived at this address? 101 _____ Months (If more than 11 months, leave blank and enter 1 year below.) 102 _____ Years (Round to nearest whole year)</p> <p>Is entry in 30 - <input type="checkbox"/> 5 years or more? - SKIP to Check Item C <input type="checkbox"/> Less than 5 years? - Ask 31</p> <p>31. Altogether, how many times have you moved in the last 5 years, that is, since _____, 197__? (Mo. of Int.) (5 yrs. ago) 103 _____ Number of times</p> <p>Is this person 16 years old or older? <input type="checkbox"/> Yes - Ask 32a <input type="checkbox"/> No - SKIP to 45</p> <p>32a. What were you doing most of LAST WEEK - (working, keeping house, going to school) or something else? 104 1 <input type="checkbox"/> Working - SKIP to 32c 2 <input type="checkbox"/> With a job but not at work 3 <input type="checkbox"/> Looking for work 4 <input type="checkbox"/> Keeping house 5 <input type="checkbox"/> Going to school 6 <input type="checkbox"/> Unable to work - SKIP to 35 7 <input type="checkbox"/> Retired 8 <input type="checkbox"/> Armed Forces - SKIP to 36a 9 <input type="checkbox"/> Other - Specify _____</p> <p>b. Did you do any work at all LAST WEEK, not counting work around the house? (Note: If farm or business operator in HHL D, ask about unpaid work.) 105 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 33a</p> <p>c. How many hours did you work LAST WEEK at all jobs? 106 _____ Hours - SKIP to 36a</p> <p>33a. If "with a job but not at work" in 32a, SKIP to 33b. Did you have a job or business from which you were temporarily absent or on layoff LAST WEEK? 107 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 34a</p> <p>b. Why were you absent from work LAST WEEK? 108 1 <input type="checkbox"/> Layoff - SKIP to 34c 2 <input type="checkbox"/> New job to begin within 30 days - SKIP to 34c 3 <input type="checkbox"/> Other - Specify _____ } SKIP to 36a</p> <p>34a. If "looking for work" in 32a, SKIP to 34b</p> <p>a. Have you been looking for work during the past 4 weeks? 109 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 35</p> <p>b. What have you been doing in the last 4 weeks to find work? Anything else? Mark all methods used. Do not read list. Checked with - 109 1 <input type="checkbox"/> Public employment agency 2 <input type="checkbox"/> Private employment agency 3 <input type="checkbox"/> Employer directly 4 <input type="checkbox"/> Friends or relatives 5 <input type="checkbox"/> Placed or answered ads 6 <input type="checkbox"/> Other - Specify (e.g., CETA, union or professional register, etc.) _____ 7 <input type="checkbox"/> Nothing - SKIP to 35</p> <p>c. Is there any reason why you could not take a job LAST WEEK? 111 1 <input type="checkbox"/> No Yes - 2 <input type="checkbox"/> Already had a job 3 <input type="checkbox"/> Temporary illness 4 <input type="checkbox"/> Going to school 5 <input type="checkbox"/> Other - Specify _____</p> <p>35. If "layoff" in 33b, SKIP to 36a When did you last work at a full-time job or business lasting 2 consecutive weeks or more? 112 1 <input type="checkbox"/> 6 months ago or less 2 <input type="checkbox"/> More than 6 months but less than 5 years 3 <input type="checkbox"/> 5 or more years ago 4 <input type="checkbox"/> Never worked full time 2 weeks or more } SKIP to 45 5 <input type="checkbox"/> Never worked at all</p> <p>36a. For whom did you (last) work? (Name of company, business, organization or other employer) 113 _____</p> <p>b. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm) 113 _____</p> <p>c. What kind of work were you doing? (e.g., electrical engineer, stock clerk, typist, farmer, Armed Forces) 114 _____</p> <p>d. What were your most important activities or duties? (e.g., typing, keeping account books, selling cars, finishing concrete, Armed Forces) 114 _____</p> <p>e. Were you - 115 1 <input type="checkbox"/> An employee of a PRIVATE company, business, or individual for wages, salary, or commissions? 2 <input type="checkbox"/> A GOVERNMENT employee (Federal, State, county, or local)? SELF-EMPLOYED in OWN business, professional practice, or farm? If yes: Is the business incorporated? 3 <input type="checkbox"/> Yes 4 <input type="checkbox"/> No (or farm) 5 <input type="checkbox"/> Working WITHOUT PAY in family business or farm?</p>											

INDIVIDUAL SCREEN QUESTIONS		
45. The following questions refer only to things that happened to YOU during the last 6 months - between _____, 19__ and _____, 19__ Did you have your (pocket picked/purse snatched)?	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	55. Did you find any evidence that someone ATTEMPTED to steal something that belonged to you? (other than any incidents already mentioned)
46. Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	56. Did you call the police during the last 6 months to report something that happened to YOU which you thought was a crime? (Do not count any calls made to the police concerning the incidents you have just told me about.) <input type="checkbox"/> No - SKIP to 57 <input type="checkbox"/> Yes - What happened? _____
47. Did anyone TRY to rob you by using force or threatening to harm you? (other than any incidents already mentioned)	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	
48. Did anyone beat you up, attack you or hit you with something, such as a rock or bottle? (other than any incidents already mentioned)	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	
49. Were you knifed, shot at, or attacked with some other weapon by anyone at all? (other than any incidents already mentioned)	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	CHECK ITEM D Look at 56. Was HHLd member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her?
50. Did anyone THREATEN to beat you up or THREATEN you with a knife, gun, or some other weapon, NOT including telephone threats? (other than any incidents already mentioned)	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	57. Did anything happen to YOU during the last 6 months which you thought was a crime, but did NOT report to the police? (other than any incidents already mentioned) <input type="checkbox"/> No - SKIP to Check Item F <input type="checkbox"/> Yes - What happened? _____
51. Did anyone TRY to attack you in some other way? (other than any incidents already mentioned)	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	
52. During the last 6 months, did anyone steal things that belonged to you from inside ANY car or truck, such as packages or clothing?	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	
53. Was anything stolen from you while you were away from home, for instance at work, in a theater or restaurant, or while traveling?	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	CHECK ITEM E Look at 57. Was HHLd member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her?
54. (Other than any incidents you've already mentioned) was anything (else) at all stolen from you during the last 6 months?	<input type="checkbox"/> Yes-How many times? <input type="checkbox"/> No	CHECK ITEM F Do any of the screen questions contain any entries for "How many times?" <input type="checkbox"/> Yes - Fill Crime Incident Reports. <input type="checkbox"/> No - Interview next HHLd member. End interview if last respondent.
Notes		

PERSONAL CHARACTERISTICS										
18. NAME	19. TYPE OF INTERVIEW	20. LINE NO.	21. RELATIONSHIP TO REFERENCE PERSON	22. AGE LAST BIRTH-DAY (cc 17)	23. MARITAL STATUS (cc 18)	24. SEX (cc 19)	25. ARMED FORCES MEMBER (cc 20)	26. Education - highest grade (cc 21)	27. Education - complete that year? (cc 22)	
Last	PGM 4	(cc 12)	(cc 13b)	(cc 17)	(cc 18)	(cc 19)	(cc 20)	(cc 21)	(cc 22)	
First	085 1 <input type="checkbox"/> Per. - Self-respondent 2 <input type="checkbox"/> Tel. - Self-respondent 3 <input type="checkbox"/> Per. - Proxy } Fill 14 on cover page 4 <input type="checkbox"/> Tel. - Proxy } 5 <input type="checkbox"/> NI - Fill 20-29 and 15 on cover page	086 Line No.	087 1 <input type="checkbox"/> Ref. person 2 <input type="checkbox"/> Husband 3 <input type="checkbox"/> Wife 4 <input type="checkbox"/> Own child 5 <input type="checkbox"/> Parent 6 <input type="checkbox"/> Bro./Sis. 7 <input type="checkbox"/> Other relative 8 <input type="checkbox"/> Non-relative	088 Age	089 1 <input type="checkbox"/> M. 2 <input type="checkbox"/> Wd. 3 <input type="checkbox"/> D. 4 <input type="checkbox"/> Sep. 5 <input type="checkbox"/> NM	090 6 <input type="checkbox"/> M 7 <input type="checkbox"/> F	091 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	092 Grade	093 6 <input type="checkbox"/> Yes 7 <input type="checkbox"/> No	094 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> American Indian, Aleut, Eskimo 4 <input type="checkbox"/> Asian, Pacific Islander 5 <input type="checkbox"/> Other - Specify _____
INTERVIEWER: If respondent 12-15 go to Check Item A. If 16+ read _____, then go to Check Item A. Before we get to the crime questions, I have a few (additional) items that are useful in studying why people may or may not become victims of crime.					34a. If "looking for work" in 32a, SKIP to 34b Have you been looking for work during the past 4 weeks? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 35					
CHECK ITEM A Look at item 3 on cover page. Is box 1 marked? <input type="checkbox"/> No - Ask 30 Yes - Is this person a new household member? 1 <input type="checkbox"/> Yes - Ask 30 2 <input type="checkbox"/> No - SKIP to Check Item C					b. What have you been doing in the last 4 weeks to find work? Anything else? Mark all methods used. Do not read list. Checked with - 1 <input type="checkbox"/> Public employment agency 2 <input type="checkbox"/> Private employment agency 3 <input type="checkbox"/> Employer directly 4 <input type="checkbox"/> Friends or relatives 5 <input type="checkbox"/> Placed or answered ads 6 <input type="checkbox"/> Other - Specify (e.g., CETA, union or professional register, etc.) _____ 7 <input type="checkbox"/> Nothing - SKIP to 35					
30. How long have you lived at this address? 101 _____ Months (If more than 11 months, leave blank and enter 1 year below.) OR 102 _____ Years (Round to nearest whole year)					c. Is there any reason why you could not take a job LAST WEEK? 111 1 <input type="checkbox"/> No Yes - 2 <input type="checkbox"/> Already had a job 3 <input type="checkbox"/> Temporary illness 4 <input type="checkbox"/> Going to school 5 <input type="checkbox"/> Other - Specify _____					
CHECK ITEM B Is entry in 30 - <input type="checkbox"/> 5 years or more? - SKIP to Check Item C <input type="checkbox"/> Less than 5 years? - Ask 31					35. If "layoff" in 33b, SKIP to 36a When did you last work at a full-time job or business lasting 2 consecutive weeks or more? 112 1 <input type="checkbox"/> 6 months ago or less 2 <input type="checkbox"/> More than 6 months but less than 5 years 3 <input type="checkbox"/> 5 or more years ago 4 <input type="checkbox"/> Never worked full time 2 weeks or more } SKIP to 45 5 <input type="checkbox"/> Never worked at all					
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CHECK ITEM C Is this person 16 years old or older? <input type="checkbox"/> Yes - Ask 32a <input type="checkbox"/> No - SKIP to 45					b. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm) 113 _____					
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INDIVIDUAL SCREEN QUESTIONS	
45. The following questions refer only to things that happened to YOU during the last 6 months - between _____, 19__ and _____, 19__ - Did you have your (pocket picked/purse snatched)?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
46. Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
47. Did anyone TRY to rob you by using force or threatening to harm you? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
48. Did anyone beat you up, attack you or hit you with something, such as a rock or bottle? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
49. Were you knifed, shot at, or attacked with some other weapon by anyone at all? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
50. Did anyone THREATEN to beat you up or THREATEN you with a knife, gun, or some other weapon, NOT including telephone threats? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
51. Did anyone TRY to attack you in some other way? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
52. During the last 6 months, did anyone steal things that belonged to you from inside ANY car or truck, such as packages or clothing?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
53. Was anything stolen from you while you were away from home, for instance at work, in a theater or restaurant, or while traveling?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
54. (Other than any incidents you've already mentioned) was anything (else) at all stolen from you during the last 6 months?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
Notes	

PERSONAL CHARACTERISTICS											
18. NAME	19. TYPE OF INTERVIEW	20. LINE NO.	21. RELATIONSHIP TO REFERENCE PERSON	22. AGE LAST BIRTHDAY	23. MARITAL STATUS	24. SEX	25. ARMED FORCES MEMBER	26. Education - highest grade	27. Education - complete that year?	28. RACE	29. ORIGIN
Last	PGM 4	(cc 12)	(cc 13b)	(cc 17)	(cc 18)	(cc 19)	(cc 20)	(cc 21)	(cc 22)	(cc 23)	(cc 24)
First	085 1 <input type="checkbox"/> Per. - Self-respondent 2 <input type="checkbox"/> Tel. - Self-respondent 3 <input type="checkbox"/> Per. - Proxy <i>F III 14 on cover page</i> 4 <input type="checkbox"/> Tel. - Proxy <i>F III 14 on cover page</i> 5 <input type="checkbox"/> NI - <i>F III 20-29 and 15 on cover page</i>	086 Line No.	087 1 <input type="checkbox"/> Ref. person 2 <input type="checkbox"/> Husband 3 <input type="checkbox"/> Wife 4 <input type="checkbox"/> Own child 5 <input type="checkbox"/> Parent 6 <input type="checkbox"/> Bro./Sis. 7 <input type="checkbox"/> Other relative 8 <input type="checkbox"/> Non-relative	088 Age	089 1 <input type="checkbox"/> M. 2 <input type="checkbox"/> Wd. 3 <input type="checkbox"/> D. 4 <input type="checkbox"/> Sep. 5 <input type="checkbox"/> NM	090 6 <input type="checkbox"/> M 7 <input type="checkbox"/> F	091 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	092 Grade	093 6 <input type="checkbox"/> Yes 7 <input type="checkbox"/> No	094 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> American Indian, Aleut, Eskimo 4 <input type="checkbox"/> Asian, Pacific Islander 5 <input type="checkbox"/> Other - Specify	095 Origin
<p>INTERVIEWER: If respondent 12-15 go to Check Item A. If 16+ read <input type="checkbox"/> , then go to Check Item A.</p> <p>Before we get to the crime questions, I have a few (additional) items that are useful in studying why people may or may not become victims of crime.</p> <p>CHECK ITEM A Look at item 3 on cover page. Is box 1 marked? <input type="checkbox"/> No - Ask 30 Yes - Is this person a new household member? 1 <input type="checkbox"/> Yes - Ask 30 2 <input type="checkbox"/> No - SKIP to Check Item C</p>					<p>34a. If "looking for work" in 32a, SKIP to 34b</p> <p>Have you been looking for work during the past 4 weeks? 109 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 35</p> <p>b. What have you been doing in the last 4 weeks to find work? Anything else? Mark all methods used. Do not read list.</p> <p>Checked with - 110 1 <input type="checkbox"/> Public employment agency 2 <input type="checkbox"/> Private employment agency 3 <input type="checkbox"/> Employer directly 4 <input type="checkbox"/> Friends or relatives 5 <input type="checkbox"/> Placed or answered ads 6 <input type="checkbox"/> Other - Specify (e.g., CETA, union or professional register, etc.)</p> <p>7 <input type="checkbox"/> Nothing - SKIP to 35</p> <p>c. Is there any reason why you could not take a job LAST WEEK? 111 1 <input type="checkbox"/> No Yes - 2 <input type="checkbox"/> Already had a job 3 <input type="checkbox"/> Temporary illness 4 <input type="checkbox"/> Going to school 5 <input type="checkbox"/> Other - Specify</p>						
<p>30. How long have you lived at this address? 101 _____ Months (If more than 11 months, leave blank and enter 1 year below.) OR 102 _____ Years (Round to nearest whole year)</p> <p>Is entry in 30 - <input type="checkbox"/> 5 years or more? - SKIP to Check Item C <input type="checkbox"/> Less than 5 years? - Ask 31</p>					<p>35. If "layoff" in 33b, SKIP to 36a</p> <p>When did you last work at a full-time job or business lasting 2 consecutive weeks or more? 112 1 <input type="checkbox"/> 6 months ago or less 2 <input type="checkbox"/> More than 6 months but less than 5 years 3 <input type="checkbox"/> 5 or more years ago 4 <input type="checkbox"/> Never worked full time 2 weeks or more } SKIP to 45 5 <input type="checkbox"/> Never worked at all</p> <p>36a. For whom did you (last) work? (Name of company, business, organization or other employer)</p> <p>113 _____</p> <p>b. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm)</p> <p>114 _____</p> <p>c. What kind of work were you doing? (e.g., electrical engineer, stock clerk, typist, farmer, Armed Forces)</p> <p>115 _____</p> <p>d. What were your most important activities or duties? (e.g., typing, keeping account books, selling cars, finishing concrete, Armed Forces)</p>						
<p>31. Altogether, how many times have you moved in the last 5 years, that is, since _____, 197__? (Mo. of Int.) (5 yrs. ago) 103 _____ Number of times</p> <p>Is this person 16 years old or older? <input type="checkbox"/> Yes - Ask 32a <input type="checkbox"/> No - SKIP to 45</p>					<p>32a. What were you doing most of LAST WEEK - (working, keeping house, going to school) or something else? 104 1 <input type="checkbox"/> Working - SKIP to 32c 2 <input type="checkbox"/> With a job but not at work 3 <input type="checkbox"/> Looking for work 4 <input type="checkbox"/> Keeping house 5 <input type="checkbox"/> Going to school 6 <input type="checkbox"/> Unable to work - SKIP to 35 7 <input type="checkbox"/> Retired 8 <input type="checkbox"/> Armed Forces - SKIP to 36a 9 <input type="checkbox"/> Other - Specify</p> <p>b. Did you do any work at all LAST WEEK, not counting work around the house? (Note: If farm or business operator in HHL, ask about unpaid work.) 105 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 33a</p> <p>c. How many hours did you work LAST WEEK at all jobs? 106 _____ Hours - SKIP to 36a</p>						
<p>32b. If "with a job but not at work" in 32a, SKIP to 33b.</p> <p>Did you have a job or business from which you were temporarily absent or on layoff LAST WEEK? 107 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No - SKIP to 34a</p> <p>b. Why were you absent from work LAST WEEK? 108 1 <input type="checkbox"/> Layoff - SKIP to 34c 2 <input type="checkbox"/> New job to begin within 30 days - SKIP to 34c 3 <input type="checkbox"/> Other - Specify } SKIP to 36a</p>					<p>e. Were you - 115 1 <input type="checkbox"/> An employee of a PRIVATE company, business, or individual for wages, salary, or commissions? 2 <input type="checkbox"/> A GOVERNMENT employee (Federal, State, county, or local)? SELF-EMPLOYED in OWN business, professional practice, or farm? If yes, Is the business incorporated? 3 <input type="checkbox"/> Yes 4 <input type="checkbox"/> No (or farm) 5 <input type="checkbox"/> Working WITHOUT PAY in family business or farm?</p>						

INDIVIDUAL SCREEN QUESTIONS		
45. The following questions refer only to things that happened to YOU during the last 6 months - between _____, 19____ and _____, 19____. Did you have your (pocket picked/purse snatched)?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	55. Did you find any evidence that someone ATTEMPTED to steal something that belonged to you? (other than any incidents already mentioned)
46. Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	56. Did you call the police during the last 6 months to report something that happened to YOU which you thought was a crime? (Do not count any calls made to the police concerning the incidents you have just told me about.) <input type="checkbox"/> No - SKIP to 57 <input type="checkbox"/> Yes - What happened? _____
47. Did anyone TRY to rob you by using force or threatening to harm you? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	118 * <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
48. Did anyone beat you up, attack you or hit you with something, such as a rock or bottle? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
49. Were you knifed, shot at, or attacked with some other weapon by anyone at all? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Look at 56. Was HHL member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her? <input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
50. Did anyone THREATEN to beat you up or THREATEN you with a knife, gun, or some other weapon, NOT including telephone threats? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	57. Did anything happen to YOU during the last 6 months which you thought was a crime, but did NOT report to the police? (other than any incidents already mentioned) <input type="checkbox"/> No - SKIP to Check Item F <input type="checkbox"/> Yes - What happened? _____
51. Did anyone TRY to attack you in some other way? (other than any incidents already mentioned)	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	119 * <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
52. During the last 6 months, did anyone steal things that belonged to you from inside ANY car or truck, such as packages or clothing?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	
53. Was anything stolen from you while you were away from home, for instance at work, in a theater or restaurant, or while traveling?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Look at 57. Was HHL member 12+ attacked or threatened, or was something stolen or an attempt made to steal something that belonged to him/her? <input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No
54. (Other than any incidents you've already mentioned) was anything (else) at all stolen from you during the last 6 months?	<input type="checkbox"/> Yes - How many times? <input type="checkbox"/> No	Do any of the screen questions contain any entries for "How many times?" <input type="checkbox"/> Yes - Fill Crime Incident Reports. <input type="checkbox"/> No - Interview next HHL member. End interview if last respondent.
Notes		

Form Approved: O.M.B. No. 43-R0587

Line number	Notes	NOTICE - Your report to the Census Bureau is confidential by law (U.S. Code 42, section 3771). All identifiable information will be used only by persons engaged in and for the purposes of the survey, and may not be disclosed or released to others for any purpose.
(201) Screen question number		FORM NCS-2 (2-20-80) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR THE BUREAU OF JUSTICE STATISTICS U.S. DEPARTMENT OF JUSTICE CRIME INCIDENT REPORT NATIONAL CRIME SURVEY
(202) Incident number		
(203)	Has this person lived at this address for more than 6 months? (If not sure, refer to Item 30, NCS-1.) <input type="checkbox"/> Yes (Item 30 blank or more than 6 months? - Read A, SKIP to 2a) <input type="checkbox"/> No (Item 30 - 6 months or less) - Read A, Ask 1	
(A) CHECK ITEM A	You said that during the last 6 months - (Refer to appropriate screen question for description of crime).	4a. Did this incident happen inside the limits of a city, town, village, etc.? (214) <input type="checkbox"/> 1 Outside U.S. - SKIP to 5 <input type="checkbox"/> 2 No - Ask 4b Yes - What is the name of that city/town/village? <input type="checkbox"/> 3 Same city, town, village as present residence - SKIP to 5 <input type="checkbox"/> 4 Different city, town, village from present residence. - Specify _____
(204) CHECK ITEM B	1. Did (this/the first) incident happen while you were living here or before you moved to this address? <input type="checkbox"/> 1 While living at this address <input type="checkbox"/> 2 Before moving to this address	(215) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> If not sure, ask: b. In what State and county did it occur? State _____ County _____
(205)	2a. In what month did (this/the first) incident happen? (Show calendar if necessary. Encourage respondent to give exact month.) Month _____ Year _____	If not sure, ask: c. Is this the same State and county as your PRESENT RESIDENCE? (216) <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No
(206) CHECK ITEM B	Is this incident report for a series of crimes? (206) <input type="checkbox"/> 1 Yes - Ask 2b (Note: series must have 3 or more similar incidents which respondent can't recall separately. Reduce entry in screen question if necessary.) <input type="checkbox"/> 2 No - SKIP to 3a	5. Where did this incident take place? (217) <input type="checkbox"/> 1 At or in own dwelling, or own attached garage (Always mark for break-in or attempted break-in of same) <input type="checkbox"/> 2 At or in detached buildings on own property, such as detached garage, storage shed, etc. (Always mark for break-in or attempted break-in of same) <input type="checkbox"/> 3 At or in vacation home/second home/hotel/motel <input type="checkbox"/> 4 Near own home; yard, sidewalk, driveway, carport, on street immediately adjacent to own home, apartment hall/storage area/laundry room (does not include apartment parking lots/garages) <input type="checkbox"/> 5 At, in, or near a friend/relative/neighbor's home, other building on their property, yard, sidewalk, driveway, carport, on street immediately adjacent to their home, apartment hall/storage area/laundry room <input type="checkbox"/> 6 On the street (other than immediately adjacent to own/friend/relative/neighbor's home) <input type="checkbox"/> 7 Inside restaurant, bar, nightclub <input type="checkbox"/> 8 Inside other commercial building such as store, bank, gas station <input type="checkbox"/> 9 On public transportation or in station (bus, train, plane, airport, depot, etc.) <input type="checkbox"/> 10 Inside office, factory, or warehouse <input type="checkbox"/> 11 Commercial parking lot/garage <input type="checkbox"/> 12 Noncommercial parking lot/garage <input type="checkbox"/> 13 Apartment parking lot/garage <input type="checkbox"/> 14 Inside school building <input type="checkbox"/> 15 On school property (school parking area, play area, school bus, etc.) <input type="checkbox"/> 16 In a park, field, playground other than school <input type="checkbox"/> 17 Other - Specify _____
(207)	2b. Altogether, how many times did this happen during the last six months? _____ Number of incidents	Ask 6a SKIP to Check Item C, page 14
(208)	c. In what month or months did these incidents take place? If more than one quarter involved, ask 2. How many in (name months)? INTERVIEWER: Enter number for each quarter as appropriate. If number falls below 3 or respondent can now recall incidents separately, still fill as a series. If all are out of scope, end incident report.	
(209)	Number of incidents per quarter Jan., Feb., or March (Qtr. 1) _____ April, May, or June (Qtr. 2) _____ July, Aug., or Sept. (Qtr. 3) _____ Oct., Nov., or Dec. (Qtr. 4) _____	
(210)	INTERVIEWER: If this report is for a series, read: The following questions refer only to the most recent incident.	
(211)	3a. Was it daylight or dark outside when (this/the most recent) incident happened? (212) <input type="checkbox"/> 1 Light <input type="checkbox"/> 2 Dark <input type="checkbox"/> 3 Dawn, almost light, dusk, twilight <input type="checkbox"/> 4 Don't know - SKIP to 4a	
(213)	b. About what time did (this/the most recent) incident happen? During day <input type="checkbox"/> 1 After 6 a.m.-12 noon <input type="checkbox"/> 2 After 12 noon-6 p.m. <input type="checkbox"/> 3 Don't know what time of day At night <input type="checkbox"/> 4 After 6 p.m.-12 midnight <input type="checkbox"/> 5 After 12 midnight-6 a.m. <input type="checkbox"/> 6 Don't know what time of night OR <input type="checkbox"/> 7 Don't know whether day or night	
Notes		

CRIME INCIDENT REPORT - Continued

6a. Did the offender(s) live (here/there) or have a right to be (here/there), such as a guest or a recipient?

218 Yes - SKIP to Check Item C
 No
 Don't know

b. Did the offender(s) actually get in or just TRY to get in the (house/apt./building)?

219 Actually got in
 Just tried to get in
 Don't know

c. Was there any evidence, such as a broken lock or broken window, that the offender(s) forced his way in/TRIED to force his way in the building?

220 No
 Yes - What was the evidence? Anything else? Mark all that apply

Window

221 Damage to window (include frame, glass broken/removed/cracked)
 Screen damaged/removed
 Lock on window damaged/tampered with in some way
 Other - Specify

Door

221 Damage to door (include frame, glass panes or door removed)
 Screen damaged/removed
 Lock or door handle damaged/tampered with in some way
 Other - Specify

221 Other than window or door - Specify

d. How did the offender(s) (get in/TRY to get in)? Mark one only

222 Let in
 Offender pushed his way in after door opened
 Through open door or other opening
 Through unlocked door or window
 Through locked door or window
 Had key
 Other means (picked lock, used credit card, etc.)
 Don't know
 Other - Specify

CHECK ITEM C Was respondent or any other member of this household present when this incident occurred? If not sure, ASK

223 Yes - Ask 7a
 No - SKIP to 13a, page 16

7a. Did the person(s) have a weapon such as a gun or knife, or something he was using as a weapon, such as a bottle or wrench?

224 No
 Don't know
 Yes - What was the weapon? Anything else? Mark all that apply

224 Hand gun (pistol, revolver, etc.)
 Other gun (rifle, shotgun, etc.)
 Knife
 Other - Specify

b. Did the person(s) hit you, knock you down, or actually attack you in any way?

225 Yes - SKIP to 7f
 No

c. Did the person(s) threaten you with harm in any way?

226 Yes
 No - SKIP to 7e

7d. How were you threatened? Any other way? Mark all that apply

227 Verbal threat of rape
 Verbal threat of attack other than rape
 Weapon present or threatened with weapon
 Attempted attack with weapon (for example, shot at)
 Object thrown at person
 Followed, surrounded
 Other - Specify

227 SKIP to 10a, page 15

e. What actually happened? Anything else? Mark all that apply

228 Something taken without permission
 Attempted or threatened to take something
 Harassed; argument, abusive language
 Forcible entry or attempted forcible entry of house/apt.
 Forcible entry or attempted entry of car
 Damaged or destroyed property
 Attempted or threatened to damage or destroy property
 Other - Specify

228 SKIP to 10a, page 15

f. How did the person(s) attack you? Any other way? Mark all that apply

229 Raped
 Tried to rape
 Shot
 Knifed
 Hit with object held in hand
 Hit by thrown object
 Hit, slapped, knocked down
 Grabbed, held, tripped, jumped, pushed, etc.
 Other - Specify

8a. What were the injuries you suffered, if any? Anything else? Mark all that apply

230 None - SKIP to 10a, page 15
 Raped
 Attempted rape
 Knife wounds
 Gun shot, bullet wounds
 Broken bones or teeth knocked out
 Internal injuries
 Knocked unconscious
 Bruises, black eye, cuts, scratches, swelling, chipped teeth
 Other - Specify

b. Were you injured to the extent that you received any medical care after the attack, including self treatment?

231 Yes
 No - SKIP to 10a, page 15

c. Where did you receive this care? Anywhere else? Mark all that apply

232 At the scene
 At home/neighbor's/friend's
 Health unit at work, school, first aid station, at a stadium, park, etc.
 Doctor's office/health clinic
 Emergency room at hospital/emergency clinic
 Other (does not include hospital) - Specify
 Hospital

232 Did you stay overnight in the hospital?
 No
 Yes - How many days did you stay?

233 No
 Yes - How many days did you stay?

234 _____ Number of days

CRIME INCIDENT REPORT - Continued

9a. At the time of the incident, were you covered by any medical insurance, or were you eligible for benefits from any other type of health benefits program, such as Medicaid, Veterans Administration, or Public Welfare?

233 Yes
 No
 Don't know } SKIP to 9f

b. What kinds of health insurance or benefit programs were you covered by? Any others? Mark all that apply

236 Private plans
 Medicaid
 Medicare
 VA, CHAMPUS
 Public welfare
 Other - Specify
 Don't know

c. Was a claim filed with any of these insurance companies or programs in order to get all or part of your medical expenses paid?

237 Yes
 No
 Don't know } SKIP to 9f

d. Did insurance or any health benefits program pay for all or part of the total medical expenses?

238 All
 Part
 Not yet settled
 None } SKIP to 9f

e. How much did insurance or a health benefits program pay? Obtain an estimate, if necessary.

239 \$ _____ .00
 Don't know

CHECK ITEM D Is "All" marked in 9d?
 Yes - SKIP to 10a
 No - Ask 9f

9f. What was the total amount of your medical expenses resulting from this incident, (INCLUDING anything paid by insurance)? Include hospital and doctor bills, medicine, therapy, braces, and any other injury-related medical expenses.

INTERVIEWER: Obtain an estimate, if necessary.

240 No cost
 \$ _____ .00
 Don't know

10a. Did you do anything to protect yourself or your property during the incident? Include getting away from the offender, yelling for help, resisting in any way.

241 Yes
 No - SKIP to 11a

b. What did you do? Anything else? Mark all that apply

242 Used/brandished a gun
 Used/brandished a knife
 Used/brandished some other weapon
 Used/tried physical force (hit, chased, threw object, etc.)
 Tried to get help, attract attention, scare offender away (screamed, yelled, called police, turned on lights, etc.)
 Threatened, argued, reasoned, etc., with offender
 Resisted without force, used evasive action (ran/drove away, hid, held property, locked door, ducked, shielded self, etc.)
 Other - Specify

11a. Was the crime committed by only one or more than one person?

243 Only one
 Don't know
 More than one } SKIP to 12a, page 16

11b. Was this person male or female?

244 Male
 Female
 Don't know

c. How old would you say the person was?

245 Under 12
 12-14
 15-17
 18-20
 21-29
 30+
 Don't know

d. Was the person someone you knew or a stranger you had never seen before?

246 Known
 Stranger
 Don't know } SKIP to 11g

e. How well did you know the person - by sight only, casual acquaintance or well known?

247 Sight only
 Casual acquaintance
 Well known } SKIP to 11g

f. What was the person's relationship to you? For example, a friend, cousin, etc.

248 Spouse
 Ex-spouse
 Parent
 Own child
 Brother/sister
 Other relative - Specify
 Boyfriend/ex-boyfriend
 Girlfriend/ex-girlfriend
 Friend/ex-friend
 Other nonrelative - Specify

g. Was he/she White, Black, or some other race?

249 White
 Black
 Other - Specify
 Don't know } SKIP to 12a, page 16

Notes

11h. How many persons?

250 _____
 Don't know

i. Were they male or female?

251 All male
 All female
 Don't know sex of any offenders
 Both male and female - If 3 or more in 11h, Ask: Were they mostly male or mostly female?
 Mostly male
 Mostly female
 Evenly divided
 Don't know

251 SKIP to 11i

j. How old would you say the youngest was?

253 Under 12
 12-14
 15-17
 18-20
 21-29
 30+ - SKIP to 11j
 Don't know

k. How old would you say the oldest was?

254 Under 12
 12-14
 15-17
 18-20
 21-29
 30+
 Don't know

l. Were any of the persons known to you or were they all strangers you had never seen before?

255 All known
 Some known
 All strangers
 Don't know } SKIP to 11o

m. How well did you know the person(s) - by sight only, casual acquaintance or well known? Mark all that apply

256 Sight only
 Casual acquaintance(s)
 Well known

CHECK ITEM E Is "well known" marked in 11m?
 Yes - Ask 11n
 No - SKIP to 11o

11n. What (was/were) the well known person's relationship(s) to you? For example, friend, cousin, etc. Mark all that apply

257 Spouse
 Ex-spouse
 Parent
 Own child
 Brother/sister
 Other relative - Specify
 Boyfriend/ex-boyfriend
 Girlfriend/ex-girlfriend
 Friend/ex-friend
 Other nonrelative - Specify

o. Were the offenders White, Black, or some other race? Mark all that apply

258 White
 Black
 Other - Specify
 Don't know race of any/some

CHECK ITEM F Is more than one box marked in 11o?
 Yes - Ask 11p
 No - SKIP to 12a, page 16

11p. What race were most of the offenders?

259 Mostly White
 Mostly Black
 Mostly some other race
 Evenly divided
 Don't know

CRIME INCIDENT REPORT - Continued

12a. Were you the only person there besides the offender(s)? Do not include persons under 12 years of age.
 (260) 1 Yes } SKIP to 13a
 2 Don't know }
 3 No }

b. How many of these persons, not counting yourself, were harmed, threatened with harm or had something taken from THEM by force or threat? (Do not include persons under 12 years of age.)
 (261) 0 None - SKIP to 13a
 _____ Number of persons
 x Don't know - SKIP to 13a

c. Are any of these persons members of your household now? (Do not include household members under 12 years of age.)
 (262) 0 No
 Yes - How many, not counting yourself? _____
 _____ Number of household members
 Enter name of other HHLd member(s). If not sure, ask _____

13a. Verify 13a or 13b when it's already known that something was taken or attempted to be taken.
 Was something stolen or taken without permission that belonged to you or others in the household?
 INTERVIEWER: Include anything stolen from UNrecognizable business in respondent's home. Do not include anything stolen from a recognizable business in respondent's home or another business, such as merchandise or cash from a register.
 (263) 1 Yes - SKIP to 13e
 2 No
 3 Don't know

b. Did the person(s) ATTEMPT to take something that belonged to you or others in the household?
 (264) 1 Yes
 2 No
 3 Don't know } SKIP to 18a, page 17

c. What did they try to take? Anything else? Mark all that apply
 (265) * 1 Cash
 2 Purse
 3 Wallet
 4 Car
 5 Other motor vehicle
 6 Part of motor vehicle (hubcap, attached tape deck, attached C.B. radio, etc.)
 (266) * 7 TV, stereo equipment (tape deck, receiver, speaker, etc.), radios, cameras, small household appliances (blender, hair blower, toaster oven, etc.)
 8 Silver, china, jewelry, furs
 9 Bicycle
 (267) * 10 Hand gun (pistol, revolver, etc.)
 11 Other gun (rifle, shotgun, etc.)
 12 Other - Specify _____

13 Don't know
 (268) _____ OFFICE USE ONLY

CHECK ITEM G Did they try to take cash, or a purse, or a wallet? (box 1, 2, or 3 marked in 13c)
 Yes - Ask 13d
 No - SKIP to 18a, page 17

13d. Was the (cash/purse/wallet) on your person, for instance, in a pocket or being held by you?
 (269) 1 Yes
 2 No } SKIP to 18a, page 17

13e. What was taken that belonged to you or others in the household? Anything else?
 (270) Cash \$ _____ .00
 and/or
 Property - Mark all that apply
 (271) * 1 Only cash taken - Enter amount above and SKIP to 14c.
 2 Purse } Did it contain any money?
 3 Wallet } Yes - Enter amount above.
 No
 4 Car
 5 Other motor vehicle
 6 Part of motor vehicle (hubcap, attached tape deck, attached C.B. radio, etc.)
 (272) * 7 TV, stereo equipment (tape deck, receiver, speaker, etc.), radios, cameras, small household appliances (blender, hair blower, toaster oven, etc.)
 8 Silver, china, jewelry, furs
 9 Bicycle
 (273) * 10 Hand gun (pistol, revolver, etc.)
 11 Other gun (rifle, shotgun, etc.)
 12 Other - Specify _____

(274) _____ OFFICE USE ONLY

CHECK ITEM H Was a car or other motor vehicle taken? (box 4 or 5 marked in 13e)
 Yes - Ask 14a
 No - SKIP to Check Item I

14a. Had permission to use the (car/motor vehicle) ever been given to the person who took it?
 (275) 1 Yes
 2 No
 3 Don't know } SKIP to Check Item I

b. Did the person return the (car/motor vehicle) this time?
 (276) 1 Yes
 2 No

CHECK ITEM I Was cash, purse, or a wallet taken? (Money amount entered or box 1, 2, or 3 marked in 13e)
 Yes - Ask 14c
 No - SKIP to Check Item J

14c. Was the (cash/purse/wallet) on your person, for instance, in a pocket or being held by you when it was taken?
 (277) 1 Yes
 2 No

CHECK ITEM J Refer to 13e. Was anything other than cash, checks, or credit cards taken?
 Yes - Ask 15a
 No - SKIP to 16a, page 17

15a. What was the value of the PROPERTY that was taken? (Exclude any stolen cash/checks/credit cards)
 (278) \$ _____ .00

b. How did you decide the value of the property that was stolen? Any other way? Mark all that apply
 (279) * 1 Original cost
 2 Replacement cost
 3 Personal estimate of current value
 4 Insurance report estimate
 5 Police estimate
 6 Don't know
 7 Other - Specify _____

CRIME INCIDENT REPORT - Continued

16a. Was all or part of the stolen (money/property/money and property) recovered, not counting anything received from insurance?
 (280) 1 All
 2 Part - SKIP to 16b
 3 None - SKIP to 17a

CHECK ITEM K Was anything other than cash/checks/credit cards taken? ("Yes" marked in Check Item J, page 16)
 Yes - SKIP to 16c
 No - SKIP to 16f

16b. What was recovered? Anything else?
 Cash:
 (281) \$ _____ .00
 and/or
 Property - Mark all that apply
 (282) * 1 Cash only recovered - Enter amount above and SKIP to 16f
 2 Purse } Did it contain any money?
 3 Wallet } Yes - Enter amount above
 No
 4 Car
 5 Other motor vehicle
 6 Part of motor vehicle (hubcap, attached tape deck, attached C.B. radio, etc.)
 (283) * 7 TV, stereo equipment (tape deck, receiver, speaker, etc.), radios, cameras, small household appliances (blender, hair blower, toaster oven, etc.)
 8 Silver, china, jewelry, furs
 9 Bicycle
 (284) * 10 Hand gun (pistol, revolver, etc.)
 11 Other gun (rifle, shotgun, etc.)
 12 Other - Specify _____

(285) _____ OFFICE USE ONLY

CHECK ITEM L Refer to 16b. Was anything other than cash/checks/credit cards recovered?
 Yes - Ask 16c
 No - SKIP to 16f

16c. Was the recovered property damaged to the extent that it had to be repaired or replaced? (Do not include recovered cash, checks, or credit cards.)
 (286) 1 Yes
 2 No - SKIP to Check Item M

d. Considering the damage, what was the value of the property after it was recovered? (Do not include recovered cash, checks, or credit cards.)
 (287) \$ _____ .00 - SKIP to 16f

CHECK ITEM M Look at 16a
 All recovered in 16a - SKIP to 16f
 Part recovered in 16a - Ask 16e

16e. What was the value of the property recovered? (Do not include recovered cash, checks, or credit cards.)
 (288) \$ _____ .00

f. Who recovered the (money/property/money and property)? Anyone else? Mark all that apply
 (289) * 1 Victim or other household member
 2 Police
 3 Returned by offender
 4 Other - Specify _____

17a. Was the theft reported to an insurance company?
 (290) 1 Yes
 2 No or don't have insurance } SKIP to 18a
 3 Don't know }

b. Did the insurance pay anything to cover the theft?
 (291) 1 Yes
 2 Not yet settled } SKIP to 18a
 3 No
 4 Don't know }

c. How much was paid?
 INTERVIEWER: If property replaced by insurance company instead of cash settlement, ask for estimate of value of the property replaced.
 (292) \$ _____ .00
 x Don't know

18a. (Other than any stolen property) was anything that belonged to you or other members of the household damaged in this incident? For example, was a lock or window broken/clothing damaged/damage done to a car/etc.?
 (293) 1 Yes
 2 No - SKIP to Check Item N

b. (Was/Were) the damaged item(s) repaired or replaced?
 (294) 1 Yes, All } SKIP to 18d
 2 Yes, Part }
 3 No }

c. How much would it cost to repair or replace the damaged item(s)?
 (295) 0 No cost - SKIP to Check Item N
 \$ _____ .00
 x Don't know } SKIP to 18e

d. How much was the repair or replacement cost?
 (296) 0 No cost - SKIP to Check Item N
 \$ _____ .00
 x Don't know

e. Who (paid/will pay) for the repairs or replacement? Anyone else? Mark all that apply
 (297) * 1 Items will not be repaired or replaced
 2 Household member
 3 Landlord
 4 Insurance
 5 Other - Specify _____

CHECK ITEM N Look at Item 5, page 13. Did the incident happen in any of the commercial places described in boxes 7-11?
 Yes - Ask 19
 No - SKIP to 20a, page 18

19. You said this incident happened in a (describe place). Did the person(s) steal or TRY to steal anything belonging to the (name place)?
 (298) 1 Yes
 2 No
 3 Don't know

CRIME INCIDENT REPORT - Continued

20a. Were the police informed or did they find out about this incident in any way?

1 No

2 Don't know - SKIP to Check Item Q

Yes - Who told them?

3 Respondent - SKIP to 20d

4 Other household member

5 Someone else

6 Police first to find out about it

7 Some other way - Specify } SKIP to Check Item Q

b. What was the reason this incident was not reported to the police? Any other reason? Mark all that apply.

► **INTERVIEWER:** Verify all answers with respondent. Mark box below if structured probe used.

300 **STRUCTURED PROBE:** Was the reason because you felt there was no NEED to call, didn't think police COULD do anything, didn't think police WOULD do anything, or was there some other reason?

No NEED to call

301 Object recovered or offender unsuccessful

2 Respondent did not think it important enough

3 Private or personal matter or took care of it myself

4 Reported to someone else

Police COULDN'T do anything

5 Didn't realize crime happened until later

6 Property difficult to recover due to lack of serial or I.D. number

7 Lack of proof, no way to find/identify offender

Police WOULDN'T do anything

8 Police wouldn't think it was important enough, they wouldn't want to be bothered

9 Police would be inefficient, ineffective, insensitive (they'd arrive late, wouldn't pursue case properly, would harass/insult respondent, etc.)

Some other reason

303 10 Afraid of reprisal by offender or his family/friends

11 Did not want to take time - too inconvenient

12 Other - Specify

13 Respondent doesn't know why it wasn't reported

Is more than one reason marked in 20b?

Yes - Ask 20c

No - SKIP to Check Item Q

20c. Which of these would you say was the most important reason why the incident was not reported to the police?

304 _____ Reason number } SKIP to Check Item Q

x No one reason most important

d. Please take a minute to think back to the time of the incident (PAUSE). Besides the fact that it was a crime, did YOU have any other reason for reporting this incident to the police? (Show card)

IF PHONE INTERVIEW: For example, did you report it because you wanted to prevent this or a future incident, to collect insurance or recover property, to get help, to punish the offender, or because you had evidence that would help catch the offender, thought it was your duty, or was there some other reason?

Any other reason? Mark all that apply. Verify, if necessary.

305 1 To stop or prevent this incident from happening

2 To keep it from happening again or to others

3 In order to collect insurance

4 Desire to recover property

5 Need for help after incident because of injury, etc.

6 There was evidence or proof

7 To punish the offender

306 8 Because you felt it was your duty

9 Some other reason - Specify

0 No other reason

Is more than one reason marked in 20d?

Yes - Ask 20e

No - SKIP to Check Item Q

20e. Which of these would you say was the most important reason why the incident was reported to the police?

307 _____ Reason number

x No one reason more important

0 Because it was a crime was most important

Is this person 16 years or older?

Yes - Ask 21a

No - SKIP to 24a, page 19

21a. Did you have a job at the time this incident happened?

308 1 Yes

2 No - SKIP to 24a, page 19

b. Was it the same job you described to me earlier as a (describe job on NCS-1), or a different one?

309 1 Same as described on NCS-1 items 36a-c - SKIP to Ck. Item R

2 Different than described on NCS-1 items 36a-c

c. For whom did you work? (Name of company, business, organization or other employer)

d. What kind of business or industry is this? (e.g., TV and radio mfg., retail shoe store, State Labor Department, farm)

310 [] [] []

e. What kind of work were you doing? (e.g., electrical engineer, stock clerk, typist, farmer, Armed Forces)

311 [] [] []

f. What were your most important activities or duties? (e.g., typing, keeping account books, selling cars, finishing concrete, Armed Forces)

g. Were you -

312 1 An employee of a PRIVATE company, business or individual for wages, salary or commissions?

2 A GOVERNMENT employee (Federal, State, county or local)?

SELF-EMPLOYED in OWN business, professional practice or farm? If yes

Was the business incorporated?

3 Yes

4 No (or farm)

5 Working WITHOUT PAY in family business or farm?

Was this person injured in this incident?

Yes (injury marked in 8a page 14) - Ask 22a

No (blank or none marked in 8a) - SKIP to 23a, page 19

22a. Did YOU lose time from work because of the injuries you suffered in this incident?

313 1 Yes

2 No - SKIP to 23a, page 19

b. How much time did you lose because of injuries?

314 0 Less than one day - SKIP to 23a, page 19

_____ Number of days

x Don't know

c. During these days, did you lose any pay that was not covered by unemployment insurance, sick leave, or some other source?

315 1 Yes

2 No - SKIP to 23a, page 19

d. About how much pay did you lose?

316 \$ _____ .00

x Don't know

CRIME INCIDENT REPORT - Continued

23a. Did YOU lose time from work because of this incident for any of these (other) reasons? Read list. Mark all that apply.

317 1 Repairing damaged property?

2 Replacing stolen items?

3 Police related activities, such as cooperating with an investigation?

4 Court related activities, such as testifying in court?

5 Any other reason? - Specify _____

6 None - SKIP to 24a

b. How much time did you lose because of (name all reasons marked in 23a)?

318 0 Less than one day - SKIP to 24a

_____ Number of days

x Don't know

c. During these days, did you lose any pay that was not covered by unemployment insurance, sick leave, or some other source?

319 1 Yes

2 No - SKIP to 24a

d. About how much pay did you lose?

320 \$ _____

x Don't know

24a. Were there any (other) household members 16 years or older who lost time from work because of this incident?

321 1 Yes

2 No - SKIP to Check Item S

b. How much time did they lose altogether?

322 0 Less than 1 day

_____ Number of days

x Don't know

Summarize this incident or series of incidents. Include what was taken, how entry was gained, how victim was threatened/attacked, what weapons were present and how they were used, any injuries, what victim was doing at time of attack/threat, etc.

Check BOUNDING INFORMATION (cc. 32)

Look at 12c, page 16. Is there an entry for "Number of household members?"

Yes - Be sure you fill or have filled an Incident Report for each interviewed HHL member 12 years of age or over who was harmed, threatened with harm, or had something taken from him/her by force or threat in this incident.

No

Is this the last Incident Report to be filled for this person?

No - Go to next Incident Report

Yes - Is this the last HHL member to be interviewed?

Yes - END INTERVIEW

No - Interview next HHL member

Notes

CONTINUED

2 OF 3

FORM D

VICTIMIZATION QUESTIONS

Household and Individual Screen Questions

Now I'd like to ask some questions about crime. They refer only to the last 12 months -- between _____ 1, 19____ and _____ 1, 19____.

(ASK QUESTIONS 1 THROUGH 13. ONLY COMPLETE PROBE QUESTIONS WHEN R ANSWERS "YES" TO ONE OF THE QUESTIONS BELOW.)

1. During the last 12 months, did anyone break into or somehow illegally get into your (apartment/home), garage, or another building on your property? (BREAKING-AND-ENTERING)

Yes No D.K.

How many times did this happen? _____

2. (Other than the incident(s) just mentioned) Did you find a door jimmied, a lock forced, or any other signs of an attempted break-in? (ATTEMPTED BREAKING-AND-ENTERING)

Yes No D.K.

How many times did this happen? _____

3. (Other than any incident already mentioned) Was anything at all stolen that is kept outside your home, or happened to be left out, such as a bicycle, a garden hose, or lawn furniture? (LARCENY)

Yes No D.K.

How many times did this happen? _____

4. Did you have any property taken from your car, part or all of your car? (LARCENY)

Yes No D.K.

How many times did this happen? _____

5. Did anyone break into or try to break into your mailbox in the past year? (LARCENY)

Yes No D.K.

How many times did this happen? _____

6. Did anyone purposely destroy or damage anything belonging to you, including your apartment or car, such as breaking your windows or slashing your car's tires? (VANDALISM)

Yes No D.K.

How many times did this happen? _____

7. Did anyone you know enter your home with your permission, such as a neighbor or a repairman, and then steal something? (HOUSEHOLD LARCENY)

Yes No D.K.

How many times did this happen? _____

8. During the last 12 months, did you have your pocket picked or purse snatched? (LARCENY)

Yes No D.K.

How many times did this happen? _____

9. Did anyone take something (else) directly from you by using force, such as a stickup, mugging, or threat? (ROBBERY)

Yes No D.K.

How many times did this happen? _____

10. Did anyone try to rob you by using force or threatening to harm you? (ATTEMPTED ROBBERY)

Yes No D.K.

How many times did this happen? _____

11. Did anyone beat you up, attack you, or hit you with something, such as a rock or bottle? (ASSAULT)

Yes No D.K.

How many times did this happen? _____

12. Did anyone try to attack you in some other way? (ASSAULT)

Yes No D.K.

How many times did this happen? _____

13. During the past 12 months, were you sexually assaulted, such as being subjected to exposure, attempted rape, or fondling?

Yes No D.K.

How many times did this happen? _____

(IF YES FOR QUESTIONS 1-13, GO TO PROBE QUESTIONNAIRE. IF NO, GO TO NEXT SECTION OF THE INTERVIEW.)

Adapted from the NCP Household Interview Schedule, U.S. Bureau of the Census.

Probe Questions

Could you answer some questions about this incident for me? (THESE QUESTIONS FOLLOW AN AFFIRMATIVE RESPONSE TO QUESTIONS 1-13. THUS, THEY ARE REPEATED FOR EACH INCIDENT.)

A. What month did this crime happen?

Month _____ 19____ or 19____

B. What time of day did it happen? ____AM or PM.

C. Could you describe where it took place?
(ASK FOR SPECIFIC LOCATION, SUCH AS INSIDE APARTMENT, PARKING LOT AT STORE, STREET NAME, ADDRESS, ETC.)

D. Could you describe what happened exactly?
(PROBE FOR DETAILS ABOUT ENVIRONMENTAL CIRCUMSTANCES, SUCH AS THE LOCATION OF BYSTANDERS, OUTDOOR LIGHTS IF THE INCIDENT OCCURRED AT NIGHT, WHAT R WAS DOING AT THE TIME, AND OTHER FACTORS THAT HAVE BEARING ON CPTED PLANNING.)

E. Was anything stolen?
What was stolen? (IF YES, LIST)

F. Did you or anyone else tell the police about the crime?
(IF YES, SKIP TO H.)

G. Why wasn't the crime reported to the police?

H. Were you injured? (IF YES)
How were you injured?

I. Did you see who did it? Yes _____ No _____
(IF NO, GO BACK TO VICTIMIZATION QUESTIONNAIRE.)

J. How many persons were there?

K. Could you describe this person (or persons)?

L. Did you recognize (this/any of the) person(s)? Yes ___ No ___
(IF NO, GO BACK TO VICTIMIZATION QUESTIONNAIRE.)

M. Does (this person/any of them) live around here? Yes ___ No ___

(IF THERE ARE MORE INCIDENTS OF THE SAME TYPE)

Now I would like to ask you about the other crime like this one. (GO TO A.)

Adapted from the NCP Household Interview Schedule, U. S. Bureau of the Census.

SPECIAL VICTIMIZATION SURVEYS. In many cases a CPTED project will be designed for a particular setting or population, for which a special victimization survey would be more appropriate than the NCS form. A special form was developed for the Broward County CPTED school demonstration. While specially designed forms are not comparable with the NCS results, they have the advantage of structuring responses to the specific subenvironments and crimes which are targets of the individual project.

In the Broward County survey (Form E) the basic victimization information is contained in the first eight items. Other areas of the form concern:

- * Use of various areas of the school
- * Perceived safety of subenvironments in the school
- * Perceived risk and effort involved in committing crimes in various subenvironments
- * Accessibility to subenvironments
- * Perceived likelihood of victimization
- * Surveillance activities of teachers
- * Involvement and awareness of respondent and others to crime prevention activities

Form E

STUDENT INCIDENT SURVEY

WINTER 1976-1977

There are no right or wrong answers to these questions. We want to learn more about how to prevent incidents which may happen in certain parts of the school. One thing we want to know is if it is easy or hard to spot someone doing something wrong in different places. For example, are there places where students might get beat up or robbed without being seen by other people?

When we ask about someone stealing something in certain places, we mean both stealing something from someone or something in that place. In some places like hallways there may not be anything there to steal. If something is stolen from a person or he is attacked, of course the person it happened to would see it. The question is always would anyone else be likely to see the crime? Remember that this is the purpose of some of the questions which you may wonder about.

No one will see your answers to these questions. The computer selected you at random (that means "by chance") to fill out this questionnaire. Enough pupils were selected so that we will get a good idea of the places where incidents are likely to happen at your school.

As you go through the questionnaire you may be unsure what is meant by "courtyard area" and "bicycle parking area." For clarification, the courtyard area describes any places on the school grounds which the school officials have set aside for students to meet and talk together before and after school and at lunch. Your school may call this the patio or mini-plaza. Bicycle parking area refers to the place or places which are officially reserved for bike parking.

1. Are you afraid to go to the following places because someone might hurt or bother you? Circle one number on each line

	NO	YES
a. the streets around the school	1	2
b. the school bus	1	2
c. the parking lot	1	2
d. the bicycle stand	1	2
e. other places on the school grounds	1	2
f. any entrance into the school building	1	2
g. the hallways	1	2
h. the restrooms	1	2
i. the stairs	1	2
j. any classrooms	1	2
k. the cafeteria	1	2
l. the locker room	1	2
m. other places inside the school building	1	2

2. Did you stay home from school anytime this year because you were afraid someone might hurt or bother you?

Circle one number	NO	YES
	1	2

3. Counting this year only, did anyone force you by weapons or threats to give money or other things to them at any of the following places? Circle one number on each line.

	NO	YES	MORE THAN ONCE
a. the streets around the school	1	2	3
b. the school bus	1	2	3
c. the parking lot	1	2	3
d. the bicycle stand	1	2	3
e. other places on the school grounds	1	2	3
f. any entrance into the school building	1	2	3

3. (Continued from previous page)

Circle one number on each line

	NO	YES	MORE THAN ONCE
g. the hallways	1	2	3
h. the restrooms	1	2	3
i. the stairs	1	2	3
j. any classrooms	1	2	3
k. the cafeteria	1	2	3
l. the locker room	1	2	3
m. other places inside the school building	1	2	3

4. Counting this year only, did anyone steal things (pick your pocket, take things from your desk or locker, steal your bike, etc.) from you at any of the following places?

Circle one number on each line

	NO	YES	MORE THAN ONCE
a. the streets around the school	1	2	3
b. the school bus	1	2	3
c. the parking lot	1	2	3
d. the bicycle stand	1	2	3
e. other places on the school grounds	1	2	3
f. any entrance into the school building	1	2	3
g. the hallways	1	2	3
h. the restrooms	1	2	3
i. the stairs	1	2	3
j. any classrooms	1	2	3

4. (Continued from previous page)

Circle one number on each line

	NO	YES	MORE THAN ONCE
k. the cafeteria	1	2	3
l. the locker room	1	2	3
m. other places inside the school building	1	2	3

5. Counting this year only, did anyone physically attack and hurt you at any of the following places? Circle one number on each line

	NO	YES	MORE THAN ONCE
a. the streets around the school	1	2	3
b. the school bus	1	2	3
c. the parking lot	1	2	3
d. the bicycle stand	1	2	3
e. other places on the school grounds	1	2	3
f. any entrance into the school building	1	2	3
g. the hallways	1	2	3
h. the restrooms	1	2	3
i. the stairs	1	2	3
j. any classrooms	1	2	3
k. the cafeteria	1	2	3
l. the locker room	1	2	3
m. other places inside the school building	1	2	3

6. How often are you afraid that any of the following things might happen to you at school? Circle one number on each line

	NEVER	ALMOST NEVER	SOMETIMES	MOST OF THE TIME
a. someone might hurt or bother you	1	2	3	4
b. someone might steal something from you	1	2	3	4
c. someone might make you give them money or things	1	2	3	4

7. Counting this year only, about what dollar value would you place on cash and/or other things stolen from you at school? Circle one number

	ZERO	UNDER \$10	\$10-\$50	MORE THAN \$50
	1	2	3	4

8. Counting this year only, about what dollar value would you place on cash and/or other things you were forced to hand over to someone at school? Circle one number

	ZERO	UNDER \$10	\$10-\$50	MORE THAN \$50
	1	2	3	4

9. About how often are you in the bus loading area? (Put an X by your answer on the following items.)

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

10. About how often are you in the courtyard area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

11. About how often are you in the locker room area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

12. About how often are you in the restroom area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

13. About how often are you in the hallway area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

14. About how often are you in the parking lot area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

15. About how often are you in the bike parking area?

- more than once a day
- about once a day
- a few times a week
- about once a week
- a few times a month
- almost never

(Place an X in the box under your answer on the following items)

	Very Safe	Safe	Somewhat Safe	Not Very Safe
16. How safe from being physically attacked is a person in the bus loading area?				
17. How safe from being physically attacked is a person in the courtyard area?				
18. How safe from being physically attacked is a person in the locker room area?				

	Very Safe	Safe	Somewhat Safe	Not Very Safe
19. How safe from being physically attacked is a person in the restroom area?				
20. How safe from being physically attacked is a person in the hallway area?				
21. How safe from being physically attacked is a person in the parking lot area?				
22. How safe from being physically attacked is a person in the bike parking area?				
23. How safe from theft is the bus loading zone?				
24. How safe from theft is the courtyard area?				
25. How safe from theft is the locker room area?				
26. How safe from theft is the restroom area?				
27. How safe from theft is the hallway area?				
28. How safe from theft is the parking lot area?				
29. How safe from theft is the bike parking area?				

	Very Difficult	Difficult	Easy	Very Easy
30. How difficult is it for someone who does not belong there to get into the bus loading area?				
31. How difficult is it for someone who does not belong there to get into the courtyard area?				

	Very Dif- ficult	Diffi- cult	Easy	Very Easy
32. How difficult is it for someone who does not belong there to get into the locker room area?				
33. How difficult is it for someone who does not belong there to get into the restroom area?				
34. How difficult is it for someone who does not belong there to get into the hallway area?				
35. How difficult is it for someone who does not belong there to get into the parking lot area?				
36. How difficult is it for someone who does not belong there to get into the bike parking area?				
	Very Likely	Likely	Un- likely	Very Un- likely
37. Suppose a person who did not belong there was in the bus loading zone. How likely is it that people would know that he did not belong there?				
38. Suppose a person who did not belong there was in the courtyard area. How likely is it that people would know that he did not belong there?				
39. Suppose a person who did not belong there was in the locker room area. How likely is it that people would know that he did not belong there?				

	Very Likely	Likely	Un- likely	Very Un- likely
40. Suppose a person who did not belong there was in the rest room area. How likely is it that people would know that he did not belong there?				
41. Suppose a person who did not belong there was in the hallway area. How likely is it that people would know that he did not belong there?				
42. Suppose a person who did not belong there was in the parking lot area. How likely is it that people would know that he did not belong there?				
43. Suppose a person who did not belong there was in the bike parking area. How likely is it that people would know that he did not belong there?				
44. How likely is it that a person could steal something in the bus loading area without being seen?				
45. How likely is it that a person could steal something in the courtyard area without being seen?				
46. How likely is it that a person could steal something in the locker room area without being seen?				
47. How likely is it that a person could steal something in the restroom area without being seen?				

	Very Likely	Likely	Unlikely	Very Unlikely
48. How likely is it that a person could steal something in the hallway area without being seen?				
49. How likely is it that a person could steal something in the parking lot area without being seen?				
50. How likely is it that a person could steal something in the bike parking area without being seen?				
51. How likely is it that a person could physically attack another student in the bus loading area without being seen?				
52. How likely is it that a person could physically attack another student in the courtyard area without being seen?				
53. How likely is it that a person could physically attack another student in the locker room area without being seen?				
54. How likely is it that a person could physically attack another student in the restroom area without being seen?				
55. How likely is it that a person could physically attack another student in the hallway area without being seen?				
56. How likely is it that a person could physically attack another student in the parking lot area without being seen?				

	Very Likely	Likely	Unlikely	Very Unlikely
57. How likely is it that a person could physically attack another student in the bike parking area without being seen?				
	Very Well	Well	Fairly Well	Not Very Well
58. How well do teachers watch what is going on in the bus loading zone?				
59. How well do teachers watch what is going on in the courtyard area?				
60. How well do teachers watch what is going on in the locker room area?				
61. How well do teachers watch what is going on in the restroom area?				
62. How well do teachers watch what is going on in the hallway area?				
63. How well do teachers watch what is going on in the parking lot area?				
64. How well do teachers watch what is going on in the bike parking area?				
65. Have you heard of any new program your school is using to help prevent crime at school?				
			yes	no
66. Have you heard of any student/faculty committees that are being organized to help plan crime prevention activities at your school?				
			yes	no

67. If you saw someone stealing something at school, do you think you would (choose the one most appropriate response). (Place an X by your answer on the following item)

- Do nothing, it is none of my business
- Do nothing, it would not do any good
- Do nothing, the troublemaker might take it out on me
- Do nothing, I would not tell on another person
- Try to stop it myself
- Try to get other students to try to stop it
- Report it

68. If you saw someone physically attack another student at school, do you think that you would (choose the one most appropriate response). (Place an X by your answer on the following item)

- Do nothing, it is none of my business
- Do nothing, it would not do any good
- Do nothing, the troublemaker might take it out on me
- Do nothing, I would not tell on another person
- Try to stop it myself
- Try to get other students to try to stop it
- Report it

69. What do you think other students would do if they saw someone suspicious at school. Do you think they would probably: (Place an X by your answer on the following item)

- ask the person what he was doing there
- report the person to a teacher or other adult
- probably ignore it

70. How many of the students at your school do you think would report a crime that they saw happening to someone at school? (Place an X by your answer on the following item)

- all of them
- some of them
- a few of them
- almost none
- most of them

71. How many students do you think would be willing to answer questions to help the authorities find a person who had committed a crime at school? (Place an X by your answer on the following item)

- all of them
- some of them
- a few of them
- almost none
- most of them

(Place an X in the box under your answers)

	Very Con- cerned	Con- cerned	Uncon- cerned	Very Un- concerned
72. How concerned do you think persons are of being reported if they steal something at school?				
73. How concerned do you think persons are of being reported if they physically attack another student at school?				
74. How concerned do you think persons are of being punished for stealing things at school?				
75. How concerned do you think persons are of being punished for physically attacking other persons at school?				

For the following questions place an X by your answer

76. In some schools students do things together and help each other -- in other schools students mostly go their own ways. In general, what kind of school would you say this is mostly -- one where most students help each other or one where most students go their own ways?

- most students help each other
- most students go their own ways

77. Would you say that you really feel a part of the school -- or do you think of it as just another place to spend some time?

- feel a part of the school
- just another place to spend some time

78. How much do you think students at your school are concerned with preventing crimes from happening to other students.

- a great deal
- not much
- somewhat concerned

79. Overall how would you rate the job the teachers and other adults are doing in protecting students from crime at your school.

very good not as good as I would like
 good enough not good at all

80. There are certain areas at this school that are built in a way that makes it easy for people to commit crimes and not be seen.

strongly agree mildly agree
 mildly disagree strongly disagree

81. As a student I really can't do very much to help stop this school's crime problem.

strongly agree mildly agree
 mildly disagree strongly disagree

82. Only a small group of troublemakers are responsible for the crimes that we have at this school.

strongly agree mildly agree
 mildly disagree strongly disagree

PLEASE PROVIDE THE FOLLOWING DESCRIPTIVE INFORMATION ABOUT YOURSELF

1. How many years have you been at this school? _____ years
2. What grade are you in? (Circle one) 9 10 11 12
3. What is your age? _____ years old
4. What is your sex? (check one) female male
5. What is your race? (check one) Black
 White
 Other

ATTITUDE SURVEYS. The willingness of people to engage in crime-prevention projects depends on a number of factors in addition to their rate of victimization. In some areas where there is a relatively high rate of crime, fear and concern over crime may be low. Areas with similar crime rates appear to differ widely in what might be called their collective tolerance of crime. In turn, the perceived desirability of engaging in preventive activities may differ. Likewise, demographically similar sites may vary in their degree of social organization; the degree of social organization may also affect residents' responsiveness to a crime-prevention program.

Many CPTED tactics attempt to enhance the identification of site users with aspects of a project area. It is therefore necessary to know the extent to which people identify with a target area at the outset of a project, in order to determine if certain tactics are appropriate or if they have worked when they are employed. It is also desirable to know what people perceive as the boundaries of their neighborhood or project area, and where in that area they feel safe or unsafe.

All of these considerations -- fear, concern, perceived safety, and more -- relate to the opinions, attitudes, beliefs, and perceptions of people in the CPTED site. Other information of concern to the analyst relates to the activities which people engage in at the site. Both types of information -- attitudinal and behavioral -- can be obtained through a survey. This information is often solicited along with demographic and victimization data.

A sample of the form developed for the Portland CPTED commercial demonstration is contained in this section (Form F). The type of items on this form include:

- * Neighborhood awareness (knowledge about neighbors/attitudes about the neighborhood)
- * Quality of life (the area as a place to live/whether the area is improving or getting worse/safety)
- * Victimization
- * Fear and anxiety about crime
- * Protective behaviors
- * Attitudes toward the police
- * Response to physical changes at the site

* Involvement in and awareness of organized activities to prevent crime

* Demographic information on the respondent and household

A similar survey was utilized in the Hartford Neighborhood Crime Prevention Program (Fowler, 1979).

Form F

UAC* RESIDENTS INTERVIEW

(1-3) Interviewee _____

Date: _____

Time: _____

(4) Interviewer: _____

Neighborhood Consciousness

(5-7) 1. How long have you lived in this neighborhood?
_____ (equate to months) _____

(8) 2. In the past year or so, do you think this neighborhood has gotten to be a better place to live, a worse place to live, or has it stayed about the same?
____ 1) better
____ 2) about the same
____ 3) worse
____ 9) DK

(9) 3. In some neighborhoods, people do things together and help each other; in other neighborhoods, people mostly go their own ways. Would you say your neighborhood is one in which people mostly go their own ways, or one in which people help each other?
____ 1) help each other
____ 2) 1/2 and 1/2
____ 3) go their own ways
____ 9) DK

(10-11) 4. How many families in this neighborhood do you know well enough to ask a favor of if you needed something?
____ # of families
____ 99) DK

*UAC = Union Avenue Corridor

Now I would like to read you several things which affect how people feel about their neighborhoods. As I read each one of these, please tell me whether you think that it is very good, good, fair, poor, or very poor for the area in which you live.

(1) vg (2) g (3) f (4) p (5) vp (9) DK

(12) _____ 5) schools and education

(13) _____ 6) parks and playgrounds

(14) _____ 7) street lighting

(15) _____ 8) upkeep of buildings and yards

(16) _____ 9) condition of streets, that is, street repair and street trash

(17) _____ 10) police community relations

Quality of Life

The next questions are specifically concerning your life here in the UA area.

(18) 11. How nice a place is this area to live in? Would you say it's

- _____ 1) very nice
- _____ 2) nice
- _____ 3) just okay
- _____ 4) not a nice place
- _____ 9) DK

(19) 12. To what extent does the crime level in the UA area affect your daily life? Would you say, overall, it has a

- _____ 1) very strong influence
- * _____ 2) strong influence
- _____ 3) moderate influence *read only these responses
- _____ 4) very little influence
- _____ 5) no influence
- _____ 9) DK

(20) 13. Five years from now, do you think the UA area will be a better place to live, a worse place, or about the same as it is now?

- _____ 1) better
- _____ 2) about the same
- _____ 3) worse
- _____ 9) DK

Crime/Use of UAC

(21) 14. How many people in this neighborhood do you think are concerned about preventing crime? Would you say. . .

- _____ 1) everyone
- * _____ 2) most everyone
- _____ 3) some *read only these responses
- _____ 4) not very many
- _____ 5) none
- _____ 9) DK

(22) 15. If you were to estimate the likelihood of a crime being committed in the UAC, compared to other areas of Portland, would you say it's. . .

- _____ 1) much less likely
- _____ 2) somewhat less likely
- _____ 3) about the same
- _____ 4) somewhat more likely
- _____ 5) much more likely
- _____ 9) DK

Now I am going to ask you several questions about your use of Union Avenue. How many times per week would you say you shop or eat on Union Avenue during the daytime?

(23) 16. _____ frequency (if zero, "almost never," "very seldom," etc.) How safe would you feel if you did? Would you say. . .

(if more than zero) How safe do you feel while on Union Avenue during the daytime? Would you say. . .

- (24)
- _____ 1) very safe
 - _____ 2) reasonably safe
 - _____ 3) somewhat unsafe
 - _____ 4) very unsafe
 - _____ 9) DK

How many times per week would you say you shop or eat on Union Avenue during the nighttime?

(25) 17. _____ frequency

(if zero, "almost never," "very seldom," etc.)
How safe would you feel if you did? Would you say. . .

(if more than zero) How safe do you feel while on Union Avenue during the nighttime? Would you say. . .

- (26) _____ 1) very safe
_____ 2) reasonably safe
_____ 3) somewhat unsafe
_____ 4) very unsafe
_____ 9) DK

How many times per week do you walk around your neighborhood at night either to socialize with neighbors or to just walk?

(27) 18. _____ frequency

(if zero, "almost never," "very seldom," etc.)
How safe would you feel if you did? Would you say. . .

(if more than zero) How safe do you feel while walking during the nighttime? Would you say...

- (28) _____ 1) very safe
_____ 2) reasonably safe
_____ 3) somewhat unsafe
_____ 4) very unsafe
_____ 9) DK

Victimization

(29-30) 19. In the past six months, that is, from May 1st through October 31st, have you or any other member of your family had a crime committed against you or them in the UA area?

- _____ 0) no
_____ yes: how many crimes were committed against family members? _____
_____ 9) DK

Fear/Anxiety about Crime

(31) 20. When you leave your home, even for a few minutes, how often do you make certain that all of the doors are locked? (Read responses)

- _____ 1) always
_____ 2) most times
_____ 3) sometimes
_____ 4) never
_____ 9) DK

(32) 21. In general, how worried are you that your house might be broken into? Would you say. . .

- _____ 1) very worried
_____ 2) somewhat worried
_____ 3) not at all worried
_____ 9) DK

(33) 22. In general, how worried are you about being assaulted or robbed on the street? Would you say. . .

- _____ 1) very worried
_____ 2) somewhat worried
_____ 3) not at all worried
_____ 9) DK

Protection

I would now like to read you a list of things which people have at home to protect themselves. Just answer yes (1) or no (0) when I read them to you.

- (34) _____ 23. special locks on doors
(35) _____ 24. special locks on windows
(36) _____ 25. a burglar alarm
(37) _____ 26. a gun that could be used for protection
(38) _____ 27. specially trained or guard dog
(39) _____ 28. dog for protection
(40) _____ 29. have you engraved any of your valuables with your name or some identification in case they are stolen

(41) _____ 30. do you ever take anything with you to protect yourself when you go out at night?

(42) 31. If someone were to commit a crime in the UA area, how likely is it that they would be seen? Would you say. . .
_____ 1) very likely
_____ 2) somewhat likely
_____ 3) somewhat unlikely
_____ 4) very unlikely
_____ 9) DK

(43) 32. If someone were to commit a crime in the UA area, how likely is it that they would be caught? Would you say. . .
_____ 1) very likely
_____ 2) somewhat likely
_____ 3) somewhat unlikely
_____ 4) very unlikely
_____ 9) DK

Attitudes about Police/Crime

(44) 33. How would you describe your attitude toward the way the police are doing their job in the UA area? Would you describe your attitude as. . .
_____ 1) very favorable
_____ 2) somewhat favorable
_____ 3) somewhat unfavorable
_____ 4) very unfavorable
_____ 9) DK

(45) 34. How would you rate the present level of crime in the UA area? In terms of the extent of the problem, is it a . . .
_____ 1) severe problem
_____ 2) moderate problem
_____ 3) slight problem
_____ 4) no problem
_____ 9) DK

Physical Changes in UAC

(46) 35. Do you know of any physical improvements that have taken place in the Union Avenue area during the past year or so?
_____ 0) no (Turn page, go to #37)
_____ 1) yes
_____ 9) DK

If yes, what improvements?

(47) _____ new street lights
(48) _____ derelict and abandoned structure clearances
(49) _____ new bus shelters
(50) _____ streets paved and/or new curbs
(51) _____ sidewalk repairs
(52) _____ park improvements
(53) _____ mini-plaza
(54) _____ other _____

(55) 36. How have these physical changes affected the quality of life in the UA area?
* _____ 1) improved living conditions
_____ 2) had no effect *read only these re-
_____ 3) made living con- ponses
conditions worse
_____ 4) too soon to tell
_____ 9) DK

(56) (if answer is "too early to tell," #4) How do you think these changes will eventually affect the quality of life in the UA area? Will they. . .
_____ 1) improve it
_____ 2) have no change
_____ 3) make it worse
_____ 9) DK

Organizing Against Crime

- (57) 37. Approximately how often do you discuss crime with your neighbors? Would you say you discuss crime. . .
- 1) a lot of the time
 - 2) some of the time
 - 3) almost never
 - 4) never
 - 9) DK
-
- (58) 38. Within the past six months, have you heard of any organized meetings with other citizens in the UA area to discuss ways of preventing crime?
- 1) no
 - 2) yes
-
- (59) If no, have you heard of any crime prevention programs operating in the Union Avenue area?
- 1) no
 - 2) yes
-
- (60-61) If yes, how many meetings have you attended?

-
- (62) If yes, have you heard of any other crime prevention programs operating in the Union Avenue area?
- 1) no
 - 2) yes
-
- (63) 39. What is the likelihood that you will be moving out of the Union Avenue area in the next year or two? Would you say. . .
- 1) very likely
 - 2) somewhat likely
 - 3) somewhat unlikely
 - 4) very unlikely
 - 9) DK

Demographic Variables

Finally, I need some background information so we can compare your answers with those of other peoples'.

- (64) 40. Now I'd like to ask which one of the following age categories you are in (read responses).
- 1) under 20
 - 2) 20-29
 - 3) 30-39
 - 4) 40-49
 - 5) 50-59
 - 6) 60 and over
 - 9) NA
-
- (65) 41. How many people reside at your address?

-
- (66) 42. Are you head of this household?
- 1) no
 - 2) yes
-
- (67) 43. What is your relationship to the head of the household?
- 1) head
 - 2) wife of head
 - 3) husband of head
 - 4) child (over 16) of head
 - 5) other relation
 - 6) Non-relative

Interviewer Inferences (Ask if uncertain)

- (68) 44. Sex: 1) female
 2) male
-
- (69) 45. Race: 1) Black
 2) White
 3) Other

CONSTRUCTION OF SURVEYS

There are many technical issues involved in the construction of a good survey instrument. These are discussed in detail in books dealing with that subject. It may be useful, however to briefly indicate some elements of construction incorporated in the sample forms.

Some of the questions on forms F and G are indirect measures of attitudes and beliefs. For example, question eight (8) of the UAC Businessmen's survey asks the respondent to select three factors which most affect business.

8. Of all the things listed on this card what are the three factors most harmful to the successful operation of your business?
- 1. physical appearance of your business
 - 2. insufficient parking
 - 3. present crime rate in UAC
 - 4. inadequate police protection
 - 5. physical appearance of Union Avenue
 - 6. bad state of the economy in general
 - 7. insufficient street lighting
 - 8. traffic patterns along Union Avenue
 - 9. current insurance rates

This question does not directly ask the respondents how concerned they are about crime, but if respondents are indeed concerned about crime they would be expected to choose 3 and possibly 4 as options in answering the question.

By contrast, question 14 on the same form asks the respondent to directly evaluate the effect of crime on business.

14. How many residents in this neighborhood would you say have limited or changed their shopping habits in the past few years because of their fear of crime in UAC? Do you feel that most of them have changed their shopping habits, some of them have changed their shopping habits, hardly any have changed their shopping habits, or none of them has changed their shopping habits?
- 1. most of them
 - 2. some of them
 - 3. hardly any of them
 - 4. none of them
 - 5. DK (don't know)

Often indirect and direct questions on the same issue are incorporated in one survey form. If only question 8 had been asked, then for those respondents who did not select options 3 or 4 there would be no measure of their concern about the effect of crime on their business. The value of using indirect questions is that they do not indicate to the respondent exactly why the question is being asked. Sometimes respondents, in their desire to be cooperative, will provide the answer they believe the interviewer is hoping to hear, regardless of their actual opinion. The value of direct questions is that they assure a response on the particular issue of concern to the analyst.

SPATIAL RESPONSES

Many of the attitudes and perceptions which the CPTED analyst is interested in eliciting involve a spatial component. For example, a project may involve a specific neighborhood. If the perception of area residents differs significantly from officially defined boundaries, the analyst may wish to change the project's boundaries.

One technique for eliciting information on perceived boundaries is to provide the respondent with a map of the area, and ask that its boundaries be marked. A similar map, or one at a larger scale, may help people respond to questions about where their friends live and which areas in the site they feel to be safe and unsafe. Maps can also be used to identify the paths of movement that respondents use in carrying out their routine activities in the site.

BUSINESSMAN INTERVIEW

Date: _____

1. What type of business is this?

2. What hours are you open for business?

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Saturday _____

Sunday _____

3. When did you start this business at this address?

Month _____

Year _____

4. Prior to that time were you in business at another location in UAC?

yes _____ no _____

If yes, how long? _____

5. Do you rent or own the space at this location?

_____ 1. Rent

_____ 2. Own

_____ 9. N/A

If own, approximately how much do you think this space would rent for per month?

6. Do you have any intentions of moving your business out of UAC in the next year or two?

_____ 1. yes

_____ 2. probably

_____ 3. maybe

_____ 4. no

_____ 8. N/A

_____ 9. DK

7. Now I'd like to ask you some questions about how well your business has been doing for the past few years. I realize that this is private information. As such I will ask for this information in an indirect manner. Using your total gross sales for 1970 as a base year, and treating that figure as a unit of 100, would you please tell me what your annual total gross sales have been for each year since 1970? If you are not sure of the exact figure, just estimate as best you can. (Don't have respondent rush the answer)

_____ 1970

_____ 1971

_____ 1972

_____ 1973

_____ 1974

_____ 1975

_____ 1976

_____ 1977 (projected)

_____ N/A

_____ DK

8. Of all the things listed on this card what are the three factors most harmful to the successful operation of your business? Hand respondent card

_____ 1. physical appearance of your business

_____ 2. insufficient parking

_____ 3. present crime rate in UAC

_____ 4. inadequate police protection

_____ 5. physical appearance of Union Avenue

_____ 6. bad state of the economy in general

(answers 7, 8, 9 on following page)

8. (answers continued)

- 7. insufficient street lighting
- 8. traffic patterns along Union Avenue
- 9. current insurance rates

Are there other factors that are not on the card which you feel are more harmful than any of the three you picked?

- 1. yes
- 2. no
- 3. DK

If yes, what factors? _____

9. Do you know of any physical changes that have taken place in UAC during the past year?

- 1. new street lights
- 2. derelict and abandoned structure clearances
- 3. new bus shelters
- 4. some streets paved and new curbing
- 5. sidewalk repairs
- 6. park improvements
- 7. mini-plaza
- 8. other _____
- 9. not aware of any changes

10. What do you feel these changes are trying to accomplish? (check as many as mentioned)

- 1. reduce crime
- 2. reduce fear of crime
- 3. improve quality of life for UAC residents
- 4. increase business confidence in UAC
- 5. improve UAC's reputation
- 6. improve natural surveillance
- 7. increase access control and territoriality
- 8. improve appearance of UAC
(remaining answers on following page)

10. (continued)

- 9. DK
- 10. Other _____

11. (Skip if unaware of physical changes)
How have the physical changes in UAC affected your business? Have they improved business, hurt business, no change, too early to tell.

- 1. improved business
- 2. no change
- 3. hurt business
- 4. too early to tell
- 9. DK

If answer is "too early to tell, #4, ask: How do you think these changes will eventually affect your business?"

12. Approximately what percent of your current customers are residents of this neighborhood? (UAC)

- _____ %
- 9.

13. The percentage of customers you have that are local residents may or may not have changed since 1970 (or since your business started). Do you feel there has been an increase, a decrease, or no basic change in the proportion of your customers who are local residents?

- 1. increase
- 2. no change
- 3. decrease
- 4. not applicable, not the type of business that serves locals
- 9. DK

14. How many residents in this neighborhood would you say have limited or changed their shopping habits in the past few years because of fear of crime in UAC? Do you feel that most of them have changed their shopping habits, some of them have changed their shopping habits, hardly any of them have changed their shopping habits, or none of them have changed their shopping habits?

- 1. most of them
- 2. some of them
- 3. hardly any of them
- 4. no one
- 9. DK

15. How safe do you think your customers feel while shopping in UAC during the day? Do you think they feel very safe, reasonably safe, somewhat safe, very unsafe, or don't you have customers in UAC?

- 1. very safe
- 2. reasonably safe
- 3. somewhat safe
- 4. very unsafe
- 5. don't have customers in UAC, N/A
- 9. DK

16. How safe do your customers feel while shopping in UAC during the night? Do you think they feel very safe, reasonably safe, somewhat unsafe, very unsafe, or you don't have customers in UAC?

- 1. very safe
- 2. reasonably safe
- 3. somewhat unsafe
- 4. very unsafe
- 5. don't have customers, N/A
- 9. DK

17. Do you think the people that live near here would report it to the police if they saw some suspicious or criminal activity around your business when you are closed?

- 1. yes
- 2. some would, some would not
- 3. no
- 9. DK

18. Generally speaking, how would you characterize your attitude toward the police? Would you say that you feel very favorable, favorable, neutral, unfavorable or very unfavorable?

- 1. very favorable
- 2. favorable
- 3. neutral
- 4. very unfavorable
- 9. DK

19. During the day (6am - 6pm) about how often do you think police cars pass within sight of your business?

0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - or more 9 = DK

20. During the night (6pm - 6am) about how often do you think police cars pass within sight of your business?

0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - or more 9 = DK

21. Was your business involved in the security surveys performed by the Portland Police (Sgt. Blair) in UAC? That is, did a police officer inspect your building and make suggestions for improving your security?

- 1. *yes
- 2. **no
- 9. DK

* If yes, to what extent did you follow the recommendations for improving your security?

- 1. completely
- 2. almost completely
- 3. partially
- 4. not at all

* Did anyone come around or call to find out what to what extent you followed the recommendations?

- 1. yes
- 2. no
- 9. DK

**If no, why no?

- 1. weren't asked
- 2. refused service
- 3. other _____

22. Are there lights outside your business, not counting street lights, that are regularly turned on at night?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

23. Are there lights inside your business that are regularly turned on at night?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

24. Do you have a burglar alarm or other means of alerting the police in case of a break-in when your business is closed?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

If no, do you have any plans to install one?

- 1. yes
- 2. no
- 3. N/A
- 4. DK

25. Do you have a silent alarm or other means of alerting the police in case of a hold-up during business hours?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

If no, do you have any plans to get one?

- 1. yes
- 2. no
- 3. N/A
- 4. DK

26. The next two questions are about the types of protection you have at your business location. Is there a gun, pistol, rifle or shotgun, on the premises for the protection of the business?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

If no, do you have any plans to get one?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

27. Is there some other kind of weapon at your business location that you use for protection (even if it has other uses)?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

28. Have you displayed any crime prevention stickers on the doors, windows, or elsewhere at your business location?

- 1. yes
- 2. no
- 3. N/A
- 9. DK

29. How has the crime problem in UAC changed since 1970 (or since you started your business)? Has it become increasingly less of a problem, more of a problem, sometimes less - sometimes more, or no change?

- 1. increasingly less
- 2. increasingly more
- 3. sometimes less - sometimes more
- 4. no change
- 9. DK

30. How would you rate the present level of crime in UAC, in terms of the extent of a problem it is? (read alternatives)

- 1. severe problem
- 2. severe to moderate problem
- 3. moderate problem
- 4. moderate to slight problem
- 5. slight problem
- 6. no problem

31. To your knowledge did any of the following crimes occur in January, February, or March of 1977 to your business or to persons in or within a block of your business.

- 1. break-in at your business yes ___ no ___
If yes, how many times ___?
- 2. hold-up at your business yes ___ no ___
If yes, how many times ___?
- 3. pursesnatch within block yes ___ no ___
If yes, how many times ___?
- 4. street assaults within block yes ___ no ___
If yes, how many times ___?
- 5. hold-up on the street yes ___ no ___
If yes, how many times ___?
- 6. vandalism at your business yes ___ no ___
If yes, how many times ___?

32. During January, February, and March of 1977 were there any organized meetings of businessmen in this area (UAC) to discuss ways of preventing crime in the Union Avenue Corridor Area?

- 1. yes
- 2. no
- 3. DK

If yes, how many meetings ___?

If yes, how many did you attend ___?

33. To what extent have you had a problem hiring and/or in keeping employees because of fear of crime during the past few years? Has it been a . . . (read responses)

- 1. severe problem
- 2. moderate problem
- 3. slight problem
- 4. no problem
- 9. DK

34. How safe do you and your employees feel while working here during the day? Would you say . . . (read responses)

- 1. very safe
- 2. reasonably safe
- 3. somewhat safe
- 4. unsafe
- 9. DK

35. How safe do you and your employees feel while working here during the night (or would you feel if you were to work here at night)? Would you say you feel . . . (read responses)

- 1. very safe
- 2. reasonably safe
- 3. somewhat unsafe
- 4. very unsafe
- 9. DK

36. Are there some areas of UAC where you do avoid walking or would avoid walking during the day because of potential crime?

- 1. no
- 2. yes

Which sections? (probe for name of intersection)

_____ number mentioned (complete after interview)

37. Are there some areas of UAC where you do avoid walking or would avoid walking during the night because of potential crime?

- 1. no
- 2. yes

Which sections? (probe for name of intersection)

_____ number mentioned (complete after interview)

38. For each of the crimes I read to you, please tell me if you think your chances of being a victim in the Union Avenue area has increased, decreased or stayed about the same during the past six months.

	increase	decrease	no change	DK
1. business broken into	1	2	3	9
2. business hold-up	1	2	3	9
3. street assault	1	2	3	9
4. street hold-up	1	2	3	9
5. vandalism, property destruction	1	2	3	9

39. How often are you concerned that any of the following things might happen to your business or to you while you are in UAC? Are you concerned most of the time, some of the time, almost never, or never?

	most times	some-times	almost never	never	DK
1. break-in and burglary of business	1	2	3	4	9
2. hold-up of business	1	2	3	4	9
3. beaten up on street	1	2	3	4	9
4. hold-up on street	1	2	3	4	9
5. vandalism, property destruction	1	2	3	4	9

40. In 1970 how did UAC compare with other commercial areas of Portland in terms of economic vitality? Was it better than most, somewhat better, the same, somewhat worse, or worse than most other commercial areas of Portland?

- 1. better
- 2. somewhat better
- 3. same
- 4. somewhat worse
- 5. worse
- 9. DK

41. How does UAC presently, (April 1977) compare with other commercial areas of Portland in terms of economic vitality?

- 1. better
- 2. somewhat better
- 3. same
- 4. somewhat worse
- 5. worse
- 6. DK

FIELD OBSERVATION METHODS

Surveys, whether conducted in person, by mail or over the phone, offer an excellent means of obtaining data on the experiences, attitudes, and concerns of project site users. However, they only offer an indirect measure of the activities which actually occur at the site. A survey may include questions about how frequently respondents use particular areas, but direct observation will provide a better idea of patterns of activity (e.g. the density of users at different times of the day, the characteristics of their activities and interactions).

Activities and interactions noted in field observations may provide the basis for questions in a survey form. Conversely, observation may help to confirm conclusions drawn from the analysis of survey findings. Ideally, both forms of data collection should be utilized to arrive at the most confident analysis of the problems and characteristics of the project site.

Several types of observational methods have been employed in CPTED and criminal justice research. These include security surveys, vehicular and pedestrian counts, and behavioral mapping. Each of these techniques will be briefly described here.

SECURITY SURVEYS

Security surveys are generally used as part of a crime prevention tactic, but they may also be used in the analysis of the vulnerability of a target site. The security survey is, in effect, a structured form for observing and evaluating environmental characteristics.

Security surveys may be conducted by trained personnel (e.g. CPTED staff or local police) or they may be designed to

be self-administered. Form H is a security survey checklist for commercial establishments used by the Portland Police Department. It contains a follow-up interview, to determine whether people have carried out recommended security improvements. Form I is a checklist for residential security against burglary. Many police departments will conduct a security survey after a robbery or burglary has occurred to help alert the occupants to measures that could be taken to prevent further victimization. Form J is a self-administered security survey.

PORTLAND POLICE BUREAU COMMERCIAL SECURITY SURVEY

Business Name _____ File No. _____

Address _____ Date _____

Name of Person Contacted _____ Position _____

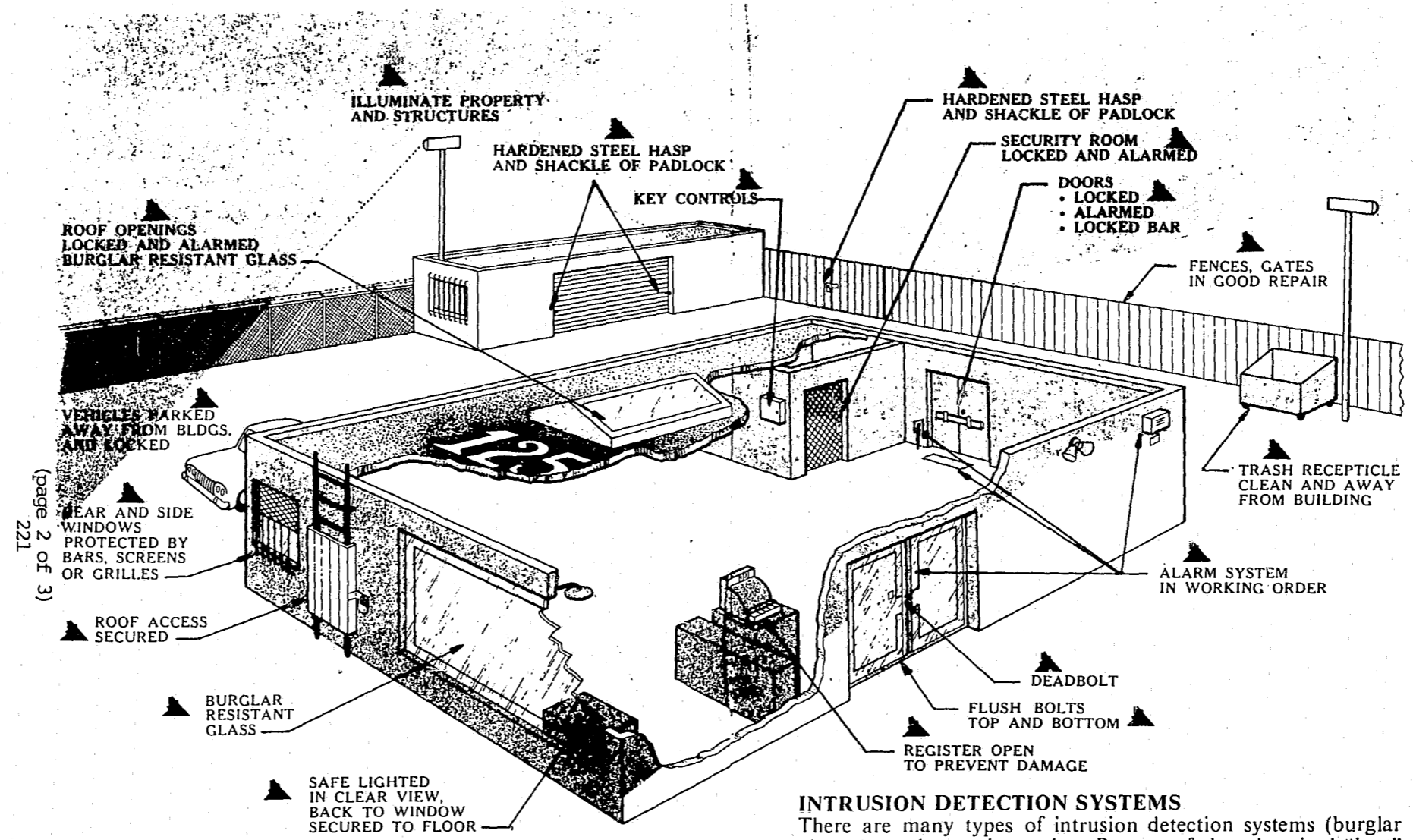
Type of Premise _____ Phone No. _____

KEY: STND = STANDARD REC = RECOMMENDATION COMM = COMMENTS

1. BUILDING FRONT				4. BUILDING LEFT SIDE				7. ALARMS			
STND	REC	COMM		STND	REC	COMM		STND	REC	COMM	
DOORS	___	___	___	DOORS	___	___	___	AUDIBLE	___	___	___
LOCKS	___	___	___	LOCKS	___	___	___	SILENT	___	___	___
WINDOWS	___	___	___	WINDOWS	___	___	___	OTHER	___	___	___
LIGHTS	___	___	___	LIGHTS	___	___	___	ALARM PERMIT #	___	___	___
VENTS	___	___	___	VENTS	___	___	___				
MISC.	___	___	___	MISC.	___	___	___				
2. BUILDING RIGHT SIDE				5. BUILDING ROOF				8. SAFES			
STND	REC	COMM		STND	REC	COMM		STND	REC	COMM	
DOORS	___	___	___	ROOF ACCESS	___	___	___	ANCHORED	___	___	___
LOCKS	___	___	___	ROOF SKYLIGHT	___	___	___	SHIELDED DIAL	___	___	___
WINDOWS	___	___	___	ROOF VENTS	___	___	___	VISIBLE	___	___	___
LIGHTS	___	___	___	MISC.	___	___	___	LIGHTED	___	___	___
VENTS	___	___	___					MONEY CHEST	___	___	___
MISC.	___	___	___					FILE	___	___	___
3. BUILDING REAR				6. LOADING DOORS				9. MISCELLANEOUS			
STND	REC	COMM		STND	REC	COMM		STND	REC	COMM	
DOORS	___	___	___	OVER HEAD	___	___	___	KEY CONTROL	___	___	___
LOCKS	___	___	___	SLIDING	___	___	___	FENCING	___	___	___
WINDOWS	___	___	___	SIDEWALK ELEVATOR	___	___	___	LIGHTING	___	___	___
LIGHTS	___	___	___	ROLLER	___	___	___	LAND-SCAPING	___	___	___
VENTS	___	___	___					OFFICE EQUIPMENT ENGRAVED	___	___	___
MISC.	___	___	___								

COMMENTS: _____

OFFICER:	NO.	PREC/DIV:	DISTRICT:
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(page 2 of 3)
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SECURITY SURVEY

The Arlington County Police Department offers you the opportunity to participate in a comprehensive evaluation of your business. The purpose of the security survey is to evaluate the physical and procedural weaknesses of your establishment and make recommendations that will increase your level of protection against crime.

All survey information and evaluations are strictly confidential for your protection. Arrangements for security surveys can be made through the Arlington County Police Department.

INTRUSION DETECTION SYSTEMS

There are many types of intrusion detection systems (burglar alarms) on the market today. Beware of the advertised "best" system. Each system should be designed and installed by a professional alarm company. Careful consideration must be made in selecting the proper system. Areas to consider are your location, value of items to be protected, coverage desired, incorporation with a fire alarm system, and cost. A properly designed and implemented system may qualify your business for a substantial insurance discount.

Your Crime Prevention Officer or a reputable alarm company representative can assist you in selecting an intrusion detection system.

FOLLOW-UP INTERVIEW

First Follow-Up

1. Have you improved your security based upon what you have learned from the survey? Yes ___ No ___ What have you done?

2. Were you burglarized since your inspection? Yes ___ No ___

3. Was the burglary reported to the police? Yes ___ No ___

4. Would compliance with security recommendations have prevented the burglary? Yes ___ No ___

5. Have you engraved your property? Yes ___ No ___

6. Is the emergency sticker posted? Yes ___ No ___

Comments: _____

Officer	No.	Date	Prec.	District
---------	-----	------	-------	----------

Second Follow-Up

1. Have you improved your security base upon what you have learned from the survey? Yes ___ No ___ What have you done? _____

2. Were you burglarized since your inspection? Yes ___ No ___

3. Was the burglary reported to the police? Yes ___ No ___

4. Would compliance with security recommendations have prevented the burglary? Yes ___ No ___

5. Have you engraved your property? Yes ___ No ___

6. Is the emergency sticker posted? Yes ___ No ___

Comments: _____

Officer	No.	Date	Prec.	District
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Form I

Name: _____ Address: _____

BURGLARY PREVENTION CHECKLIST

PREVENTION TIPS	OK	NEEDED	RECOMMEND REPLACEMENT
Doors:			
Strong Pintumbler Locks:			
Front Door	_____	_____	_____
Back Door	_____	_____	_____
Side Door	_____	_____	_____
Basement Door	_____	_____	_____
Chain Latch:			
Front Door	_____	_____	_____
Back Door	_____	_____	_____
Side Door	_____	_____	_____
Basement Door	_____	_____	_____
Heavy Duty Door Hinges:			
Front Door	_____	_____	_____
Back Door	_____	_____	_____
Side Door	_____	_____	_____
Basement Door	_____	_____	_____
Peep-Hole:			
Front Door	_____	_____	_____
Back Door	_____	_____	_____
Doors with Windows			
Need key to open inside and out	_____	_____	_____
Mail Box			
Mail Slot in Door	_____	_____	_____
Garage Door			
Pintumbler Lock	_____	_____	_____
Windows:			
All windows with pintumblers	_____	_____	_____
Bar or Strip of Wood (Patio Door)	_____	_____	_____
Bars or Grill Works:			
"Out of the Way Windows"	_____	_____	_____
Garage Windows	_____	_____	_____
Basement Windows	_____	_____	_____
Keys:			
Change Tumblers	_____	_____	_____
When you moved in	_____	_____	_____
If Keys are Lost	_____	_____	_____

PREVENTION TIPS	OK	NEEDED	RECOMMEND REPLACEMENT
Keys: (continued)			
Don't Give Out Duplicate Keys	_____	_____	_____
Home and Automobile Key Separate	_____	_____	_____
Don't put Name and Address on Keys	_____	_____	_____
House Key hidden outside	_____	_____	_____
Valuables:			
Serial Numbers, TV, Radios, etc. List	_____	_____	_____
Bank Deposit Box	_____	_____	_____
Cash (Large Amounts)	_____	_____	_____
Jewelry	_____	_____	_____
Bonds (Negotiable)	_____	_____	_____
Under Lock and Key:			
Check Books	_____	_____	_____
Credit Cards	_____	_____	_____
Bicycles List of Serial Numbers	_____	_____	_____
Lights:			
Outside:			
Front	_____	_____	_____
Rear	_____	_____	_____
Side	_____	_____	_____
Inside:			
Automatic Device	_____	_____	_____
Lights and Radio	_____	_____	_____
Small Door Light			
Front	_____	_____	_____
Rear	_____	_____	_____

The following are important reminders to help you from being the next victim of a Burglar.

- A. Keep all doors and windows locked at all times.
- B. When home alone leave lights on in other rooms.
- C. Always close the curtains and draw the shades after dark.
- D. Always use your chain latch every time you answer the door.
- E. Require identification from repairmen and utility company representatives.
- F. Don't let anyone in unless you are sure they are who they say.
- G. Be alert for strangers who loiter in hallways, elevators, and laundry rooms.

- H. Make note of license tag numbers of suspicious autos you notice in your neighborhood.
- I. Stop delivery of mail, milk, and newspapers when you are going away.
- J. Arrange to have your grass cut or the snow shoveled when you are away.
- K. If you are a woman and live alone use initials on mail box, door, and in phone book.
- L. Let the police know when you will be going out of town.
- M. Most important always call the Police whenever you see or hear anything suspicious in your neighborhood.

OPERATION IDENTIFICATION

Operation Identification is available at your local police station in the District of Columbia, at no cost to you.

- 1. Borrow an ENGRAVER from the police station.
- 2. Engrave your SOCIAL SECURITY NUMBER on your property (TV, radio, etc.).
- 3. Return the engraver to the police station, and pick up stickers.
- 4. Place the WARNING STICKERS on doors/or/windows.

Inspecting Officer _____ District _____
Date _____

Source: Metropolitan Police Department, Washington, D.C.

Don't let a burglar hit you where you live. In five minutes you can take this simple test to determine how well protected your home is against burglary. Your home protection depends on good locks, adequate lighting and safe practices.

DOORS

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. Are the locks on your most used outside doors of the cylinder type? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are they of either the deadlocking or jimmy-proof type? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are you sure none of your locks can be opened by breaking out glass or wood panels? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you use chain locks or other auxiliary locks on most used doors? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do the doors without cylinder locks have a heavy bolt or some similar secure device that can be operated only from the inside? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Can all of your doors (basement, porch, french, balcony) be securely locked? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Do your basement doors have locks that allow you to isolate that part of your house? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are your locks all in good repair? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Do you know everyone who has a key to your house? (Or are there some still in possession of previous owners and their servants and friends?) | <input type="checkbox"/> | <input type="checkbox"/> |

WINDOWS

- | | | |
|---|--------------------------|--------------------------|
| 10. Are your window locks properly and securely mounted? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Do you keep your windows locked when they are shut? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Do you use locks that allow you to lock a window that is partly open? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. In high hazard locations, do you use bars or ornamental grille? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Are you as careful of basement and second floor windows as you are of those on the first floor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Have you made it more difficult for the burglar by locking up your ladder, avoiding trellises that can be used as a ladder or similar aids to climbing? | <input type="checkbox"/> | <input type="checkbox"/> |

GARAGES

- | | | |
|---|--------------------------|--------------------------|
| 16. Do you lock your garage door at night? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Do you lock your garage when you are away from home? | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Do you have good, secure locks on the garage doors and windows? | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Do you lock your car and take the keys out even when it is parked in your garage? | <input type="checkbox"/> | <input type="checkbox"/> |

WHEN YOU'RE AWAY

- | | YES | NO |
|--|--------------------------|--------------------------|
| 20. Do you stop all deliveries or arrange for neighbors to pick up papers, milk, mail, packages? | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. Do you notify a neighbor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. Do you notify your sheriff. They provide extra protection for vacant homes. | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. Do you leave some shades up so the house doesn't look deserted? | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Do you arrange to keep your lawn and garden in shape? | <input type="checkbox"/> | <input type="checkbox"/> |

SAFE PRACTICES

- | | | |
|---|--------------------------|--------------------------|
| 25. Do you plan so that you do not need to "hide" a key under the door mat? | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Do you keep as much cash as possible and other valuables in a bank? | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. Do you keep a list of all valuable property? | <input type="checkbox"/> | <input type="checkbox"/> |
| 28. Do you have a list of the serial numbers of your watches, cameras, typewriters and similar items? | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. Do you have a description of other valuable property that does not have a number? | <input type="checkbox"/> | <input type="checkbox"/> |
| 30. Do you avoid unnecessary display or publicity of your valuables? | <input type="checkbox"/> | <input type="checkbox"/> |
| 31. Have you told your family what to do if they discover a burglar breaking in or already in the house? | <input type="checkbox"/> | <input type="checkbox"/> |
| 32. Have you told your family to leave the house undisturbed and call the sheriff or police if they discover a burglary has been committed? | <input type="checkbox"/> | <input type="checkbox"/> |

HOW WELL DID YOU SCORE?

Every "no" check mark shows a weak point that may help a burglar. As you eliminate the "no" checks, you improve your protection.

Your local sheriff or chief of police can arrange a thorough home security inspection of your house or apartment at no cost to you. Give them a call today. **REMEMBER—Crime Prevention Begins At Home.**



PREPARED AND DISTRIBUTED BY
THE NATIONAL SHERIFFS' ASSOCIATION
IN COOPERATION WITH
YOUR LOCAL LAW ENFORCEMENT AGENCY

PEDESTRIAN AND VEHICULAR COUNTS

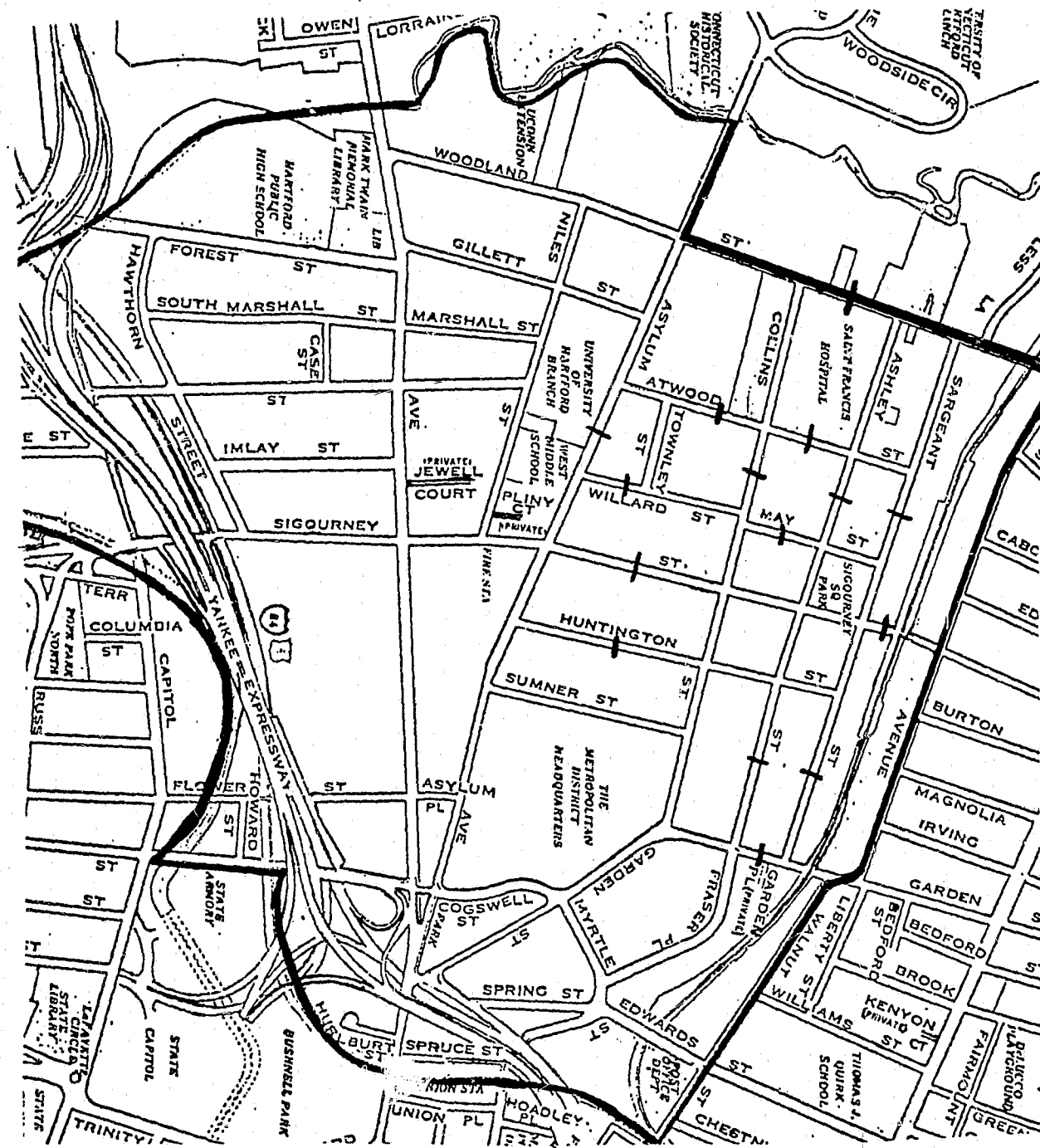
Improving conditions for casual and formal surveillance, and for controlling movement through a site, are basic CPTED strategies. In some sites heavy vehicular traffic moving through an area can make surveillance difficult. Similarly, excessive non-resident pedestrian traffic can inhibit surveillance. The analyst may determine that strangers moving through a site are a problem by using key-person interviews or other surveys. This condition can also be assessed, and more accurately, by actual traffic counts.

The Hartford residential demonstration included street closings as a major strategy. Part of the problem analysis and evaluation of that project involved machine counts of vehicular traffic in the area before and after streets were closed. Counting devices were used at selected points (see figure K). Changes in the density of pedestrian traffic were also of concern. Pedestrian counts were made manually at check points.

In the Portland CPTED commercial demonstration, pedestrian counts were used to help assess the effect of certain tactics intended to affect patterns of behavior in and around the commercial strip. Observation was conducted on a structured schedule. The persons observed were categorized according to age, race and sex. The locations (e.g., at a bus stop, in a phone booth) were also noted.

Counts of vehicular and pedestrian traffic may be supplemented through the use of surveys to ascertain the origin and destination (C&D) of those observed. These surveys are very brief, usually consisting of two or three questions. They are used to help distinguish through-traffic from local or internal traffic.

Figure K
VEHICULAR TRAFFIC COUNT SITES, 1976-1977



KEY: -- MECHANICAL 24-HOUR COUNTERS (15 SITES)

BEHAVIORAL MAPPING

The observations of pedestrian traffic made in the Portland demonstration begin to move away from simple frequency counts to a fuller description of the types of activities occurring at the site. In many studies it is not the number of people present at the site, but changes in what they are doing, that is important to the analyst. One technique for observing and recording behavior at a site is behavioral mapping.*

Mapping involves the use of a code which identifies specific behaviors being observed. Observations are conducted according to a fixed schedule, and behaviors are noted on a scale map of the area. The site itself is divided into subareas so that the frequency of observed behaviors can be compared between subareas and for the same subarea at different times (e.g. frequency of selected behavior before and after physical modifications have been made).

Form L was developed for the Broward County school demonstration. It includes a set of questions to be filled out by the observer at each scheduled observation period. It also has a map for indicating where persons were located at the site during the period of observation.

*"The use of behavioral maps in environmental psychology." Ittelson, W, Leanne Rivlin, and Harold Proshansky in Environmental Psychology, Proshansky, et al; Holt, Rinehart, and Winston, 1970.

Form L

Following are observational questions applied to all four schools.

Patio

1. Number of groups of students in patio at start of observation.

2. Have new tables and benches (other than picnic) been installed in patios?
Yes _____ No _____
(IF NO, SKIP TO #5.)
 - a. IF YES, list number of tables _____ and benches _____.
 - b. IF YES, do students use these tables and benches?
Yes _____ No _____
(1) IF YES, percentage used. _____%
 - c. IF YES, do these tables and benches physically divide spaces?
Yes _____ No _____
 - d. IF YES, do these tables and benches physically divide the size of groups?
Yes _____ No _____
3. Does traffic flow into patio without impediment?
Yes _____ No _____
 - a. Does traffic flow within patio without impediment?
Yes _____ No _____
4. Is patio isolated from view of public thoroughfares?
Yes _____ No _____

Patio (Cont.)

5. Is entire patio surveyable from points outside its perimeter?
Yes _____ No _____
 - a. IF NO, explain why not. _____

6. Is entire patio surveyable from points within its perimeter?
Yes _____ No _____
 - a. IF NO, explain why not. _____

7. Is there a student smoking zone located in the patio?
Yes _____ No _____
 - a. IF YES, count the number of students smoking at this instant in zone.
Male _____
Female _____
 - b. IF YES, count the number of students smoking at this instant in other parts of patio.
Male _____
Female _____
8. Is behavior in patio area orderly? Yes _____ No _____
 - a. IF NO, explain. _____

9. Do students in patio appear aware of behavior occurring throughout patio?
Yes _____ No _____
Explain. _____

Patio (Cont.)

10. Number of students in patio at end of observation. _____

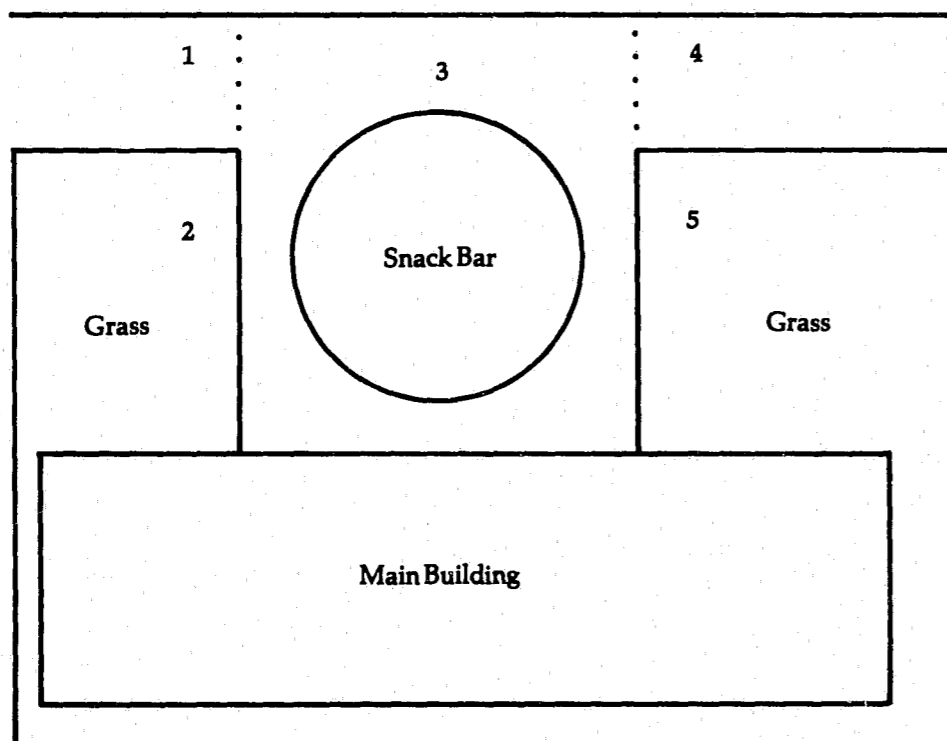
11. Number of groups of students in patio at end of observation.

12. Are any supervisors present during the observation period?

Yes _____ No _____

a. IF YES, how many? _____

Mark locations of stationary students at start of observation on map below:



U.S. Department of Justice
National Institute of Justice

Official Business
Penalty for Private Use \$300

Postage and Fees Paid
U.S. Department of Justice
Jus 436

SPECIAL FOURTH-CLASS
RATE BOOK



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