

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

CPTED PROGRAM MANUAL

Volume I

Planning and Implementation Manual

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PREFACE

Crime is one of the most significant social problems in the United States, requiring innovative and varied solutions for reduction and prevention. Although Federal, State, and local governments have committed enormous resources towards combatting crime, the fear of crime is a discomfoting facet of everyday living in many communities. This fear has combined with other social forces to undermine the vitality of commercial areas, has led to the abandonment of residential areas as families are prompted to flight, enmeshed school administrations with internal disorders which have disrupted educational activities, and has often hastened declines in public transportation ridership.

NILECJ has recognized the need for research and the development of new approaches for crime prevention and the restoration of personal security. Because the environment in which we live is such a fundamental determinant of how we act and perceive our surroundings, it is both natural and imperative that we seek an understanding of its influence upon both crime and the fear of crime within our society.

In 1974, a major exploration of techniques for Crime Prevention Through Environmental Design (CPTED) was initiated with an award to a consortium of firms headed by the Westinghouse Electric Corporation.

The goal of the CPTED Program is to develop and demonstrate design concepts for urban environments that will reduce crime and im-

prove the quality of urban life by reducing the fear of crime. Specific objectives of the Program are:

- To consolidate and extend CPTED concepts that bear upon the prevention of crime in urban settings.
- To mount demonstration projects for the evaluation and refinement of CPTED concepts.
- To distill the concepts and demonstrations' findings into guidelines suited to architects, planners, and developers.
- To disseminate and institutionalize Program results on a wide basis.

There are several products developed by Westinghouse that are based on the experience and knowledge gained from the CPTED Demonstrations. These products were developed with the explicit purpose of articulating and formalizing the process involved in planning and implementing a CPTED project. Chief among these products is the CPTED Program Manual. The Program Manual, which consists of three volumes, was produced to assist urban designers and criminal justice planners in determining the applicability and feasibility of the CPTED concept to the solution of crime or fear-of-crime problems in various different urban environments. The Program Manual also provides detailed guidance for the planning and implementation of a CPTED project. Volume I, the Planning and Implementation Manual, describes the planning framework and related project management activities. Volume II, the Strategies and Directives Manual, presents a catalog of strategies, together with

examples of specific design directives. Volume III, the Analytic Methods Handbook, provides a catalog of appropriate analytic techniques.

The support of the Law Enforcement Assistance Administration is greatly appreciated. Blair Ewing and Fred Heinzelmann of the National Institute of Law Enforcement and Criminal Justice provided essential support for the CPTED Program. Efforts of other Institute staff - Lois F. Mock - are appreciated. Richard M. Rau and Richard M. Titus, initial and current monitors of the Program for LEAA, have contributed substantially to the effort by resolving problems and providing proper perspective between this program and other research activities.

The consortium also wishes to express its thanks to R.A. Carlston and Dr. L.F. Hanes of Westinghouse National Issues Center especially for their foundation-laying contribution during Phase I of the project. We also thank as a group those many individuals at the demonstration sites who contributed to the development and testing of many elements contained in the Program Manual.

Finally, Westinghouse wishes to express its grateful appreciation to the following, who provided guidance and review in the evaluation of the CPTED Program Manual and who offered suggestions for its improvement, many of which have been incorporated in this revised version: Sue Heller, Ellen Barhar, and Peter Hart (Cooperative Community Planning, Department of City Planning, New York), Captain Ernest Howard (Crime Prevention Bureau, Middletown, Ohio, Division of Police), Sherry Kinikin

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CHAPTER 1. INTRODUCTION

1.1 Purpose and Organization of the CPTED Program Manual

The CPTED Program Manual has been prepared to assist interested persons in determining the applicability of the Crime Prevention Through Environmental Design (CPTED) concept to the solution of crime and fear-of-crime problems in various environments. The components of the Manual provide:

- Guidance for the planning and implementation of a CPTED project.
- A variety of CPTED strategies that have been developed for specific crime/environment problems in the residential, commercial, and schools environments.
- A technical catalog of analytical processes that are useful for planning a large-scale CPTED project.

The scope of planning and implementation covered in the CPTED Program Manual is large. A CPTED project can be targeted on a large area (such as an extensive residential neighborhood, or even a whole city), which is a highly complex undertaking. Necessarily, the Manual must address the needs of a project of that magnitude. However, it should be recognized that the planning and implementation process also can be scaled to meet the requirements of smaller projects. These could range from simply ascertaining the most beneficial and appropriate locations for implementing a new municipal

street lighting program to defining and implementing the security needs of a school complex.

Because of the range of the project target areas, it is not possible to provide in the CPTED Program Manual guidelines on the cost of planning and implementing a CPTED project, nor is it possible to define precise staffing levels and specific management directives. Rather than giving specific direction on *how* a project must be planned and implemented, the CPTED Program Manual focuses on *what* needs to be done in that process. This focus gives full recognition to the political realities of any jurisdiction in which a CPTED project is being considered. In the real world, political interests always impact on projects or activities, like CPTED, that affect the quality of life.

The CPTED Program Manual is addressed primarily to the planner at the municipal government level. The Manual is not primarily a theoretical study of crime prevention as such but a practical guide for application of the CPTED concept to urban crime prevention projects. By discipline or position, Manual users may be urban planners, criminal justice planners, architects, or designers in any organizational structure where they could be given responsibility to develop solutions to a crime problem.

Those using the CPTED Program Manual are not expected to be statisticians, data analysts, or trained evaluators, although these and many other specialists may become involved in the planning and implementation phases of a CPTED project. Instead, the Program Manual is designed to

acquaint planners with project needs so that they can identify and enlist the services of specialists when required. The CPTED Program Manual is divided into three volumes.

Volume I -- Planning and Implementation Manual

A practical guide for the application of the CPTED concept to urban crime prevention projects.

Describes a process by which:

- CPTED applicability and feasibility are determined.
- Policy decisions are reached on the development of a project.
- Project initiation is effected.
- The necessary information is obtained to assess the nature and severity of the crime and fear-of-crime problem.
- The analytic findings are translated into CPTED strategies.
- The CPTED strategies are implemented and evaluated.

Volume II -- Strategies and Directives Manual

A catalog of strategies (or solutions to identified problems), together with examples of specific design directives to implement those strategies in a given environment, that have been developed for specific

application in three environments. Residential, Commercial, and Schools. This manual does not attempt to present an all-inclusive taxonomy of CPTED approaches. Its purpose is to provide a wide variety of examples to inspire the development by the planner of strategies and specific directives.

For Residential, Commercial, and Schools environments, respectively, strategies are classified according to their primary thrust or orientation:

- Physical strategies create, eliminate, or alter physical features that affect criminal actions.
- Social strategies create interactions among people by, for example, involving neighborhood residents and businessmen in crime prevention projects.
- Management strategies have a policy and practice thrust.
- Law enforcement strategies concern both public police support and private security forces.

Volume III -- Analytic Methods Handbook

A framework for conducting crime/environment analysis to accomplish necessary information gathering steps for diagnosing crime and fear-of-crime problems, and for evaluating strategies designed to deal with these problems.

Describes the process of crime/environment analysis and presents the basics of data collection methods with guidelines covering the coordination of analytic objectives and resources. Technical appendices treat aspects of crime/environment analysis in depth, including theoretical foundation analysis of police crime data, and evaluation designs and procedures.

1.2 Elements of the CPTED Concept

It is important that persons interested in the CPTED approach be familiar with its conceptual elements prior to initiating a local project. Familiarity with these elements will help determine whether the CPTED approach is feasible in their community, as well as indicate the types of activities that will be required to organize, plan, and implement a CPTED project. Thus, the purpose of this chapter is to synthesize conceptual considerations that provide the basis for the more practical considerations related to the planning and implementation process.

1.2.1 Background of CPTED

The foundation of the CPTED concept is not new. It is perhaps as old as the discovery that the environment influences human behavior and perceptions. However, contemporary interest in the relationship between physical design and crime has been stimulated by ideas presented by many investigators during the past 20 years. In the early 1960's and early 1970's, concern about the detrimental effects of urban renewal programs led many to study the psychic and social costs of rebuilding environments,

particularly with respect to a diminished sense of security among the users of those environments.

In 1974, the National Institute of Law Enforcement and Criminal Justice (NILECJ) of the Law Enforcement Assistance Administration initiated the Crime Prevention Through Environmental Design (CPTED) Program. The overall purpose of the effort was to demonstrate and evaluate the CPTED concept in environments that had not been addressed in previous studies. The principal objectives of the program were:

- To modify and expand the security-related environmental design principles.
- To select willing local demonstration sites.
- To develop general strategies and specific plans for each demonstration site.
- To implement the demonstration plans and initiate an evaluation process.

Three demonstration sites were chosen: A commercial strip in Portland, Oregon; four public high schools in Broward County, Florida; and a low-density neighborhood in Minneapolis, Minnesota. Demonstration plans were prepared in each of these communities with the active support and involvement of local citizens and officials. The CPTED demonstration plans currently are at different levels of implementation within the three cities. However, the experiences gained in planning these projects provides the basis for many of the suggestions and processes contained within the Manual.

1.2.2 The CPTED Concept

Crime Prevention Through Environmental Design is a concept whose goal is to reduce crime and fear by fostering a positive interaction between human behavior and the physical environment. However, the CPTED concept is not solely concerned with the physical aspects of the environment. While proper design of buildings, neighborhoods, communities, and cities to reduce crime and fear is an important element of the CPTED concept, physical changes can be effective only with the conscious and active support of those persons, organizations, and businesses who use the respective environment. Thus, the support and involvement of the user population is a fundamental part of the CPTED approach.

The CPTED concept embraces efforts to achieve a positive change in the attitudes and behavior of the user population. The primary means by which this can be accomplished are through physical design, social activities, law enforcement efforts, or management strategies. This diversity of means indicates why, in CPTED theory, the term, *environment*, includes, together with the physical elements, the social, economic, and institutional elements of a given locale. The thrust of the CPTED concept is directed towards "natural" strategies or solutions that reinforce desirable existing activities, eliminate undesirable activities, create positive new activities, or otherwise support desirable use patterns.

1.2.3 Goals and Objectives

The CPTED concept is based on a central hypothesis that certain types of crime and fear of crime can be reduced through the proper design and

effective use of the environment. The primary goal of the CPTED concept is to reduce crime and fear in urban environments through environmental design techniques. A companion goal is improving the quality of life, since many CPTED strategies can complement non-crime-related plans for a target environment. Crime problems often appear to be most severe in deteriorating locales, hence CPTED projects frequently can be designed to aid revitalization activities. In addition to these goals, several important objectives have emerged. They include:

- Initiating Positive Social Activities -- The CPTED emphasis on the effective use of the environment recognizes that even the most desirable physical changes do not necessarily guarantee a reduction of crime and fear. The design of appropriate social activities to complement and facilitate physical improvements is a fundamental CPTED objective. These activities can include:
 - Social and economic incentives that can make physical changes possible while, at the same time, providing employment opportunities.
 - Promotion of citizen awareness and response to crime and fear problems.
 - Efforts to improve police/community relationships.

- Promotion of social cohesion among
diverse interest groups.
- Designing for Diverse Human Needs -- Environmental design activities of a CPTED project should be guided by an awareness of the different needs and human conditions of various user groups, particularly those groups that are seriously affected by crime and fear problems or potential design changes. Different groups of people who reside near one another often perceive the same neighborhood differently, depending upon the extent to which their special needs are met and their vulnerability to particular problems. The CPTED concept assigns a special priority of urgency to designing for the needs of highly dependent and vulnerable environmental user groups.

1.2.4 CPTED Target Crimes

The offense categories addressed by CPTED are those classified by the Federal Bureau of Investigation as Part I crimes against persons (criminal homicide, forcible rape, robbery, aggravated assault) or property (burglary, larceny, and auto theft), as well as Part II crimes (simple assaults, arson, and vandalism). These offenses receive attention because they are destructive to the social and physical environment, they engender public fear of crime, and the opportunity for their commission can be eliminated

or minimized through environmental design. Excluded from consideration are "white collar" crimes (fraud, embezzlement), "victimless" crimes (drug abuse, prostitution), crimes against the government, organized racketeering, morals offenses, family and juvenile offenses, and disorderly conduct.

1.2.5 Key Operating Hypotheses

A model of the relationship of the CPTED hypotheses to crime / environment problems and solutions is presented in Figure 1-1.

An important assumption underlying the CPTED concept is that various types of crime/environment analyses will reveal contributing factors to crime and fear problems in a project environment. Once the local planner gains insight into the contributing factors of a given crime/environment problem (or parts of that problem), he or she can make judgments as to which of the key CPTED operating hypotheses would be most appropriate. For example, if the crime/environment analysis reveals that poorly secured residences contribute to the overall burglary problem, the analyst would focus on access control strategies. Once the key operating hypotheses are determined, specific strategies or solutions within that operational framework can be developed.

There are four general CPTED operating hypotheses that provide the underlying rationale for all of the CPTED strategies: Access control, surveillance, activity support, and motivation reinforcement. While conceptually distinct, these hypotheses tend to overlap in practice. For example, strategies designed to increase surveillance also tend to control access to a given environment. Some examples of strategies in

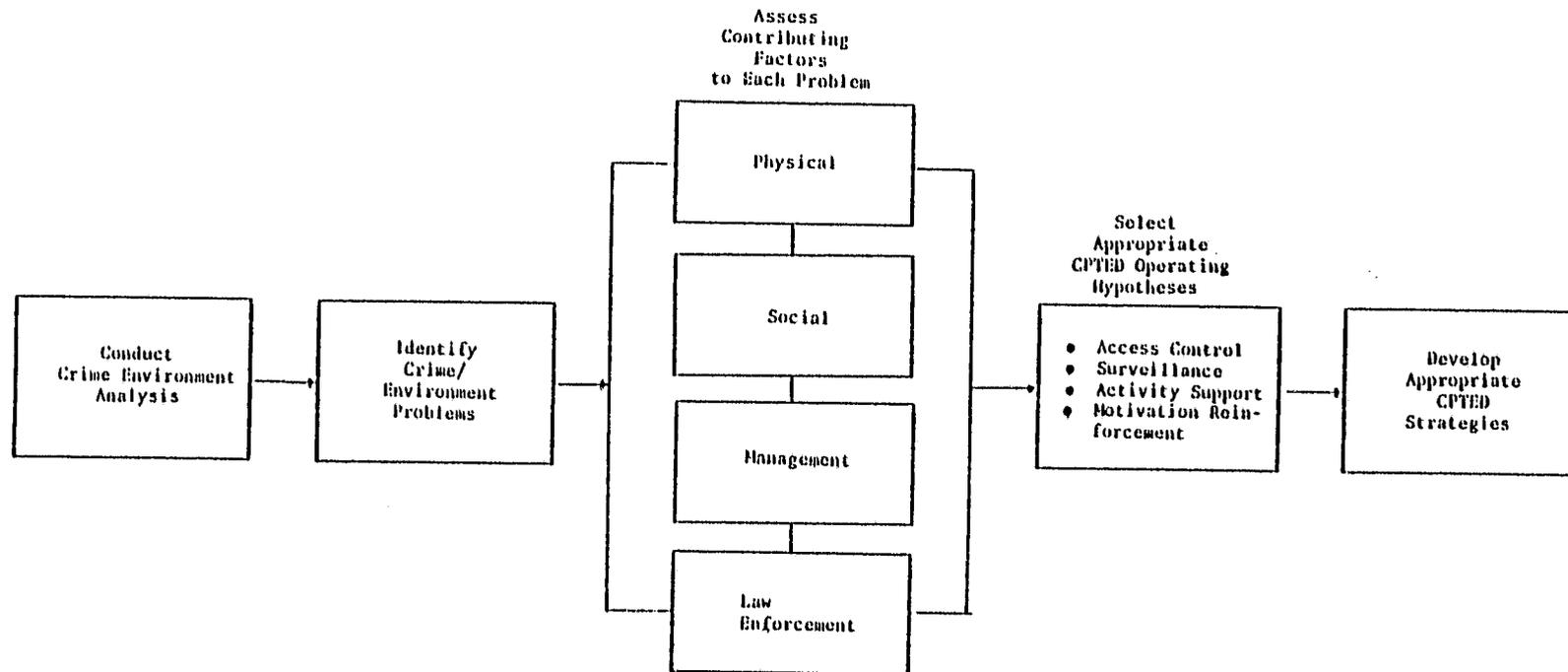


Figure 1-1. Relationship of Key Operating Hypotheses to Crime/Environment Problems and Solutions

relation to the four key operating hypotheses are presented in Table 1-1.

Access control is primarily directed at decreasing criminal opportunity. In essence, it operates to keep unauthorized persons out of a particular locale if they do not have legitimate reasons for being there. In its most elementary form, access control can be achieved in individual dwelling units or commercial establishments by use of adequate locks, doors, and similar installations. Access control can also be achieved through personnel deployment (such as doormen and security guards). In certain instances, access control can be achieved by the creation of psychological barriers. These barriers can appear in the form of signs, parkways, hedges -- in short, anything that announces the integrity and uniqueness of an area.

The primary aim of *surveillance* is not to keep intruders out but to keep them under observation. Surveillance increases the perceived risk to offenders, as well as the actual risk *if* the observers are willing to act when potentially threatening situations develop.

A distinction can be made between organized surveillance and natural surveillance. Organized surveillance is often performed by police patrols in an attempt to project a sense of omnipresence. In some instances, surveillance can be achieved with mechanical devices such as closed-circuit television (CCTV) or alarms.

Natural surveillance can be achieved by design techniques such as channeling the flow of activity to put more observers near a potential crime area, creating a greater observation capacity by installing windows



TABLE 1-1

Examples of Prevention Strategies Derived
from Each CPTED Operating Hypothesis

Access Control	Surveillance	Activity Support	Motivation Reinforcement
Provide protection in the form of target-hardening devices on the ground floor windows, entry points, and skylights.	Provide adequate levels of lighting for pathways, entry points, and parking lots. Eliminate visual barriers, such as fences, shrubs, and walls.	Locate facilities that will attract users alongside pathways so as to generate activity (i.e., locate seating, recreation facilities, or gardens near pathways).	Differentiate open grounds according to a hierarchy of public/semipublic/public zones through landscaping, different textured or colored paving materials, or gateways.
Organize, under law enforcement sponsorship, security forces who provide access control to major entry points.	Organize projects in which residents watch establishments that are temporarily vacant.	Engage teenagers in community maintenance services and recreational supervision.	Organize activities that foster a sense of community.
Employ off-duty law enforcement officials as security guards.	Increase police patrols in the target area.	Create substations to serve as bases of operations on a localized, neighborhood scale for regular police activity.	Assign a special team to one area to integrate all patrol, traffic, community relations, and detective functions.
Incorporate minimum security measures for access control into building codes.	Provide insurance rate reduction for increasing surveillance potential in and around insured buildings.	Zone for the integration of land uses to generate activity.	Manipulate locations to create a greater socioeconomic integration.
Provide mandatory sentences for offenders convicted of illegal entry.	Use electronic surveillance measures to control illegal entry.	Involve criminal offenders in carefully supervised recreational and cultural activities outside prison walls.	Institute half-way houses, job training programs, and employment opportunities for rehabilitating criminal offenders.

along the street side of a building, enclosing a staircase in glass, or using single-loaded corridors.

The concept of *activity support* involves methods of reinforcing existing or new activities as a means of making effective use of the built environment. This perspective is based on the observation that, in a given community, there are often resources and activities capable of sustaining constructive community crime prevention. Support of these activities can bring a vital improvement to a given community, together with a reduction of the vulnerable social and physical elements that permit criminal intrusions. Such an approach might focus on a geographic area (e.g., block, neighborhood, or city sector), a target population (vulnerable elderly victims or opportunistic youthful offenders), or an urban system (health delivery, transportation, or zoning).

In contrast to the more mechanical concepts of access control and surveillance that concentrate on making offenders' operations more difficult, *motivation reinforcement* seeks to affect offender behavior and offender motivation by increasing the risk of apprehension and by reducing the payoff to him. The hypothesis also seeks to reinforce positively the motivation of potential victims.

Territorial concern, social cohesion, and a general sense of security can result from such positive reinforcement strategies as altering the scale of a large, impersonal environment to create one that is smaller, more centralized, and personalized. These results can also occur from improving the quality of an environment by such measures as upgrading

the housing stock, the school facilities, or the interiors of subway cars. Other measures can include changing management policies and organizing the occupants and users of that environment to promote effective concerted action.

Territorial concern, social cohesion, and a general sense of security can be reinforced through the development of the identity and image of a community. Recognized consciously, this approach can improve not only the image the population has of itself and its domain but also the projection of that image to others.

1.2.6 Environmental Design Strategies

Another important element of the CPTED concept is the environmental design strategy. Stated simply, an environmental strategy is a solution to some or all aspects of a given crime/environment problem. Environmental design strategies include physical, social, management, and law enforcement activities. In many situations, strategies encompassing several activities are required to alleviate crime/environment problems, since there can be numerous variables associated with any given problem. For example, residential burglary can be supported by physical inadequacies (e.g., inadequate locks and doors), social patterns (an organized group of juvenile delinquents), victim vulnerability (most victims work or are away from home during peak burglary periods), or other variables. An environmental design strategy can be a combination of actions that address the total problem, or it can be a singular action (e.g., target hardening) that addressess one aspect of the problem.

CHAPTER 2. OVERVIEW OF
THE PLANNING AND IMPLEMENTATION
PROCESS

2.1 Introduction

Prior to initiating a local CPTED project, decisionmakers should be familiar with the planning and implementation process described in this Manual and with some of the benefits that can be derived from that process. The purpose of this chapter is to present a brief overview of the overall process, which is detailed in subsequent chapters. The framework has been developed around the premise that it is essential for community organizations, public and private agencies, individual citizens, and specialists in other disciplines (in addition to law enforcement) to become actually involved in efforts to reduce crime and fear in local communities.

The planning and implementation process is adapted from the previously noted CPTED demonstration projects. It has proven to be an effective method for bringing about citizen involvement and participation. Although the comprehensive approach presented herein was instrumental in implementing the CPTED demonstrations, it should be viewed as dynamic and flexible. During the planning process, the framework must be modified to suit local conditions and resources. Therefore, another objective of these guidelines is to document planning and implementation experiences so that the process can be modified and improved by local application and testing. If this objective is accomplished, the

state-of-the-art for CPTED planning and implementation can be advanced.

The potential benefits and object lessons that are described in the latter part of the chapter were also derived from the demonstration program. These statements are intended as examples of the potential impact of a CPTED project on a local community, beyond reduction of crime and fear problems.

2.2 The Planning and Implementation Process

The CPTED planning and implementation process uses a sequential approach to problemsolving and is organized around several distinct phases of activity. The process employs qualitative and quantitative methods to identify crime and fear problems and to pinpoint probable causes and contributing factors. This stage of the process is perhaps the most important, yet it also is the most difficult. Generally, failures in problemsolving can be attributed to a lack of understanding of the causes of the problem.

The planning and implementation approach presents a systematic framework that identifies events or combinations of events that are responsible for specific crime/environment problems. Although crime/environment analysis is necessary, it cannot be guaranteed to reveal all cause-and-effect relationships, given the shortcomings of the present state-of-the-art. Nevertheless, the process described herein is recommended because it can produce information about conditions that contribute to the problem, enabling the planner to formulate alternative solutions that can mitigate some of the causes.

It also should be recognized that, for a variety of reasons,

problemsolving at the local level does not always fall into neat, organized patterns. Therefore, the reader should not infer that the planning and implementation process must proceed in the precise sequence in which it is described. Again, local planners must adapt the process to local conditions. Although this Manual describes each of the steps systematically, the actual planning and implementation of a CPTED project is not likely to occur in such an organized and sequential fashion. Many of the activities will occur simultaneously or may be initiated in one phase and concluded in another. Therefore, when being applied, the process will require flexibility and qualitative judgments.

For example, if an evaluation component to the project is contemplated, it should begin during the project initiation phase. Plans for data collection are formulated during this phase; therefore, it is important to develop an evaluation framework so that baseline data to be used to document the procedures and effects of project strategies can be compiled.

Experience in CPTED demonstration projects has shown that an iterative planning process is most effective, with basic activities being carried from general to more specific development. For example, community participation is part of the Policy Determination phase (see Section 2.2.1) but, in reality, is a continuous, constantly refined activity throughout the CPTED project phases. Another example concerns funding activities, which are described in the implementation stage. Since funding is the ultimate key to implementation of the CPTED project, this activity should begin immediately and narrow gradually as funding commitments are obtained. The status of, or potential for, funding is an important criterion in

selecting crime/environment problems for inclusion in a CPTED project and designing CPTED strategies.

2.2.1 Organizational Structure

The CPTED planning and implementation process is organized into four phases: Policy Determination, Project Initiation and Organization, Project Planning, and Project Implementation. Within each of these phases, a series of planning and implementation guidelines is presented (see Figure 2-1). Each phase of the process can be viewed as a major decision point:

- Policy Determination Phase -- Determines the applicability of CPTED principles for local issues and concerns. Provided that CPTED is applicable, local planners and decisionmakers must specify the objectives and scope of the CPTED project, determine the location and size of the project site, and determine major organizational requirements (e.g., project management and available resources).
- Project Initiation and Organization Phase -- Defines analytic needs regarding key problems and issues, defines project objectives and requirements, organizes the project planning team and its operating procedures, identifies community interests, and develops the overall work program and schedule.



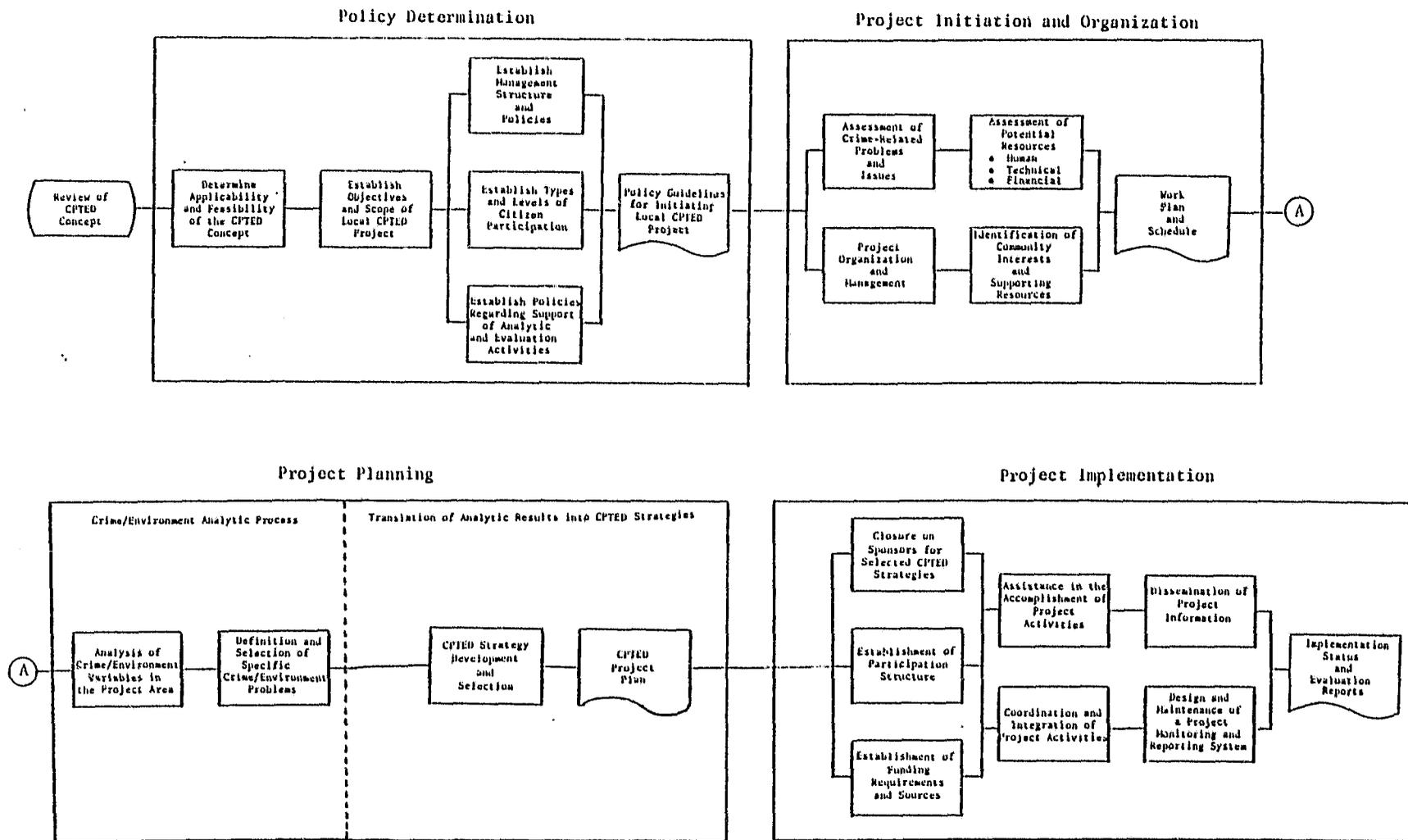


Figure 2-1. CPTED Planning and Implementation Process

- Project Planning Phase -- Includes a series of analyses that narrow the crime and fear problems to a point where they can be treated by CPTED, and provides insight into factors that contribute to the defined crime/environment problems. During this phase, a CPTED project plan is produced that specifies the strategies, directives (the means by which a given strategy can be fulfilled), methods of implementation, and funding for the alleviation of selected problems.
- Project Implementation Phase -- Comprises a series of activities that produce the construction of the physical portion of CPTED strategies and the initiation of other programmatic activities.

Within each phase there are distinct activities that provide the information on which key decisions are made. These activities can be expanded or reduced in scope, or otherwise modified, by local planners to fit local conditions. Nevertheless, they are indicative of the range of activities that will be necessary to reach valid conclusions at the end of each phase.

2.3 Potential Benefits of CPTED

CPTED projects can be designed to produce a variety of benefits to a community. Although the primary benefit to be derived from a CPTED project is the reduction of crime and fear of crime within a specific

urban environment, along with improvements in the quality of life in many cases, there are other benefits that can be derived. Some of these are the following:

- Reduction of crime and fear at various environmental scales.
- Provision of guidelines and standards to improve the security of new developments, as well as currently built environments.
- Strengthening of social cohesion through physical, social, and economic revitalization.
- Institutionalization of CPTED processes and principles.
- Application of leverage for resource acquisition.
- Establishment of an interdisciplinary and unified approach for resolving certain urban problems.
- Fostering of better relationships and cooperation among citizen groups, law enforcement officials, city officials, and business organizations.

2.3.1 Reduction of Crime and Fear of Crime at Various Scales

Crime and fear operate within a variety of environmental scales: Residences, apartment complexes, neighborhoods, cities, and entire metropolitan areas. A major benefit of CPTED techniques is that they also can be applied on a variety of scales from an individual building to an entire metropolitan area. For example, a CPTED project could be initiated within

the local schools to reduce vandalism, larceny, extortion, auto theft, assault, and other problems associated with that setting. In such a case, the CPTED approach would be quite comprehensive, seeking to improve the overall quality of life throughout that environment by reducing a broad array of crime and fear problems.

However, CPTED projects also can have a more limited focus. A CPTED project could be limited to extortion in school restrooms. Also, a CPTED project can be initiated against auto theft from alley garages in a neighborhood, or against auto theft in all environmental settings throughout a city. A CPTED project can be launched in a single public housing project at a specific location, or throughout the public housing projects of an entire community. Thus, CPTED projects have the potential to reduce crime and fear problems at various levels of the community.

2.3.2 Development of Security Guidelines and Standards

Although the focus of the Manual is on the proper design and use of the presently built environment, CPTED concepts can be applied to new environments. In this age of environmental concern, proposed developments, as they should be, are often subjected to evaluation in terms of their short- and long-term impact on natural resources, community services, and financial resources. To date, however, few communities evaluate proposed developments with respect to their implications for producing crime and fear problems.

Unless the planners, designers, architects, and other molders of future environments understand crime/environment relationships, they

will create future crime/environment problems. Many large-scale housing developments, new towns, and subdivisions are considered models of planning and design. Yet, their carefully selected landscaping, wooded areas, pedestrian ways, and housing types often fail to consider future crimes of opportunity such that users of the environment may be unable to move freely with minimal chance of victimization and without fear. Thus, another possible benefit from a CPTED project is the development of security guidelines and standards by which proposed developments can be evaluated.

2.3.3 Strengthening Social Cohesion through Physical, Social, and Economic Revitalization

After several decades of urban sprawl and suburban growth, there is a broad movement to revitalize the Nation's urban areas. This renewed interest in the plight of central cities has been stimulated by various physical, social, economic, and environmental conditions. Numerous cities have initiated ambitious programs of revitalization, preservation, redevelopment, and development. Many of these revitalization efforts are being impacted or delayed in part because of the crime and fear levels that exist in the urban environment.

In some communities, the level of crime itself may not be high, but fear can still be high, shaping local attitudes. The attitudes of a community towards all or part of its environment can be so negative that social conditions appear to support antisocial behavior in the sense that people stop trying to act responsibly, with the result that few share a sense of belonging.

CPTED can be instrumental in fostering positive community organization and identity as CPTED-sponsored physical, economic, and social projects are launched. Since crime is such an overriding concern in most communities and since the CPTED concept emphasizes the participation and involvement of diverse community groups, the possibility for improved community organization and identity is enhanced. Thus, a resulting benefit is a whole neighborhood banded together around a project of mutual interest or concern. If neighborhood residents, business leaders, or investors perceive that a comprehensive effort to reduce crime and fear is underway, their confidence in the future stability of the area will be improved.

2.3.4 Institutionalization of CPTED Processes and Principles

CPTED projects can be used to develop the management capability and expertise needed locally to maintain an ongoing crime prevention effort. Most local communities do not have any significant crime prevention capability or, at best, rely upon the local police department to handle this function (along with its many other responsibilities). CPTED projects can be initiated with an overall objective of developing a continuing capability to deal with crime and fear problems on a communitywide basis. This management capability can be incorporated into existing agencies or organizations (e.g., the crime prevention bureau of the police department) or established as a new organizational entity.

Moreover, CPTED planning typically can result in incorporation of its techniques and concepts for crime prevention in other supporting and impacting programs. For example, if CPTED principles and processes

are initiated within the local redevelopment and housing agency, in due course it is probable that existing crime problems will be routinely addressed by that agency as part of its normal activities. A new awareness of the implications of environmental, management, and other changes on crime and fear will be instilled in these kinds of activities.

2.3.5 Application of Leverage for Resource Acquisition

The incorporation of the CPTED concept into existing programs can provide leverage for obtaining a variety of additional resources (e.g., grants, loans, and community development funds). There is considerable competition in most communities for limited financial resources. The possibility of reducing crime and fear levels -- in addition to achieving the primary objectives of a project (e.g., better housing maintenance services) -- can increase the chances of obtaining needed funds for the primary objectives. For example, if housing maintenance services can be coordinated with a project to reduce burglary and vandalism, it will accomplish multiple objectives through the "packaging" of different funding programs. This type of project should be more attractive than one that accomplishes only maintenance objectives.

2.3.6 Establishment of an Interdisciplinary Approach to Urban Problems

The initiation of a CPTED project brings together a wide array of urban specialists. Although most communities have individuals with different expertises, it is unusual to find an interdisciplinary team. A CPTED project can bring all of these different experts together for a common objective. Traditionally, crime has been considered a problem

for law enforcement officials, criminologists, or residents of high-crime-rate areas. Other disciplines and the population at large have been only peripherally concerned with the problem. This is not desirable. Planners, architects, the business community, elected officials, and other molders of the urban environment must become directly involved as a team in the pursuit of environmental security. This involvement is necessary not only to achieve safety and security in the Nation's cities but for other disciplines to achieve the primary objectives of their professions.

2.3.7 Encouragement of Better Agency/Police/Community Relations

An important byproduct of a CPTED project is improved relationships between law enforcement and other agency officials and the communities they serve. An important thrust of the CPTED concept is the coordination of law enforcement activities with citizen efforts to combat crime. This combination can produce a better understanding of crime and fear that will improve the understanding of the respective roles and responsibilities of the police and citizen groups. A similar understanding is promoted regarding other services such as housing, transportation, education, parks, and recreation.

2.3.8 Summary

The above discussion indicates that numerous benefits can be achieved through a CPTED project. Not all of these situations will apply to every local jurisdiction, and there may be additional applications not covered by the preceding examples. It is important that local decisionmakers determine the focus and objectives that they hope to achieve through a

CPTED project. CPTED can be initiated with narrow and single-purpose objectives, or it can be expanded into a broad and comprehensive focus with multiple benefits. Hence, a decision about the project and its objectives will be an important determinant of the type of CPTED project to be initiated, its management requirements, its resource commitments, and similar policy decisions.

2.4 Object Lessons from the CPTED Program

The research and demonstration activities of the CPTED Program, along with other related efforts across the country, provide a basis for the majority of the guidelines presented in this Manual. From these activities certain object lessons have emerged. These lessons are key factors or guidelines that can influence the overall success of a CPTED project at the local level, and they are applicable to the majority of local jurisdictions undertaking a CPTED project. Thus, they merit special attention. These object lessons are fully discussed in subsequent chapters, and appropriate references are noted in parentheses.

- Strong community participation is essential -- A successful CPTED project must involve local residents, neighborhoods and community organizations, law enforcement officials, elected officials, and a wide variety of public agencies in the planning and implementation process (see Section 4.4.5).

- Planners and implementers of a CPTED project must have ready access to decisionmakers -- The planning and implementation of a CPTED project will require decisions and commitments from a variety of public and private institutions. If these decisions are to be made in a timely manner, CPTED planners must have ready access to them (see Sections 4.4.2 and 4.4.5).
- Implementation of large-scale CPTED projects will require multiple funding sources -- The funding of a CPTED project, especially for the implementation of CPTED strategies, is a prime consideration in the planning and implementation process. CPTED strategies can involve diverse components and, since there is no large, supportive implementation fund earmarked for CPTED projects, CPTED funding must be a dynamic and innovative process. Stated simply, unless a local jurisdiction has a large amount of its own resources that can be committed to the CPTED project, CPTED planners should anticipate that various funding sources and programs should be "packaged" for implementation of the CPTED project (see Section 4.3 and Chapter 6).

- Site selection for a CPTED project is a key consideration -- There are certain characteristics that will influence the feasibility of a given area for a CPTED project. It is recognized that local circumstances may not allow much flexibility in the selection of a site for a CPTED project, nor is it necessary for any given site to possess all of these characteristics. However, it is important that local officials be aware of these characteristics, since they will influence subsequent planning and implementation activities (see Section 3.1).
- CPTED is most successful when it is focused on opportunity areas -- Although CPTED projects *can* be initiated in areas that do not have current attention or focus by the community, the CPTED concept will be most successful when it is introduced into an opportunity area. In this context, an opportunity area is an environment or target site within the community that has supportive programs underway, has programs planned or scheduled, or is a focal point of community interest. For example, the Portland CPTED demonstration was integrated with the Union Avenue redevelopment effort, and the

Minneapolis CPTED demonstration complemented an ongoing public works improvement effort and a neighborhood rehabilitation project initiated with community redevelopment funds (see Section 3.1).

- The Scope of a CPTED project is dependent upon the local objectives -- The CPTED concept can be applied to a single structure or be expanded to cover an entire city. Similarly, CPTED can address one aspect of a crime/environment problem (for example, the environmental setting of residential burglary), or it can address a wide range of problems throughout an entire environment (i.e., crime/environment problems associated with residential neighborhoods). Local decision-makers must determine the scope and expectations for the CPTED project so that local planners can develop an appropriate work program and plan (see Section 3.3).
- Management and participation requirements can change as a CPTED project makes the transition from planning to implementation -- Experience from other CPTED projects indicates that both management and participation requirements normally

will change as a CPTED project moves from planning to implementation. During the planning activities, the management emphasis is planning, research, and coordination of diverse interest groups. Once implementation is initiated, the management emphasis shifts to construction management, program implementation, estimating and scheduling, fiscal control, and other tangible activities. Thus, it may be desirable to change both project leadership and team makeup as the transition occurs. A similar shift is likely to occur in the participation activities. During the planning of a CPTED project, participation is broad-based and advisory, as it concentrates on policies, goals, and options. During implementation, the participation focus shifts to agencies, organizations, and individuals with direct implementation responsibility. Since these changing management and participation roles can create difficulty in the timing of and commitment to a CPTED project, CPTED planners should be aware of potential difficulties and structure their activities so that possible problems are minimized (see Section 3.4).

CHAPTER 3. POLICY ISSUES AND DECISIONS

3.1 Introduction

A large-scale CPTED project normally will involve many agencies, individuals, and organizations within the local jurisdiction. Although this high degree of involvement and participation is fundamental to the CPTED concept, it can present some difficulties in terms of policymaking. There are numerous policy decisions that must be made during the planning of a CPTED project (as shown in Figure 3-1), and the diversity of the participants and their interests often can complicate the policymaking process. Although every policy decision cannot be made prior to initiating a CPTED project, it is important that anticipated policy issues be defined and major policy guidelines established as early as possible.

Policy guidelines that are clearly established will provide a framework within which the CPTED project can be organized and planned. They will also eliminate possible confusion among the diverse participant groups by providing a clear direction and decisionmaking path. Although each local jurisdiction must identify and resolve policy issues pertinent to its community, there are several key policy issues that *must* be considered prior to the initiation of a CPTED project.

- Applicability of CPTED -- Whether CPTED is appropriate for the perceived issues and problems.

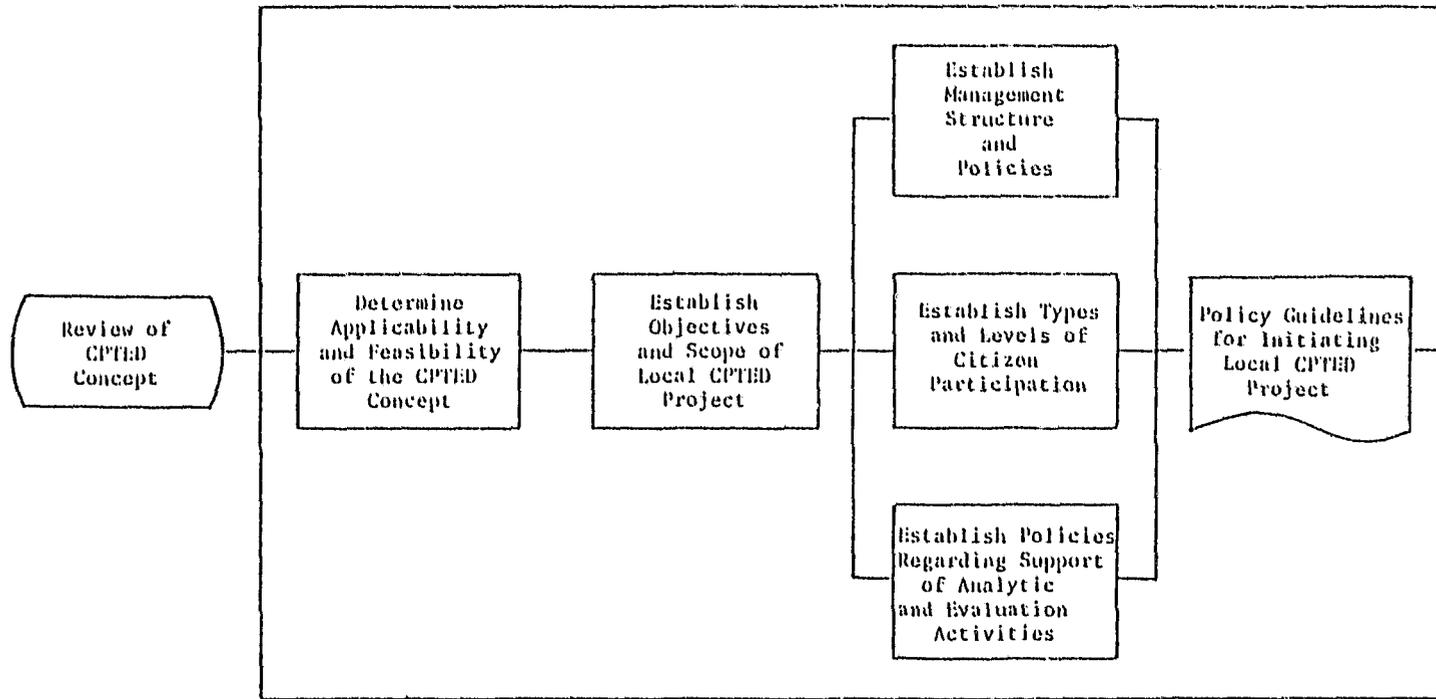


Figure 3-1. Diagram of Policy Issues and Decisions



- Scope and Objectives of Project -- What is expected from the project, and what the scope and emphasis of the project should be.
- Management Structure -- What mix of professional skills is desired, and who should direct activities and assign responsibilities.
- Community Participation -- To what extent community participation should be involved.
- Analysis and Evaluation -- What analysis and evaluation activities should be undertaken.

These decisions should be made in sequence because the policies established at one decision level partially define the range of options at the next level. For example, the decision of who should be involved depends on the scope of the project which, in turn, depends on whether a CPTED approach is to be adopted. Some decisions are a matter of planning philosophy and conviction and, in a sense, are independent of policy decisions. For example, a planner may believe that community participation and evaluation activities are important regardless of project objectives. In any case, policies concerning these five categories of consideration should be established early and should guide decisions on the commitment of planning, implementation, and evaluation resources to a CPTED project.

3.2 Applicability and Feasibility of the CPTED Concept

The most fundamental policy decision that must be made is whether the CPTED concept is applicable to the crime problems in the local

community. Policymakers should also determine that CPTED, if applicable, is the most appropriate approach. There are numerous crime prevention approaches that may be applicable to a given set of problems, and decisionmakers should be assured that CPTED will be cost-effective.

To make this type of decision, it is necessary to understand the conceptual basis of the CPTED approach and to have some insight into the type of crime and fear issues that are prevalent in the local jurisdiction. An assessment of applicability and feasibility should delineate (from existing sources and data) the crime and fear issues in the community. Alternative preventive methods and approaches (including CPTED) should be identified and considered as to their potential for resolving the problems. Among other factors, the evaluation should consider conceptual approach, potential benefits, required and available resources, and timing.

CPTED is an approach to reduce predatory-type crimes that threaten personal property and security and, hence, is not intended to address other types of crimes, such as victimless crime or fraud. Therefore, before raising the expectations of the community or committing financial or human resources, local sponsors should assure themselves that CPTED is the proper approach for their crime problems and concerns.

The important point to keep in mind is that the decision to proceed with a CPTED project should be based on as much factual information as possible. Although conceptual and philosophical decisions are useful, they should not be the sole basis for the policy decision.

CPTED projects touch on many components of the community (thereby raising the expectations of many individuals and organizations); generally involve substantial commitments of human, technical, and fiscal resources; and address sensitive social problems. For these reasons, a CPTED project should not be casually initiated.

3.3 Scope and Objectives of CPTED Projects

There are numerous benefits that can be derived from a CPTED project, in addition to reduction of crime and fear (see Section 2.3). To maximize these potential benefits, objectives should be established by local policymakers so that the CPTED project can be organized and planned in a manner that will achieve the stated objectives. For example, if the goal is to initiate a citywide crime prevention effort, one type of work plan would be required. If the objective is to reduce crime in housing projects within a given neighborhood, a different scope of work could be required. Policy decisions should be made concerning the objectives of the CPTED project, and local planners should design their work plan to achieve these objectives.

Many local programs have primary objectives or priorities that are not consciously oriented to crime prevention but, if viewed from a CPTED perspective, could have important crime-related implications. For example:

- Public transportation programs can be planned in ways that will improve security of passengers in waiting areas and reduce exposure of riders to street crimes.

- Changes in street traffic patterns can be planned to increase "eyes" on the streets (motorists) or reduce tendencies for outsiders to pass through private neighborhoods.
- Development plans of public and private organizations can take potential crime implications into account to minimize problems later.
- Insurance and business or home loan programs can provide incentives for clients to improve the security of their premises.
- Social agencies and special interest associations can sponsor programs that promote the security consciousness of their clients and members, as well as tactical programs that direct their resources to collective crime prevention actions.

As stated before, to ascertain the applicability of CPTED, policymakers should identify the preliminary concerns that have given rise to the possible need for a CPTED project, and should clearly establish the overall objectives for the project.

A related policy issue involves the size of the planning area and the diversity of CPTED project activities. With respect to the planning area, if CPTED projects are limited to geographically bounded communities, it can be questioned whether a local planning team should concern

itself with what happens outside of that community and, if yes, to what extent. The issue of crime displacement is a good example. On the one hand, CPTED planners should be aware of displacement possibilities when designing anticrime solutions but, on the other hand, the CPTED approach is not a total prevention program; it purposely limits itself to geographically bounded environments. Thus, a key policy decision has to be made about the extent to which individuals and groups outside of the planning area should become involved in the planning process.

3.4 Management Structure

Most local communities will not have a clearly defined management framework and capability already in place to undertake a CPTED project. Therefore, it is important to establish certain policies and assign responsibility for the planning and implementation of a CPTED project. Although the final management structure will depend on local conditions, there are several options that can be considered. Crime prevention programs, such as CPTED, can be vested in:

- Existing Agencies and Departments -- This alternative may include the planning agency, police department, city manager's office, criminal justice planning organization, or other similar agencies.
- A New Division of an Existing Agency or Department -- Examples would be the crime prevention bureau of the police department or a special division of the comprehensive planning agency.

- A New and Separate Agency -- This agency would have responsibility for crime prevention planning.

Obviously, the management structure will be determined by a number of factors. Prior to establishing the management framework, the local sponsors should consider the following factors:

- Legislative constraints and charter requirements.
- Ability to interact with different groups and agencies.
- Access to key decisionmakers.
- Available resources and qualifications of personnel.
- Workloads and commitments.
- Interest in the problem.

The management of a CPTED project should be vested in a group or agency that has:

- Key financial resources and personnel to accomplish the project objectives.
- Legislative and legal authority to carry out such projects.
- Type of access to decisionmakers that will overcome day-to-day coordination problems.
- Organization, interest, and motivation to take on the responsibility.

Management capabilities and problems will vary with the objectives of the project and the target environment. For example, the decision-making and management framework is clearly defined in a closed environment such as the high school. Conversely, the interaction and responsibilities are much more difficult to ascertain in an open environment, such as a residential neighborhood. Therefore, the type of environment will be an important factor in the evaluation of management capability. Unless management control and responsibility is clearly defined at the outset of the CPTED project, it will be difficult to achieve timely interagency decisions and commitment of human and financial resources.

3.5 Community Participation

It is important to identify potential participants and also to establish policy regarding who participates and what form such participation should take. If a minimal level of support and guidance is anticipated, the policymakers must either reorient the objectives of the program to a level commensurate with the support, or they should initiate activities to generate a broader level of support. Obviously, if there is a broad array of support for a CPTED project, it will have a better chance of success. Therefore, this policy decision should follow an appraisal of the types and levels of support that can be anticipated. The results of this decision will be an important determinant in the scope of the project.

If the CPTED project has prime support from the key political figures (for example, the mayor, city council, or other elected officials)

and a strong coalition of citizen groups, it is highly probable that other types of support will follow.

Many of the people whose support will be required may not perceive the problems to be within their realm of responsibility. Others may feel they have little or no influence in crime/environment issues or in formulating policies or improvements that can have an impact on the future. CPTED sponsors should meet with local groups to identify their principal concerns or priorities and to identify other potential supporting organizations. A list of persons and organizations that represent different viewpoints should be prepared. Interviews with key persons in the community should be accomplished. Locally sensitive judgments must be made as to which groups should be directly involved and which should assume a supporting role. In the CPTED demonstrations, the roles were determined by the level of interest and support. Experience from these efforts strongly indicates that all potential groups should be identified and contacted, since support was generated from such a wide sphere of the respective communities. Table 3-1 illustrates the broad range of participants in the demonstration programs in Portland, Broward County, and Minneapolis.

3.6 Analysis and Evaluation

Analysis is an important component of the planning process. To be relevant and effective, CPTED project planning must be guided by information about specific crime/environment problems. However, a local community may not have the technical and financial resources to undertake extensive data gathering efforts and perform necessary data analyses.

TABLE 3-1

Illustrative Participants in CPTED Projects

TYPE OF PARTICIPANT	COMMERCIAL PORTLAND, ORE.	EDUCATION BROWARD COUNTY, FLA.	RESIDENTIAL MINNEAPOLIS, MINN.
Elected Officials	<ul style="list-style-type: none"> • Mayor's Office • City Council 	<ul style="list-style-type: none"> • County School Board • Board of County Commissioners 	<ul style="list-style-type: none"> • Mayor's Office • City Council
Local Public Agencies	<ul style="list-style-type: none"> • Bureau of Police • Lighting Bureau • Office of Planning and Redevelopment • Bureau of Human Resources • Office of Public Works Admin. • Office of Justice Programs • Department of Finance and Administration • Portland Development Commission • Bureau of Street and Structural Engineering • Office of Neighborhood Assoc. • Bureau of Parks • Metro Youth Comm. • Comm. on Aging 	<ul style="list-style-type: none"> • Dept. of Internal Affairs • School Administrators • Teachers • Broward County Sheriff's Office • Ft. Lauderdale Police Department • County School Superintendent's Office 	<ul style="list-style-type: none"> • Planning Commission • City Coordinator's Office • Police Department • Housing & Redevelopment Authority • Department of Public Works • Pilot Cities Program • Parks Board • Board of Education • City Planning Department
Civic Organizations and Neighborhood Groups	<ul style="list-style-type: none"> • Metropolitan Economic Development Alliance • Union Avenue Boosters Club • Neighborhood Associations • Union Avenue Businessmens Association 	<ul style="list-style-type: none"> • Neighborhood Security Advisory Committees • PTA 	<ul style="list-style-type: none"> • Urban League • Willard-Homewood Organization (WHO) • Willard-Homewood Increasing Progress on the Go (WIPOG) • East Lowry Hill Assoc. • Willard-Homewood Block Clubs • West Broadway Business Association • Wedge Area Improvement Organization • Plymouth Avenue Economic Organization
Federal, State and Regional Agencies	<ul style="list-style-type: none"> • Tri-Metropolitan Transportation Authority • Columbia Region Assoc. of Gov. • Portland State Univ. • Oregon Law Enforcement Council • LEAA • State Highway Div. • HEW-Administration on Aging 	<ul style="list-style-type: none"> • LEAA • Florida Dept. of Education 	<ul style="list-style-type: none"> • Governor's Commission on Crime Prevention and Control • HUD Office of Policy Development and Research • LEAA
Business Organizations and Individuals	<ul style="list-style-type: none"> • Individual Businessmen • Local Financial Institutions • Pacific Northwest Telephone Company • Oregon Bankers Association • Oregon Automated Clearinghouse Association 	<ul style="list-style-type: none"> • National Assoc. of School Security Directors • Broward County Students 	<ul style="list-style-type: none"> • Churches • YMCA • Private Citizens

Moreover, analysis can take much time, especially if impact evaluation (measurement of the effect of the project on the target area) is included. Therefore, an important decision that must be made early in the planning process is to what extent analysis and evaluation activities will be supported.

Although data collection activities can require a significant investment of time and money, they can also be limited to a minimum amount of information. For example, the usefulness of police records can be assessed by one person in less than a day. Similarly, preliminary field surveys can be accomplished in a short period of time and are helpful for identifying potential crime/environment problems. Other policy decisions require detailed information but such information is not necessarily difficult or expensive to obtain. Once an initial assessment of existing and potential data sources is completed, policy will have to be established regarding the level of commitment to be given to a thorough study of crime/environment relationships.

If evaluation activities are contemplated, project policy decisions will have to be translated into specific objectives so that quantifiable criteria can be established for measuring the success of the project. Evaluation serves to provide data on previous and current operations to make decisions about the project's future activities (and possibly about future projects). In addition to assessing impact, evaluation monitors the progress of a project and helps decisionmakers determine whether planned objectives are being attained. Therefore, evaluation should be designed to assist the decision function. Planning for evaluations

should begin early in the project's development (i.e., at the point when objectives are being established), and monitoring should continue long after project implementation.

3.7 Appointment of a CPTED Project Manager

The planning and implementation of a CPTED project is a complex undertaking because of the diverse range of participants. If the project is to succeed, it will require careful coordination of activities to ensure that the results are consistent with the expectations of the residents, business owners, and other users of the target environment. A strong project manager should be appointed prior to project initiation so that he can organize the planning and implementation efforts. This individual should have strong organizational skills and possess the ability to work effectively with diverse organizations, agencies, and individuals. Although there are various alternatives for the project manager, in terms of local management organization, he should have direct access to key decisionmakers in the community.

CHAPTER 4. PROJECT INITIATION

4.1 Introduction

Prior to the commencement of detailed project planning, there is a series of preplanning and management activities that should be undertaken. These activities serve as the basis for the CPTED work plan and schedule proposed during this phase (see Figure 4-1). The accomplishment of these Project Initiation activities will assist the CPTED sponsors and planners in developing a project that is realistic in terms of local objectives and capabilities.

The major activities that are accomplished during this phase of the process are assessment of crime-related problems and issues so that crime/environment targets can be delineated, and assessment of human, technical, and fiscal resources so that the resulting planning approach and work plan are realistic. The project initiation activities provide guidelines for the composition of the project planning team. The CPTED planning team should be formed on the basis of information gained from the agency review, program assessment, and initial participation efforts. Depending on the findings (particularly, the level of expressed interest found) of the preceding activities, the planning team can be assembled from existing community resources or recruited.

Community participation and involvement is also initiated during this phase: Formal methods of participation are established; participants are identified; roles, functions, and responsibilities are assigned; and various

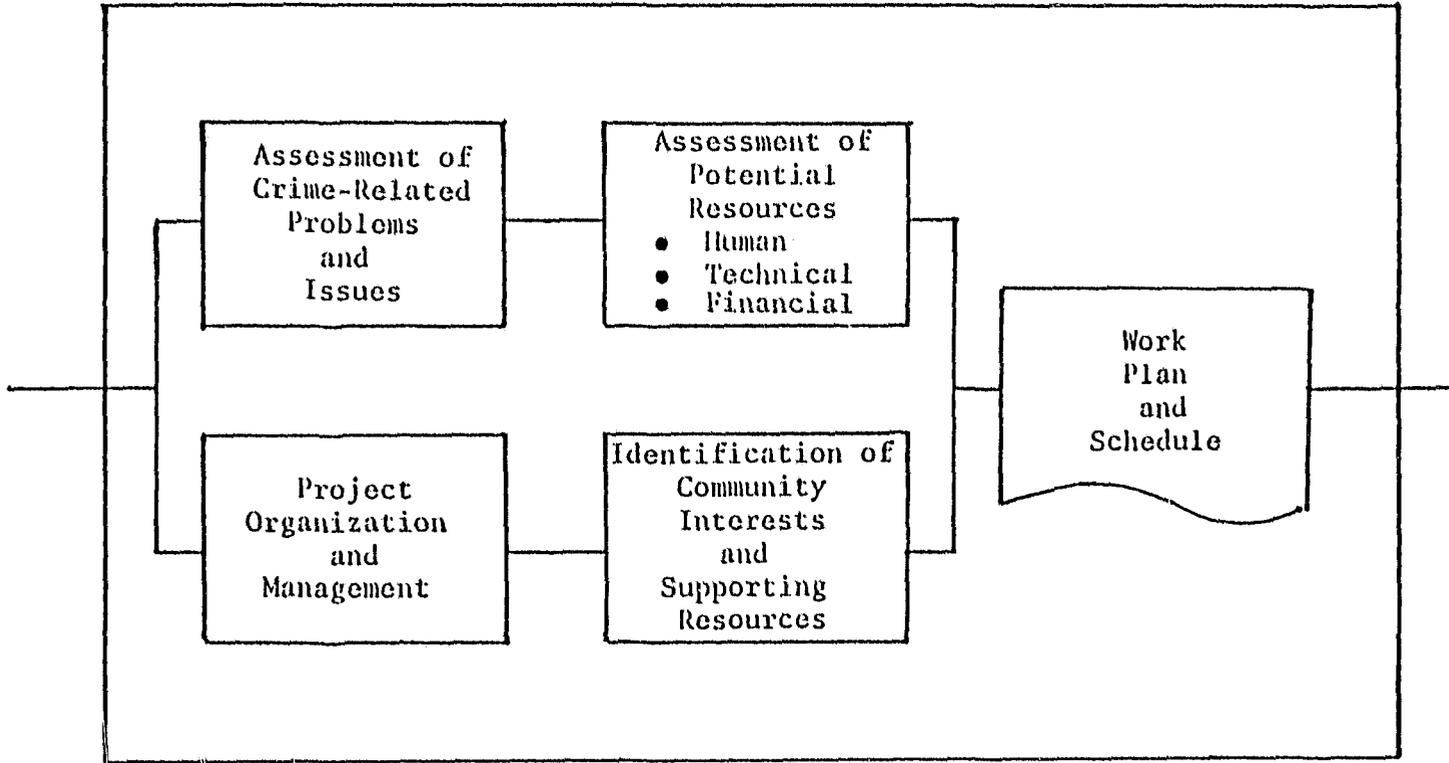


Figure 4-1. Diagram of Project Initiation Activities



interviews are held to further determine citizen perceptions and attitudes.

After the planning team has been assembled and an initial measure of community involvement has been established, the CPTED work plan and schedule is prepared. The work plan is the principal product of the Initiation phase. It describes work activities and schedules, including specific methods of management organization, citizen participation, and evaluation approaches.

4.2 Assessment of Crime-Related Problems and Issues

Rational planning for a CPTED project requires that crime-related problems and issues be defined in a general manner prior to undertaking detailed analyses. The initial task is to collect available reports or summaries from different municipal agencies and project area groups. This information is used to define community issues and perceived problems. Identified issues and problems should then be discussed with key individuals to gain a better understanding of which problems should receive priority attention. The process of conducting crime/environment analysis is described in Section 5.5. It should be recognized that, once a preliminary assessment is reached, additional data-gathering activities will be required. For example, if vandalism and aggravated assault emerge as key problems within a school environment, the planning team should outline the type of data that will be useful in studying these problems more closely. The data analysis activities then will examine the practical problems involved in compiling this (and other useful information) from existing sources. Alternatively, it will be necessary to develop data

gathering instruments and procedures for obtaining the requisite data.

4.3 Assessment of Potential Resources

Prior to formulating an overall work plan or establishing a CPTED planning team, the CPTED project manager should assess the human, technical, and fiscal resources that are available. This assessment should evaluate information as to potential members of the CPTED team, supportive activities, sources of fiscal support, available data, and other important information.

4.3.1 Assessment of Supportive Programs

In most communities, there are a variety of programs -- either proposed or underway -- that can be supportive of CPTED projects. It is important to inventory these resources since they can assist in the funding of CPTED strategies, help leverage additional funding sources, and provide potential human and technical resources. In addition to the direct support offered by existing programs, it is important to consider them as a means to further develop and extend the concept of crime prevention through environmental design. If existing programs can be adjusted to include security objectives and crime reduction techniques -- in addition to their primary purposes -- the goal of raising the level of personal security and the quality of life in a given environment can be achieved in the most cost-effective manner.

A survey of existing or proposed programs should be made to determine their potential relationship to the CPTED effort. The survey should describe existing programs in terms of their objectives, timing, funding

sources, manpower, equipment, and facility resources. An important by-product of this type of survey is that it may uncover potential members for the CPTED planning team, as well as funding sources. However, the key purpose is to establish program relationships and reveal data sources. After descriptions of all of the activities or programs underway or proposed by Federal, State, regional, and local agencies (as well as of those being sponsored by the private sector) are prepared, the functional relationships among the programs should be analyzed. This will assist the CPTED planner in identifying primary support programs for the CPTED effort.

The inventory will reveal current workloads of agencies and the diversity of disciplines available within the community. For example, it should reveal if design services are available from existing agencies or whether this service must be developed for the project. Additionally, this type of assessment will avoid duplication of efforts in the event other activities are being planned to address any of the defined issues.

4.3.2 Assessment of Fiscal Resources

Perhaps the most critical issue to be faced in a large-scale CPTED project is the availability of resources to plan and implement the recommended strategies. CPTED funding must be a dynamic and innovative process since, typically, there is no large implementation fund earmarked for CPTED projects. Resources to implement a CPTED project will usually come from a variety of sources including Federal, State, regional, and local governments, as well as private sources. As previously noted, integration of CPTED strategies with ongoing programs is a significant

method of funding a CPTED effort.

The funding of a CPTED project is a continuous activity throughout the planning and implementation process. Continuous funding review is necessary because actual costs and funding commitments will be dependent upon the final project plan. If the planning team does not initiate funding until final strategies are determined, they are likely to face a significant lag between the time the CPTED project plan is approved and the time that implementation is initiated. Since CPTED quite often involves physical modifications that are costly and require significant construction periods, timely funding commitments are important. If there is a significant time lag between the planning and implementation of strategies, the physical, social, economic, and other conditions may change sufficiently within the site area. These changes could impact the validity of the CPTED project plan.

The CPTED sponsors should review existing and proposed programs at all levels to determine their potential support of strategies to alleviate crime or fear of crime. The purposes of the initial funding review are to: (a) Ascertain whether there might be funding available for CPTED-related activities that can be specifically explored after the work plan is completed; (b) brief interested sources as to the scope and general objectives of the CPTED project; (c) gain insight into additional funding sources; and (d) determine eligibility requirements, authorization levels, submission requirements, timing for applications and other pertinent factors.

The ultimate implementation of a large-scale CPTED project will also require the assistance, cooperation, and support of many agencies, individuals, and organizations within the community. The support and interest of these groups can be assessed while reviewing the fiscal resources. Based on interviews, local knowledge, and other information, a determination can be made as to which groups should have direct involvement in project planning (i.e., city planners, law enforcement officials, agency officials, architects, etc.), and which should be involved in supporting roles (i.e., residents, civic organizations, State and Federal agencies, development organizations).

4.4 Organization and Management

The assessment of various resources should provide considerable insight into the type of skills, information, and funding support that will be available to the CPTED project. This information should prove especially useful in the development of an organization and management framework. Once the assessment is completed, management guidelines should be developed that will facilitate the orderly planning and implementation of the project.

Implementation of CPTED projects should be achieved in a manner that is responsive to local attitudes, needs, and resources to sustain the ultimate strategies over a long time period. The management structure must be designed to develop a broad base of community cooperation and support, create positive interaction between diverse groups, develop a CPTED consciousness and focus among agencies or projects that are primarily organized for other purposes, and maintain the daily attention

and coordination essential for a successful project. This section outlines some of the key organization and management activities that will have to be adapted by each local community according to its special circumstances or conditions.

4.4.1 Management Functions

Prior to explaining specific organizational and management requirements, it is useful to outline the type of management functions that will be required in a CPTED project. Although local circumstances and requirements will be instrumental in prescribing the exact management functions of a given project, the following listing is indicative of the management activities in planning and implementation of a large-scale CPTED project:

- Directing the analysis and planning activities related to the project.
- Developing and maintaining the CPTED work plan and schedule.
- Coordinating the community participation and involvement activities.
- Identifying, securing, and managing fiscal resources. A significant activity is likely to be the administration or coordination of a wide variety of grants, activities, and financial commitments.
- Interagency coordination and management to ensure that commitments of technical and financial resources are provided in an orderly and timely manner.

- Maintaining coordination with law enforcement agencies.
- Preparing progress reports, evaluating the planning and implementation process, and disseminating public information.
- Identifying legal requirements (such as zoning approvals, permits, submission requirements for approvals), and securing timely approvals from appropriate agencies.

4.4.2 CPTED Project Manager: Organizational Considerations

The project manager should be appointed early in the planning and implementation process so that he or she can assist in the work planning, recruitment of a planning and implementation team, and other preplanning activities (see Section 3.7). Ideally, the project manager should be located in an organizational hierarchy that can transcend the traditional boundaries or narrow responsibilities of many decisionmakers. For example, if the local jurisdiction is characterized by a form of government in which the mayor is the operating executive, the mayor's office may be the best location for the CPTED project management. Conversely, if the city has a city manager form of government, the best access to decision-making may be through location in the city manager's office. As previously noted, it is important that the project manager have direct access to key decisionmakers and this guideline should influence the organizational makeup of the position.

The ability to establish project priorities and achieve timely decision-making is important. In most instances, the CPTED project manager will

rely on other agencies and individuals to carry out some of the key directives of the project. If those agencies have priority constraints, the project manager must be in a position to facilitate the needs of the project, or time schedules, the level of interest, and support or resources will be dissipated.

The project manager should have organizational skills and possess the ability to work effectively with diverse organizations, agencies, and individuals. Since many of the project manager's functions will be related to coordination and cooperation, the ability to achieve these is a more important attribute than a technical or disciplinary background.

4.4.3 The CPTED Team(s)

If the local jurisdiction chooses to implement a comprehensive CPTED project, the CPTED project manager normally is supported by other specialists. The policy decision as to the scope of the CPTED project will be an important determinant as to the size and composition of the CPTED planning and (if different) implementation team(s). For example, if the decision is made to initiate a CPTED project with a strong research emphasis, the CPTED planning team should include specialists in that area. Information and decisions as to the available financial and human resources within the community will also be a determinant to the makeup of the CPTED team(s).

The scope of the project and the composition of the CPTED planning team will be major influences on the ultimate project plan that is developed. It is important to match the capabilities of the planning team with

the overall objectives of the project. For example, it would be wasteful to assemble a research-oriented team, develop a comprehensive work plan for analytical activities, and then discover that there were no technical and/or financial resources to carry out that component of the plan.

Since CPTED covers such a wide range of activities, there are no specific guidelines to determine what type of agencies or individuals should comprise a given team. The project manager must acquire familiarity with available resources, major issues and concerns in the local environment, and important agencies and individuals to assist him in forming an effective CPTED planning team.

Another decision is whether new positions for CPTED planning will be created or whether the CPTED team will be formed from existing community resources. The latter approach has the advantage of training personnel in CPTED planning and research activities, which will enable them to extend their acquired working knowledge of the CPTED concepts to other areas of their responsibility. Conversely, the use of existing resources may require a higher degree of management and coordination to ensure timely completion of the project.

Local sponsors should be alerted to the different requirements of personnel for planning and implementation. Project planning will require analytical or similar technical capabilities and the ability to synthesize various crime/environment factors and design strategies into a workable plan. Once the project plan is completed, a different set of requirements may emerge. If the project plan recommends physical design changes, there

will be a need for experience in final planning, bidding, construction, and construction management. In other CPTED projects, these responsibilities have been assigned to existing agencies or departments during the Project Implementation phase. For example, the physical modification of a school could be assigned to the director of school physical facilities; streetscape or engineering changes could be assigned to public work agencies; and housing modifications could be assigned to housing or planning agencies.

If it is anticipated that implementation will be accomplished by this type of interagency assignment, it is important to include representatives of the responsible agencies on the project planning team. This will ensure that technical requirements and other considerations are properly evaluated during the Project Planning phase, thereby avoiding problems or delays during implementation.

4.4.4 Reporting and Coordinating Procedures

An important management activity is the establishment of project coordination procedures. Overall project management roles for the various members of the CPTED planning team should be established, and initial responsibilities for the remaining planning activities should be assigned. Internal reporting procedures and coordination approval requirements for working with organizations outside the CPTED planning team will have to be set.

A preliminary work plan should be established that outlines the planning process, tasks and responsibilities, time schedules, funding requirements, and data sources. A final work plan should await the involvement of community groups so it can include the expectations of

neighborhood participants. However, the preliminary work plan will be necessary to discuss the project and its objectives with participating groups. The planning team should fully expect to modify both the preliminary and the final work plan, reflecting the dynamic nature of a CPTED project.

In addition to establishing clearly defined methods of coordination among the participants, the project manager should develop a method for reporting and discussing progress, issues, alternatives, and key decisions. Typically, the citizen groups will establish or expect certain objectives to be accomplished during the project. The technical aspects of the CPTED project will be carried out by the project team(s) through cooperative arrangements with private and public agencies. Unless there are timely progress reports given to these groups, credibility problems may arise. For example, the citizen participants may decide that neighborhood improvement projects are essential to reduction of crime and fear problems. However, there may be numerous technical and legal requirements that must be satisfied to achieve these improvements. Unless the citizen groups are fully informed as to the progress and actions, they may become demoralized over the amount of time required to fulfill these objectives. The establishment of a regular procedure for reporting and public information will partially alleviate this and similar communication problems.

4.5 Organization of Community Participation

A successful CPTED project must involve local residents, neighborhood and community organizations, law enforcement officials, elected

officials, and a wide variety of public agencies. This type of intensive and broad-based participation will require careful organization and coordination on the part of the CPTED project manager.

Community participation is not only important to the success of a CPTED project but is important to the overall concept of CPTED. The attitudes, knowledge, and insight that participants will receive from active involvement in the planning and implementation of a CPTED project can have considerable impact upon the environment. Local participants can also provide insight into the nature and cause of crime/environment problems within a given environment and, if properly informed, they can act as a meaningful sounding board for concepts and strategies to relieve these problems. However, it is critical to the success of any project that premature hopes and expectations *not* be aroused among the members of the user community. A major announcement and massive appeal for community support that is followed by months of no *visible* activity will be counterproductive to the project and destructive to the support engendered.*

4.5.1 Identification of Key Participants

The initial task in the community participation effort is the identification of key participants. Although the planning and implementation process will ultimately involve a wide range of agencies, organizations, and individuals, there are certain participants who, by living or working

*For a more complete discussion of citizen participation, see the CPTED Technical Guideline, Citizen Involvement in Crime Prevention Through Environmental Design Projects.

within an area, have intimate knowledge of the positive or negative aspects of an environment and can provide useful insights. There are also individuals who, by virtue of their position or knowledge, have influence and persuasive powers within a community. Such key participants might include residents, policemen assigned to a local area, elected officials, community groups, businessmen, and religious leaders. Often, a key participant may be the person who determines financial commitments for a public agency (for example, the Chairman of the Housing Authority).

There is no precise formula for identifying key participants in a given jurisdiction. Perhaps the easiest method is to start with one group or organization and ask them to list the key persons and organizations within an area. For example, the local police precinct commander might be asked to generate a list. By use of the names obtained from this initial source, these groups are then individually asked to list additional participants. As the list grows, certain individuals or organizations will probably appear more frequently than others. This should then be followed by key-person interviews.

The key-person interview is a low-cost technique for gaining insight and perceptions of issues and concerns within the local environment. If the CPTED planners can develop a clearer understanding of crime and fear problems from the perspective of the users of that environment, they will be able to develop a responsive work plan and planning approach. If the key-person interviews do not produce valid insight into crime and fear problems, the planning team may need to emphasize research activities as

part of the work plan.

The results of key-person interviews can also provide a reference point or cross-check on later quantitative analysis. For example, if statistical analysis shows a high incidence of assault within a given environment, it is reasonable to assume that users would perceive this as a key issue. If gaps do occur between participant perception and crime/environment analysis, they could be an indication that further analysis is needed or that issues other than the rate of crime affect the local population's perceptions.

4.5.2 Determination of the Method of Participation

Once the participants for the CPTED project are identified, a decision must be made concerning the methods of participation and involvement that will be used. Citizen participation can be passive (e.g., monthly reports or newsletters to the local civic group) or active (e.g., residents assuming roles in the planning and implementation process). Active participation will produce stronger commitments to the goals and objectives of the project since the directly impacted residents would be instrumental in developing the direction of the project. Moreover, active participation can provide an additional resource base for the project and effectuate continuous education about the proper design and use of the built environment.

This activity should also assign specific roles and functions to the participants. Examples of functions that could be provided by participants include: Field surveys, data collection, advisory boards,

educational meetings, and monitoring of changes in the physical and social setting of the target site.

4.5.3 Selection of Site for CPTED Project

Unless a target site for the CPTED project is predetermined, the actual site for the project must be selected. There are certain practical considerations that influence the feasibility of a given area for a CPTED project and it is important that CPTED planners be aware of these characteristics since they will influence subsequent planning and implementation activities. Important considerations in site selection are:

- The types of crime or crime-related problems found within the target site should be those that can be alleviated by CPTED. Criteria that can be used to evaluate alternative sites for a CPTED project include: Type and severity of crime and fear, local attitudes and perceptions; loss from criminal activity; population at risk; and impact on the quality of life.
- There should be readily available crime and environment data or there should be a plan and commitment to generate such data. Generally, the delineation of crime/environment problems will involve analysis of the relationship between various aspects of crime problems and physical, social, and economic variables. Unless this data base is available, or there is the potential for developing a base, the ability to properly analyze crime/environment relationships will be

minimized. If there is an inadequate data base, the CPTED planner should recognize this condition and either include a data inventory element with work programs or utilize alternative analysis techniques to define crime/environment problems.

- The selected site should have strong support and interest from community decisionmakers. In addition, various public or private organizations and agencies should be committed to improvements in the site area.
- Supportive programs should be underway or planned for the target site. These programs can provide funding assistance and expand the scope of CPTED strategies.

There are numerous advantages in combining a CPTED project with supporting programs or projects:

- Funding support is possible.
- The possibility of a better data base is enhanced.
- Strategies can be incorporated into improvements already scheduled.
- The area already is a focal point of community interest and attention.
- The possibility of incorporating the CPTED concept into related/supportive ongoing programs is increased.

4.5.4 Identification of Site Participants

Once a bounded site is chosen for the CPTED project, it is important

to identify site-based participants for the project. The type of participation that is required for a CPTED project can be characterized as grass roots involvement. This means that the CPTED planning team must go into the neighborhood and identify all of the present and potential users of the target environment. This guideline implies that participants must include both those with positive and negative expectations about the potential for the success of the project.

As various participants are identified, a series of organizational meetings should be held to provide background on the projects, solicit support, and assess user perceptions and attitudes. The specific purposes of the organizational meetings are to: (a) Initiate the community participation activity; (b) explain the purpose and objectives of the CPTED project (e.g., what it can and cannot be expected to accomplish); (c) initiate the assessment of community perceptions, attitudes, and priorities; (d) explain schedules, the planning process, and anticipated activities; and (e) gain recommendations and ideas for the final work plan and schedule. The reason for the organizational meetings is that local residents and users should be directly involved in defining problems and developing approaches for the resolution of those problems, including the final work plan.

4.5.5 Establishment of Project Objectives and Requirements

The foregoing activities should form a basis for the establishment of project objectives and requirements. The community participation element and the assessment of crime-related problems and issues should define

the crime/environment targets for the project. Policy guidelines will have established the general scope and direction of the project, and the assessments of potential resources will have produced an appraisal of human, technical, and financial resources.

It may not be possible to address all of the issues and concerns delineated during project initiation. Lack of resources, management deficiencies, inability to generate solutions that have a reasonable expectation for success, timing difficulties, and similar factors may constrain the project planning effort. However, after an evaluation has been made of these factors, at least a portion of the problems can be addressed, and continuing CPTED planning or other crime control programs can address those issues not carried into the Project Planning phase.

The findings that have been accumulated from previous activities should be synthesized into project objectives. Essentially, project objectives are a consensus of the various guidelines that have evolved during the preceding activities and are selected on the basis of crime/environment targets, the individual objectives and priorities of the participation groups, potential funding sources, ability to develop and implement solutions that have a reasonable chance for success, and similar criteria. Once a consistent set of project objectives is derived, the work plan should be designed to accomplish these objectives.

4.6 Preparation of the Work Plan and Schedule

At this point in the process, the CPTED planning team should understand most of the requirements for a CPTED work plan. The work plan becomes the

operational document defining the tasks, approaches, resources, and schedules for carrying out the project planning activities described in Chapter 5. Thus, the work plan directs the detailed crime/environment analysis, the selection of discrete strategies, and the specification of the CPTED project plan (i.e., once finally approved, the project plan becomes the implementation plan).

In preparing the work plan, the team should review existing data and information that could be useful to the subsequent phases of the project. This reconnaissance should be undertaken in light of the issues and concerns of the community and the possible analytical methods that are contemplated in the crime/environment analysis. For example, if the planning team anticipates the use of computer techniques or programs, the existence of requisite data for the program should be verified. If the reconnaissance reveals inadequate or unavailable data for the analytical technique, new methods must be considered, or the final work plan and schedule should reflect a data compilation task to obtain this information.

Therefore, the major purposes of the data reconnaissance, which flows from the resource survey completed earlier, are to (a) Determine the availability and adequacy of the data base; (b) identify information gaps so appropriate surveys or inventories can be incorporated into the final work plan; and (c) determine the analytical methods that will be used during the Project Planning phase.

The completed work plan should contain:

- A description of tasks and activities.
- Completion schedules.
- Personnel requirements and cost estimates.
- Survey instruments and methods.
- Assignment of responsibilities for the development of crime/environment survey.
- Preliminary list of expected physical improvements and related costs.
- List of products to come out of the succeeding Project Planning phase.

CHAPTER 5. PROJECT PLANNING

5.1 Introduction

Project Planning is the phase in which the CPTED work plan is executed, leading to the specification of CPTED project plans that are to be implemented. Major activities include: Detailed crime/environment analysis leading to final selection of the crime/environment problems that exist or are perceived within the area, and specification of strategies to alleviate those problems. This phase ends with preparation of the detailed project plan that will guide CPTED project activities during the project implementation (see Figure 5-1).

The CPTED project plan is a statement and description of the physical, social, management, and law enforcement actions that will be implemented to alleviate the selected crime/environment problems. The content of the project plan should proceed from the general to the specific. Although the steps of the Project Planning phase are described separately, each consists of interrelated activities that synthesize the preceding steps of the planning process into specific implementation actions.

During Project Planning, the effort focuses on assessing the relationship of environmental variables to crime and fear problems, in order to identify those variables that should be manipulated to produce the desired changes. For example, if the crime/environment analysis revealed that the majority of homes burglarized in the project area had similar structural features and the burglary methods were highly consistent,

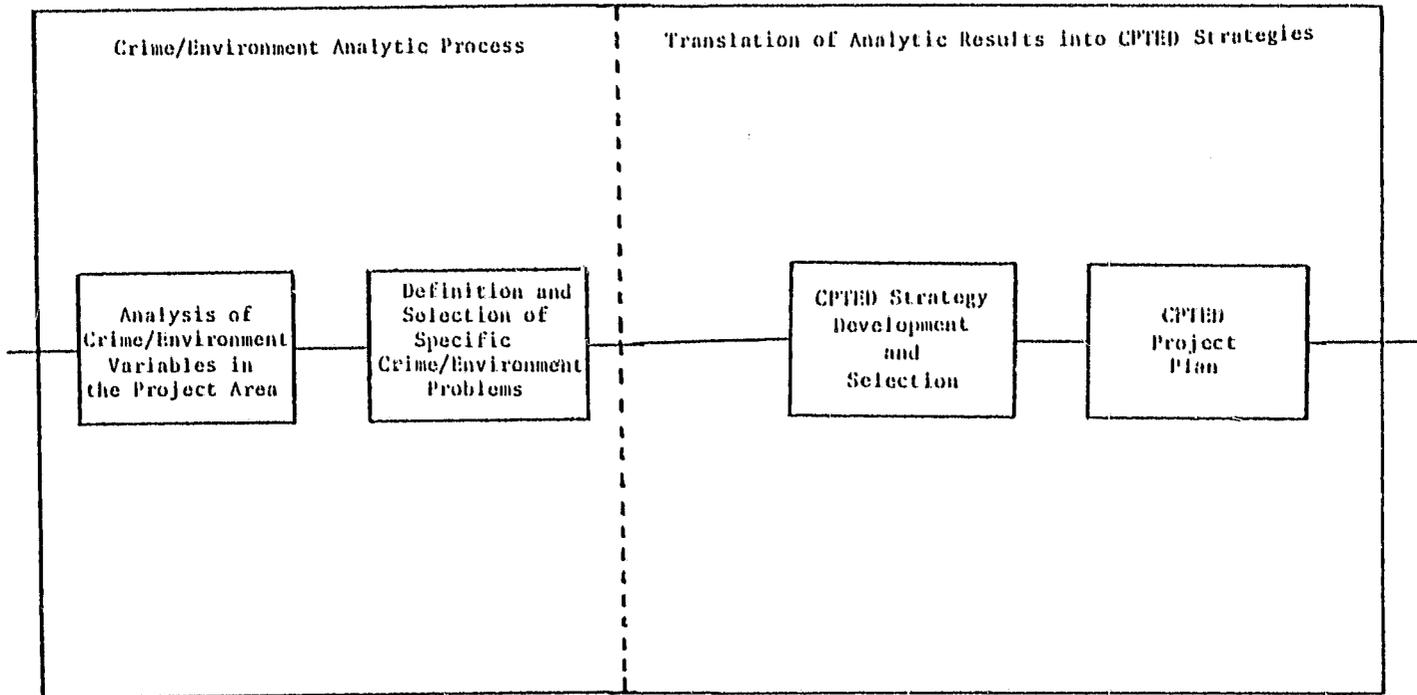


Figure 5-1. Diagram of Project Planning Phase

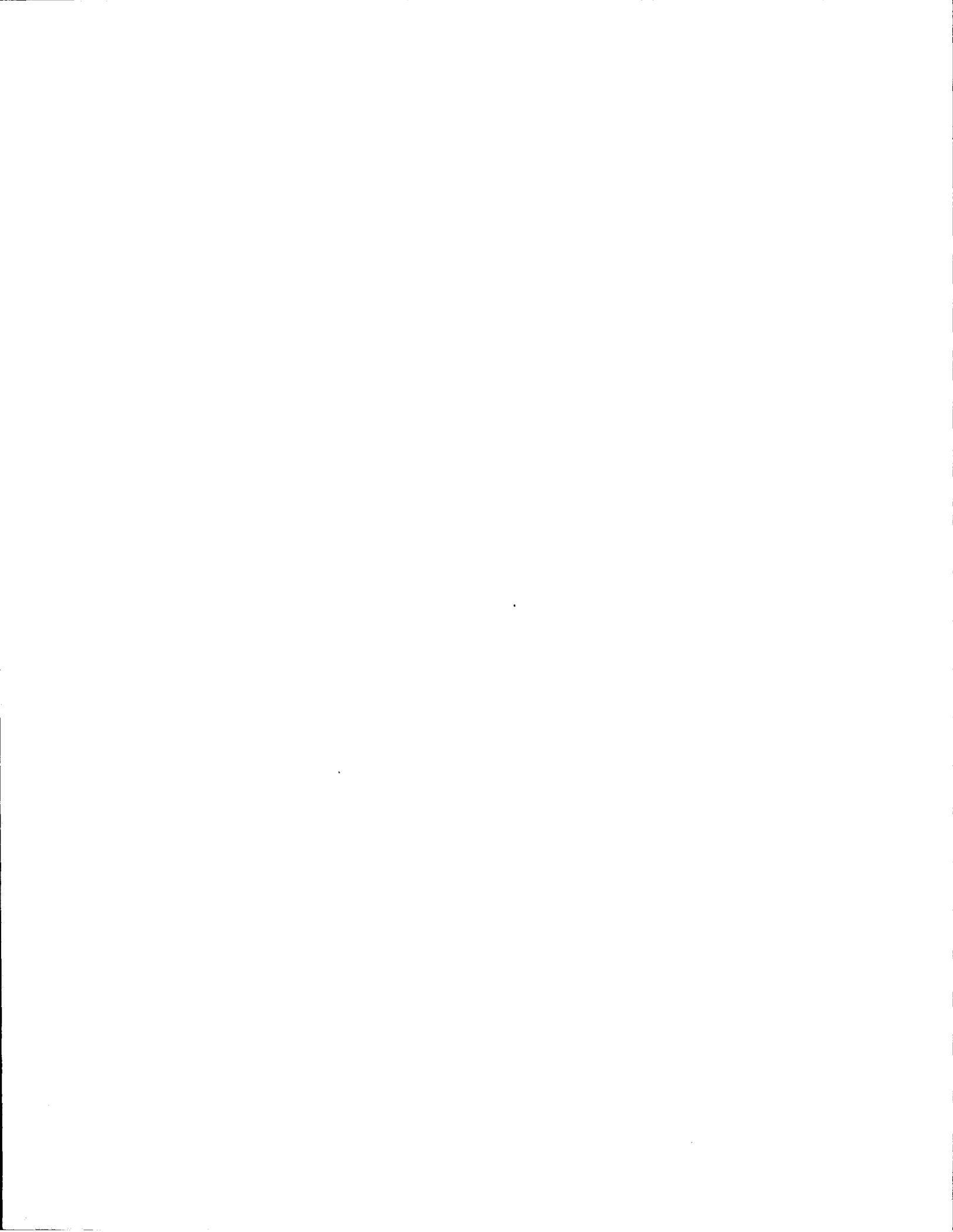


CPTED strategies could concentrate on the specific relationship between structural design and offender behavior. Conversely, if the key variable in the burglary problem concerned the manner in which the environment was used (e.g., all occupants of burglarized homes were at work during the peak burglary period), the strategies could concentrate on the relationship between victim behavior and offender behavior. Diagnostic activities are simply an effort to gain as much insight as possible into environmental factors related to a given crime or fear problem, so that realistic strategies can be devised.

The diagnostic activities consist of analyses that narrow a broad problem statement to a set of specific crime/environment targets. Upon conclusion of the crime/environment analysis, the various findings are synthesized into crime/environment problem statements that provide direction for the selection of alternative courses of remedial action. The planning team must weigh the various crime/environment problems and consider such factors as funding sources, potential costs, priorities of residents or other participants, the possibility of impacting the problem, and similar criteria. Those problems judged not within the desired scope of the CPTED project would then be referred to other sources for treatment.

5.2 Variables Important to Crime/Environment Analysis

An important aspect of the crime/environment analysis is identification of the physical and social environment variables that may interact to affect levels of crime and fear. Crime/environment variables



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1 OF 2

must be identified and analyzed to develop sound crime/environment problem statements that will be useful for the selection of appropriate CPTED strategies. The crime/environment analysis should consider nine categories of variables summarized in Table 5-1.

5.3 Data Availability and Selection of Analytic Methods

The availability of data (or the ability to generate the necessary data within the time and resource constraints of the local project) is an important consideration in the Project Planning phase. Although some types of crime/environment problems may be qualitatively defined, it is more likely that a complete analysis will be required for a sound determination of the problems and their contributing factors. Therefore, a strong data base is an important element in this stage of activity.

Volume III -- Analytic Methods Handbook -- identifies the principal data collection approaches that can be utilized by the CPTED planning team during the Project Planning phase. There is a close relationship between data sources and the analytical methods that are chosen to examine crime/environment problems. Local planners should review these two factors together.

The amounts of time, manpower, and cost associated with data collection activities will depend upon the objectives involved. Problems can be diagnosed and assessed at a minimum cost with face-to-face interviews of key individuals. Their perception of problems can provide the framework for developing CPTED solutions. If more rigorous data collection and analysis activities are anticipated, costs will increase sharply.

TABLE 5-1

Data and Variables Important to the Assessment
of Crime/Environment Problems
(Page 1 of 2)

<u>CATEGORY</u>	<u>VARIABLES</u>
Type of Crime	Homicide Assault Rape Robbery Breaking and entering Larceny-theft Auto theft Vandalism Arson
Severity of Crime	Number of incidents by type of crime Number of incidents per capita, household or business establishment Extent of bodily harm per incident Extent of loss Whether the incident involved use of weapon Whether the incident involved severe assault
Offender Behavior	Use of weapon Force Place of entry Method of entry Visibility of entry point Demographic characteristics (age, sex, area of residence, alone or with others)
Pattern of Crimes	Geographic location of incident Temporal characteristics (hour, day, month, year)
Environmental Design	Density of built environment Structural design Building codes and ordinances Location of street lighting Location of transit routes and waiting stations Location of public amenities (e.g., parks) Land use type Location of parking areas Landscaping and vegetation patterns Layout of streets, alleys, and pedestrian ways Spatial arrangements of buildings

TABLE 5-1
 Data and Variables Important to the Assessment
 of Crime/Environment Problems
 (Page 2 of 2)

<u>CATEGORY</u>	<u>VARIABLES</u>
Citizen/User Behavior	Age Sex Racial composition Income Education Family characteristics Community organization-interaction Transience of population Environmental use patterns Offender-victim relations (location when victimized, activity prior to victimization)
Law Enforcement Behavior	Police deployment practices Police community programs Use of private security forces
Displacement	Temporal Tactical Target Functional Territorial
Fear Behavior	Attitude profile Self-protective behavior Environmental associations

* A complete discussion of these variables, as they apply to CPTED planning, is presented in Chapter 2 of the Analytic Methods Handbook.

Research is expensive, especially to people who make funding decisions without an appreciation for its benefits. Therefore, it is important that analytical objectives be clearly defined prior to the actual analysis.

There are various research methods that can be used for conducting crime/environment analyses. The selection of methods, and related analytic techniques depends on the availability and completeness of data sources, the skills of the CPTED planning team, and available financial and manpower resources. It is desirable to obtain the most comprehensive picture of crime and fear problems that is technically and economically possible. This is not to say that every research tool can and should be applied to a CPTED project. Some methods are simply not applicable or appropriate due to the current state of knowledge, lack of resources, staff capability, project timing, or other factors.

5.4 Project Evaluation and Monitoring Activities

While the data are being compiled, certain decisions must also be made about evaluation activities. To conduct a meaningful evaluation, the CPTED planners should consider alternative methods of evaluation and choose an appropriate evaluation framework. They must then specify the data elements that will be necessary to carry out the evaluation. Knowledge about the physical and social environment is important for establishing proximate goals. Proximate goals are the linkages between project activities and objectives. For example, if a project goal is to reduce fear, knowledge of existing fear problems is necessary for

the measurement of an increase or decrease in the level of fear.

The CPTED planner should also establish a monitoring system whereby changes in the project area can be studied continuously. The monitoring system could also be used to establish research priorities. For example, burglary in single-family homes may be the priority crime target at the outset of a project. By designing a system for recording land use characteristics associated with burglaries, the analyst should be able to detect a shift in patterns more quickly (e.g., the trend may shift to robbery in food stores). If this occurred, the planning team could analyze various factors in an effort to determine a reason for the shift and design alternative strategies for the commercial robbery problem.

5.5 The Analytic Process

The steps involved in crime/environment analysis are presented in Figure 5-2.

5.5.1 Delineation of Issues and Problems

The first step in crime/environment analysis is to identify the major issues and perceived problems in the project area. This will allow the CPTED planning team to establish project objectives with respect to existing crime and crime-related problems within the project area. Through systematic and comparative analysis of existing police and census records, this activity affords a basis for focusing on well documented problems. Specifically, this phase of the process entails:



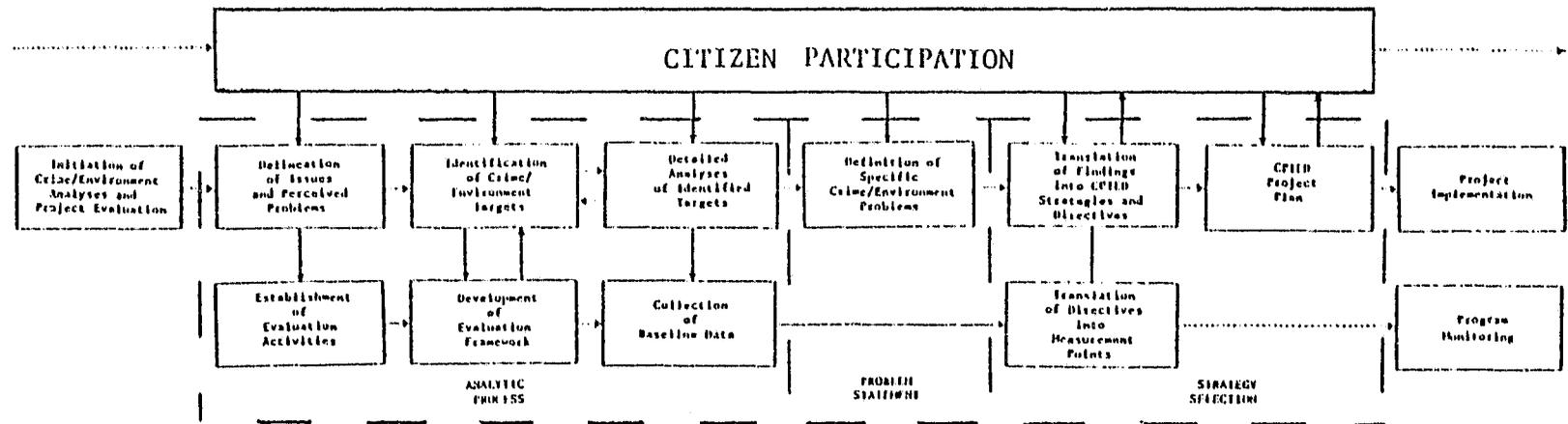


Figure 5-2. Diagram of Steps Involved in Crime/Environment Analysis

- Conducting field trips to assess the nature of the project environment and the population.
- Examining summary reports of crime and socio-economic data obtained from the U. S. Census, local law enforcement agencies, the planning department, and other municipal agencies that keep records.
- Meeting informally with key individuals or groups.

The delineation of key issues and concerns should have been initiated during the Project Initiation phase (since this information helps shape the scope and focus of the CPTED project) and is completed at this point in the process.

5.5.2 Identification of Crime/Environment Targets

A crime/environment target is a specific type of crime studied within the context of a specific environmental setting (e.g., residential burglaries in relation to single-family, detached houses, or personal robberies within the context of outdoor parking lots). Such targets should be selected on the basis of crime-related, environment-related and project-related criteria.

The process of identifying crime/environment targets for detailed examination involves the following activities:

- Conducting structured indepth interviews with knowledgeable individuals (police, community

leaders, persons holding political offices).

- Examining police offense reports for an assessment of types and frequencies of crimes, offender methods, temporal and locational data.
- Studying the nature of fear of crime by surveying the population of the project area.
- If the offense reports are inadequate for establishing accurate crime rates, conducting a victimization survey.
- Assessing crime-, environment-, and program-related criteria selecting specific targets for detailed analysis.

The analytic methods will vary with local conditions, but a basic principle is to use a variety of different approaches, as opposed to relying on a single approach.

5.6 Crime/Environment Problem Statement

The crime/environment analysis will form a basis for delineating crime/environment problems which can be addressed by CPTED strategies. Once contributing factors to a crime or fear problem are ascertained, the analysts will be able to judge which factors should be manipulated. For example, it is not enough to document that there is a high residential burglary rate. To reduce the incidence of burglary, the CPTED planning team needs to understand where and when the offense occurs; the modus operandi; victim/offender profiles; temporal and geographic patterns;

and other details that are elaborated upon below.

In generating crime/environment problem statements, the planners may find voids in their analyses. For example, the clearance rate for burglaries may be too low to provide enough information on offender behavior. If there are voids, the planners may wish to initiate additional analytic studies concerning this aspect of the problem, or they can rely on interviews with public officials and community leaders.

The classification system recommended for preparing crime/environment problem statements is relatively simple. It is closely related to the variables presented in Table 5-1. The procedure entails determining what is happening at the site and site vicinity (type of crime); how it is happening (methods); where it is taking place (physical location and geographic setting); who is being victimized (profile of victim); who initiates the offense (offender profile); temporal conditions; and other contributing factors, as described below. Examples of data pertaining to the variables are presented in accompanying tables. (The illustrative data is from the Minneapolis demonstration site.)

- Type of Crime -- The analysis will provide considerable information on the types of crime occurring in the project environment. It is important to distinguish between types of crime, since the nature and ramifications of particular offenses can be very different. The second function served by focusing on type of crime is that significant

environmental variables can be delineated. If there is a high degree of property crime, for instance, this will suggest certain variables to be analyzed, whereas violent crimes may require analysis of completely different factors. (See Table 5-2.)

- Methods of Crime -- This analysis encompasses all aspects of the manner in which a particular type of crime is committed. Method analysis includes use of weapons, force versus nonforce, point of entry, visibility of entry point, type and amount of property stolen, and similar factors. (See Table 5-3.)
- Crime Setting -- This variable is concerned with the physical, behavioral, and socioeconomic situation in which a criminal incident occurs. Physical conditions include lighting, land use setting, vegetation and landscape characteristics, spatial arrangements, building types and settings, structural design and quality, and related physical factors. Behavioral conditions include perceptions, fear, user security practices, the function of the location of the offense, etc. (See Table 5-4.) Socioeconomic variables

TABLE 5-2

Reported Crime Data by Type and Rate

Type of Crime	Number of Incidents	Percent of Total Incidents	Opportunities for the Crime	Opportunity Rate Incidents/1,000
Street Robbery	32	4.3	8800 Residents	0.4
Aggravated Assault	35	4.8	8800 Residents	0.4
Simple Assault	105	14.4	8800 Residents	1.2
Residential Burglary	249	33.9	2775 Dwellings	9.0
Commercial Burglary	41	5.6	N/A	N/A
Pursesnatch	26	3.5	2900 Women	0.9
Larceny	140	19.0	8800 Residents	1.6
Residential Robbery	6	0.8	2775 Dwellings	0.2
Commerical Robbery	9	1.2	N/A	N/A
Rape	9	1.2	2900 Women	0.3
Auto Theft	85	11.3	N/A	N/A
TOTALS	735	100.0		

TABLE 5-3

Analysis of Burglary Methods

<u>Method of Entry</u>	<u>Percent of</u>
<u>With Force (65.9%)</u>	<u>Offenses</u>
Broke Lock/Window	26.5
Forced Door/Window	32.9
Slashed Screen	6.0
Other	0.5
 <u>Without Force (34.1%)</u>	
Unlocked Door	16.9
Unlocked Window	7.6
Had Key	1.6
Subterfuge	0.4
Other	7.6
 <u>Point of Entry</u>	
Basement	0.8
Ground Floor	77.1
Higher Floors	3.6
Other	11.3
 <u>Visibility of Entry Point</u>	
<u>From Street</u>	
Visible	10.4
Not Visible	28.9
Unknown	60.7

TABLE 5-4

Reported Crimes by Land Use Setting

<u>Environmental Setting</u>	<u>Type of Crime by Setting as Percent of Total Reported Crime</u>		<u>% Total/ Incidents</u>
	<u>Violent</u>	<u>Property</u>	
Residential	46.9	59.9	56.0/365
Commercial	5.1	7.5	6.8/44
Transportation	8.7	12.5	11.3/74
Streets & Alleys	28.1	12.1	16.9/110
Institutional	6.6	4.6	5.2/34
Unknown	4.6	3.5	3.8/25

include age, sex, racial composition, income, family profiles, density, education, property values, transient characteristics (e.g., renter versus owner, housing turnover, vacancy rates), and employment. Crime setting findings can be generalized or site-specific, however, it is desirable to be as specific as possible.

- Crime Victim -- Information about crime victims will reveal if a particular user group (e.g., the elderly population) of the area is being disproportionately victimized. In some instances, the manner in which the victim uses the environment will be a contributing factor, variables of victim analysis are age, sex, racial characteristics income levels, and activity prior to the offense (standing at a bus stop, walking a dog at night). (See Table 5-5.)
- Offenders -- Profile information on known or suspected offenders is an important component of understanding crime/environment problems. This information is especially important if the offender characteristics differ between types of crime. For example, it could be determined that residential burglaries are committed by juveniles

TABLE 5-5

Victim and Suspect Characteristics

Victim Characteristics

<u>Sex</u>	<u>%</u>
Male	49.8
Female	44.2
Unknown	6.0

<u>Race</u>	
Black	11.7
White	7.6
Unknown	80.7

<u>Age</u>	
10-16	0.4
17-20	0.4
21-24	1.2
25-32	2.8
33-48	4.4
48+	3.2
Unknown	87.6

Suspect Characteristics

<u>Sex</u>	<u>%</u>
Male	22.5
Female	3.0
Unknown	73.6

<u>Race</u>	
Black	16.2
White	4.2
Unknown	79.6

<u>Age</u>	
0-15	9.9
16-18	6.0
19-21	-
21+	3.2
Unknown	81.0

<u>Residence</u>	
Neighborhood	11.3
City	3.5
Other	0.4
Unknown	84.9

who reside in the local area, while street robberies are committed by older persons who work alone and come from outside of the target area. As offender characteristics change, appropriate strategies will conceivably change. The planner should be aware of the difficulty of obtaining valid information about potential offenders. Generally, this type of information is limited.

- Temporal and Geographic Variables -- Factors such as the time-of-day, day-of-week, and month of offense may reveal patterns in offenses that can be related to other activities in the area. For example, if it is found that burglaries are typically committed following social activities at the local high school, further insight into the crime problem is gained. (See Table 5-6.)
- Other Contributing Factors -- Other factors be studied because they may account for some of the observed variance in crime/environment problems. Such factors may not be readily apparent in other aspects of the analysis

TABLE 5-6

Temporal Variables

<u>Time of Day</u>	<u>%</u>
12-6 a.m.	4.4
6 a.m.-Noon	7.2
Noon-6 p.m.	16.1
6 p.m.-Mdnt.	11.2
Unknown	61.1

Day of Occurrence

Monday	7.6
Tuesday	13.7
Wednesday	12.5
Thursday	10.8
Friday	12.0
Saturday	11.2
Sunday	5.2
Unknown	26.9

Month of Year

Jan-Mar	21.1
Apr-Jun	22.1
Jul-Sep	32.1
Oct-Dec	23.7
Unknown	2.0

but nevertheless may explain certain crime/environment phenomena. An example would be the determination that drug abuse among teenagers is a major problem within the area.

Preparation of the crime/environment problem statement will determine:

- The nature and severity of crime problems in a given environmental setting.
- Important physical characteristics that could influence crime problems.
- Other features of the locale that could affect access control or natural surveillance.
- Potential influences of physical mobility systems and patterns.
- Social and economic factors that could influence crime problems and remedial opportunities.

Then, through a synthesis of these findings, the problem statement will establish the primary factors to be addressed by CPTED concepts and strategies. Figure 5-3 illustrates a crime/environment problem statement.

5.7 Translating Analytical Results into CPTED Strategies

The crime/environment analysis effort is based on the assumption that, the more comprehensive the assessment is of the crime/environment problem, the more likely selected CPTED strategies will be effective in alleviating the problem. Once the contributing factors are evaluated,

CRIME-ENVIRONMENT PROBLEMS IN WILLARD-HOMEWOOD

TYPE	DESCRIPTION	METHOD	SETTING
RESIDENTIAL BURGLARY	"THE UNLAWFUL ENTRY OF A STRUCTURE TO COMMIT A FELONY OR THEFT, EVEN THOUGH NO FORCE IS USED TO GAIN ENTRY". BY ALL ACCOUNTS, RESIDENTIAL BURGLARY IS THE PRIMARY CRIME PROBLEM IN WILLARD NEIGHBORHOOD. STATISTICALLY, RESIDENTIAL BURGLARY INCIDENTS CONSTITUTED 34% OF ALL VIOLENT AND PROPERTY CRIMES IN 1974 (249 OUT OF 735); ON THE AVERAGE, 9 OUT OF EVERY 100 DWELLING UNITS WERE BURGLARIZED (249 INCIDENTS OUT OF 2775 DWELLING UNITS = .0897).	TEMPORALLY, RESIDENTIAL BURGLARIES TEND TO BE MORE NUMEROUS DURING THE SUMMER MONTHS THAN WINTER MONTHS (THOUGH JANUARY IS A PEAK MONTH); FAIRLY EVENLY DISTRIBUTED OVER THE DAYS OF THE WEEK (BUT WITH A HIGH ON TUESDAYS AND LOW ON SUNDAYS); AND MORE NUMEROUS BETWEEN NOON-3 P.M. AND 6-9 P.M. THAN AT ANY OTHER TIME OF THE DAY. BY FAR THE MOST FREQUENT POINT OF ENTRY IS ON THE GROUND FLOOR. THE POINT OF ENTRY TENDS TO NOT BE VISIBLE FROM THE STREET -- I. E., BURGLARS TEND TO APPROACH THROUGH THE ALLEY SIDE OF HOMES. FORCE IS USED FOR ENTRY IN APPROXIMATELY TWO-THIRDS OF THE BURGLARIES. ENTRY INTO MOST HOMES IS SIMPLE; MOST WINDOWS AND DOORS ARE POORLY MAINTAINED AND HAVE IMPROPER LOCKS.	AS NOTED ABOVE, ALLEYS PROVIDE A BETTER OPPORTUNITY FOR APPROACHING A TARGET HOME UNOBSERVED THAN IS POSSIBLE FROM THE STREET. BUILDINGS AND FENCES, RATHER THAN VEGETATION PROVIDE COVER FOR AN APPROACH. THOUGH BURGLARIES ARE SCATTERED FAIRLY EVENLY THROUGHOUT THE NEIGHBORHOOD, ABOVE AVERAGE CLUSTERING DOES OCCUR IN CENSUS TRACT 27 (BOUNDED BY PLYMOUTH, PENN. GOLDEN VALLEY AND XERXES).
AGGRAVATED ASSAULT	"AN UNLAWFUL ATTACK BY ONE PERSON UPON ANOTHER FOR THE PURPOSE OF INFLECTING SEVERE BODILY INJURY; USUALLY ACCOMPANIED BY THE USE OF A WEAPON OR OTHER MEANS TO PRODUCE DEATH OR SERIOUS BODILY HARM, THOUGH VIOLENT AND FEAR PRODUCING, AGGRAVATED ASSAULTS ARE RELATIVELY RARE -- 5% OF TOTAL CRIME (35 OUT OF 735 INCIDENTS) AND 4 OUT OF 100 FOR THE OPPORTUNITY INDEX (BASED ON INCIDENTS PER CAPITA). FURTHER, AGGRAVATED ASSAULTS TEND NOT TO BE STRANGER-TO-STRANGER CRIMES, SUCH THAT OFTEN THEY ARE NOT AMENABLE TO A CPTED APPROACH.	AGGRAVATED ASSAULTS TEND TO BE EVENLY DISTRIBUTED BY MONTH AND DAY OF WEEK. MORE THAN TWICE AS MANY OCCUR AT NIGHT AS 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 THE AGGRAVATED ASSAULTS OCCUR IN OR NEAR A PRIVATE RESIDENCE. THE NEXT MOST FREQUENT SITE IS IN A PRIVATE VEHICLE. (THESE OBSERVATIONS RELATE CLOSELY TO OFFENDER AND VICTIM CHARACTERISTICS). GEOGRAPHICALLY, ALMOST THREE-FOURTHS OF THE AGGRAVATED ASSAULTS ARE DISTRIBUTED BETWEEN PLYMOUTH AND 16TH AVENUES.
PURSESNAATCH	"THE GRABBING OF A PURSE FROM A PERSON IN A PUBLIC AREA, FOLLOWED BY IMMEDIATE ESCAPE (USUALLY ON FOOT), WITHOUT HAVING ASSAULTED THE VICTIM". PURSESNAATCH IS REGARDED AS A PROBLEM IN CERTAIN PARTS OF THE COMMUNITY, PARTICULARLY IN AND NEAR THE BUSINESS DISTRICT, BUT OVERALL IS NOT REGARDED AS A SERIOUS ISSUE. PURSESNAATCH CONSTITUTED 4% OF ALL CRIMES IN 1974, WITH AN OPPORTUNITY INDEX OF LESS THAN 1 OUT OF 100 (26 INCIDENTS OUT OF APPROXIMATELY 2900 WOMEN AGE 15 OR OLDER).	PURSESNAATCHING TENDS TO OCCUR WITH GREATER FREQUENCY IN THE NON-WINTER MONTHS, ON DAYS OTHER THAN SUNDAY OR MONDAY, DURING THE HOURS THAT BUSINESS ESTABLISHMENTS ARE OPEN (THE PEAK PERIOD BEING 9 A.M. TO NOON). A WEAPON IS NOT INVOLVED.	TWO-THIRDS OF THE PURSESNAATCHINGS OCCUR ON A STREET OR ALLEY, WITH MOST OF THE REMAINING OCCURRING IN A PARKING LOT OR NEAR THE VICTIM'S HOME. VIRTUALLY ALL OCCUR IN A HIGH ACTIVITY AREA -- IN A COMMERCIAL NODE, ON A MAJOR ARTERIAL, NEAR A PUBLIC SCHOOL.
SIMPLE ASSAULT	"AN UNLAWFUL ATTACK BY ONE PERSON UPON ANOTHER WITHOUT THE INTENT OF DOING SEVERE BODILY INJURY. SIMPLE ASSAULT IS REFERRED TO AS A PROBLEM BY PERSONS FAMILIAR WITH THE NEIGHBORHOOD, PARTICULARLY AS RELATED TO PURSESNAATCH, ELDERLY VICTIMS, AND SCHOOL AGE VICTIMS BEING ASSAULTED BY FELLOW STUDENTS; SIMPLE ASSAULT IS NOT, HOWEVER, REGARDED AS A MAJOR ISSUE. SIMPLE ASSAULTS CONSTITUTE A RELATIVELY LARGE SHARE, 14% OF ALL CRIMES; ITS OPPORTUNITY INDEX IS MODERATE -- JUST OVER 1 OUT OF 100 (105 INCIDENTS COMPARED TO THE NEIGHBORHOOD'S POPULATION).	THE MONTH TO MONTH DISTRIBUTION OF SIMPLE ASSAULTS FORMS NO CLEAR PATTERN, NOR DOES THE DAY OF THE WEEK DISTRIBUTION (WEEKENDS DO HAVE A HIGHER AVERAGE NUMBER THAN WEEKDAYS). IN TERMS OF THE TIME OF DAY DISTRIBUTION, 3-5 P.M. IS A LOW PERIOD, 9 A.M. - 6 P.M. IS A MODERATELY HIGH PERIOD, AND 6 P.M. - 3 A.M. IS THE HIGHEST PERIOD. ONLY ABOUT 10% OF SIMPLE ASSAULTS INVOLVE THE USE OF A WEAPON, USUALLY A FIREARM.	HALF OF ALL SIMPLE ASSAULTS IN WILLARD NEIGHBORHOOD OCCUR IN A PRIVATE RESIDENCE. ANOTHER TEN PERCENT OR SO OCCUR ON A STREET OR ALLEY. THE REMAINING LOCATIONS ARE FAIRLY EVENLY DISTRIBUTED AMONG ALL OTHER POSSIBLE LOCATIONS. THOUGH SIMPLE ASSAULTS ARE SCATTERED THROUGHOUT THE NEIGHBORHOOD, THEY DO BEAR A NOTICEABLE RELATION TO LAND USE. IN PARTICULAR, SIMPLE ASSAULTS ARE MORE PREVALENT IN AND AROUND SCHOOLS (ESPECIALLY NORTH HIGH SCHOOL) AND THE NEIGHBORHOOD'S COMMERCIAL NODES.

Figure 5-3. Sample Crime/Environment Problem Statement (Page 1 of 2)

CRIME-ENVIRONMENT PROBLEMS IN WILLARD-HOMEWOOD (continued)

TYPE	OFFENDER	VICTIM	SCALE	CONTRIBUTING FACTORS
RESIDENTIAL BURGLARY	BURGLARS TEND TO BE MALE, BLACK JUVENILES (UNDER 19 YEARS OLD), ROUGHLY HALF THE TIME THEY OPERATE ALONE, HALF THE TIME IN GROUPS OF TWO OR MORE. OFTEN THE BURGLARS ARE ACQUAINTED WITH THEIR VICTIM, BUT NOT IN A MAJORITY OF THE CASES. APPROXIMATELY THREE-FOURTHS LIVE IN THE SAME NEIGHBORHOOD IN WHICH THEY OPERATE, AND VIRTUALLY ALL LIVE IN THE SAME CITY.	BLACK HOUSEHOLDS TEND TO BE MORE FREQUENTLY VICTIMIZED THAN WHITE HOUSEHOLDS. HOMES IN WHICH BOTH MARRIAGE PARTNERS ARE AT WORK DURING THE DAY MAY BE FAVORITE TARGETS, BECAUSE THE DEFINITION OF BURGLARY SPECIFIES THE ABSENCE OF A CONFRONTATION BETWEEN OFFENDER AND VICTIM, NO INJURIES ARE SUSTAINED.	THE MOST APPROPRIATE SCALE APPEARS TO BE THE NEIGHBORHOOD LEVEL.	YOUNG PEOPLE HAVE LITTLE ACTIVITY DURING THE DAY AND ARE LOOKING FOR SOMETHING TO DO. POLICE ATTITUDES TOWARD THE NEIGHBORHOOD AND POLICE/COMMUNITY RELATIONS ARE POOR. POST-CRIME CRIMINAL SYSTEM ACTIONS (INVESTIGATION, CLEARANCES, COURT SENTENCES) ARE POOR. DRUGS MAY BE INVOLVED.
AGGRAVATED ASSAULT	OFFENDERS ARE PREDOMINANTLY MALE, BLACK, ADULT, AND OPERATING ALONE. TWO-THIRDS OF THE TIME THEY ARE ACQUAINTED WITH THE VICTIM AND 1 NEIGHBORHOOD RESIDENT.	VICTIMS TEND TO BE MALE (22 VERSUS 13), BLACK, AND ADULT (WITH THE MOST VICTIMIZED AGE GROUP BEING 33 TO 48 YEARS OLD). MOST VICTIMS ARE ENGAGED IN ROUTINE ACTIVITY AT HOME PRIOR TO ATTACK. AN INJURY RESULTS IN APPROXIMATELY TWO-THIRDS OF THE CASES.	THE MOST APPROPRIATE SCALE IS THE INDIVIDUAL HOUSEHOLD, THOUGH IDENTIFYING TARGET HOUSEHOLDS WILL REQUIRE A NEIGHBORHOOD FOCUS.	AGGRAVATED ASSAULTS TEND TO BE A PRODUCT OF DISPUTES BETWEEN PERSONS WELL ACQUAINTED WITH ONE ANOTHER (FAMILY MEMBERS, JEALOUS LOVERS, ETC.). ACCORDINGLY, CONTRIBUTING FACTORS ENCOMPASS A VERY WIDE RANGE OF SOCIAL AND MORAL FORCES.
PURSESNAATCH	OFFENDERS OPERATE ALONE HALF THE TIME. THEY ARE ALMOST EXCLUSIVELY MALE AND BLACK. ALMOST ALL ARE JUVENILES, INCLUDING A HIGH PERCENTAGE AGED TWELVE OR UNDER. THEY ARE ALMOST NEVER ACQUAINTED WITH THE VICTIM. HALF ARE FROM THE NEIGHBORHOOD AND HALF FROM THE CITY AS A WHOLE.	VICTIMS OF PURSESNAATCH IN THE NEIGHBORHOOD ARE ALMOST EXCLUSIVELY FEMALE AND WHITE. WHILE ALL AGE GROUPS ARE VICTIMIZED, THOSE OVER 33 -- AND ESPECIALLY HARD HIT. ALMOST ALWAYS THE CRIME OCCURS WHILE THE VICTIM IS WALKING DOWN THE STREET. INFREQUENTLY THE VICTIM WILL SUFFER A MINOR INJURY.	AN APPROPRIATE SCALE FOR PURSESNAATCH IS THOSE AREAS OF HIGH PEDESTRIAN ACTIVITY, I.E., BELOW THE NEIGHBORHOOD LEVEL BUT ABOVE THE SITE LEVEL.	PURSESNAATCH IS MAINLY A CRIME OF YOUNG JUVENILES, AND HENCE CONTRIBUTING FACTORS ENCOMPASS THOSE FORCES WHICH PROVIDE THE TIME AND MOTIVATION FOR A JUVENILE TO BECOME INVOLVED IN CRIMINAL ACTIVITIES.
SIMPLE ASSAULT	SIMPLE ASSAULTS ARE COMMITTED MAINLY BY BLACK MALES, OF WIDELY VARYING AGES, OPERATING ALONE. ONE-FOURTH OF THE TIME THE OFFENDER AND VICTIM ARE STRANGERS TO ONE ANOTHER; WHEN THEY DO KNOW ONE ANOTHER, ONE-THIRD OF THE TIME THE OFFENDER AND VICTIM ARE RELATED. THE OFFENDER IS A RESIDENT OF THE NEIGHBORHOOD IN MORE THAN HALF OF ALL SIMPLE ASSAULTS.	JUST UNDER TWO-THIRDS OF SIMPLE ASSAULT VICTIMS ARE FEMALE, AND JUST UNDER TWO-THIRDS ARE WHITE. VERY YOUNG AND ELDERLY PERSONS TEND NOT TO BE VICTIMIZED; PERSONS AGED 13 TO 48 ARE VICTIMIZED FAIRLY EVENLY. MOST VICTIMS ARE ENGAGED IN ROUTINE ACTIVITY AT HOME OR WORK PRIOR TO ATTACK.	SIMPLE ASSAULT CAN BE APPROPRIATED FROM BOTH A NEIGHBORHOOD AND INDIVIDUAL HOUSEHOLD PERSPECTIVE.	GENERALLY SPEAKING, SIMPLE ASSAULTS RESULT FROM DISPUTES AMONG PERSONS WHO KNOW EACH OTHER, SUCH THAT (FOR EXAMPLE) FAMILY COUNSELING PROGRAMS MAY BE AS EFFECTIVE OR MORE EFFECTIVE THAN A CITED PROGRAM.

Figure 5-3. Sample Crime/Environment Problem Statement (Page 2 of 2)

decisions can be made regarding the variables that need to be manipulated to reduce the problem. Volume II -- Strategies and Directives Manual -- may be useful for guidance throughout the strategy selection activity.

5.7.1 Overview of the Strategy Selection Activity

Once crime/environment problems are defined, the planning team should decide which of the CPTED operating hypotheses and their component parts would be most suitable for resolving the problem. For example, if the primary contributing factor to fear of crime within a commercial sector is poor lighting, which impedes visibility, the appropriate CPTED strategies might emphasize improved surveillance.

Selection of appropriate CPTED operating hypotheses involves:

- Determining the crime/environment problems that will be addressed by the project plan. In some instances, factors such as project objectives, fiscal capability, timing, or inadequate analytical data will eliminate some problems from further consideration.
- Assessing what contributing factors are related to the crime/environment problem.
- Determining which of the specific environmental variables (e.g., method, setting, offender behavior, victim behavior, law enforcement, or fear patterns) need to be manipulated to achieve more effective design and use of the built environment.

Once the CPTED operating hypotheses are selected (i.e., access control, surveillance, motivation reinforcement, or activity support), strategy objectives should be formulated. Knowledge of the array of operating hypotheses and approaches enables the planning team, with citizen input, to establish reasonable and achievable objectives. For example, if the crime/environment problem analysis suggests that improper building design is related to crime, the strategy objectives might be physically oriented. Conversely, if the principal factor is the manner in which the environment is used by a particular victim group (e.g., elderly), the strategy objective might be more socially or management oriented.*

The next activity is to develop and evaluate alternate specific strategies. Strategy selection is a basic decisionmaking process and follows a rational progression. Any type of problemsolving process must ultimately choose specific actions of one kind or another. If the CPTED planners have systematically identified and assessed the probable cause of the problem, selected appropriate operating hypotheses, and established objectives for resolving the problem, they will be in a position to judge which type of strategies have the greatest potential for alleviating the problem. If the process has been unsystematic and purely intuitive, strategy development will be a complicated task with a questionable potential for success.

*For a more complete discussion, see Chapter 1 of Volume II -- Strategies and Directives Manual.

Development and selection of alternative strategies will involve a sequence of actions:

- Assess Probable Causes -- The results of the crime/environment analysis should be reviewed to focus on probable causes of the delineated crime/environment problems.
- Determination of Appropriate CPTED Operating Hypotheses -- This activity determines which CPTED operating hypothesis is most appropriate for each stated crime/environment problem.
- Establishment of Objectives -- Objectives are developed based on the selected operating hypotheses. These objectives are statements of what is to be accomplished relevant to the particular crime/environment problems.
- Development of Strategies -- On the assumption that the objective is clearly stated, the next step is to develop different ways of getting the job done in accord with CPTED principles. For example, if the objective is to increase user activity, there may be numerous ways in which this objective can be accomplished. Additional commercial activity can be generated by relocating parking areas closer to stores;

community activities can be scheduled through management tactics and social programs; law enforcement patrols can be increased; or operating hours of businesses can be extended.

- Evaluation of Alternative Strategies --

Once alternative strategies are developed, they should be evaluated for their potential effectiveness and implementability. Useful criteria include: The relationship of the strategy to objectives; funding potential; resource availability; timing; political considerations; community impact; potential for resolving the problem; complexity of solution; and relationship to ongoing programs. Additional criteria can be developed based on local conditions.

- Establishment of Directives -- Each selected strategy or combination of strategies is then translated into specific directives so that tasks can be operationalized and implementation objectives established. A directive is a specific method for accomplishing a strategy. For example, if the strategy is target hardening, a

directive could be to install deadbolt locks on the front doors and redesign window openings.

Figure 5-4 is an illustration of how the analytical results, as presented in Figure 5-3, can be translated into CPTED strategies.

5.8 Preparation of the CPTED Project Plan

As defined earlier, the project plan is a statement and description of the physical, social, management, and law enforcement actions that will be implemented to alleviate the probable causes of crime or the fear of crime within the specified environment, together with the methods by which these strategies will be implemented. In addition to presenting individual strategies, the project plan interrelates various strategies (e.g., a combination of physical, social, management or law enforcement actions) into strategy sets so as to achieve the maximum reduction of crime and fear problems.

For the CPTED project plan to achieve maximum effectiveness, it should develop priorities for strategies based upon the principal crime/environment problems and their impact upon the subject site. After evaluation of these factors, those problems are selected which will be the targets of the CPTED projects proposed for implementation, as defined in the draft project plan.

5.8.1 Preparation of Draft Project Plan

At this stage in the planning process, the planning team is able to specify a refined, albeit preliminary, set of strategies proposed



Crime/ Environment Target	Crime/Environment Problem Statement					CPTED Operating Hypothesis	Objective	Strategy	Directive
	Method	Setting	Offender	Victim	Temporal Conditions				
Residential Burglary	Forced Entry Through Doors and Windows	Single-Family Structures Adjacent to Alley and Dense Foliage	Suspects Are Young Males From Within Neighborhood	Working Families Who Are Absent for Extended Periods During Day	Peak Periods Are 3-5 PM on Weekdays	Motivation Reinforcement Access Control Surveillance Surveillance Activity Support	Impact the Potential Offender Group Secure the Vulnerable Portals Increase Natural Surveillance Remove Obstacles to Natural Surveillance Educate Potential Victims	Develop Youth Services Program Initiate Target Hardening Establish Blockwatch Program Plan Alleyway Modification Conduct Seminars for Potential Victims	 1. Install Locks on Windows 2. Change Location of Doors 1. Train Volunteers 1. Pave Alleys 2. Trim Foliage

Figure 5-4. Translation of Analytic Results into CPTED Strategies and Directives

to be implemented. A draft project plan should be prepared to review and discuss the proposed strategies with interested parties and impacted participants prior to preparation of a final project plan. The draft project plan should describe the types of strategies or alternative strategies that are proposed to impact the selected crime/environment problems, together with the methods by which these strategies will be implemented. The draft project plan should contain general descriptions for:

- Selected crime/environment problems.
- Probable contributing factors.
- Environmental variables to be manipulated.
- Suggested CPTED operating hypotheses and approaches.
- Recommended strategies or strategy sets for each of the defined problems.
- Approximate cost and source of funds for each of the strategies or strategy sets.
- Guidelines for implementation responsibility.
- Evaluation guidelines.
- Probable schedule.

There are several reasons for preparing a draft project plan. The chief reason concerns the number of participants and programs involved in a large-scale CPTED effort and the assumption that a multi-funding project and an interagency community implementation approach

will be adopted. For example:

- There can be a wide range of participants in the CPTED planning and implementation process, and it is important to obtain a consensus as to the scope and direction of the project prior to preparing a detailed project plan.
- CPTED projects are normally funded from a variety of sources, and a draft project plan is useful for soliciting funding commitments and agreements.
- There may be several alternatives as to approaches (e.g., law enforcement, physical, social or management) and strategies that can be applied to a given crime/environment problem. The draft project plan facilitates an evaluation of these alternatives.
- Numerous approvals (legal, technical, financial, political) will be required prior to project implementation, and this activity can be outlined and initiated with the draft plan. Since it is at a general level, the draft plan also allows modification and refinement on the basis of comments and suggests obtained during the approval cycle.

- In addition to determination of what actions should be taken to resolve the defined crime/environment problems (i.e., selection of strategies and directives), decisions must also be made as to who will implement the strategies; how they will be financed; when will they be initiated; how they will be managed; and where they will take place. At best, these decisions require close coordination and interrelationship.

The level of detail in the draft project plan will be dependent upon local considerations. However, it should provide sufficient information that participants, citizen organizations, elected officials, approval authorities, key agencies, and potential funding sources can indicate their support, concerns, or recommended modifications for various elements of the draft plan.

5.8.2 Project Plan Revision and Approval

After the draft is reviewed with all affected agencies, individuals, and organizations and appropriate modifications, additions, and refinements are made, the final project plan should be prepared. Upon completion of the project plan, formal support, endorsements, and commitments should be obtained. Although the range and type of approvals will vary with the local jurisdiction, it is especially important to gain formal approval from the following sources:

- Elected officials.

- Participants in the CPTED project.
- Organizations and individuals in the area in which the CPTED project is to be implemented, providing these sources are not formal participants in the planning process.
- Affected agencies and agencies who may play a role in implementation.
- Potential funding sources.
- Sources whose approval will be legally required prior to final implementation (e.g., planning boards, zoning commissions, and law enforcement agencies).

The format of the final design may vary, but it is suggested that the following elements be contained in the document:

- Statement of the overall problem.
- Description of the site area in terms of its physical, social, and economic characteristics.
- Precise statement of the crime/environment problems that are to be addressed by CPTED strategies.
- Statement of overall project goals and objectives, as well as specific objectives to

be achieved in regard to the individual crime/
environment problems.

- Specification of the CPTED approaches to be applied to each of the crime/environment problems.
- Detailed description of individual strategies for the reduction or alleviation of crime/environment problems.
- Statement of design directives and the physical, social, management, or law enforcement elements that are to be modified.
- Cost estimates and funding sources for strategies and other project costs.
- Description of the participants for the implementation process and a definition of their roles and functions.
- Designated responsibilities for implementation of strategies.
- Detailed schedules.
- Evaluation guidelines.

The final project plan closely parallels the contents of the draft plan, but it contains considerably more detail. In addition to the detailed problem statements, strategy descriptions, and cost estimates, the final design plan should specify the manner in which each of the recommended actions will be achieved. More precise cost estimates, based on

the additional level of detail, should be prepared and commitments for funding obtained.

CHAPTER 6. PROJECT IMPLEMENTATION

6.1 The Implementation Process

The Project Implementation phase results in the construction and use of the physical elements of the CPTED project plan and the programmatic achievement of the social, managerial, and law enforcement strategies. Experience indicates that the implementation phase of a CPTED project will vary greatly from community to community. Therefore, this chapter does not purport to chart seemingly routine tasks and functions for implementation, because this could be misleading. Rather this chapter focuses on important implementation considerations that offer guidance to those actually charged with implementation responsibility.

During this phase, an implementation team must assume the lead role in continuing community participation and support, adding refinements to physical and programmatic concepts, closing on resource and funding commitments, retaining continuous political support, and implementing the recommended strategies. It must be recognized that, in many cases, those persons having the responsibility for the actual implementation of the individual project designs will not be the same persons who developed the plans. Thus, a major task of the implementation team is to transfer responsibility to the agency or group that will actually carry out the specific strategy or strategy sets.

The major sequence of tasks in the implementation process involves closing on strategy sponsors, development of the participation structure,

implementation of the strategies and directives, and evaluation of the effectiveness of the results. There are also the requirements for reinforcement of public awareness through timely disseminations of information concerning the project. (See Figure 6-1).

Throughout this phase, the day-by-day concerns and priorities of the implementation team will vary, since a CPTED project is dynamic and changes can occur in scope and definition. Such changes must be expected, since CPTED projects are closely related to both human relations and political areas. In such an environment, there is a need for the maintenance of the previously developed project plan, against which changes and progress can be measured. Therefore, while the functions that must be addressed during this phase are discussed individually in the remainder of this chapter, the need for their integration into the overall project plan covering the life of the project cannot be overemphasized.

6.2 Strategy Sets and Sponsors

The focus of a CPTED project is almost invariably some geographic area, rather than a function. As a result of this area focus, many agencies or groups will be involved in the typical CPTED project, since each will have its own discrete function to contribute (e.g., lighting improvements, housing maintenance, park services). As a result, a strategy or set of strategies developed to relate to a single area will, in most cases, involve the areas of interest of a number of sponsoring agencies or groups. Therefore, every strategy selected for inclusion in the project plan must be developed and refined to the point where the responsibilities



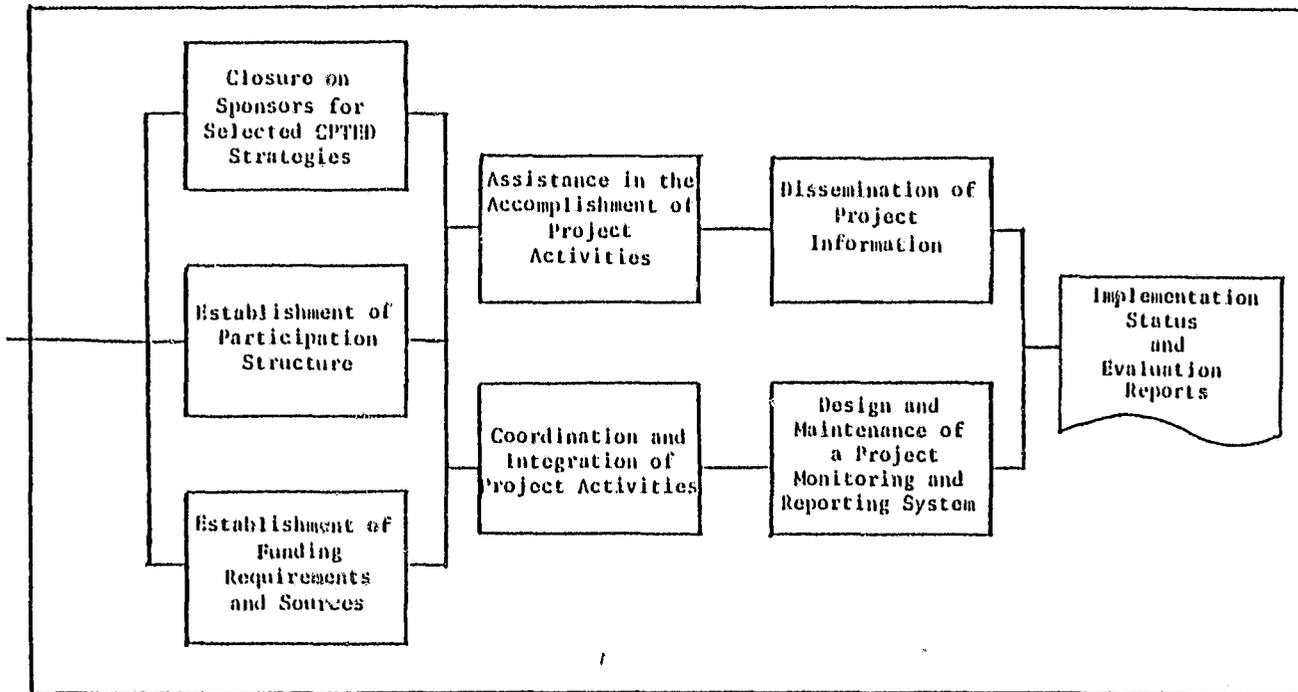


Figure 6-1. Diagram of Project Implementation

of each sponsor group are operationalized.

While conceptually the assignment and coordination of actions may appear a straightforward task, experience has shown it to be a time-consuming and critical operation. In accomplishing this task, it is recommended that a chart be developed and maintained showing all of the sponsor/set matches at the lowest possible level of discrimination. In some cases, this may be straightforward and conclusive (e.g., street lights -- public service commission -- city ordinance). In other cases, much judgment will be required in maintaining matches. This could be particularly true in the public-interest area where, for example, numerous private organizations could be interested in an activity such as creating blockwatch groups. Here, the implementation team could retain responsibility, or assign the responsibility to a single dominant organization, or it could encourage establishment of a consortium.

A final organizational decision, for example, must be based upon the implementation team's assessment of the effect of the decision upon the successful accomplishment of the sponsor group's responsibility. Thus, the implementation team must consider all ramifications of any set of sponsor activities in initial implementation, and must remain sufficiently flexible to modify its plan as additional decision factors arise.

After the project plan is finalized, the implementation team must secure formal endorsements and commitments. Once the strategy set/sponsor relationships have been formally accepted, the participation structure and the funding support functions can be established.

6.3 Implementation Participation Structure

By the time the Project Implementation phase is underway, a preliminary determination will have been made as to those agencies and organizations that should play major roles in the implementation process. Many of these were identified and contacted during development of the draft project plan, and confirmation of those who accepted specific implementation roles was accomplished during the strategy set/sponsor matching process. In most cases, preliminary meetings will have been held with them, and a participation structure will have evolved. While this participation must be maintained, its structure will no doubt change during the implementation process.

Of great importance to the success of the project is maintaining contact with the cognizant public agencies, since they will be the source of most (if not all) of the necessary approvals and funds. The contact list should include the strategy/sponsor list and be expanded to include all agencies that could be involved in any stage of strategy implementation.

The resultant participant structure should closely parallel the actual groupings of interest, authority, and responsibilities reflected in the project plan. Depending upon the plan, this could result in one large, interactive group; a number of subcommittees, with a central council; or any combination. However, there are certain guidelines that should be observed in establishing any such structure.

The first is that the core of the operating group should be small and, if possible, consist of full-time (or at least dedicated) personnel.

They must conduct day-by-day activities for a full committee. The full committee should include representatives of all the major projects being undertaken and should be comprised of individuals who have authority to speak for their agency or group. Agencies or other bodies having interest but no responsibility could be members, or simply invited to meetings. If the latter group is large, the members could be encouraged to have meetings of their own, with one joint representative designated to be a full-time participant in the overall group. Points of contact should be designated for every participating group or agency, and a listing showing this designee, his agency, and overall area of interest circulated to all involved.

For larger projects, creation of a steering committee could be beneficial, with meetings being scheduled periodically. Normally, such meetings would be required often as the project plan was being finalized and implementation started, and then less often as the project progressed.

Thus, the objective of defining the participation structure is to ensure the continuing involvement of agencies, organizations, and individuals directly affected, both so that positive results will be obtained by the project and so that those results will be sustained beyond the implementation period. If the CPTED participation and involvement activity is properly planned, it will assist in the institutionalization of the project by fostering adoption of the CPTED concept in other programs and activities of the participants.

6.4 Funding

By the time the project implementation is underway, many of the funding

questions inherent in a major CPTED project will have been resolved and included in the final plan. The implementation must have authorized funding for salaries, office space, and other operating expenses. The difficulties in obtaining these commitments will serve as an indication of the feasibility of obtaining funds for actual strategy implementation.

Socially oriented strategies (e.g., blockwatches, security inspections, protective organizations) will require the least expenditure of funds and have the most varied potential sources. Depending upon their definition, physical strategies will require direct (and usually substantial) expenditures. The source for such funds will vary from the owner of a building or lot, to a local public utility, to a major governmental agency. Each will require a different approach, and a varying period for approval. Shown in Table 6-1 is a list of some of the sources that could provide funding support.

Simply listing potential funding sources is of little value until a connection is made between strategy and funding sources. Any such grouping made during the development of the project plan should be updated and specific activity/funding sources identified. A sample list is shown in Table 6-2. Once this sample list is prepared, each potential funding source must be explored with the most authoritative local source.

If the jurisdiction has (or has access to) a lobbyist or public-interest group in Washington (such as the League of Cities), the complete funding source list should be coordinated with them in the hope that additional programs with potential for funds can be identified at the Federal level.

TABLE 6-1

Typical CPTED Project Funding Sources

Federal Agencies	<ul style="list-style-type: none">• Economic Development Administration• Public Works Program• Community Development Block Grants• HUD Federal Crime Insurance Program• Department of Labor, Comprehensive Employment and Training Act• Small Business Administration• LEAA Programs• Department of Transportation• HEW, Administration on Aging• HEW, Safe Schools Act
Private Agencies	<ul style="list-style-type: none">• Citizen Groups and Professional Organizations,Local Business Groups• Financial Institutions• Private Foundations• Insurance Companies and Foundations• National Chain Stores• Public-Interest Groups
Local	<ul style="list-style-type: none">• State Crime Prevention and Planning Agencies, Human Resources Programs• Public Works Programs• Capital Improvement Programs• Law Enforcement Programs -- State, Regional, and Local• Redevelopment/Revitalization Programs• Criminal Justice Programs -- State, Regional, and Local• Park and Recreation Programs -- State and Local• Transportation Programs -- State, Regional, and Local• School and Education Programs -- State and Local• Social Programs• State, Regional, and Local Planning Programs

TABLE 6-2

Project Activity/Funding Source Matching

<u>Project</u>	<u>Potential Funding</u>
A. Commercial Rehabilitation Loans	-- HCD Eligible
B. Albina Family Service -- Rehabilitation and site improvements	-- HCD Eligible Historic structure
C. Economic Feasibility Study -- Identify actions for neighborhood commercial	-- HCD Eligible; Area 4 Neighborhood Commercial Center
D. Traffic and Roadway Improvements -- Completion of Area 1 improvements (between Sacramento and Graham Streets), including: Planted median, undergrounded lighting, curb cuts, and removal of on-street parking	-- HCD Eligible and LEAA Lighting Grant; sodium vapor/major portion of Area 2 improvements budgeted as part of first year.
-- Area 4 Improvements (between Holman and Bryant Streets), including: Planted median, undergrounded lighting, curb cuts, and removal of on-street parking	-- HCD Eligible and LEAA Lighting Grant (same as above)
E. Public Parking Lots -- For areas where on-street parking is precluded	-- HCD Eligible Assessment District
F. Demolition Loan Fund -- Clearance of abandoned structures	-- HCD Eligible
G. LID Projects -- Area 4; Grand Street	-- HCD Eligible
H. Acquire one parcel for North Precinct	-- HCD Eligible; EDA Public Works Grant

Similar coordination should take place at the State and local levels. After this process has been completed, the implementation team will have the data necessary for reaching a realistic decision as to what funds are to be required/available for which strategies or group of activities.

Once such a determination has been reached, at least tentatively, the role of the implementation team becomes that of coordination and assistance. This is particularly true in the case of Federal grants, where the responsibility for submission and administration will be clearly defined.

Since funding commitments must be obtained before strategies can be implemented, complete and precise information as to the steps necessary to receive funds from each source must be obtained. The need for properly scheduling documentation and implementation activities is discussed in Sections 6.6 and 6.7. Understanding the usually lengthy funding procedures is essential to their accomplishment. In the implementation of the CPTED Program demonstrations, major funding support was received from two Federal agencies -- the Law Enforcement Assistance Administration and the Department of Housing and Urban Development. With both agencies, the preparation of each request for submission took some four months of assistance and coordination, while the time lapse from formal submission of the request for funds until their receipt was about 4 to 6 months. Thus the time required *after* firm identification of the funding source was close to a year.

Often the holding of public hearings will be required before authori-

zation can be given to implement the physical modifications planned for the project. For a large CPTED project, it is not unlikely that almost a year will be required before any substantial physical strategies can be initiated, and the implementation team must actively coordinate and assist in the processing of requests if even that estimate is to be achieved.

6.5 Activity Development

In describing the implementation process, a series of terms is used to designate certain types of actions. The term *project plan* has been used to refer to the overall plan for accomplishing the CPTED project objectives. The term *strategy set* refers to those individual strategies that have been grouped under a single sponsor. In this context, the term *CPTED project* refers to the process associated with planning and implementing all strategies, and the term *activity* to those efforts related to implementing a strategy set. These distinctions are important since responsibilities and functions will vary with the topic being discussed in this chapter. There are actually two types of implementing teams associated with each activity. These are the CPTED project implementation team and the ad hoc activity implementation team formed to coordinate the implementation of each strategy set.

To aid in understanding the respective roles of the CPTED project implementation team and the activity implementation team, a convenient approach is to say that their roles reverse, depending upon the effort being discussed. The project implementation team has lead responsibility

for implementing the CPTED project plan, and the activity implementation team is responsible for technical support. At the activity level, these roles are reversed, with the project implementation team providing the technical assistance and support to the activity team that has the responsibility. In some cases, the project implementation team may also undertake direct responsibility for implementing an activity, as in the social strategy area, or for inspection and documentation.

While these distinctions are real in a real-world situation, the project implementation team must accept responsibility for any tasks required to successfully implement an activity that are not accepted by the official activity sponsor. This normally means that the activity sponsor will accept responsibility for completing those tasks normal to his area but will request assistance in matters unfamiliar or foreign to him.

For example, the design of improved lighting fixtures, calculations of costs, estimates of maintenance, and scheduling are routinely done by the local lighting authority. The authority is competent to accomplish these portions of a grant request and would seldom relinquish its prerogative. However, writing the justification for the grant, obtaining the necessary administrative signatures, and lobbying for its approval are areas where the authority is normally less involved and where the assistance of the implementation team will be welcomed.

6.6 Project Integration

It is unlikely that any CPTED project will consist of only one

series of activities -- that is, that all actions can be planned on a sequential basis for each strategy as the previous task terminates. Rather, the normal situation will be that a series of activities are progressing simultaneously and that each is in a varying degree of completion. The degree of interrelationship between each such series can be determined only on an individual project basis; however, it is normal that such relationships will exist. While these interdependencies may not be so apparent as when the newly paved street is dug up for the new sewer line, they will be present and ignoring them can lead to needless criticism, together with extra effort and delay.

The methods for coordinating and integrating a CPTED project are the same as those employed for any integrated activity. First, the steps necessary to accomplish each activity and task are determined and an activity schedule prepared. These are then used to develop a master schedule showing graphically what needs to be accomplished and its timing. Once this is done, interrelationships are established and a project milestone list compiled. After these are developed and a method established to record and track actual-versus-planned progress, the basic management tool is ready. Examples of a project planning and implementation schedule and a project activity schedule are shown in Figures 6-2 and 6-3 respectively. These are extremely simple versions and intended to show gross relationships only. However, kept up to date and supported by individual project folders, they will highlight delays or imminent problem areas. Much more elaborate charts are possible,

CPTED PROGRAM	1974		1975												1976				
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
PREPARE, REVISE, AND OBTAIN APPROVALS FOR DEMONSTRATION PLAN																			
OBTAIN IMPLEMENTATION FUNDING																			
IMPLEMENTATION																			
DEMONSTRATION IN PLACE AND OPERATING																			
CPTED EVALUATION																			

Figure 6-2. Project Planning and Implementation Schedule for the Portland Demonstration

up to and including those showing PERT (Program Evaluation and Review Technique) relationships. In general, it is prudent to construct as elaborate a series of visual aids as possible, since they also will serve as briefing aids for the decisionmakers. It is also recommended that a pessimistic estimate of time requirements be made, since delays are rather more common than early completions.

6.7 Dissemination

An area that can serve beyond its intrinsic value either to enhance or degrade the CPTED project effort is dissemination. Anything that can serve to decrease crime is newsworthy, and the project will receive publicity whether desired or not. If the project is well conceived and properly presented, this publicity will be favorable. However, even if the report itself is favorable, it can result in an unfavorable impact if the timing is wrong.

Nothing can serve to foster criticism more than unrealized expectations, unless it is failure to be informed of an action impacting upon one's profession or life style. Therefore, dissemination should be viewed as a project function at least equally as important as identifying funding sources and strategy sponsors. As with the other functions, it requires planning and preparation. Every project has a story to tell, and every project will receive publicity. If the project's story is available and attractively presented, it is most likely to be heard. If not, negative aspects may be presented instead, since criticism is often the easier path to follow.

The end result of dissemination is public awareness of the project -- its goals and its accomplishments. The public can be reached through a variety of ways, such as:

- Media (newspapers, television).
- Group public interest meetings.
- Handouts and mailings
- Government meetings (council deliberations).
- Signs ("This Improvement Being Supported By...").
- Educational institutions.

Effective use of each of these means of dissemination requires preparation on the part of the implementation team. While there can be many variations, this preparation should result in "hard-copy" descriptions of the project (to be handed out or mailed whenever the occasion presents itself) and in the development of a presentation, with slides or other visual aids, that can be given to interested groups.

Hard-copy descriptions should be up-to-date and aimed at the potential audience. At a council meeting where implementation plans are being discussed, a presentation could be offered to the council and a fairly comprehensive handout provided to the press. Neighborhood handouts could be aimed at encouraging participation in blockwatch groups, while those at public meetings held to discuss zoning changes would concentrate on potential neighborhood improvements.

Other, less orthodox, methods of keeping a CPTED project in the public awareness are the use of signs giving credit for physical improvements

to the project, and sponsoring discussions on a local public-interest radio or television program. How-to messages can also be designed and provided to local area publications. Notices can be displayed that serve as a reminder of the project and encourage local participation.

The implementation team should also remain conscious of any significant ethnic group(s) in the area where English is not the sole language, and prepare notices and instructions in appropriate languages. Above all, notices and articles should be scheduled around events where *accomplishment* can be shown. Unfulfilled expectations of improvements will quickly lead to criticism of and disillusionment about the worth of the project.

6.8 Records and Reports

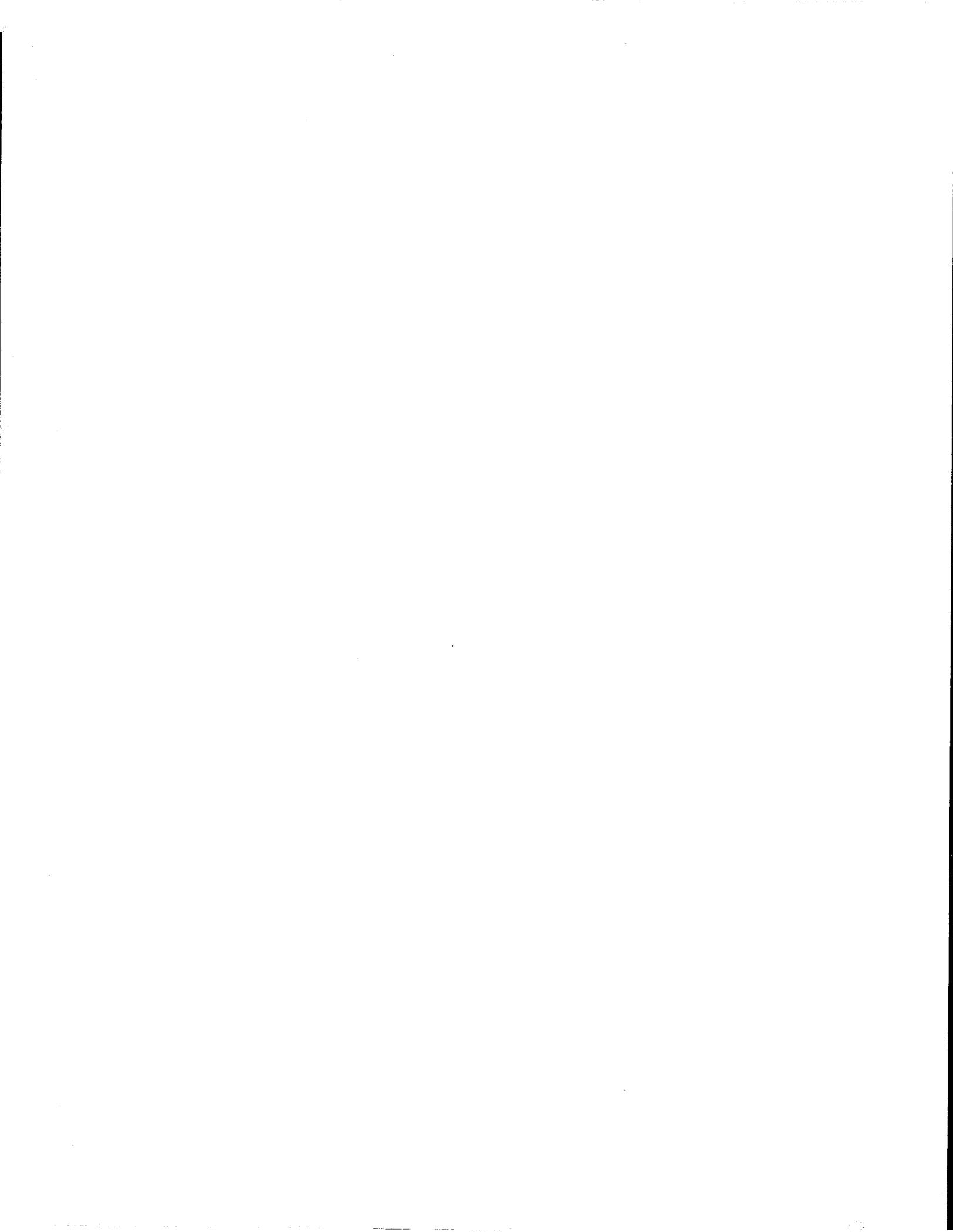
The maintenance of records and the generation of reports are as vital to the management of a CPTED project as to any other complex and continuing enterprise. As in other fields, records and reports are required to fulfill legal requirements, to record agreements and discussions, to serve as a basis for evaluating the progress made, and to enhance replication. Required will be financial records supporting the expenditure of funds, minutes of meetings, trip and conversation memorandum, and periodic reports to the enabling authorities.

Any jurisdiction will have an established system calling for periodic reviews of major projects and administrative policies or preferences as to how such reports will be prepared. Other well-defined requirements will be established as requirements for the

provision of funds. Care should be taken that records and reports are used to keep project participants informed as to the current status of each element of the project. Circulation of such reports will:

- Provide information and guidelines to those assigned to the project.
- Allow those assigned to check data for consistency and errors during the data collection period.
- Monitor secondary and unpredicted events.
- Obtain qualitative views on the effectiveness of the planning or implementation process and various strategies.
- Allow revision of procedures based upon reports as to effectiveness.

Evaluation reports should be prepared on a regular basis and the results furnished to all interested parties. These reports should be designed to furnish information on the system process, system costs, and system results. Community participants should also provide periodic reports to the evaluator as to citizen reaction, changes in the baseline conditions, and other variables that may impact the project. Based on project feedback and evaluation reporting, the project implementation team should constantly reevaluate strategies and should refine, amend, or change them as appropriate, depending upon their effectiveness in achieving the established CPTED project goals and objectives.



END