The idea of smart growth is to reverse what we regard as the undesirable impacts of suburban sprawl, such as inner-city neglect, heavy traffic, and the loss of our natural environment. While various groups differ somewhat in their particular concerns and in their definitions and use of the term “smart growth,” we can all agree that the improvement of safety and the perception of it in existing downtowns and residential areas is paramount to achieving common smart growth initiatives—particularly those that seek to redevelop inner-city areas and that encourage people to walk and use public transit. All smart growth initiatives require environments where people feel and are safe.

Not coincidentally, “safe” areas tend to be places with the greatest sense of a cohesive community: areas that are active, attractive, and functional and that support the needs of residents, businesses, and visitors. Design fulfills a critical function, and designing for safety means designing for community.

How is this kind of design achieved? Many people have heard of crime prevention through environmental design, commonly referred to as CPTED, but now many CPTED practitioners have gone beyond the basic principles. Their goal is to craft a framework on which to build safer places by creating more visible neighborhoods.

Safe and Unsafe
Where to begin? First, it’s important to understand the answer to the question “What makes people feel unsafe?” Over the past 10 years, my partner, Stan Carter, and I have conducted CPTED training throughout the United States. We ask participants this very question, and typical responses have included:

- Dark and isolated areas.
- Areas that are hidden from view or that allow for concealment.
- Vacant, abandoned, and unkept properties.
- The perception of being lost.
- Crowding and congestion.
- Restricted spaces.
- Overgrowth of vegetation.
- Signs of vandalism.
- Illegal activities.
- Loitering and panhandling.
- Lack of access to assistance.
Conversely, “safe” areas are clean, orderly, and well-lit places where people follow the rules, buildings are occupied and actively used, and ownership is demonstrated through well-kept grounds, gardens, artwork, and preserved historic features. Other noted factors include the presence of authority or access to assistance.

Basic CPTED

Many undesirable environmental conditions, and even disorderly behavior, can be reversed through fairly simple design, maintenance, and management strategies, commonly referred to as CPTED practices. This concept was introduced by Professor C. Ray Jeffery in his book of the same title. In present-day use, the CPTED concept incorporates both Jeffery’s contention that the physical environment is as important as the social environment and Oscar Newman’s precept that people care for what they believe is theirs—giving rise to the importance of territoriality.

Both Newman and Jeffery have been influenced in part by Jane Jacobs’s famous book *The Death and Life of Great American Cities*. Since Jacobs’s book was published in 1961, a variety of theories, concepts, and strategies have developed that seek to minimize the chances for crime and to maximize the opportunities for positive social interaction.

Timothy D. Crowe, criminologist, in his book *Crime Prevention Through Environmental Design*, expands upon the assumption that “the proper design and effective use of the built environment can lead to a reduction in the fear of crime and the incidence of crime, and to an improvement in the quality of life.” Crowe promotes the use of three basic concepts: natural surveillance, natural access control, and territorial reinforcement.

**Natural surveillance.** The placement of physical features, activities, and people in such a way as to maximize visibility. [Includes] the lighting of public spaces and walkways at night.

We feel and are safer when our activities and those of others can be monitored. Creating opportunities for casual surveillance can be accomplished with design features and the placement of activities.

**Natural access control.** The physical guidance of people coming to and going from a space, by the judicial placement of signs, entrances, exits, fencing, landscaping, and lighting.

Barriers can be real or symbolic. The goal is to clarify acceptable routes. Clarified access assists the first-time user by providing direction, raising comfort levels, and reducing the vulnerability associated with feeling lost. At the same time, trespassing and unacceptable entry are more easily recognized.
**Territorial reinforcement.** The use of physical attributes that express ownership, such as fences, pavement treatments, art, signage, landscaping, and the placement of buildings.

The idea is to define clearly the private, semiprivate, and public spaces. Good border definition provides visual cues as to ownership and acceptable behavior. Property that is enhanced is perceived as cared for and therefore looked after. Likewise, ownership or a sense of proprietorship can be increased by the participation and physical representation of a target population. Examples include displays of student art in schools, historic preservation projects, community gardens, and cultural themes in transit stations.

In addition to these three basic CPTED strategies, consideration must be given to maintenance, which often is included as a fourth principle.

**Maintenance.** Allows for the continued use of a space for its intended purpose and serves as an additional expression of ownership.

**Beyond the Basics**
The design, use, and maintenance of a space can reduce opportunities for crime, enhance comfort, and have an overall positive impact upon quality of life. Design alone, however, cannot resolve all public safety issues associated with declining neighborhoods and downtowns.

A successful program must consider social and economic factors and their relationships with disorderly and criminal behavior. Efforts to do this have resulted in an expansion upon the basic CPTED principles discussed above.

**Community CPTED**
This author, working with another company on a financial sustainability study for the city of Sarasota, Florida, has developed a model by which selected physical, social, and economic factors can be examined in relationship to one another. These relationships then can be used both to predict a pattern of increasing disorder and criminal behavior and to form the basis for specific countering strategies appropriate to the target area. I call this model community CPTED. It’s a process that can be applied to a small or a large area and is particularly useful for residential neighborhoods.

The process begins with a review of basic demographic data for households: educational attainment, income, composition, and housing type and value. This review is followed by an examination of land use mix and spatial distribution of assessed values. Calls for law enforcement services and code violations are plotted, and traffic patterns and volume are determined. These steps begin the identification of problem areas.
Next comes the field survey. The following circumstances are noted on maps: the condition of public and private facilities; the condition of transitions between land uses, particularly residential and business; transportation patterns; and social patterns. Physical conditions that support order and community and those that disrupt them are identified.

The physical data are compared with the demographic and public service data compiled earlier. Finally, public opinion is sought and used in developing customized recommendations for combined strategies to address the physical, social, and economic issues.

Here are two examples of problems described in the Sarasota study, with related recommendations:

**Negative traffic impacts.** In all residential areas, a notable factor relating to neighborhood cohesion, homeownership, and physical deterioration was the manner in which roads were widened, along with the amount and speed of traffic moving through, next to, or around residential areas. Routine road improvements had destroyed the residential quality of many older neighborhoods.

Left were fragmented, dysfunctional residential sections with ill-defined boundaries and with little hope of improving on their own. Two key recommendations, which would require the involvement of the affected citizens, working with planning and design assistance, included:

- Creating identity and a sense of pride by improving and defining boundaries; enhancing the public space with signage, landscaping, and historic or cultural connections; and involving local children and artists in these efforts.
- Streetscape improvements to mitigate the impacts of roads and traffic. Might include traffic-calming neighborhood entry features and suitable buffers along heavily traveled roads.

In general, both strategies reinforce the sense of community by fashioning a more orderly and secure environment that promotes positive social interaction. These improvements make a neighborhood more attractive to newcomers and enhance the quality of life for existing residents.

**Low educational attainment.** The level of household educational attainment was a factor consistently found to be related to income, the physical deterioration of both personal and public property, and disorderly and criminal behavior. Low levels of education and skills were directly related to people’s ability to provide for themselves, their families, and their neighborhoods.
Improving the appearance and function of the neighborhood could have a positive effect by bringing in better role models and raising the personal self-esteem of residents. But a successful program also would include youth development and adult education opportunities. Also, given an aging housing stock, shortages in the construction industry, and limited job opportunities for non-college-bound youth, training in the construction fields was specifically recommended.

Overall, implementation for such programs requires a trained staff, collaboration between and among governmental departments, and meaningful public participation. Benefits include the enhancements of physical, social, and economic conditions that support smart growth initiatives.

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