Crime Prevention Through Environmental Design [CPTED]:
Designing Out Opportunity and Fear

January 2018

Kayla Macano
Research Associate
Center for Public Safety Initiatives
Rochester Institute of Technology
kmmgcj@rit.edu

Janelle Duda-Banwar
Research Associate
Center for Public Safety Initiatives
Rochester Institute of Technology
jmdgcj@rit.edu

John Klofas, PhD
Director, Center for Public Safety Initiatives
Rochester Institute of Technology
John.Klofas@rit.edu
Crime Prevention Through Environmental Design [CPTED]

Overview

Crime Prevention Through Environmental Design [CPTED] is an activity that often includes a wide variety of law enforcement and community stakeholders. CPTED is a problem-oriented policing strategy that focuses on how an environment can create or promote opportunities for crime. This strategy may be defined as a proactive or reactive activity which uses or modifies existing aspects of the environment, or modifies the environment, to decrease the likelihood of criminal activity. As a proactive activity, this may occur as new housing complexes or city and public buildings are being planned and constructed. When reactive, it is likely to be a response to a particular event or series of events such as break-ins or robbery. Environmental changes may be modifications to physical structures or vehicular or pedestrian traffic flow. They may entail “target hardening” by modifying access points, installing spot lights or adding video surveillance. Modifications may involve broader changes to the surrounding environment, such as cleaning up communities, modifying street lighting, fixing broken windows, adding parks and recreation or encouraging outdoor communal social activities.

Supplementary Description

In describing the potential value in CPTED, Cozens et al. state “the proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime, and an improvement in the quality of life.” (2005, p. 329). CPTED is theoretically based on the concept of opportunities. The theory proposes that a crime occurs because opportunities are provided in the environment. If you ‘design out’ opportunities, you design out crime. Describing the range of CPTED components can be complex, but the research presented in this paper will present the strategy in six general headings (see Figure 1); it is important to note that these six principles are not always mutually exclusive (Cozens et al., 2005).

CPTED Components

The following six components of CPTED, defined by Cozens et al. (2005) will likely overlap; they are related and are often used simultaneously. The main components include territoriality, surveillance, access control, image and maintenance, activity support and target hardening.
Territoriality

Also referred to as territorial ownership, this design component aims to clearly identify ownership of land or property, which can be done in a variety of ways. Some ideas may include ‘symbolic barriers’ and ‘real barriers’ (Cozens et al., 2005). Territoriality designs reinforces a ‘sense of ownership’ for legitimate users, and discourages illegitimate users by reducing opportunities to offend.

**Symbolic barriers.** Examples of symbolic barriers include signage, gardens or other landscaping (see Figure 2). Signs may depict ‘private property’ or ‘neighborhood crime watch’ to deter illegitimate use, while gardens and landscaping can show that someone cares about the property and keeps it up, such as hedging to block off public property from private areas.

**Real barriers.** A step up from a hedge row, fences present a physical barrier to show territorial ownership (refer to Figure 3). Real barriers involve design to delineate between private, semi-private and public areas (e.g., sidewalk materials changing from a public walkway to a business’s sidewalk).

Surveillance

This component is defined as opportunities to see, and/or be seen from the perspective of potential offenders. The perception of being seen can act as a deterrent to a potential offender, and the heightened risk may outweigh any possible reward. There are three main types of surveillance that can be implemented: formal, informal and mechanical.

**Formal (organized).** Provided by local stakeholders (storeowners, security guard, etc.), and often referred to as guardianship, can be done by closely observing behavior and activity of patrons and passersbys (example in Figure 5). Extra police patrols can also provide a form of organized surveillance.
Informal (natural). Offenders are less likely to target areas that are easily seen and readily overlooked. Lighting, shrubbery, high fences that do not provide total concealment (e.g., tall wooden fencing), self-surveillance of residents and store owners through windows all offer natural surveillance. An example of natural surveillance is depicted in Figure 4.

Mechanical. CCTV, other security cameras and lighting can all fall under the category of mechanical surveillance; refer to Figure 6.

Access Control

The third primary concept of CPTED necessitates the creation of physical or perceptual barriers to restrict or redirect movement within a location (this can be in line with or related to territoriality). These are meant to deny access to potential target, or only allow permitted individuals entry and exit (Cozens et al., 2005). Examples include widening walkways, clear enter and exit routes (Figure 7), regulated access to certain areas (housing complex), automatic gates or turnstiles to prevent evasion (Figure 8), and bulletproof barriers at the bank.
Image / Maintenance

Up-keep of an area not only promotes a positive image, but shows guardianship (Figure 10); light fixtures, drives, paths, sidewalks, and gardens guide movement though the site but also open up the space so there are no areas for potential offenders to hide. Graffiti on public transit or buildings, ‘broken windows’ in residential or commercial buildings, and litter are all forms of disarray and negative images, and counteract social cohesion and informal social control, as shown in Figure 9 (Cozens et al., 2005).

Activity Support

Activity support promotes the use of the area by the target group, community, playing in the park, picnics. This includes design and signage to encourage the intended patterns of use. “Although increased numbers of pedestrians may provide additional ‘eyes on the street’ and potentially discourage some offences, this may also actually encourage and provide other targets for crime (e.g. pick-pocketing)” (Cozens et al., 2005, p. 337).
CPTED: Designing Out Opportunity and Fear

Target Hardening

Directed at denying or limiting access to a target through use of physical barriers, target hardening is somewhat self-explanatory. This may include upgrading locks/points of access, reinforcing doors, installing locks on windows, etc. (see Figures 14 and 15). These design features can be supported by a physical security guard, CCTV, or guards when needed (Figure 16). Some criminologists argue that target hardening is its own component, while others argue that it is to be embedded within the other five ‘main’ components. Too much reliance on target hardening can result in a ‘fortress mentality’. “Crucially, excessive use of target hardening tactics can create a ‘fortress mentality’ and imagery whereby residents withdraw behind physical barriers and the self-policing capacity of the built environment is damaged, effectively working against CPTED strategies which rely on surveillance, territoriality and image.” (Cozens et al., 2005, p. 338).

Conclusions and Implications

These six concepts primarily apply to the physical design and environment. Arguments to refine the strategy argue to include more risk assessment, socio-economic and demographic profiling (Cozens et al., 2005). Despite the various arguments around the CPTED strategy components and inclusions, this can be a very effective approach to reducing opportunities to commit crime, while also decreasing the fear of crime that people experience. Future working papers will describe CPTED strategies specific to reducing open-air drug sales and use.

References