

# Crime Prevention through Environmental Design (CPTED)

Embodying this notion that clever design can create safer neighbourhoods, a set of design principles known as crime prevention through environmental design (CPTED) have been gaining popularity with planners and security professionals around the world in recent years.

The four main principles of CPTED are:

- Natural Surveillance
- Natural Access Control
- Territorial Reinforcement
- Maintenance

When these principles are put into practice, the resulting environment should discourage or impede criminal behaviour, while at the same time encourage the rest of the community to keep a watchful eye.

## **Natural surveillance**

Natural surveillance increases the perceived danger of attempting criminal activity by making potential offenders more visible to the general public. When aware that they could be being watched, potential offenders feel there is an increased risk of being caught, which acts as an effective deterrent.

Natural surveillance can be achieved by designing the placement of physical features, activities and people in such a way that maximises visibility of the space and its users.

Tactics can include designing streets and public spaces to increase pedestrian and bicycle traffic, ensuring potential problem areas, such as pathways, bus stops and ATMS, are well lit, and positioning windows in new buildings to directly overlook pavements and carparks.

## **Natural access control**

Natural Access Control is another design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating a perception of risk for offenders.

People are physically guided through a space by the strategic design of streets, sidewalks, building entrances, landscaping and neighbourhood gateways. Design elements are very useful tools to clearly indicate public routes and discourage access to private areas.

### **Territorial reinforcement**

Territorial reinforcement is a design strategy that recognises that physical design can create or extend a sphere of influence over a property or space. When a space is clearly marked as public, semi-public, or private, it creates appropriate ownership of that space.

Owners have a vested interest and are more likely to challenge intruders or report them to the police. This means it's important to try to create public spaces that residents feel they have some ownership of and are therefore more likely to defend.

### **Maintenance**

As the broken windows theory suggests, it is vitally important to keep urban environments well-maintained. Proper care and maintenance enable the continued use of a space for its intended purpose, while any deterioration indicates a greater tolerance of crime and disorder.

### **Designing public spaces**

While a lot of planners and architects are now incorporating these CPTED strategies into the design of new buildings and residential developments, they can also be applied fairly easily to existing public spaces, without the need for them to be totally redesigned.

All of the CPTED design principles can be achieved through the creation of clearly designated, functional public spaces that are well-maintained and enjoyable to use. By ensuring that the design of these spaces fosters positive social interaction, local authorities can successfully decrease the likelihood of anti-social or criminal behaviour.

Pedestrianising certain areas through the addition of fixed bollards and barriers creates spaces that are clearly intended for public use, helping to create a sense of ownership of the area among the local community. Pedestrianisation can be used to transform previously uncared for urban areas into bustling multi-functional spaces that are more likely to be consistently occupied throughout the day and can be used to host a variety of community events, which helps to achieve natural surveillance.

Bollards and barriers can also be placed strategically to differentiate public and private spaces, for example around the entrances of office buildings or to create defined walkways, encouraging correct use of the environment through natural access control and territorial reinforcement.

Attractive street furniture items are another easy way for local authorities to encourage interactivity between visitors, residents and the streetscape. Benches and planters help to create aesthetically pleasing, practical spaces that can be used by residents and visitors alike. Adding plants and flowers signifies that particular care and attention has been put into an area, which also deters criminality.

As an additional security benefit, these simple bollards and street furniture items can have hostile vehicle mitigation technology embedded within them. This protects users of the spaces and nearby businesses from possible vehicle ramming attacks and contributes to the overarching sense of ownership and care of an area.

For local authorities looking to prevent crime through environmental design, carefully selected security measures such as these can simultaneously facilitate natural surveillance and natural access control, by encouraging people to use the spaces in positive ways, while also creating the impression that the environment is well maintained and looked after, which should help to successfully keep crime levels to a minimum.