Safety and Surveillance

Active frontages and people friendly design enhance safety and surveillance
Subiaco Square, Perth
Source: TPG Town Planning & Urban Design

Definition
Perceptions of personal safety, as well as actual safety, influence the extent to which places and spaces are used. The design of streets and places can reduce crime and anti-social behaviours making places and spaces feel safer, which in turn can enhance the physical, mental and social well-being of community members. The presence of pedestrians, the thoughtful design of housing, other buildings and public spaces has the potential to increase natural surveillance, which improves safety and feelings of safety. This is one of the key principles of ‘Safer Design’ or ‘Crime Prevention Through Environmental Design’ (CPTED) (see reference section of this fact sheet for further guidelines on this subject). While the focus of this fact sheet is on the key aspects of design relating to personal safety from a crime perspective, pedestrian safety from vehicular traffic is also relevant as it facilitates pedestrian movement and therefore increases street activity.
Overview
The design and layout of streets and places can influence how safe they are. Aspects of urban design that influence safety include design that maximises surveillance and clear sightlines, mixes of land uses and activities, building design, the location and design of fences and walls to define ownership boundaries, and the quality of design and maintenance of landscaping, lighting and signage. Good management of buildings, spaces and streets also increases safety. Suitable materials can reduce vandalism and graffiti, while good maintenance also reduces property related crime and consequently improves perceptions of safety. Community involvement in planning and design of neighbourhoods is also important as it can increase feelings of ownership and interaction and therefore, surveillance by local residents.

Why?
Public spaces, walking and cycling routes, entrances and exits to buildings and public transport facilities that are designed for pedestrian traffic safety, maximise feelings of safety and reduce crime and anti-social behaviour, improve perceptions of safety, encourage greater use and thereby, increase levels of physical activity. Well-designed and maintained places facilitate community members meeting and socialising in public places, enhance social capital and increase the likelihood of people feeling safe and secure (Whitzman 2008, p. 234; Foster 2008). Communities with more target hardening infrastructure (security measures such as bars on windows) can decrease feelings of safety.

Adequate infrastructure supporting safety such as signage and lighting, as well as seating, shade and shelter, encourages people to use facilities, thereby supporting activity and social interaction. These features contribute to the physical and mental health of the community.

Signage to support walking to school
Source: Planning Institute of Australia
How?
Urban planning and design policies and practices that include Safer Design or Crime Prevention Through Environmental Design (CPTED) in State and local government guidelines will facilitate appropriate design of buildings and public spaces. Some of the specific considerations include the following:

- Design streets to increase the presence of people, with adjoining buildings designed so that people have a good view of public space (Jacobs, 1961, p.46).
- Design buildings to provide natural surveillance of the street. For example, windows overlooking footpaths, and building entrances facing the street that are easily visible and accessible from the street frontage and other building exits that are lit and have direct links to car parks and footpaths.

Higher density housing and retail and restaurant uses with active frontages to public spaces
Source: Planning Institute of Australia

- Ensure facilities including footpaths and parks are well maintained, that routes have good sightlines to entrances and exits, that landscaping is pruned to ensure that sightlines are clear and opportunities for surveillance are enabled.
- Locate parks, play areas and public open spaces so they are visible from adjoining buildings such as houses, streets and schools.
Artificial lighting of public spaces and routes used at night can improve safety and surveillance and increase usage (Clarke in Tonry and Farrington, 1995, p116).

Design car parks to maximise natural surveillance and pedestrian visibility and ensure that there is safe and convenient pedestrian access.

Consult existing communities to ensure that the most direct and potentially safe routes are identified and the design and materials are appropriate for special needs groups such as mobility impaired people.

Provide continuous footpaths and cycle routes within road reserves, and with traffic speed limits and crossings to facilitate walking and cycling. Reducing speed from 60km/h to 50km/h can result in a reduction in pedestrian fatalities of over 25 per cent (McLean, no date). In residential areas speed limits of 30-40 km/h are common in Europe and increasingly common in Australia.

Provide street crossings on busy streets, along direct, preferred routes for pedestrians and cyclists, to schools, shops, parks and public transport stops.

Encourage

- Neighbourhoods with a mix of land uses to increase the level of activity on the street.
- Shopping centres and public transport settings with good footpath and cycle route connections between them, and to, adjoining neighbourhoods for safe use during the day and after hours.
- Buildings being designed to provide natural surveillance, with windows overlook streets, public spaces (e.g. parks), public transport stops and car parking areas, and where possible provide a mix of uses at ground level.
Bus stops being located in areas where there is natural surveillance from surrounding buildings and homes.

On-street car parking to calm traffic speeds, support retail and commercial businesses, and provide a buffer between pedestrians and roads.

Avoid

- Isolated, physically segregated residential developments or ‘gated communities’ or a ‘fortress’ approach to dwelling, neighborhood and shopping centre design.
- Dominant use of cul de sacs in residential areas, particularly curved cul de sacs which increase walking distances between residential homes and local facilities and increase motor vehicle use, particularly in areas where pedestrian cut-through paths are not provided. Be aware that unless pedestrian cut-through paths are well designed to increase surveillance, property crime in the cul de sacs is likely to increase as well as levels of fear for those in the cul de sacs.
- Use of pedestrian underpasses that reduce opportunities for natural surveillance.
- Blank walls and fences, car parks and service areas that separate the fronts of buildings from the street, and excessive widths of garage doors fronting streets.
- Locating bus stops alongside blank walls and fences that provide no natural surveillance.
- Dense vegetation and shrubs around pedestrian routes.
- Dissection of residential neighbourhoods by heavily trafficked roads.

Long blank walls and barriers in a shopping centre create a ‘fortress’ that is not conducive to safe walking.

Note- there is a residential area on the right but direct access to the shops is not possible in this location.

Source: Planning Institute of Australia
Access between car park and shops—it has poor visibility, no natural surveillance, poor sightlines, narrow and no lighting. This results in conflict between pedestrians and vehicles.

Source: Planning Institute of Australia

REFERENCES


