

National Guidelines for Crime Prevention  
through Environmental Design in New Zealand

# Part 1: Seven Qualities of Safer Places

**N Z** URBAN DESIGN PROTOCOL





## Who should read this?

This document is primarily for planners and designers working for local authorities.

It should also be read by police and those involved in crime prevention activity (such as local crime and safety managers, chairs and co-ordinators of Safer Community Trusts) as well as architects, urban designers, engineers, planners and building managers involved in planning, designing and managing publicly accessible places.

Information on implementing Crime Prevention through Environmental Design can be found in the companion guide: *Part 2 – Implementation Guide*.

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Thanks to the Ministry for the Environment, New Zealand Police and all the workshop participants from Dunedin, Christchurch, Wellington and Auckland. Their involvement helped to focus the National Guidelines and to fine-tune these documents.

We thank the many researchers and practitioners in the field who played an important role in reviewing the National Guidelines, providing valuable comments and giving written submissions that substantially improved the final product.

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### NATIONAL TASKFORCE

Please refer to the glossary on page 37 for membership.

# ■ ■ Foreword

The Ministry of Justice is committed to creating a healthy, enjoyable and safe environment for New Zealand citizens and visitors.

Reducing crime and building safer communities is a priority for all New Zealanders. Research and practical examples show that crime and the fear of crime can be significantly reduced by implementing appropriate environmental design strategies in the community.

That is why I am pleased to introduce the *National Guidelines for Crime Prevention through Environmental Design in New Zealand* to local government, urban planners and designers, and the police and others involved in crime prevention.

The National Guidelines outline how urban planning, design and place management strategies can reduce the likelihood of crime and deliver numerous social and economic benefits in the long-term. Places that are safe and feel safe are vibrant – they attract people, activity and positive social interaction. Popular places are also better for business, with high pedestrian counts reflected in higher turnover, employment, profit and investment.

The National Guidelines were developed under the *National Taskforce for Community Violence Reduction*, led by Local Government New Zealand. The comprehensive membership of this group demonstrates the commitment of government and non-government organisations to work together to reduce crime. The National Taskforce and its work programme were established as part of the *Safer Communities Action Plan to Reduce Community Violence and Sexual Violence* released by the Ministry of Justice in June 2004.

The Ministry of Justice has drawn on the experience of many people and organisations in developing the National Guidelines. I thank these people for sharing their knowledge and experience in effective crime prevention through environmental design. Without their help and assistance, the National Guidelines would not have been possible.



**Hon Mark Burton**  
Minister of Justice  
Minister of Local Government

# ■ ■ Introduction

Crime and the fear of crime are real and important issues for people in New Zealand. They affect people's quality of life – people may avoid going out at night or stay away from particular areas because of their fear of crime. This in turn has important economic consequences as people choose to avoid certain retail and entertainment areas in favour of those that are safer or perceived as safer.

Although the role of law enforcement and punishment in tackling crime is widely recognised in our society, there is growing recognition of the significant role that crime prevention can play in managing and reducing New Zealand's crime problems.

Crime prevention takes many forms and New Zealand's local authorities approach crime prevention in different ways and with different emphasis. One of these approaches is Crime Prevention through Environmental Design (CPTED). CPTED provides a framework for incorporating crime prevention within quality urban design by focusing on reducing the opportunity to commit crime, therefore lessening the motivation to offend.

While many local authorities are already using CPTED concepts in their work, the National Guidelines for CPTED in New Zealand now provides all local authorities with an opportunity to introduce these concepts in ways that are appropriate to the New Zealand context. This document introduces seven qualities of safer places (qualities that will improve the urban environment while reducing crime and the fear of crime) it establishes the benefits of CPTED and it suggests possible organisations to involve and their roles. The Ministry of Justice hopes those involved will find the National Guidelines helpful in achieving safer places that all residents and visitors enjoy.





## ■ □ What is CPTED?

CPTED<sup>1</sup> is a crime prevention philosophy based on proper design and effective use of the built environment leading to a reduction in the incidence and fear of crime, as well as an improvement in quality of life. CPTED reduces criminal opportunity and fosters positive social interaction among legitimate users of space. The emphasis is on prevention rather than apprehension and punishment.

While crime occurs for many different reasons and cannot be prevented by well designed places alone, CPTED is an important tool with proven benefits. To be most effective, CPTED needs to be part of a broader crime prevention strategy that incorporates social, environmental and community development strategies.

There are four key overlapping CPTED principles. They are:

1. **Surveillance** – people are present and can see what is going on.
2. **Access management** – methods are used to attract people and vehicles to some places and restrict them from others.
3. **Territorial reinforcement** – clear boundaries encourage community ‘ownership’ of the space.
4. **Quality environments** – good quality, well maintained places attract people and support surveillance.

## The CPTED approach to design

There are three approaches to managing the physical environment in ways that will reduce the opportunity for crime:

- **Natural** – the integration of security and behavioural concepts into how human and physical resources are designed and used (e.g. border definition, windows).
- **Organised** – the introduction of labour-intensive security (e.g. guards, police, security patrols).
- **Mechanical** – the introduction of capital or hardware-intensive security (e.g. locks, closed circuit television, lighting).

CPTED emphasises the employment of natural strategies where possible, so that crime prevention is integrated into design. More formal and expensive mechanical strategies are a last resort, when other options are unsuitable.

<sup>1</sup> Definitions of text highlighted in this document can be found in the glossary on pages 36 to 38.

## ■ ■ What are the National Guidelines?

CPTED's four principles of surveillance, access management, territorial reinforcement and quality environment form the foundations of the National Guidelines for CPTED in New Zealand.

The National Guidelines aim to:

- encourage local authorities to adopt, develop and implement their own crime reduction guidelines by providing them with a framework from which to start
- raise public awareness of crime prevention and safety and its link to the built environment
- promote the value of crime prevention design as a key component of good urban design
- achieve more attractive and vibrant public physical environments, which enhance public safety and reduce opportunities for criminal offending.

The National Guidelines define seven qualities that characterise well designed, safer places:

### 1. Access: Safe movement and connections

Places with well-defined routes, spaces and entrances that provide for convenient and safe movement without compromising security.

### 2. Surveillance and sightlines: See and be seen

Places where all publicly accessible spaces are overlooked, and clear sightlines and good lighting provide maximum visibility.

### 3. Layout: Clear and logical orientation

Places laid out to discourage crime, enhance perception of safety and help orientation and way-finding.

### 4. Activity mix: Eyes on the street

Places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times by promoting a compatible mix of uses and increased use of public spaces.

### 5. Sense of ownership: Showing a space is cared for

Places that promote a sense of ownership, respect, territorial responsibility and community.

### 6. Quality environments: Well designed, managed and maintained environments

Places that provide a quality environment and are designed with management and maintenance in mind to discourage crime and promote community safety in the present and the future.

### 7. Physical protection: Using active security measures

Places that include necessary, well designed security features and elements.



## ■□ The benefits

The purpose of the Local Government Act 2002 is to make local authorities responsible for promoting the social, economic, cultural and environmental wellbeing of their communities. This includes playing a part in reducing crime. Local authorities are also responsible under the Resource Management Act 1991 for the sustainable management of natural and physical resources. This means managing the use, development, and protection of natural and physical resources in a way (or at a rate) that enables people and communities to provide for their social, economic and cultural wellbeing, and for their health and safety while avoiding, remedying or mitigating adverse environmental effects. This responsibility includes public streets, public places (such as parks, playgrounds and public conveniences) and the interface between public and private development. The National Guidelines help local authorities to fulfil their statutory responsibilities.

### **SAFETY AND SECURITY ARE ESSENTIAL TO SUCCESSFUL COMMUNITIES**

Successful communities are places where people live, work and enjoy life in the knowledge that they can do so safely. Places that are safe and feel safe are vibrant and attract people, activity and investment.

### **SAFE DESIGN ENHANCES THE QUALITY OF THE ENVIRONMENT**

Safe design not only enhances public safety, it also adds to the attractiveness and use of the environment. Many safe design principles reinforce fundamental principles of good **urban design**. Safe design can improve the quality of the environment in many ways. The National Guidelines help local authorities to develop **urban design** action plans required of the signatories to the New Zealand Urban Design Protocol (2005).

### **PLANNING FOR SAFETY MAKES SENSE FINANCIALLY**

Integrating safety at the outset of a development's design brings long-term social and economic benefits. Getting it right first time saves future costs of correcting or managing badly designed development. Safe popular places with high pedestrian counts are better for business, reflected in higher turnover, employment, profit, rents, capital values and rates.

### **INTEGRATED PLANNING MAKES A SIGNIFICANT CONTRIBUTION TO TACKLING CRIME**

Good design alone cannot be expected to solve crime. However, considered positive planning, particularly when co-ordinated with other measures, can make a significant contribution to safety. Taking an integrated approach to each development, where professional disciplines and key stakeholders work together, is important.

## ■ Who should be involved?

Crime prevention is complex. CPTED and wider crime prevention solutions are likely to be more effective if central and local government work in partnership with local communities, businesses and service organisations. The nature and scale of partnerships to promote safety from crime will vary according to local circumstances. The key partners are local authorities and the police.

### Key partners

ORGANISATION	ROLE
Local authorities	<p>Local authorities are responsible for the design and use of public spaces. They have a key role to implement CPTED. In most cases it is anticipated that the local authority will initiate, lead and facilitate the partnership with the police and other groups. Other roles include:</p> <ul style="list-style-type: none"><li>▪ identifying community outcomes</li><li>▪ initiating major works in public areas</li><li>▪ managing public places and assets</li><li>▪ fulfilling responsibilities under the Local Government Act 2002 and Resource Management Act 1991.</li></ul>
Police	<p>Police play a key role by:</p> <ul style="list-style-type: none"><li>▪ sharing their knowledge of criminal behaviour, types and location of crimes</li><li>▪ providing intelligence on hot-spot areas (such as identifying trends in criminal activity)</li><li>▪ helping with crime prevention techniques.</li></ul>

## Other partners to consider

ORGANISATION	ROLE
Business and shopping centre owners and managers, especially local hospitality operators	<p>Often crime hot-spots are in retail, business or entertainment areas. Businesses in these areas can play a role in helping to better understand why crime is occurring and how it could be prevented.</p> <p>Some solutions may need businesses to play a more active role in crime prevention, particularly if this involves improving the design of publicly accessible places on privately-owned land.</p>
Neighbourhood Support groups, residents' associations, community boards	<p>These groups can help with:</p> <ul style="list-style-type: none"> <li>▪ better understanding what is happening in the local neighbourhood from the perspective of residents</li> <li>▪ identifying neighbourhood crime hot-spots and areas that trigger a fear of crime</li> <li>▪ identifying options for improvement</li> <li>▪ CPTED safety audits.</li> </ul>
Urban designers, planners, architects and landscape architects in the private sector	<p>Urban designers, planners, architects and landscape architects can contribute specialist knowledge to help achieve CPTED, both in new development and redevelopment projects.</p>
Community agencies, groups or service providers	<p>These agencies and groups can provide:</p> <ul style="list-style-type: none"> <li>▪ a perspective on crime from different sectors within the community including vulnerable people (such as victims of crime, people with disabilities, young people, children, older people, women, schools and preschools)</li> <li>▪ a perspective on the effectiveness of design options.</li> </ul>
Other organisations that could have a useful role	<ul style="list-style-type: none"> <li>▪ Ministry of Justice Crime Prevention Unit</li> <li>▪ Housing New Zealand</li> <li>▪ Māori and Pacific Island community groups</li> <li>▪ community patrols and Māori wardens</li> <li>▪ local hospitality operators</li> <li>▪ car park building owners</li> <li>▪ private developers</li> <li>▪ transport providers</li> <li>▪ schools</li> </ul>

## ■ The seven qualities for well-designed, safer places

The National Guidelines' seven qualities are not rules or universal solutions for every situation. Instead they focus attention on key issues to consider in relation to the needs of each local setting.

As the qualities overlap and reinforce each other, effective results can be achieved only when all qualities are considered together and applied appropriately to the local context. The seven qualities need to be considered throughout the planning and design process. It's particularly important that these are considered right from the early stages of a new development or redevelopment so that fundamental matters such as site layout and its relationship to the surrounding area are accounted for.

This section provides a summary of the key considerations associated with the seven qualities as well as an in-depth look at each quality. As the seven qualities overlap with one another, some of the considerations listed on the following pages may relate to more than one quality and not just to the quality in which they are listed.



## ■ □ Summary of key considerations

### ACCESS: SAFE MOVEMENT AND CONNECTIONS

- Clear routes are provided for different modes of traffic.
- Movement safety is maximised especially after dark.
- Safe access is provided between key destinations and **entrapment spots** eliminated.
- All routes are necessary and lead to destinations that people want to reach.
- Multiple exit points are provided from **public spaces** and along pedestrian routes.
- Consequences of the number and type of connections are carefully considered.
- Routes do not provide potential offenders with ready and unnoticed access to potential targets.

### SURVEILLANCE AND SIGHTLINES: SEE AND BE SEEN

- Good **visibility**, sightlines and casual **surveillance** are provided.
- Opportunities for **surveillance** from adjacent buildings are maximised.
- Building design creates opportunities for informal **surveillance** and incorporates crime reduction measures.
- **Concealment** and isolation opportunities are removed so that areas are active.
- **Concealment** spots are eliminated or secured with **visibility** aids incorporated where necessary.
- Fencing, landscaping and streetscape features are designed to help **visibility**.
- Efforts are made to eliminate 'inactive' frontages and corners.
- Lighting is a primary consideration and integral to the overall design.

### LAYOUT: CLEAR AND LOGICAL ORIENTATION

- Design and layout support safe movement and help with orientation and way-finding.
- Design and layout are appropriate for the identified crime risk, maintain or improve environmental conditions and enhance personal safety.
- Ground level building facades are of a high design quality and provide **active frontages** to the street (e.g. windows, doors, displays and visible indoor activity).
- **Public spaces** are of a high quality, serve a purpose and support an appropriate level of legitimate activity.
- Entrances and exits are clearly signposted and easily accessible.
- Signage is legible and informative of the surrounding development, public facilities and access routes.
- Landscaping supports **legibility**.

### ACTIVITY MIX: EYES ON THE STREET

- Informal **surveillance** is supported and the **legitimate use of public space** is maximised.
- **Mixed use/activity generators** are incorporated with various uses successfully integrated.
- Uses in an area are compatible with any potential conflicts being thoroughly addressed.
- Strategies for encouraging residential population in town and city centres are promoted.
- Encouraging appropriate night-time uses is considered.



#### **SENSE OF OWNERSHIP: SHOWING A PLACE IS CARED FOR**

- Spaces are clearly indicated as to whether they are public, communal, semi-private or private.
- Boundaries between these spaces are appropriately indicated to support their intended use.
- Elements that delineate ownership boundaries are well designed and do not restrict visibility.
- Property numbering and identification are incorporated within the design.
- Community engagement in the planning and design process is encouraged.
- People who feel ownership of a place are involved in defining its identity.

#### **QUALITY ENVIRONMENTS: WELL DESIGNED, MANAGED AND MAINTAINED ENVIRONMENTS**

- Care is taken to create good quality public areas.
- Appropriate management and maintenance systems are in place.
- Design and layout support management and maintenance.

- Materials and fixtures are vandal resistant.
- Users, businesses and residents are involved in management.
- Integrated approach to design, involving a range of disciplines, is taken.
- Alliances or partnerships between stakeholders are promoted.

#### **PHYSICAL PROTECTION: USING ACTIVE SECURITY MEASURES**

- Potential for target hardening measures to have a visually negative impact is carefully addressed.
- Barriers are designed carefully, of high quality and appropriate to their local context.

## ■ Access: Safe movement and connections

*Places with well-defined routes, spaces and entrances that provide for convenient and safe movement without compromising security.*

The success or failure of a place as part of a sustainable community is influenced by the nature and quality of its connections, particularly to local and wider services and amenities. Too few connections can undermine vitality; too many of them, especially too many underused or poorly thought out connections, can increase opportunities to commit crime.

Safe movement and access are strongly influenced by elements and spaces acting as **movement predictors** or **entrapment spots**.

Pedestrian tunnels and bridges, narrow passageways, moving escalators and staircases all serve as effective predictors of a user's route. Such **movement predictors** are of particular concern when they are isolated or end in **entrapment spots**. Eliminating and/or managing such elements and spaces are important for enabling safe movement.

The right level and type of access, resulting in places that are well connected and secure, is achieved through careful, creative design based on a thorough assessment of the local environment.

Left to right

- 1 *Key pedestrian routes should be well lit at night.*
- 2 *Clear and well defined routes for pedestrians enhance enjoyment of the waterfront area.*





## ■ □ Considerations

### MOVEMENT FRAMEWORK

- A good movement framework has direct routes that lead people safely to the places they want to go by whatever means – on foot, by bike or on public transport. This should cover the needs of all people, including the elderly and disabled.
- Well connected street networks provide pedestrians with a choice of routes. Layouts based on main routes and shared spaces reduce the need for underused alleyways, shortcuts and minor access points that can become vulnerable to or facilitate crime. The consequences of the number and type of connections in each particular setting need to be carefully considered.
- Major connecting streets should have long sightlines to help navigation and monitoring of danger spots.

- Footpaths should be designed to allow **visibility** and avoid creating potential hiding places. Physical elements such as continuous solid fences, blank walls or planting beside footpaths that impede sightlines and reduce opportunities for **surveillance** should be avoided.
- Access points to private development or communal spaces should be clear and casual access removed or managed.
- Public access to the rear of buildings should be restricted. In particular, secluded footpaths or alleyways should not run at the rear of, and provide access to, buildings or gardens. If this is difficult to achieve other measures such as enhanced **visibility** and **good lighting** need to be considered.

### ENTRAPMENT SPOTS AND MOVEMENT PREDICTORS

- Keeping pedestrians and vehicles at the same level, including pedestrian crossings, limits the need for elements that act as **movement predictors** (such as footbridges, tunnels and

Left to right

- 3 *This cycleway is visible from the adjacent road.*
- 4 *Clear views and different paths allow people a choice of routes.*



- □ underpasses). Where these are unavoidable, other measures to reduce vulnerability such as increased visibility (e.g. exit ways that are visible from the entry), lighting, and activity at and around these spaces need to be considered.
- Potential **entrapment areas** along or around frequently used pedestrian routes should be eliminated, particularly those in close proximity to **movement predictors**. When potential **entrapment spots** cannot be designed out, they should be gated or secured at night.
- Pedestrian and cycle paths should be physically integrated into surrounding areas to avoid predictability of movement and provide pedestrians with a choice of routes.
- Alternative routes that are well lit and well travelled at night should be made available. Multiple exit points from **public spaces** and along pedestrian routes or paths should be provided and clearly signposted in advance of entrances to underpasses, overpasses, escalators, etc.

**Left to right**

- 5 *Good views through the park help create an open and safe playground.*
- 6 *Lots of people and activities promote safe places.*

**THINK CRIMINAL<sup>2</sup>**

Crime and antisocial behaviour are more likely to occur if:

- pedestrian routes are poorly lit, indirect and away from traffic
- streets, footpaths and alleyways provide access to the rear of buildings
- it is easy for people to become lost or disoriented.

<sup>2</sup> The UK Safer Places Guide, 2004 suggests that one way to envisage how the configurations of existing and planned features and layouts in a location might affect crime is to 'think criminal', or more formally, to think how criminals might react to, or exploit the use, layout and development of land. A checklist of 'think criminal' questions (adapted from the UK Safer Places Guide) is included under the guidelines for each quality.



## ■ Surveillance and sightlines: See and be seen

*Places where all publicly accessible spaces are overlooked, and where clear sightlines and good lighting provide maximum visibility.*

Surveillance and sightlines and many of the other qualities, particularly 'access', 'sense of ownership' and 'layout', are underpinned by the theory that places are safer if they are overlooked.

The idea of 'see and be seen' is a central CPTED principle. Effective surveillance and maximising visibility are central to safe design. Places that have passers-by, or windows and activities that overlook them, provide the victim with the possibility of help and the criminal with the risk of detection.

Clear sightlines and good visibility allow people to see where they are going and make a reasonable choice of routes. This has a significant impact on feeling and being safe. Landscaping design has a key role in enabling clear sightlines and good visibility.

In areas designed for use after dark, visibility depends on effective lighting. Well designed lighting increases the opportunity for surveillance at night, sends positive messages about the management of an area, and enhances the aesthetics of the night-time environment.

### Considerations

#### SURVEILLANCE: SEE AND BE SEEN

- Places that could be vulnerable to crime should be overlooked by buildings that are busy at all times, or places that are activity generators. Windows and activities in buildings should be directed to overlook pedestrian routes, open spaces and car parks at ground level.

Left to right

7. *Café patrons provide 'eyes on the street'.*

8. *Taxi drivers help keep an eye on the surrounding area.*





- □
  - Windows and doors should face onto the street. *Active frontages* with ground level uses opening to the street (e.g. cafes and shops) should be encouraged. The more windows overlooking the street and other *public spaces*, the better.
  - In some circumstances, security cameras and security staff may be appropriate in addition to (but not instead of) informal *surveillance* (see 'physical protection').

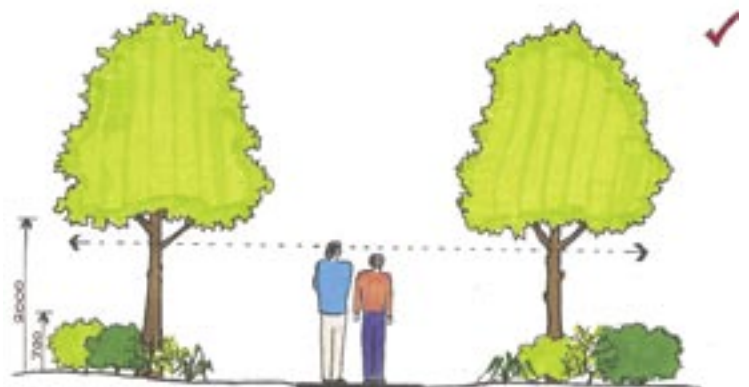
#### VISIBILITY/SIGHTLINES/CONCEALMENT REDUCTION

- Providing *visibility* into spaces where there is a perceived risk to personal safety, (e.g. stairwells, elevators, car parks, bike stands and lobby entrances) is critical.
- Barriers (e.g. landscape features, fences and walls) along principal pedestrian and bicycle routes should be low or visually permeable (made of see-through materials).

Left to right

9. *Fencing clearly defines a boundary while maintaining visibility of the playground from the street.*
10. *Ground cover and trees do not block sightlines and opportunities for concealment are reduced.*

- Features and elements that inhibit sightlines should be avoided, such as:
  - blind corners, especially on routes where movement is predictable
  - sudden changes of grade on pathways that reduce sightlines
  - *concealment spots* (unless they can be secured after-hours)
  - pedestrian tunnels.
- Hardware, such as mirrors, combined with *good lighting* can help to improve impeded sightlines and restore *visibility*.
- Dark areas next to designated pedestrian routes, private dead-end alleyways and recesses in fencing or walls (e.g. entrances and doorways) can create opportunities for concealment and should be addressed. Where a *concealment area* is unavoidable, aids to *visibility* (e.g. convex mirrors) and good vandal-resistant lighting should be provided.



## ■ □ LIGHTING

- It is crucial that lighting:
  - sends the right messages to the public about the safe and appropriate use of space at different times of day and night
  - is an integral part of the overall design and considered in relation to the specific needs of the place
  - is designed with management and maintenance in mind (e.g. lighting fixtures are vandal resistant and kept out of reach)
  - is well-maintained and bulbs are promptly replaced as part of a co-ordinated management strategy.
- Lighting should:
  - provide good visual guidance and orientation
  - support **visibility** for pedestrians as well as for motorists
- be considered for places that are well used at night (e.g. car parks, major pedestrian and bicycle routes, public spaces, building entrances, public toilets, access and egress routes) and for areas where safety risks have been identified
- ensure **visibility** for a reasonable distance to improve perceptions of safety.
- Lighting should be placed to ensure:
  - uniformity of lighting levels over an area, avoiding glare and reducing the contrast between shadows and illuminated areas, except when highlighting a specific area or feature
  - vegetation or other elements do not interfere with its effectiveness.

11 *Retail activity on the street helps to create opportunities for informal surveillance.*

12 *Good quality lighting assists in providing comfortable pedestrian movement.*



- □
  - Lighting should not be provided in areas not intended for night-time use, therefore avoiding a false impression of safety.

#### THINK CRIMINAL

Crime and antisocial behaviour are more likely to occur if:

- criminals can operate and travel to and from the location without fear of being seen
- criminals or their activity do not attract attention, or they are confident that no action will be taken
- the sides of a building and its surrounding spaces are not overlooked by surrounding users or passers-by
- buildings and spaces are not designed to allow *surveillance* 'outside' from 'inside' and vice versa.

13 *Open design allows surveillance into this ground floor car park.*

14 *The dark colour of the fence railings allows good visibility through to the park.*



## ■□ Layout: Clear and logical orientation

*Places that are laid out to discourage crime enhance perceptions of safety and help with orientation and way-finding.*

The layout or structure of a place (how buildings, spaces, uses, activities and circulation relate to one another) affects its safety and the perception of safety. Of particular concern is the **legibility** of a place – the ability of the environment to communicate a sense of place and give messages about orientation and direction. **Legibility** is an important quality of safe places as it strongly influences the feeling of security.

A safe and legible urban structure has a well defined and clearly understood movement framework and good quality, highly-used **public spaces** that support **surveillance**.

Pedestrians need well-lit and clearly defined routes linking areas of activity and key destinations. A legible layout lessens the need to depend on signs to find one's way around. It enables people to read their surroundings and the way ahead in order to detect dangers and warning signs.

Unattractive and poorly maintained spaces feel unsafe and uninviting. A person's vulnerability to becoming a victim of crime may increase if it is easy to become lost or disoriented. Alternatively, a vibrant, high quality environment with good **visibility** and open familiar spaces attracts people, assists legibility, conveys confidence and helps to reduce fear.

Left to right

15 *Good views and signs help visitors understand the park layout.*

16 *The entrance to the railway station is clearly visible.*





## ■ □ Considerations

### DESIGN AND SITE LAYOUT

- Design should:
  - enable people to find buildings and site entrances and exits as well as services such as telephones, public toilets and information
  - avoid locating public toilets, car parking facilities and other **vulnerable uses** in **isolated areas**.
- Site layout of areas and spaces should:
  - have a well-defined movement framework with interconnected streets providing safe alternative routes to destinations
  - have easily understood pedestrian networks to help with orientation and way-finding
  - provide good quality **public spaces** overlooked by buildings with **active frontages**.

Left to right

17 *Strategically located signs help to orientate park visitors.*

18 *A network of high quality pedestrian paths makes it easy to get around.*

### BUILDING DESIGN

- Building entrances should:
  - be clearly visible, well-lit and facing the street
  - have lobbies visible from the outside
  - have any ramps and lift entrances in visible areas that are connected to street activity to emphasise their presence and ensure safety for users
  - not create **concealment spots** next to pedestrian routes or **public spaces**.

### SIGNAGE

*See also 'quality environments' and 'sense of ownership'.*

- Signs and maps should:
  - be strategically located at entrances to areas of activity, at bus stops and public facilities
  - be clearly visible and appropriately illuminated for night-time use
  - be informative rather than restrictive (e.g. 'do not enter')



- □
  - easily convey all necessary information in a form understood by different user groups (e.g. internationally recognised symbols)
  - be legible (strong colours, clear contrasts, standard symbols, simple graphics and non-reflective surfaces).
- Information on signs and maps should:
  - identify access to assistance such as emergency services, information centres, public telephones, toilets, taxi ranks and bus stops
  - provide after-hours information, especially if certain exits are closed at certain times
  - clearly indicate street names and numbers and the purpose of the building (such as library, hospital, crèche).
- Signs that share a common design appearance and are provided at regular intervals along main pedestrian routes and at junctions are helpful.

### THINK CRIMINAL

Crime and antisocial behaviour are more likely to occur if:

- buildings, streets, and spaces are laid out in ways that allow criminals to move around and operate undetected
- a place tends to bring people who are likely to offend and suitable targets together
- places become derelict or underused and lack natural *surveillance*
- building entrances and exits and access to assistance are not clearly indicated
- it is easy for people to become lost or disoriented.

#### Left to right

19 *Providing information where people need it, helps people to get around safely.*

20 *Sign blends into the environment as well as providing information.*



## ■□ Activity mix: Eyes on the street

*Places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times by promoting a compatible mix of uses and increased use of public spaces.*

Crime can be deterred through the 'eyes on the street' of people going about their everyday business – making a place more secure by populating it.

The levels and type of activity are determined by land use patterns. A broad range of activities in a mixed use environment (such as residential, restaurants, offices and shops) helps to promote activity around the clock, informal **surveillance** and increased use of **public spaces**. It is important, however, that new activities are compatible with neighbouring land uses and are designed to minimise conflict.

Left to right

21 *High quality public spaces attract people to linger and enjoy their surroundings.*

22 *Shop windows create interest and activity at ground level.*

### Considerations

#### SAFER PUBLIC SPACES

- Popular **public spaces** are both successful and safe. The key is to:
  - create a high quality environment that attracts people to go and stay there
  - provide alternative opportunities and activities for those who might otherwise become involved in crime or disorder
  - design **public spaces** and provide a range of complementary activities that are enjoyed by different cultural and age groups at the same time.

#### THE RIGHT MIX OF USES

- Encourage a mixture of uses with a broad range of activities. Care should be taken to ensure that the different uses are compatible and right for the location.





- □
  - Opportunities for mixed-use developments should be maximised so that:
    - public spaces are used at day and night
    - potentially conflicting uses are avoided
    - proposed new land uses are compatible in scale, consistent with neighbouring uses and enhance the character of surrounding areas.
  - Potential crime generating activities (e.g. licensed premises) should be balanced with other uses such as entertainment facilities for a range of age and user groups, restaurants, residential and commercial activities. Concentration of vulnerable development and uses should be avoided.
  - A residential population in the town or city centre brings activity, surveillance and ownership. Opportunities for inner city residential living should be provided and encouraged.
- Ground level activity should be promoted, especially in high and medium density environments so that attention is drawn to the street level.

#### APPROPRIATE NIGHT-TIME USES

- Night-time uses that work well in both economic and safety terms include a range of activities, not just hotels and bars. A variety of complementary night-time uses with a range of closing times (such as restaurants, shops, cafes, cinemas, theatres and galleries) provide more 'eyes on the street', contributing to the safety of a place at night.
- Provision of secure car parking, safe public transport facilities and lighting should be promoted as part of a wider strategy aimed at supporting and gaining advantage from night-time uses, while avoiding associated opportunities for criminal activity.

Left to right

23 Food vendors create activity.

24 City ambassadors keep an eye on things around the clock and provide help if needed.





### THINK CRIMINAL

Crime and antisocial behaviour are more likely to occur if:

- an area is either very quiet or very busy, depending on the local context and the type of crime
- groups of people feel that there is nothing to do
- criminals can go about their business unnoticed
- places become devoid of activity at certain times of the day and night, while remaining accessible to offenders
- potential offenders and/or victims are concentrated in the same place at the same time, such as bus stops or taxi ranks throughout the evening.

Left to right

25 *Night-time events create interest and activity.*

26 *Buskers provide entertainment for shoppers.*



## ■ Sense of ownership: Showing a space is cared for

*Places that promote a sense of ownership, respect, territorial responsibility and community.*

Encouraging residents and users of places to feel a sense of ownership and responsibility for their surroundings can make an important contribution to crime prevention. This can be helped if public spaces and spaces that are communal, semi-private or private are clearly defined.

Uncertainty of ownership can reduce responsibility and increase the likelihood of crime and antisocial behaviour going unchallenged. Alternatively, when responsibility and ownership are high, there is a feeling that crime is more likely to be detected and responded to.

Sense of ownership is closely linked to the overall quality and maintenance of a place. The 'broken windows' theory of crime suggests that initial attacks of vandalism, if ignored, can grow into a spiral of decline – the lack of response by owners or

occupiers sends a message to offenders that nobody cares and that there are no apparent obstacles to them continuing with their destructive activity.

Alternatively, places that convey a strong sense of belonging to and being cared for by someone (pride of place) are less likely to be a target of vandalism or crime.

### Considerations

#### DEFINITION OF OWNERSHIP BOUNDARIES

- A clear distinction between public, communal, semi-private and private space should be provided by using design techniques and elements appropriate for the local context and the intended use of the space.

Left to right

27 *Planting, awnings and change of grade show clearly where private space begins.*

28 *Low fences define ownership but do not block sightlines into and out of private residences.*





- □
  - Common design techniques and elements to delineate ownership boundaries (that most people respond to) include:
    - landscaping
    - changes of level
    - use of different ground surface treatment
    - sensitive placement of low, appropriately selected physical barriers (e.g. gates, fences, walls, hedges, bushes)
    - design features (e.g. gateway structures to mark or enhance entrances to public areas)
    - signage
    - lighting.
  - High fences and landscaping that actively impede access are most appropriate in places that are vulnerable to crime, such as behind dwellings. However, these barriers should be visually permeable so that they do not hinder *surveillance* or provide hiding places for offenders.
- Buildings should be used to frame *public spaces*, with *active frontages* bordering the public area.

**SIGNAGE**

*See also signage under 'quality environments'.*

- Signage can be used to:
  - indicate the private nature of communal areas in private developments
  - identify the agency responsible for monitoring the area
  - indicate the location of entry and exit points.

**USERS' INVOLVEMENT AND MAINTENANCE**

- Involving those that use a space in decision-making about its planning, design, management and maintenance is an effective way to develop pride in a place and a sense of ownership.
- Elements and features (such as public art and sculpture) can help to personalise the space and promote local identity, sense of place and community ownership.

Left to right

29 *A sign shows the location of key facilities nearby.*

30 *Community murals promote local pride and ownership.*





- □
  - A prompt maintenance response enhances the sense of ownership and is critical to the successful management of a space.

#### THINK CRIMINAL

Crime and antisocial behaviour are more likely to occur if:

- it is unclear whether a space is public or private and what behaviour is expected
- private space is easily accessible to people who have no right to be there
- an offender's presence in the area does not attract attention
- a place feels as if it is not under the supervision of local residents, businesses, organisations, or other users.

Left to right

31 *The sign reinforces ownership and appropriate use of the park.*

32 *Public art helps to promote local identity.*



## ■ Quality environments: Well-designed, managed and maintained environments

*Places that provide a quality environment and are designed with management and maintenance in mind to discourage crime and promote community safety in the present and the future.*

While getting physical design right is paramount, management and maintenance are important factors in maintaining safer places. The overall quality of the environment and its upkeep can influence both the perception and reality of safety and security.

A good quality, attractive **public space** that is perceived as well maintained and cared for by its owners and its users improves its overall image, encourages greater use, promotes greater respect for the environment and reduces the likelihood of crime or vandalism. Recent international research shows conclusively that good **urban design** has the potential to create value for communities, individuals, the economy and the environment<sup>3</sup>.

Addressing maintenance and management at the outset of a development proposal will help to minimise running costs and the requirement for maintenance. Design needs to take into consideration long-term maintenance, while ensuring quality design and encouraging use. A long-term maintenance programme to establish strategies and responsibilities for the ongoing upkeep of a place is important.

‘Quality environments’ is closely linked to ‘sense of ownership’.

Left to right

33 *Good design and quality materials create a busy and attractive space.*

34 *Regular maintenance assists in providing places that are attractive and safe.*

3 Ministry for the Environment (2005) - The Value of Urban Design: The economic, environmental and social benefits of urban design.



## ■ □ Considerations

### QUALITY DESIGN

- Encouraging proper attention to the design quality and attractiveness of **public spaces** increases their safety and use, and promotes a greater respect for the environment.

### EFFECTIVE MANAGEMENT AND MAINTENANCE

- Cleaning and maintenance initiatives should include regular grass cutting, ground maintenance, and litter and graffiti removal.
- Signs indicating contact details for emergency maintenance, reporting and prompt repair should be prominently located.
- Long expanses of blank walls or fences should be avoided, especially those using light colours unless it is intended to increase light reflection in areas such as car parks.
- Robust materials and elements and detail that are consistent with the character of a space should be encouraged.
- Graffiti-resistant paints and finishes are desirable for easier maintenance and should be used where appropriate. Highly vulnerable materials should be avoided.
- Imaginative responses to maintenance and vandalism problems need to be encouraged (e.g. involving local young people, commissioning murals by local artists, using vandal-resistant textures, and limiting access to vulnerable surfaces).
- The visible presence of maintenance staff can further reinforce the message that a place is well cared for, while contributing to **surveillance** and activity and promoting a sense of ownership.

Left to right

35 *Well-maintained landscaping welcomes visitors.*

36 *Street furniture should be robust and appropriate for its location.*





■ □ **PLACE MANAGEMENT AND INTEGRATED PLANNING AND DESIGN**

- Integrated approaches to planning and design should recognise the contribution of safety to the multiple disciplines involved in **urban design**. Policies on lighting, signage, landscaping and street furniture should complement each other and be approached in a consistent and integrated manner.
- Encouraging public/private partnerships such as town centre organisations and main street programmes (which promote the interests of local businesses) help to promote the importance of good **urban design** in creating places that are safe and vibrant.
- Promote safety audits and site assessments as part of the planning and design process.

**THINK CRIMINAL**

Crime and antisocial behaviour are more likely to occur if:

- places are untidy or unattractive, giving the impression of not being cared for or that crime and disorder are tolerated
- signs of disorder and neglect, such as broken windows, abandoned vehicles or graffiti, are not removed at the earliest opportunity
- an organised human presence, such as police, security guards or street wardens, is absent.

Left to right

37 *Clean and busy spaces are less likely to be vandalised.*

38 *Quality materials help to create pleasant spaces.*



## Physical protection: Using active security measures

*Places that include necessary, well designed security features.*

While not traditionally a CPTED quality, physical protection measures are another design tool for reducing opportunities for crime. Physical protection is also referred to as **target hardening**. It involves measures that make it more difficult to commit offences and instil a feeling of safety in users. It includes active security measures (such as locks, closed circuit television and security staff) that aim to place secure physical barriers or **surveillance** in the path of the criminal – making crime harder to commit and raising the risk of detection and possible capture.

Physical protection is the most traditional method of securing a place against crime. While an obvious and important aspect of crime prevention, it needs to be considered in an integrated manner that puts and explores the other qualities first.

If applied without due consideration, physical protection can adversely affect the look and feel of a place. Measures such as grilles and barbed wire are often unattractive and increase the fear of crime by suggesting that the area is unsafe.

Some places need to be made secure. However, it is important that this is done in a balanced way by employing methods that reasonably secure a place without visibly announcing that the design was concerned about crime.

### Considerations

#### DESIGN TREATMENT OF SECURITY FEATURES

- Avoid using elements that create a poor image or a fortress-like appearance. Integrate any necessary security features into buildings or **public spaces** by designing them to be intrinsic, unobtrusive or a positive visual feature.

Left to right

39 *The lights along the path have been designed with vandal-resistant housings.*

40 *The gate sends a clear message that access is not allowed.*





Possible design techniques include:

- treating gates and grilles as public art
- making perimeter fences look attractive by allowing **visibility** through the fences, including simple design motifs or combining them with a hedge (thorny shrub varieties can 'target harden' boundary treatment)
- using open grilled designs or internal shutters instead of roller-shutter blinds
- using different grades of toughened or laminated glass as a design alternative to various types of grille.

#### BUILDING DESIGN

See also building design under 'layout'.

- Building design should:
  - avoid design features that make access to upper levels easier

- consider secure doors, windows and entry telephone systems to protect buildings with multiple occupants
- locate lifts within secure entrances
- incorporate graffiti and vandal-resistant measures.

#### USE OF CLOSED CIRCUIT TELEVISION (CCTV)

- CCTV should not be considered as an alternative to getting the design right in the first place, but can be used retrospectively to compensate for poor design. While no substitute, CCTV can supplement 'harder' forms of security.
- CCTV can help with crime detection, especially when implemented as part of a wider package of crime prevention measures.
- CCTV can be an effective crime prevention measure when combined with appropriate lighting, targeted at particular offences, and supported by good management, monitoring and adequate response.

Left to right

41 *Boundary definition can be a positive visual feature.*

42 *This fence clearly defines boundaries and is easy to see through.*





- □
  - The way CCTV systems are designed and used should be influenced by their intended purpose (e.g. will it be monitored and used to direct police or other security personnel in the case of an incident?).
  - Signs publicising that CCTV is in operation can increase its impact.
  - Plans for the placement and use of CCTV should comply with the Privacy Act 1993 and advice of the Privacy Commissioner should be sought at the earliest stages of planning.

#### THINK CRIMINAL

Crime and antisocial behaviour are more likely to occur if:

- the target hardening measures (e.g. for doors, windows and gates) are inadequate for the building and the crime risk faced; or are not integrated, installed or used properly
- it is easy to enter and exit properties unlawfully
- it is easy to remove property
- there is no indication of mechanical or organised surveillance.

Left to right

43 *Dark colours and see-through design mean that this fence is not visually intrusive.*

44 *This service lane has a grille-style gate that can be closed at night.*





# ■ ■ References



## ■ □ Glossary

### **ACTIVE FRONTAGES**

Buildings that face onto the street and show signs of activity inside (such as shop fronts and window displays), or that generate activity on the pavement (such as cafes).

### **ACTIVITY GENERATORS**

Land uses that encourage the use of public spaces, such as outdoor cafes and restaurants and sporting areas that are located within open space.

### **CONCEALMENT**

Spaces that are not easily visible and provide the opportunity to conceal potential offenders, their victims, illegitimate uses, antisocial activity and crimes.

### **CPTED**

Crime Prevention through Environmental Design is a crime prevention philosophy based on proper design and effective use of the built environment. The use of CPTED is intended to reduce crime and fear of crime by reducing criminal opportunity and fostering positive social interaction among legitimate users of space.

### **EFFECTIVE OR GOOD LIGHTING**

Lighting that:

- provides visual guidance and orientation, good visibility and visual amenity, especially for an ageing population
- eliminates glare and other forms of light pollution, including light trespass with the ability to clearly see beyond the light sources
- projects an image of safety and security and enhances the accessibility and appearance of the area
- meets or exceeds the requirements of AS/NZS 1158 Road & Pedestrian Lighting Standards
- enables objects to be clearly seen in peripheral areas that are immediately adjacent to the subject area (e.g. planted areas close to footpaths)
- does not lead people into potential areas of entrapment or concealment such as dead-ends (such areas should not be lit)
- is well maintained
- is consistent in terms of appearance (e.g. avoid mixing high pressure sodium with metal halide)
- is integrated with CCTV where present.

## ■ □ **ENTRAPMENT SPOTS/AREAS**

Small physically confining spaces shielded on three sides by a barrier such as walls or landscaping, which offenders can use to physically or psychologically surround and entrap people. Entrapment spots include loading zones, leftover spaces between buildings, clearings within landscaping and recessed entrances. Entrapment spots are particularly dangerous when located close to well-travelled routes and movement predictors.

### **ISOLATED AREAS**

Places where it would be hard for a person in difficulty to summon assistance or to attract the attention of passers-by or other people in the vicinity. Offenders may use isolated areas to their benefit, knowing that they are out of public view. Isolated areas are usually well screened from the view of adjoining buildings and away from activities that draw people near for natural surveillance.

### **LEGIBILITY**

The ability of people who are unfamiliar with an area to find their way. Legibility instils a sense of confidence in users of public space and can be achieved through identifying designated pedestrian routes, clear sightlines and using signage, lighting and suitable landscaping.

### **LEGITIMATE USE**

Any lawful and formally appropriate use of a building, facility or public space.

### **MOVEMENT PREDICTORS**

Predictable or unchangeable thoroughfares that provide limited opportunities with which to exit. Examples of movement predictors are pedestrian underpasses or subways, narrow passageways, stairwells and pedestrian bridges. Movement predictors are of particular concern when located near entrapment spots or isolated areas.

### **NATIONAL TASKFORCE FOR COMMUNITY VIOLENCE REDUCTION**

The taskforce was established in early 2005 as a result of the Government's Action Plan to Reduce Community Violence and Sexual Violence. It is charged with developing and leading a set of initiatives to reduce community violence, specifically violence related to alcohol and violence in public places, of which CPTED is a key focus. Members of the taskforce leaders group include: Sir Barry Curtis, Manukau City Council (chair); Commissioner Rob Robinson, New Zealand Police; Graeme McIndoe, Victoria University; Pat Mayhew, Victoria University; Bruce Robertson, Hospitality Association NZ; Steve Caldwell, Victim Support; Leith Comer, Te Puni Kōkiri; Dr Mike MacAvoy, Alcohol Advisory Council of NZ; Su'a Kevin Thomsen, Ministry of Pacific Island Affairs; John Angus, Ministry of Social Development; Jenny Brash, Porirua City Council; and Belinda Clark, Ministry of Justice.

### **PUBLIC SPACES**

Spaces, which may be publicly or privately-owned, that are intended for public use.

## ■ □ SURVEILLANCE

Includes informal surveillance (e.g. by casual observers), organised surveillance (by trained security guards, attendants and other trained personnel) and electronic surveillance (e.g. security cameras). The National Guidelines are aimed especially at enhancing opportunities for informal surveillance so that antisocial behaviour or crime-related incidents are discouraged or detected and prevented.

## TARGET HARDENING

The use of physical barriers, locks, safes, screens, reinforced materials or CCTV to reduce the opportunity for illegal access or vandalism to a property.

## URBAN DESIGN

The design of buildings, places, spaces and networks that make up our towns and cities, and the way people use them. Urban design ranges in scale from a metropolitan region, city or town to a street, public space or single building. It is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design. Urban design draws together many different sectors and professions, and includes the process of decision-making as well as the outcomes of design. (Definition sourced from the New Zealand Urban Design Protocol, 2005.)

## VISIBILITY

The ability of users of a place to see and be seen. Visibility ensures that public spaces are subject to informal surveillance by the maximum number of people.

## VULNERABLE PEOPLE

Individuals or groups of people who are likely to perceive themselves as being unsafe, insecure, or at risk of violence in the community; and people perceived by others to be vulnerable, and therefore potential victims. Such people may include (but are not limited to) people with disabilities, older people, students, ethnic minorities, young people and women.

## VULNERABLE USES/DEVELOPMENT

- Uses and activities such as (but not limited to) licensed premises (including taverns, hotels, entertainment venues, licensed clubs, off-licence premises, bottle shops and nightclubs), large entertainment and recreational venues, large institutional uses, (e.g. tertiary campuses, hospitals) schools, car parks (50 or greater), public toilets, telephone booths, and automatic teller machines.
- Any use or activity in an area, which is identified by responsible authorities (based on crime statistics and/or public perception of unsafe places) as attracting crime and/or nuisance behaviour, that generates people movement or use at times when there are less than normal levels of formal and/or informal surveillance.
- Any use operating at night-time or over a 24-hour period.
- Any large-scale project considered to have wide ranging safety implications such as (but not limited to) major shopping centres.



## ■ ■ Bibliography

Auckland City Council, Safer Auckland City (2001). Introduction to Crime Prevention Through Environmental Design. [www.aucklandcity.govt.nz/auckland/introduction/safer/cpted](http://www.aucklandcity.govt.nz/auckland/introduction/safer/cpted)

Auckland City Council, Safer Auckland City (2005). Isthmus District Plan, Plan Change 141, Annexure 16: Safety Guidelines making CPTED a District Plan requirement for certain activities. [www.aucklandcity.govt.nz/auckland/introduction/safer/planchange141](http://www.aucklandcity.govt.nz/auckland/introduction/safer/planchange141)

Bell Planning Associates (2004). Safer Design Training for Wellington City Council.

Canterbury Safety Working Party (2005). Safer Canterbury: Creating Safer Communities – Crime Prevention Through Environmental Design.

Crowe, T.D. (1991). Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts, National Crime Prevention Institute, Stoneham, M.A: Butterworth-Heinemann

Department of Sustainability and Environment , Victorian Government (2004). Safer Design Guidelines for Victoria, Model CPTED Code.

Department of Sustainability and Environment, Crime Prevention Victoria (2005). Safer Design Guidelines for Victoria.

Manukau City Council (2005). 'Design Out Crime', Crime Prevention Through Environmental Design, Dealing with Public Realm 'Hot-Spots'.

Ministry for the Environment (2005). New Zealand Urban Design Protocol

Ministry for the Environment (2005). New Zealand Urban Design Protocol: Action Pack

Ministry for the Environment (2005). The Value of Urban Design: The economic, environmental and social benefits of urban design.

Ministry for the Environment (2002). People + Places + Spaces: A design guide for urban New Zealand

Office of the Deputy Prime Minister (2004). Safer Places: The Planning System and Crime Prevention, United Kingdom.

Region of Peel (2002). CPTED Advisory Committee, Crime Prevention Through Environmental Design: Principles. [www.region.peel.on.ca/planning/cpted](http://www.region.peel.on.ca/planning/cpted)

Stoks, F.G. (1987). Introduction to Crime Prevention through Environmental Design.

Wekerle, G. R. & Whitzman, C. (1995). Safe Cities: Guidelines for Planning, Design and Management, Van Nostrand Reinhold, NY.

Wellington City Council (2005). 'Guidelines for Design Against Crime', Wellington City District Plan. <http://www.wellington.govt.nz/plans/district/volume2/vol2.html>

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