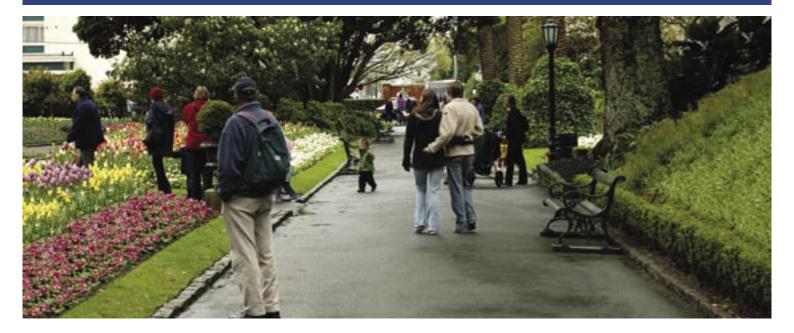National Guidelines for Crime Prevention
through Environmental Design in New Zealand

Part 2: Implementation Guide

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.

Introductory information to Crime Prevention through Environmental Design and the National Guidelines can be found in *Part 1 – Seven Qualities of Safer Places*.

Contents

Introduction

This document accompanies the *National Guidelines for Crime Prevention through Environmental Design in New Zealand – Part 1: Seven Qualities of Safer Places*.

It aims to help local authorities, particularly those for whom Crime Prevention through Environmental Design (CPTED) is a relatively new initiative, to introduce CPTED when planning, designing and managing publicly accessible places.

For some local authorities, CPTED is already an integral part of their vision, strategy, policy and implementation processes.

Defining crime prevention through environmental design

CPTED 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.

Who should be involved?

Crime prevention is complex. The National Guidelines and crime prevention solutions are
likely to be more effective if central and local government work in partnership with local communities,
businesses and service organisations. While 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	Local authorities are responsible for the design and use of public spaces[1]. 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: • identifying community outcomes • initiating major works in public areas • managing public places and assets • fulfilling responsibilities under the Local Government Act 2002 and Resource Management Act 1991.
Police	Police play a key role by: • sharing their knowledge of criminal behaviour, types and location of crimes • providing intelligence on hot-spot areas (such as identifying trends in criminal activity) • helping with crime prevention techniques.

1 Definitions of text highlighted in this document can be
   found in the glossary on page 46.

Other partners to consider

ORGANISATION	ROLE
Business and shopping centre owners and operators, especially local hospitality operators	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. 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.
Neighbourhood Support groups, residents' associations, community boards	These groups can help with: ▪ better understanding what is happening in the local neighbourhood from the perspective of residents ▪ identifying neighbourhood crime hot-spots and areas that trigger a fear of crime ▪ identifying options for improvement ▪ CPTED safety audits.
Urban designers, planners, architects and landscape architects in the private sector	Urban designers, planners, architects and landscape architects can contribute specialist knowledge to help achieve CPTED, both in new development and redevelopment projects.
Community agencies, groups or service providers	These agencies and groups can provide: ▪ 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) ▪ a perspective on the effectiveness of design options.
Other organisations that could have a useful role	▪ Ministry of Justice Crime Prevention Unit ▪ Housing New Zealand ▪ Māori and Pacific Island community groups ▪ community patrols and Māori wardens ▪ local hospitality operators ▪ car park building owners ▪ private developers ▪ transport providers ▪ schools

Ways to implement CPTED

There are many ways a local authority can implement CPTED.
This section outlines some of those options.

Adopt CPTED as strategic policy

The recommended first step is for a local authority to formally adopt crime prevention and CPTED as strategic council policy. This step is critical. Successful implementation depends upon high level acceptance of the importance of crime prevention and CPTED, and the clear communication of this to the community and local authority staff.

Local authorities could use or adapt the following:

> Outcome/objective: Incidents, opportunities and fear of crime are prevented or reduced by ensuring that CPTED principles are understood and incorporated into public and private development.
>
> Policy: Council's design, planning, management and use of public space and community facilities will incorporate CPTED in service delivery and asset management programmes. Council will implement voluntary initiatives to encourage private development to incorporate CPTED and will implement regulatory initiatives if appropriate.

There are several benefits for adopting a policy like this:

- It signals that the local authority is committed to reducing the incidence and fear of crime and enhancing quality of life.

- It signals that the local authority will incorporate CPTED into the planning, design, construction and management of public space and community facilities. This is the most efficient and effective way that a local authority can enhance the safety and quality of public space and facilities.

- It is an opportunity for a local authority to lead by example.

- It signals that the local authority will use voluntary mechanisms to encourage private development to incorporate CPTED. This is the most efficient and effective way that a local authority can enhance the safety and quality of private development.

- It signals that the local authority will use regulatory mechanisms if there is reluctance by developers to sufficiently change their proposals to allow for CPTED.

- It helps to ensure compliance with the Resource Management Act 1991, Local Government Act 2002 and non-statutory protocols (such as the Urban Design Protocol) and policies.

In addition, it is likely to lead to:

- greater use of community facilities (such as parks, promenades and street malls) and a corresponding increase in people's safety and wellbeing

- increased business as commercial areas become safer and more attractive to people.

Introduce an action plan

Following the formal adoption of crime prevention and CPTED as council policy, a local authority should prepare an action plan. The action plan should identify how the local authority proposes to reduce crime. There should be a strong link between the resource allocation in the local authority's annual plan and the resource required to implement the action plan.

If a council is a signatory to the New Zealand Urban Design Protocol, their CPTED action plan could be a key component of their Urban Design Protocol Action Plan.

A successful action plan is likely to include initiatives within the following broad areas:

- Achieve community involvement and stakeholder partnerships.

- Understand the local context and identifying priority hot-spots.

- Apply CPTED to local authority projects and public places.

- Apply CPTED to private sector projects.

Local authorities will give different emphasis to certain implementation initiatives to reflect their circumstances. Some action plans may focus on CPTED; others may include broader crime prevention initiatives; and some may contain the proposed actions of other stakeholders identified through community involvement.

For local authorities wishing to implement CPTED, it is recommended that a crime prevention leader or community safety co-ordinator is charged with preparing and implementing the local authority's action plan.

Ideally a crime prevention leader should:

- understand crime prevention and be familiar with CPTED

- be committed to reducing crime and improving the quality of public spaces

- be able to achieve the organisational change required to support introducing CPTED

- have the skills to organise, manage and facilitate community and stakeholder involvement

- be committed to educating, promoting and training local authority staff and the private sector.

Examples of action plans

- Manukau City Council's *Crime Prevention Action Plan* (December 2003) and *Update Report* (August 2004). Available from *www.manukau.govt.nz*.

- Waitakere City Council's *Waitakere Crime Prevention Strategy* (August 2004). Available from *www.waitakere.govt.nz*.

- Christchurch Safer Community Council's (Safer Christchurch) *The Garden City, A Safer City – Reducing Crime through Environmental Design* (2nd edition 1996) and *Safer Christchurch – A Proposed Approach* (April 2004). Available from *www.ccc.govt.nz*.

Involve the community and build partnerships

One of the most important ways a local authority can effectively implement crime prevention initiatives is to act as a facilitator – to involve and build partnerships with the community and other agencies.

There are several benefits to a local authority acting as facilitator and promoting community involvement. The local authority may:

- provide leadership and direction to the community

- help the community and stakeholders to identify the types and locations of crime and where people do not feel safe

- help the community and stakeholders to identify possible solutions

- find the information and opinions gathered are useful when setting priorities and making decisions.

While the communities, agencies, interested groups and individuals who can help a local authority will vary depending on local circumstances, the involvement of police and affected local residents and businesses within a crime problem area is likely to be crucial to successful crime prevention or reduction initiatives. Groups could include:

- Ministry of Justice Crime Prevention Unit

- Māori and Pacific Island community groups

- community patrols and Māori wardens

- business association and promotion representatives

- Neighbourhood Support groups

- local hospitality operators, especially for licensed premises

- special interest parties

- car park building owners

- council asset managers

- private developers

- other street users (e.g. public transport operators, taxi operators)

- consultants such as urban designers, architects, resource managers, specialists in CPTED

- residents' associations

- tenancy groups (in the case of large multi-unit developments)

- schools and preschools.

Understand the local context

It is important that community safety and crime reduction initiatives are based on a good understanding of local circumstances. It is important to identify as clearly as possible the relationship between crime, the fear of crime, and place.

Understanding the local context requires gathering and assessing relevant information and opinions on the type, incidence and risk of crime in public places. This information will also help to identify priorities for action.

Experience shows that a local authority that successfully involves the community will have a better understanding of the local context – by working together, the community and various stakeholders develop a good understanding of where and what type of crime occurs. In addition there are at least four main tools that help to gain an understanding of the local context: crime statistics, safety audits, site assessments and management audits.

Crime statistics

Having good quality quantitative information enables a local authority to identify:

- the type of crimes taking place
- their occurrence and frequency
- their location
- who's most affected
- how the crimes are committed
- the trends.

Quantitative information helps a local authority to identify hot-spots (areas that have high numbers or a high rate of crime) as well as areas that are not as bad as might be feared. It is recommended that a local authority's action plan include initiatives to acquire quantitative information on the incidence of crime. The initial purpose would be to gain a broad picture of the nature, extent and location of crime with more specific analysis of identified hot-spots.

Hot-spot analysis

Hot-spot analysis is a process to confirm what partners may already know about crime in a specific area. It can also help to identify the causes of crime so that these can be addressed rather than focusing on the symptoms.

A hot-spot analysis has a number of specific benefits:

- It systematically tests anecdotal information and identifies changing and newly emerging trends to improve the knowledge and reliability of crime and disorder information.

- It validates why resources are targeted to particular areas with statistical information.

- It presents a picture that prompts broad discussion, promoting contribution from all partners.

- It questions the validity of information and examines how complementary data from the partnership can better inform local decision-making processes.

- It provides a base to monitor and measure targeted actions.

- It highlights the need for quality information that helps to identify and diagnose the problem, improve resource allocation, consult more effectively with the partner groups and the local community, and assess the factors that are most likely to reduce crime.

There are several methods and techniques for mapping crime and identifying hot-spots. Some are more suitable than others for improving partnership understanding of crime, fear of crime and disorder patterns.

An effective hot-spot analysis should:

- involve the police and other relevant agencies, and include regular communication and progress updates to overcome problems and ensure the end product is appropriate

- scan the geographical area for distribution of crime – a genuine crime problem is usually relatively equally distributed across different time periods (e.g. weeks or months)

- seek to understand crime patterns over a large timeframe (a minimum of a year is recommended so that seasonal crime variations are uncovered and endemic crime trends are identified).

CPTED safety audits and site assessments

Community safety is most effectively addressed when considered consistently throughout the planning and design process of new development. However, it is common for crime issues to arise in established areas and spaces, requiring an assessment to identify site-specific issues and provide recommendations for improvements.

There are two commonly used practical procedures for assessing a site or an area with respect to CPTED: safety audits and site assessments. The two procedures are complementary – safety audits are often undertaken as part of a site assessment.

CPTED SAFETY AUDITS

Safety audits are a proven way to identify the perceived safety of an area, and to identify community safety issues and possible solutions. Safety audits are qualitative. They record the feelings and perceptions of those people who use a space – encouraging a subjective interpretation of the environment from the perspective of participants (such as particular user groups including women, young people, the elderly and the disabled) who may have different perceptions of safety than professionals and designers. They can be completed for a particular location, street, park, building, residential complex or neighbourhood.

More information about safety audits is included on pages 21 to 27.

CPTED SITE ASSESSMENTS

Site assessments are carried out by trained professionals to identify the perceived and actual safety of a site, and how these may be addressed when planning and designing a site development project.

To be most effective, site assessments need to be undertaken at the early planning stages so that CPTED can be incorporated from the beginning

and tailored to the particular site. This avoids the likelihood of potentially costly corrective work later on.

More information about site assessments is included on pages 29 to 35.

Management audit

Management audits help a local authority to identify existing management processes and potential improvements to those processes that could achieve better safety outcomes.

A local authority may decide to carry out a management audit, to:

- identify the extent to which crime prevention is incorporated within its existing policies and processes
- respond to a significant new development where opportunities to incorporate CPTED to gain better safety outcomes were lost.

There are four steps in undertaking a management audit:

1. Identify recent significant developments.
2. Identify the planning, design and approval process that was used.
3. Identify the extent to which CPTED was used in planning, designing and approving the development.
4. Identify process weaknesses and potential improvements.

Process improvements could include:

- changing a local authority's commissioning practices to better incorporate CPTED into its projects
- training the local authority's staff so that they are better equipped to apply CPTED (particularly those involved in planning, designing and commissioning projects)
- introducing peer review, by specialists trained in CPTED, of local authority projects
- improving community involvement processes to better understand community perceptions and possible responses in designing local authority projects
- reflecting CPTED more strongly in local authority plans, policies and procedures
- improving stakeholder partnerships, particularly with the development community, so that a local authority is more knowledgeable about impending private development and in a better position to encourage incorporating CPTED during the early planning stages
- changing the District Plan and resource consent processes so that CPTED is appropriately incorporated into private development
- producing and distributing local guidelines that help designers and applicants to identify safer design solutions.

Prioritise areas for improvement

Prioritising areas helps a local authority to focus the community and agencies on the most significant problems. Some commonly identified priority areas include:

- public and community car parks
- public toilets
- bus stops and shelters
- pedestrian paths, alleyways and cycle routes
- public transport facilities (taxi ranks, railway stations, interchanges)
- pay phones and automated teller machines
- public parks, recreational areas and playgrounds
- street malls
- pedestrian over-bridges and underpasses
- civic centres
- shopping malls
- retail, entertainment and commercial areas
- licensed premises
- multi-unit residential development.

Many of these areas are local authority facilities or on land managed by local authorities.

Apply CPTED to public initiatives

The most effective way a local authority can enhance the safety and quality of public space and facilities is to apply CPTED to its existing facilities, public spaces and new developments.

The types of public works or projects a local authority undertakes, which can influence the incidence and fear of crime, include:

- street lighting

- signage

- pedestrian linkages and sightlines

- design and placement of landscaping

- main street enhancement projects

- road closures, surfacing and paving of footpaths

- refurbishment of street malls and public facilities

- scheduling street activities.

A local authority can apply CPTED to its activities and public spaces by:

- involving the community and forming partnerships with key stakeholders (such as the police and the Ministry of Justice's Crime Prevention Unit)

- obtaining a better understanding of the local context and identifying hot-spots

- incorporating CPTED into appropriate activity policies and strategies (such as urban design strategy, open space strategy, multi-unit residential design guidelines and asset management plans)

- preparing a local design guide based on the National Guidelines to help all parties to identify appropriate local design responses

- making provision in asset management plans for appropriately investigating and improving existing facilities to incorporate CPTED

- making CPTED a planning and design criteria for new projects

- selecting project designers with skills and a proven track record

- assessing alternative designs against CPTED assessment criteria and design guidelines for selection

- contracting CPTED specialists to review significant existing and proposed public facilities (such as street enhancement schemes, park designs, civic centres, public transport facilities and car parking buildings and facilities)

- assessing the relationship between the project area and surrounding spaces and private development so that opportunities to enhance the quality and safety of public space are realised

- seeking the voluntary co-operation of adjacent private owners to activities and/or works on their land that enhance the safety and quality of the public space

- training staff in crime prevention and the National Guidelines

- initiating organisational change to promote communication and co-operation between the different sectors that need to work together to achieve CPTED

- establishing voluntary guidelines, protocols and working partnerships or by seeking regulatory management through District Plans to manage other users and occupiers of streets (for example, the location of taxi stands, bus stops, telephone booths, pump stations and substations).

Apply CPTED to private development

Significant development of privately-owned land can usually be achieved without the need to obtain resource consent. While this has benefits, it means that significant development may be planned and constructed with little or no consideration of CPTED.

Under these circumstances, there are two main ways that a local authority can apply CPTED to existing and proposed private development – voluntary initiatives and regulatory management.

Voluntary initiatives

It is recommended that local authorities first use voluntary initiatives to promote the application of CPTED to existing and proposed private development.

These initiatives could include:

- promoting and distributing the National Guidelines and offering training opportunities to the private sector as well as to council staff

- making owners in hot-spots more aware of the local crime issues and the benefits of incorporating CPTED and its importance to themselves and to the community

- anticipating where significant private development is likely to occur and contacting the owner or developer to advocate the importance of CPTED

- forming closer partnerships with the development community so that a local authority is more knowledgeable about impending private development and in a better position to take proactive action to encourage incorporating CPTED at the early stages of planning and development

- making specialist officers available to give advice on CPTED.

Voluntary initiatives are attractive because they can be immediately implemented by a local authority and are not costly. They are particularly applicable when seeking safety improvements to existing development (such as when retrofitting existing public places) and permitted new development. They are also the only way to gain improvements to existing hot-spots in circumstances where the owners are not contemplating change or development.

Councils may prefer to take a non-statutory approach for a variety of reasons including:

- low awareness of the National Guidelines and their value

- a general preference for non-statutory initiatives, particularly initially

- concern that if CPTED is proposed for private land it should also apply to public land (for example, council works on legal roads such as street improvement schemes)

- a need to work within existing budgets – a statutory approach could lead to increased costs due to compliance, staff training and the need to employ additional, specially skilled staff

- a preference to avoid increasing stress on local authority regulatory officers

- a desire to gain experience and test the value of CPTED locally without introducing statutory changes.

The New Zealand Urban Design Protocol

There are also relevant non-statutory imperatives such as the New Zealand Urban Design Protocol's vision, 'making New Zealand towns and cities more successful through quality urban design'. The protocol states that achieving quality urban design needs to involve:

- understanding the important role that physical design plays in helping reduce the incidence and fear of crime, and

- applying safer design principles to development projects.

If a council is a signatory to the protocol, it may choose to incorporate CPTED within its Urban Design Protocol Action Plan. This has the advantage of promoting an integrated approach to the planning and assessment of the environment.

On the other hand, a separate design guide may help to highlight CPTED as an issue. Design guides are a useful way for a local authority to illustrate how CPTED might apply in the local context.

More information about the New Zealand Urban Design Protocol is available from the Ministry for the Environment at *www.mfe.govt.nz/publications/urban.*

Regulatory management

A second step is for a local authority to incorporate CPTED into their District Plan. This enables the council to impose appropriate conditions if developers are reluctant to change their proposals to sufficiently incorporate CPTED. However, regulatory management is ineffective for existing hot-spots where the owners are not contemplating change or development.

More information on incorporating CPTED into District Plans is included in pages 37 to 43.

Manage relationships between public and private development

Legal boundaries and different land ownerships may limit CPTED from being effectively applied.

Issues often arise at the boundaries between public and private land due to the number of people and groups involved, each with different motivations and timeframes and each focusing on their own land and developments. In these circumstances, voluntary initiatives are likely to be more successful in implementing improvements than regulatory mechanisms.

In the case of development commissioned by a local authority, assessing the relationship and boundaries between the project area, surrounding spaces and private development is critical to identifying opportunities to enhance the quality and safety of the project area. The local authority can do this by:

- carrying out safety audits and/or site assessments to better understand the wider context of a project

- involving adjoining and adjacent owners in project planning and designing public spaces and facilities.

There are several benefits for a local authority in widening the assessment of a public project so that it includes neighbouring private land:

- Private landowners are a valuable source of local knowledge.

- Private landowners may provide valuable input into the council's proposed design including suggestions for design improvement.

- The local authority may find out what proposals owners have for their properties.

- The local authority may be able to discuss issues of mutual benefit.

- The local authority can discuss initiatives to make the public facility better and safer, with private landowners.

A close look at CPTED safety audits

What is a safety audit?

Poor urban design and management contribute to fear of crime in a community. Those best placed to determine the factors that contribute to fear of crime are often not crime prevention specialists, designers or management staff, but the people who live, work or spend their leisure in the community of interest. It is these user groups that can most accurately assist in identifying vulnerable areas and factors that contribute to, or detract from, feelings of safety in an area.

A safety audit involves asking these user groups about their feelings of safety while moving around a site – what contributes to these feelings, and what changes they would like to improve safety. It encourages a subjective interpretation of the environment from the perspective of particular user groups (such as women, young people and people with disabilities) that may have a different perception than professionals and experts.
A safety audit is a practical way to assess the perceived safety of an area.

Why conduct a safety audit?

Any group or organisation may identify crime issues within an area. It may be that the police notice recurring criminal incidents in certain places, or the local authority receives regular complaints about certain uses, or community groups or organisations such as business groups experience repeated vandalism of their property. The local authority or police may respond by facilitating a safety audit.

A safety audit:

- identifies factors that enhance the actual and perceived vulnerability of an area

- helps to identify long and short-term problems within the community

- gives the community a way to express their concerns about local safety

- promotes a sense of community ownership and responsibility

- focuses on dangerous or unsafe areas and improves public awareness of such issues

- provides useful information and guidance to planners, designers and service providers so that they continue to improve and maintain community safety.

Who should be involved?

It is important to consider the mix of participants – involving a cross-section of the community is important. The particular context of the area a (such as the type of activities and the scale of development) can help to determine who could be involved with a safety audit.

The local council facilitates the safety audit. Key players that may be involved include:

- members of the local community
- local police

- Neighbourhood Support groups
- community groups representing specific groups (such as victims, people with disabilities, young people, children, older people and women)
- other organisations, such as public housing agencies, public transport providers, business organisations and public health services.

Key steps to a successful safety audit

KEY STEPS

1. Make contact with the primary users
2. Conduct the audit
3. Develop a summary of issues and recommendations
4. Council to discuss issues and identify solutions and give advice
5. Feedback and follow-up

1. Make contact with the primary users

Make contact with the primary users of the area, including residents, the elderly, young people, women, workers, children, business owners, Neighbourhood Support groups, security firms and people with disabilities.

Ways to make contact include:

- word of mouth
- community newsletter
- local papers
- posters
- community radio
- public meeting
- letter drops.

Include the details of when and where the audit will be held, how to get involved and what participants can expect such as where to meet and what to bring. This may include good footwear, suitable clothes for the weather and a torch.

2. Conduct the audit

BRIEFING

Brief the participants at a community centre or hall within the area, before setting out on the audit. The briefing is an opportunity to explain where they will be going, what they need to do and how to provide their feedback (such as providing specific suggestions with addresses and directions, for example 'inadequate lighting outside 52 General Avenue'). Remind participants to consider the needs of others such as those with disabilities, the elderly, someone with small children, and those on their own.

The following questions may help to prompt participants to think about how they feel within their community before setting off on the audit:

- How do they feel walking through their local park at 9 o'clock at night?
- Would they feel safe? If not why not?
- What would make them feel safer within their community?

Supply clipboards, pens and maps. If the group is large or the audit is being held at night, it may be worth splitting the participants into groups.

DEBRIEFING

Get the participants together for a debriefing and information-sharing session once they return from the audit and while the issues are still fresh in their minds. It is useful to allow some time to discuss the most important issues that were identified. Usually they will be obvious – they may even be the reason for the audit (such as poor lighting throughout a suburb, an unsafe park in the area or graffiti).

3. Develop a summary of issues and recommendations

The process of summarising and interpreting information collected during the audit, then translating this into a summary of issues is important. Look for common themes. Consider who said what. Summarise and prioritise the issues. Identify the agency or organisation that could be responsible for addressing them. Having clear responsibilities and actions is critical for the successful outcome of the audit.

Some groups may wish to be involved in improving an area in partnership with the local council. For example, tree planting or tidying a reserve are opportunities to foster positive partnerships within the community and improve community wellbeing.

EXAMPLES OF ORGANISATIONS AND POSSIBLE RESPONSIBILITIES

ORGANISATION	ROLE
Local council	Lighting, signage, rubbish, footpaths, graffiti, parks and gardens, public toilets, vandalism to public property, traffic management, recreation areas, street planting, community centre security, bus shelter maintenance and provision
Police	Antisocial behaviour of groups or individuals, vandalism, issues around alcohol-related problems, dangerous driving and safety-related issues, security advice, burglary and crime and community safety
Power authority	Lighting
Public telephone provider	Installation and repair of public phones
Business/shopping centres	Car parks, signage, lighting, vegetation, maintenance
Schools/educational institutions	Conduct of students, and/or signage, lighting, planting and car parking
Public transport provider	Location and maintenance (graffiti, vandalism) of bus and train stops and stations

4. Council to discuss issues and identify solutions and give advice

Provide the summary of issues and recommendations to the local council for consideration. Some councils may have funding set aside for community safety projects that can be used to help implement the solutions.

5. Feedback and follow-up

Provide audit participants with the summary of issues and recommendations within a month of the audit being held. Keep them informed about any action that takes place as a result. Even small results (such as a reserve being weeded, street lighting upgraded to a higher wattage, or signs being replaced) are positive and can help to empower the community. Updates may be by:

- community or school newsletters

- Neighbourhood Support newsletters

- community meetings

- local newspaper articles.

It may be useful to provide participants with copies of the audit forms completed and a contact list of those who took part in the audit as well.

Hints and questions for a successful audit

Hints for a successful audit

- The more participants the better. It is important to get a cross-section of the community who use the area.

- Ensure the combination of people within the group(s) help to minimise the possibility of an individual's perceptions or feelings of safety being influenced by others. For example, it may be appropriate to separate males and females, young and older, and security personnel from vulnerable groups.

- Choose a realistic amount of area to cover. It is better for groups to cover a smaller area completely than to miss important issues. Another audit can be organised at a later date to cover other areas.

- Carry out a safety audit at day and at night so that all user groups are catered for. If only one time can be considered then carry out the safety audit at dusk or at night.

- Provide an incentive for people to take part such as refreshments at the completion of the audit.

- Provide participants with accurate, easy-to-read maps and other equipment such as clipboards, survey forms and pens. Make sure any questionnaires, checklists and audit forms used during the audit are carefully structured and relevant for the location.

- If the safety audit is for a large-scale development (e.g. a town centre or big shopping mall) it might be useful to split the participants into smaller groups to conduct audits of identified hot-spots.

Possible questions for a successful audit

Lighting

- Is the street lighting adequate and appropriate for the area?

- Does the lighting allow you to see far enough ahead?

- Are there obstructions to lighting, such as trees?

- Are all the lights working?

- Is there adequate lighting around pedestrian crossing, bus stops, telephones, signs and toilets?

Public facilities such as public telephones, public toilets, signage, bus and train stops, taxi stands, parks and reserves

- Where is the nearest public telephone?

- Is it accessible to anyone who needs to use it? (such as for children or people with wheelchairs)

- Have any of these facilities (telephone box, bus stop, signs, parks or toilets) been vandalised or hit with graffiti?

- How does this make you feel?

- Are the public toilets accessible to all the people who may wish to use them?

- Are the facilities (such as toilets, telephones, bus stops) in the area well signposted and easy to read and understand?

- Are there parks or gardens in the area?

- Is the park well maintained?

- How do you feel about using the park?

- Do you feel safe?

- Is there any vandalism or graffiti in the park?

- Is the park visible from the street, nearby houses or buildings?

- How well used is the area?

- Who uses the area most often?

Landscaping/vegetation

- Are there any obstructions to visibility (such as overgrown shrubs and trees)?

- Are the paths obscured by vegetation?

- Are the trees and shrubs suitable for the area?

Maintenance

- Is the area well maintained?

- Is there much litter around the area?

Roads/footpaths

- Are there damaged footpaths or roads in the area?

- Do you think the footpaths are suitable for the residents in the area? Why?

Site security: businesses, car parks, shopping malls, parks

- Do businesses, car parks, malls and parks look safe and secure to you?

- Would you feel safe using these areas at night? Why?

Activity

- Who is around?

- What is the level and type of activity in the area?

- Do you feel safe using the area?

Sense of direction and signage

- Is it easy to find your way around?

- Are the pedestrian pathways clearly defined?

- Is there good signage to give direction?

A close look at CPTED site assessments

What is a site assessment?

A site assessment is a process by which professionals and specialists, trained in CPTED, are contracted by local authorities or the police to assess a site. A site assessment determines the factors that impact on the actual and perceived safety of that site for potential users. The ultimate aim of a site assessment is to make recommendations for improving the safety of the area and assist with their implementation.

A site assessment involves a wide range of data and analysis, including an exploration of social, economic and environmental issues. It may include several site visits to assess and investigate various aspects of the area. It can include a safety audit.

Site assessments are most effective when undertaken before the final planning and construction of a development. This ensures that CPTED can be incorporated from the beginning and allows safety and security strategies to be tailored for the needs of the particular site – avoiding the likelihood of costly remedial work later on.

A site assessment helps to:

- identify the factors that increase the actual and perceived vulnerability for users in a certain area

- determine measures and design applications to enhance the safety of that area for users and deter potential offenders (for example, by increasing the actual or perceived risk of apprehension).

Why carry out a site assessment?

This list of indicators can help determine whether an area or site may need a site assessment for safety:

- The site is a vulnerable development or hot-spot.

- There is a major crime attractor in the adjoining area.

- There are high vacancy levels in a centre.

- The site is located on a major arterial road.

- The site is a focal point of public transport.

- There is a community perception of crime regarding the use or area.

- Crime data indicates the area may be high risk.

Who should be involved?

Overseeing the site assessment

Typically the local authority and the police work in partnership to oversee site assessments. It is important that their roles and responsibilities are agreed at the outset of the assessment project as this will increase the likelihood of recommendations from the site assessment being implemented.

Site assessments are usually undertaken for public projects, although there is also scope to work on privately-owned sites.

Carrying out the site assessment

Usually the local authority or the police engage a team of professionals to carry out the site assessment. In addition, the police may provide assistance with the onsite evaluation and supply statistics and intelligence.

The team may require specialists to comment on safety issues within a particular area of expertise (such as lighting engineers, landscaping specialists or urban planners). The team may also involve stakeholders to help identify relevant issues by interview, questionnaire or involvement in a safety audit (if one is held). These stakeholders could include:

- crime prevention workers
- business or activity managers
- managers of public facilities or spaces
- private security staff
- youth workers
- agencies (e.g. public transport authorities, public housing providers, public health services).

In carrying out the site assessment, it's important to identify the groups that use the area. These groups could be involved in a safety audit or interviewed for anecdotal information about vulnerable areas, depending on the nature of the site assessment.

These groups may include:

- children
- young people
- adults
- students
- women
- families
- older people
- people with disabilities
- ethnic groups
- mobility impaired
- hearing/sight impaired
- employers/shopkeepers
- shoppers
- residents
- public transport users
- visitors (this is particularly relevant if the site is within a tourist precinct).

Presenting the recommendations

The findings and recommendations from the site assessment are provided to the local authority, in a formal written report or a presentation, to consider.

A copy of the findings and recommendations should also be provided to the participants in the site assessment, and they should be informed about any action that takes place as a result.

Implementing the recommendations

The local authority is usually responsible for implementing and co-ordinating the recommendations of a site assessment.

The police usually help to evaluate the impact of the project.

Information sources for a successful site assessment

The National Guidelines are about defining the relationship between crime and place – gathering information is a critical step towards achieving this. An effective site assessment relies on information from a variety of sources. There are six main sources of information for a site assessment.

SIX SOURCES OF INFORMATION

1. Council
2. Crime statistics
3. Demographic data
4. Stakeholder interviews and user surveys
5. Observations
6. Safety audits

1. Council

A city or district council should be able to provide:

- a site or aerial map

- reports relating to traffic and pedestrian mobility patterns, local social services, heritage or cultural values and environmental features and/or any assessments and plans relevant to the site

- land use and activity patterns maps showing the designation and distribution of the various land uses such as residential, commercial, industrial and open space.

These are all useful in understanding the physical setting of an area or site, its predominant uses and their relationships to each other and to the major transport corridors and pedestrian routes.

2. Crime statistics

The police can provide statistical information about the site relating to crime types, victimisation surveys, local demographic profiles and specific crime location and offender types.

Area intelligence units at police stations can provide annual statistics reports and crime mapping systems. Other agencies (such as councils) can provide graffiti and vandalism reports, and hospitals may be able to provide reports on emergency admissions related to assaults. This data will help to determine geographical and temporal patterns of crime.

3. Demographic data

This describes local populations in terms of age, ethnicity and socio-economic variables and is available through government agencies such as Statistics New Zealand and the Ministry of Health, and local councils.

4. Stakeholder interviews and user surveys

These provide information on peoples' perceptions of safety and the factors that influence their perceptions. They are an important source of information as they provide a balance to the crime statistics and often uncover contributing factors and solutions to design problems.

A random sample of public users of the site may be surveyed to collect information about actual crime, and public perceptions of safety or fear of crime at the site.

■ □ Interviews may be held with individuals or groups that have a particular experience, knowledge or interest in the site. These usually involve face-to-face interviews using structured or semi-structured interview formats.

5. Observations

It can be useful to conduct formal or informal observations of the area to obtain direct knowledge of how the area is used. This includes observing who uses the area (both normal user and offender behaviour) and the time at which problematic behaviour occurs.

6. CPTED safety audits

Feedback from safety audits can provide valuable information about factors that contribute to perceptions of safety and fear of crime from the perspective of user groups.

Hints for a successful site assessment

Preparing for a site assessment

When planning a site assessment, take safety into account by considering:

- the site, context, development and related policies

- the safety issues

- who should be involved and/or consulted in the assessment

- the best time to assess the site (day, night, peak times, special events) and over what period

- the tools to take (camera, maps, video, clipboard, tape recorder)

- the mode of traffic for assessor/s to best assess access issues (walking, cycling, public transport, motor vehicle or all).

Assessment of the wider context

When assessing the safety-related issues of the wider area, take into account:

- the main pedestrian routes connecting activities to public transport stops and car parking

- car parking locations

- underpasses, overpasses, alleyways.

Considering vulnerable land uses

Note and map the location of vulnerable areas or uses, such as:

- licensed premises (taverns, hotels, entertainment venues, licensed clubs, liquor stores, nightclubs)

- large entertainment and recreational venues

- large institutional facilities

- schools

- car parks

- uses after 9pm or over a 24-hour period such as automated teller machines, service stations and public transport interchanges

- large-scale projects considered as having wide ranging safety implications

- public telephones

- public toilets.

Safety through other eyes

Consider issues such as:

- footpath surfaces

- distance between car parks and entrances to facilities

- access to public transport

- ease of mobility

- safe facilities for children

- safe movement from edges to centres

- type and location of signage.

Consult with:

- different cultural groups to improve understanding of the design environment from their perspective

- men and women to understand gender differences relating to feelings of safety and levels of fear

- the aged and disabled to understand issues relating to access, mobility, signage and safety.

Vulnerable groups

Identify the potential presence of vulnerable groups to determine who they are, how they use the area, whether they are potential or actual targets, and why.

An effective site assessment should also consider the range of special needs within the groups and individuals identified as relevant for the site assessment area. For example, older people may have special needs regarding certain design elements and/or treatments such as surface materials, safe routes to public transport from public housing, night-time access by public transport, short direct walking routes to entrances of spaces and facilities, and special requirements relating to the width of footpaths and car parking. Younger people may need public transport to serve venues after hours, spaces to socialise, clear rules about behaviour and activities, and opportunities to participate in discussions about issues relevant to them.

Other issues

A number of other issues may impact on safety in and around the site, and require data gathering and analysis. They can include:

- the different weekend uses or users of an area
- the location of generators and attractors such as licensed premises and gathering places
- the potential for mixed uses or activities such as community events
- the activities in the daytime (e.g. commercial)
- the level of after-hours usage
- people's perceptions

- the relationship between safety and perceptions of safety to factors such as gender, age, mobility, level of disability and culture
- the public transport routes and shops, and the distance to residential areas
- the general appearance of the area
- the cultural or heritage significance of the site
- the lighting
- the extent and mix of housing
- crime statistics and police activity
- the method and location of access to an area by potential offenders
- the existence of neighbourhood or business community groups
- the role of other business or community bodies
- community development programmes and other programmes, processes or systems that exist
- the future trends likely to affect the area including social mix and demographics such as age distribution, education and employment.

A close look at CPTED and the District Plan

This section on the District Plan is specifically for urban planners and developers.

CPTED and District Plans

Adopting CPTED as council policy and implementing it through its District Plan is one way a local authority can go about meeting its responsibilities under the Resource Management Act and the Local Government Act – making their cities, towns and districts safer and better places to live and visit.

There are two main statutory approaches: limited and comprehensive.

Relevant legislation

The Resource Management Act 1991

The purpose of the Resource Management Act is 'to promote the sustainable management of natural and physical resources' (s5(1)). In exercising their functions and powers, local authorities must ensure that this purpose is realised.

Sustainable management means 'managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while (among other things) avoiding, remedying, or mitigating any adverse effects of activities on the environment…' (s5(2)). Providing for the safety of people and communities is specifically referred to as an objective. In addition, adverse effects on the environment can include the potential for crime and fear of crime.

The Resource Management Act requires local authorities to have particular regard to 'the maintenance and enhancement of amenity values'. Amenity values are defined as 'those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes'. Safety is a prerequisite for people to appreciate the pleasantness, aesthetic coherence, and attributes of an area.

Your Guide to the Resource Management Act
This guide, developed by the Ministry for the Environment, is designed for users of the Act. It provides a simple explanation of the Act and its processes. A copy is available from the Ministry for the Environment's website *www.mfe.govt.nz*.

Local Government Act 2002

Local authorities are also responsible under the Local Government Act for promoting the social, economic, cultural and environmental wellbeing (including safety) of their communities, including identifying community outcomes in their long-term council community plans. These plans typically include outcomes such as:

- to improve safety within the community
- to enhance the particular qualities of a particular city, town or district that contribute to people's appreciation of it.

In particular, the Local Government Act requires a local authority to prepare a long-term council community plan. Safety from crime and achieving quality physical environments are important community outcomes that should be included in the plan, as well as the local authority's strategic policy commitment to crime prevention and CPTED.

Complete copies of these Acts are available from *www.legislation.govt.nz*.

Limited statutory approach

Under this approach, CPTED is incorporated into a District Plan but there are no directly associated rules or assessment criteria – only the objectives and policies have statutory effect.

A local authority might wish to adopt a limited statutory approach as a first phase before considering whether to adopt a comprehensive statutory approach. The advantages of this approach could include slightly easier implementation (the statutory process is likely to be easier than that associated with a comprehensive approach) and a phased approach to developing the capability of a local authority to undertake site assessments.

CASE STUDY: WELLINGTON CITY COUNCIL

The Wellington City Council has taken a limited statutory approach to CPTED.

The District Plan:

- identifies that a safe city is a significant resource management issue for Wellington

- has an objective in the residential, commercial and rural areas 'to promote the development of a safe and healthy city' (interestingly, the objective is absent from the 'open space' areas of the city)

- has a policy in the above areas to 'improve the design of developments to reduce threats to personal safety and security'.

- states that the method to achieve the above is advocacy with the explanation that 'guidelines for design against crime have been prepared and these will be used by council to advocate the development of a safe city'.

Guidelines for Design against Crime are contained within the District Plan but are marked *Non Statutory – For Guidance Only*.

The council has found that:

- it is easier to introduce CPTED into the District Plan on a limited basis (i.e. without statutory rules)

- having statutory CPTED objectives and policies in its District Plan has raised awareness of CPTED amongst staff, applicants and consultants

- while the *Guidelines for Design against Crime* tend not to be specifically assessed in 'Assessments of Effects on the Environment' submitted with applications for resource consent (mainly because the guide is non-statutory and therefore easy for applicants to avoid or overlook), design changes for CPTED reasons are often achieved by mutual agreement

- while occasionally some applicants are unwilling to make design changes voluntarily, development in Wellington's commercial area and multi-unit development in residential areas are subject to statutory urban design guides, providing an alternative way to require design change for CPTED reasons.

Comprehensive statutory approach

A comprehensive statutory approach involves incorporating objectives, policies, rules and assessment criteria relating to CPTED into District Plans. This means that all these components have statutory effect.

CASE STUDY: AUCKLAND CITY COUNCIL

The Auckland City Council approved a change to their District Plan so that CPTED now applies to:

- people generating activities such as integrated housing developments as well as non-residential activities (such as care centres and places of assembly) in residential zones

- large-scale redevelopments (including mixed-use developments), residential developments, large-scale transport facilities, and car parking facilities in business areas

- certain activities subject to the threshold effect

- business activities that interface with residential activities

- certain new buildings, car parking and playground areas within open space zones and special purpose zones.

Other aspects of the plan change include:

- a focus on requiring certain activities that already require resource consent to be assessed against the proposed safety provisions

- the introduction of the objective 'to enhance public and personal safety through reducing opportunities for crime to occur'

- the inclusion of a Section 32 assessment of the proposed provisions, including assessment of whether incorporating CPTED provisions into a District Plan is the most appropriate way to achieve the purpose of the Resource Management Act.

The main advantage of the plan change is that the hearing commissioners will take CPTED into consideration when assessing resource consent applications. Therefore CPTED is likely to have a greater effect under a comprehensive statutory approach than for a limited statutory approach. A copy of the plan change is available from the council's website *www.aucklandcity.govt.nz*.

Advantages of incorporating CPTED

A recent research project[2] assessed the advantages and disadvantages of incorporating CPTED into District Plans. These were the main findings:

- CPTED can be overlooked unless incorporated into a District Plan.

- Some private developers will only be persuaded to change proposals to be consistent with CPTED guidelines if there are specific rules in the District Plan that provide the council with the ability to impose conditions.

- Some resource management regulators might ignore non-statutory issues in order to manage workload.

- Statutory concerns tend to be treated more seriously than non-statutory ones.

- Awareness of CPTED is likely to rise if there is statutory application.

In addition, incorporating CPTED into District Plans has the following advantages under the Resource Management Act:

- The consent authority (such as the local authority) will be able to consider issues of public safety or CPTED when assessing discretionary and non-complying activities.

- One of the alternate gateway tests for non-complying activities is whether the activity is in keeping with the objectives and policies of the District Plan.

- There must be particular attention to District Plan objectives and policies, when processing Notices of Requirements and outline plans.

However, statutory initiatives are not effective in existing crime problem areas where the owners (including a local authority) are either not contemplating change or new development, or if the new development is permitted under the District Plan.

2 'Crime Prevention through Environmental Design – Applications in Resource Management' by Jayne Klein, Massey University, Palmerston North.

Successfully incorporating CPTED

Thresholds need careful assessment

Issues that require careful assessment when incorporating CPTED into a District Plan, include:

- the threshold at which an activity needs resource consent

- the thresholds that define an activity as a controlled, limited discretionary or discretionary activity, and whether these may change.

If resource consent is required for new buildings, then the simplest approach may be to widen the existing assessment criteria to include CPTED. This has the advantage of not being more restrictive as no additional applications for resource consent are required.

FOR EXAMPLE

An existing District Plan requires resource consent for a proposed parking facility once the number of spaces exceeds a certain level.

Once it exceeds that level, the parking facility needs to meet certain assessment criteria relating to its potential impact on the surrounding road network.

A plan change could be introduced so that the criteria takes CPTED into consideration as well – ensuring that the design of the parking facility becomes consistent with the National Guidelines.

However, as some developments with poor design may not require a resource consent application, they may remain a permitted activity without taking CPTED into consideration. Councils may need to change the status of certain activities and areas (such as parking facilities, underground public pedestrian links, public transport facilities accessible to the public, new central city public parks, new street malls, central commercial areas and hot-spots) so that an application for resource consent is required. Changes like this need careful assessment. Controlled activity status permits a local authority to impose reasonable conditions while giving certainty to applicants that their proposal will be approved.

There is little evidence to date that suggests that local authorities need or require the ability to decline applications on the basis of possible non-compliance with CPTED, but there may be exceptions that local authorities can identify and incorporate into a District Plan change.

The Auckland City Council recently approved a change to its District Plan and a copy of this change can be found on the council's website *www.aucklandcity.govt.nz*.

A Section 32 assessment for plan changes

A council wishing to make a change to the District Plan is required to carry out a Section 32 assessment under the Resource Management Act. The assessment needs to demonstrate that the additional (more restrictive) District Plan provisions sought are the most appropriate way to achieve crime prevention and that the benefits outweigh the costs.

Information on undertaking a Section 32 assessment can be found on the Ministry for the Environment 's website *www.mfe.govt.nz*.

Carry out a gap analysis

A gap analysis is a useful way to assess the extent to which District Plan provisions need improving so that CPTED can be implemented. It may include answering questions such as:

1. What physical developments or changes have occurred or can occur as permitted activities but should be managed in terms of CPTED?

2. What physical developments or changes have been subject to the resource consent process but insufficiently assessed in terms of CPTED?

3. Where were these developments and changes located? Were these on private land or public land (i.e. legal road or parks)?

The results are likely to help a local authority to identify:

-   whether District Plan provisions are the appropriate methods in given situations

-   priority issues and areas for applying CPTED.

In preparing for a gap analysis, it is often useful to seek the opinions of a wide variety of stakeholders, specialists and interest groups.

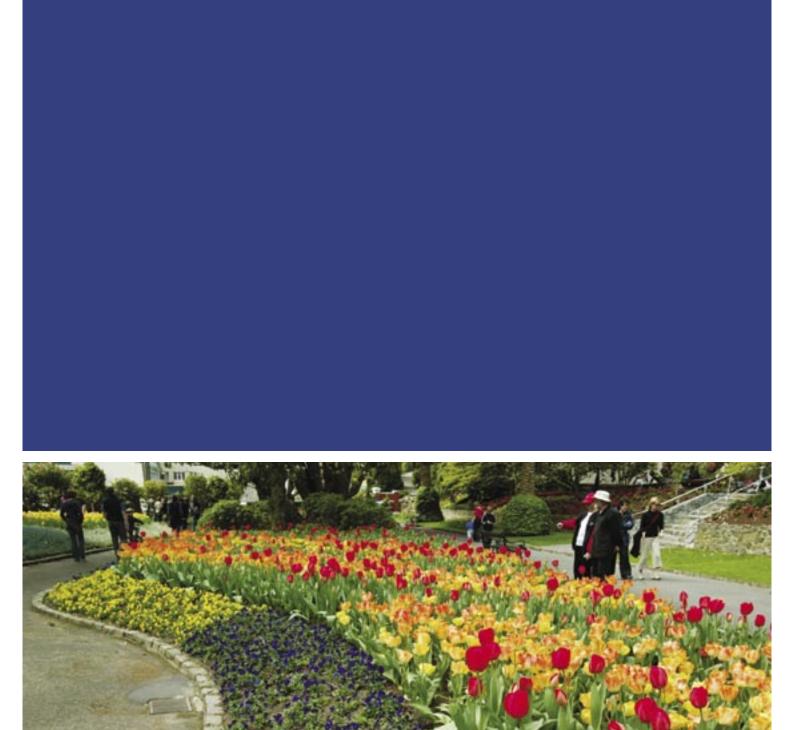## Education, training and identifying the need for specialists

Effectively implementing CPTED through the District Plan relies on local authorities to educate and train their staff and local participants (such as resource management consultants, architects, designers, engineers, landscape architects, developers, special interest groups and town centre promotion organisations) in the resource management process. It also requires them to identify when advice and assistance from specialists is required.

Local authorities could organise training to promote CPTED and therefore the District Plan's provisions for CPTED.

Pre-application meetings become more important

Pre-application meetings become more important when issues of design interpretation are involved. Council resource managers need to understand CPTED and feel confident in assessing proposals against the criteria. They need to be able to provide high quality, consistent advice as early as possible in the process.

In some cases, a proposal might be so significant that a local authority requests the applicant to arrange for an independent assessment by an appropriately qualified or experienced specialist. Or, the local authority may commission its own assessment or peer review of the proposal.

References

Glossary

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.

Public spaces

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

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 development and areas

- 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.

Vulnerable people or groups

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.

Bibliography

Auckland City Council, Safer Auckland City (2001). Introduction to Crime Prevention Through Environmental Design. *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*

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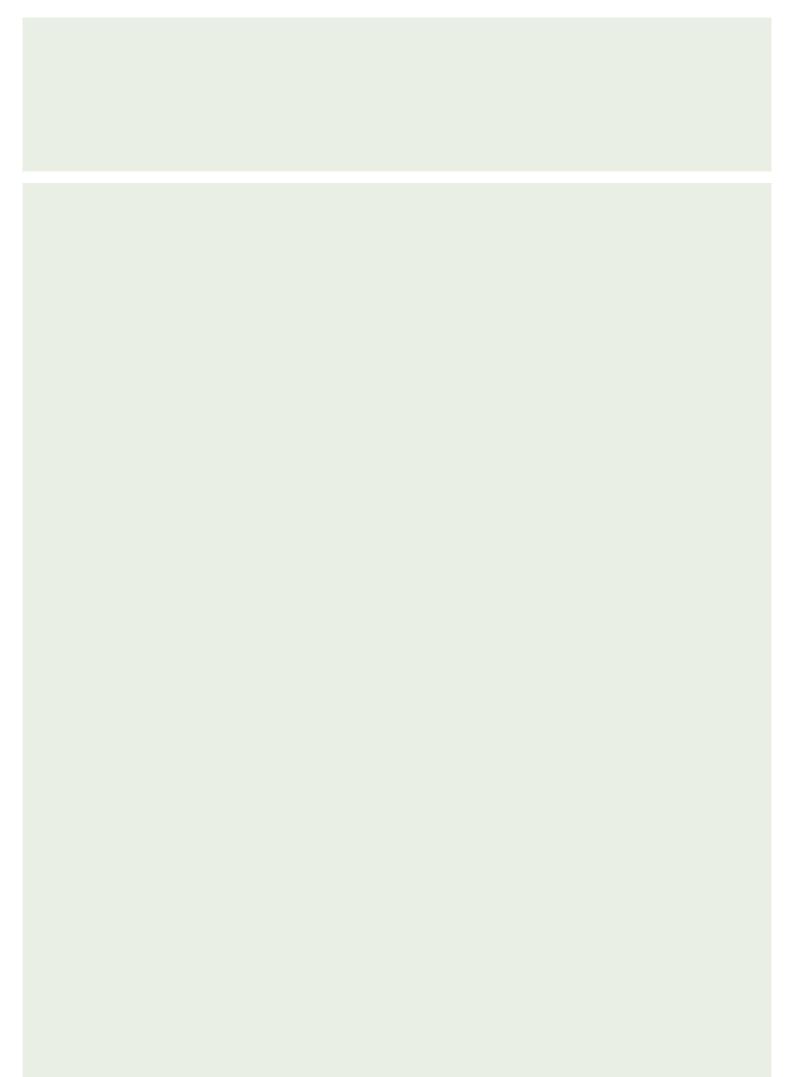
Office of the Deputy Prime Minister (2004). Safer Places: The Planning System and Crime Prevention, United Kingdom.

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

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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