

Appendix R – CPTED Guiding Principles, City of Winnipeg, May 2006



INQUIRIES

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SUPPORTING DOCUMENTS

- City of New Westminster, Crime Prevention Through Environmental Design Guidelines for Safe Urban Design, April 1999. * CPTED is a part of the New Westminster Official Community plan (adopted 1998)
- City of Regina, Crime Prevention Through Environmental Design An Introduction to CPTED Principles and Strategies for Safe Urban Design, No date.
- City of Surrey, Official Community Plan (Division F), Guidelines for Crime Prevention Through Environmental Design (CPTED), November 2001.
- City of Winnipeg, Safety Tool Box, November 2001.
- Illuminating Engineering Society of North America <http://www.iesna.org/>

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**Crime
Prevention
Through
Environmental
Design**

Crime prevention guiding principles for private & public development in Winnipeg



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Planning and Land Use Division





Safety is found in numbers - a busy summer day at The Forks provides a great space to relax and people watch.



A pathway in St. Boniface with clear sightlines leads pedestrians safely down to the Red River's edge.



Vines against this downtown parkade deter graffiti and soften the exterior of the walls.

WHAT IS CPTED?

The City of Winnipeg is committed to making our communities safer. Safety and security in homes, neighbourhoods, and in the downtown is critical to our quality of life. Preventing crime through environmental design is a powerful tool to improve community safety. The City of Winnipeg encourages the integration of Crime Prevention Through Environmental Design or CPTED (pronounced Sep-ted) principles in Plan Winnipeg 2020 Vision. CPTED is the relationship between how space is designed and used and the real or perceived feeling of safety by the user of the space.

This document outlines how CPTED principles can be integrated into the planning, design and development stages of a project city-wide. Applying CPTED principles at the earliest stages of a project can help prevent crime, improve public safety and comfort and makes good business sense. Incorporating CPTED is an important part of creating a high-quality urban environment.

CPTED:

- is an environmental design approach to crime prevention;
- it can improve the comfort of an area for the user; and
- it can be applied to a single site or an entire neighbourhood.

CPTED builds on the following ideas:

Natural Surveillance

1. Clear paths of visibility and busy areas where there are people watching and observing provide a better sense of security to a given place.

Access Control

2. Access can be controlled and limited through well-demarcated entrances and exits with distinguishable private and public spaces.

Territoriality

3. Encouraging positive activity in public spaces helps to discourage crime and disorder. Busy areas increase the feeling of safety.

Maintenance & Image

4. Well-maintained areas express a sense of ownership - people tend to protect an area they feel belongs to them.

COMMON CPTED APPLICATIONS

Parking Facilities

Surface and parkades require thoughtful design to decrease vandalism and theft of and from vehicles. Well-designed parking facilities are more likely to draw a consistent, high number of users.

Parking Facility Guidelines

- Parking areas should be kept bright with clear sightlines so all activity through the area can be observed.
- Access to the site should be controlled and limited.

Common Suggestions

- Install vehicle gates for underground parking facilities.
- Secure access to the building from underground parkades.
- Use reflective, white paint in underground facilities to improve brightness and visibility.
- Minimize solid walls, and instead use grilles or glazing to promote sightlines at street level and within the parkade.
- Consider video surveillance in underground facilities. Example: entrances to stairwells.
- Do not number parking stalls to match residential units.
- Include good signage for wayfinding.
- Glass walls for entrance vestibules allows users to see into the parkade or elevator lobbies before going to or from their cars.
- Include lighting that is even, does not create shadows or glare and is vandal proof.



This well-maintained parking lot provides safety, comfort and visibility for its users. The landscaping treatment allows observation of the lot from the neighbouring building.



Safety and good design are a fundamental part of this well-integrated parkade on Albert Street in the Exchange District Natural Historic Site.



A clearly defined sidewalk at an Osborne Village Grocery Store traverses the parking lot and provides evident separation between pedestrians and vehicles aided by the landscaping and change in paving patterns.



Carefully shaped hedges delineate between public and private space, but still provide clear views of the open space on the other side.



Geraniums in their planter boxes along Grosvenor Street prevent individuals from gazing directly into the windows and provides a friendly indication of ownership.



A downtown restaurant provides a well-demarcated patio space for its patrons during the summer months, helping to create a vibrant and safe streetscape.

COMMON CPTED APPLICATIONS

Landscaping

Well-maintained planting and landscaping that provides open sightlines and good visibility demonstrate care and create a safer more comfortable space for individuals. Common sense prevails when using landscaping, taller plant material which hinders visibility should be avoided, and the maintenance as well as the mature state of plants should be considered when making final landscaping decisions.

Landscaping Guidelines:

- Keep site lines clear. Trim shrubs and trees. Shrubs should be kept low (approximately 76 centimetres) and all tree branches pruned up above head height.
- Plant prickly shrubs in areas you do not want people to go. Example: under operable windows and windows you do not want people peering into.
- Plant shrubs or vines against walls to prevent graffiti and vandalism.
- Plant low shrubs along front property line to provide a clearly defined edge.

Suggested Plant Materials:

Vines

- Virginia Creeper
- Engelmanns Ivy
- Riverbank Grape

Spiny Shrubs or Shrubs with Needles

- Horizontal Juniper (0.15 – 0.3 m)
- Roses (0.3 – 3 m)
- Common Juniper (0.6 m)
- Pygmy Caragana (0.75 m)
- Russian Caragana (2 m)
- Wolfwillow, Silverberry (2-3 m)
- Silver Buffaloberry (3 m)
- Common Caragana (to 4 m)
- Common Seabuckthorn (4 m)

FOUR KEY CPTED PRINCIPLES

Principle 1: Natural Surveillance

Design space to ensure maximum visibility of activity

Natural surveillance is the ability to see into or out of an area so all activity is easily observed. When there is a high level of natural surveillance – or “eyes on the street” - illegitimate activity is discouraged for fear of being caught, and legitimate users feel safer knowing people will see them if they are in trouble.

Some examples:

- Is it easy to see into and out of a store, what is ahead of you on a treed path, or across a parking lot as you enter or exit your car?
- Do shrubs and trees conceal unwanted activity around your home or business?
- Does the design of a facility or space create hiding spots or entrapment spots?

Principle 2: Access Control

Limit and define access to a space as a means to control crime

Access control is the means of limiting, controlling and defining entrances and exits through the use of real or symbolic barriers in order to maximize surveillance and the feeling of safety. This can be the placement, design and location of entrances and exits, as well as the use of fencing, lighting and well planned landscaping to help define and guide movement through a particular space.

Some examples:

- Are entrances easily identified?
- Are access points easily observed?
- Do barriers such as fencing provide visual permeability or do they create a fortress-like appearance?



The entrances to residences along Gerard Street, although placed right next to the public sidewalk, help define the semi-private space.



This interior staircase on the Adult Education Centre is visible from the exterior, due to clever design and ingenious lighting.



This “good neighbour” fence in River Heights gives some visibility, but maintains privacy eliminating the fortress effect that high fences can often create.



This well-maintained community garden on Langside Street is a neighbourhood effort turning otherwise vacant lots into spaces in which area residents can feel pride and ownership.



Historic signage is left unmarred by graffiti in the Exchange District National Historic Site.



A restaurant on Provencher lures patrons to its doors by its carefully defined and maintained outdoor space.

Principle 3: Territoriality

Use physical elements to reflect ownership of a place

Territoriality clearly defines areas and types of spaces reinforcing a sense of ownership. Spaces should be designed to clearly indicate its intended use. Users should clearly understand what is public, semi-public and private space.

Some examples:

- Do pavement patterns, curb placement, signage, fencing and landscaping define the space?
- Do spaces easily transition from public to private space without creating a fortress like design?

Principle 4: Maintenance and Image

Design space to be easily maintained

A poorly maintained space is more vulnerable to further neglect. Neglected areas lack a sense of ownership and provide the opportunity for illegitimate users to claim the space. Spaces should be designed with low maintenance requirements. Durable, high-quality building materials and landscaping should be used that are easy to maintain and project a positive image.

Some examples:

- What are the preventative steps used to discourage graffiti?
- Are garbage and recycling enclosures located away from views of public streets, but in secure, well-lit locations?
- Are lights vandal resistant?

COMMON CPTED APPLICATIONS

Lighting

Lighting is a vital component to enhance safety in spaces where people move after dark. Well-designed lighting should be responsive to the environment, thereby increasing comfort levels for the users and eliminating the possible detrimental effect some lighting may have in isolated areas. Unnecessary or poorly designed lighting in locations without actual or perceived surveillance can create ideal locations for illegal activities. Therefore, when it comes to lighting, each situation is different, and a comprehensive lighting plan is necessary for all developments.

Lighting Guidelines:

- Light public spaces, entrances, pedestrian routes, building entries and parking lots
- Lighting levels should be adequate to identify approaching people
- Lighting should be designed and installed to ensure even illumination
- Locate lighting in hard to reach places to reduce vandalism

Lighting Checklist:

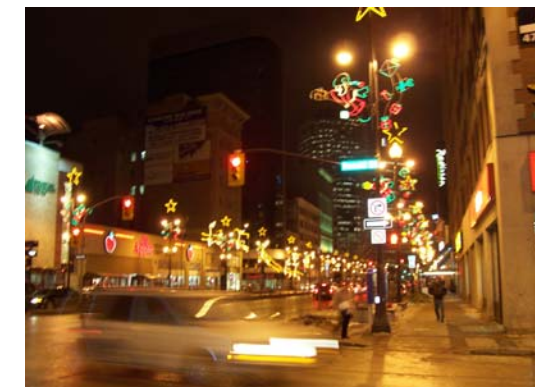
- Is light being blocked? For example: A tree canopy blocking street lights.
- Are lighting levels adequate to identify potential hazards ahead?
- Are lighting levels too bright disturbing adjacent properties? Lower light levels might help to reduce the glare for neighbouring properties, as well as for pedestrians and motorists.
- Is the lighting even or does it create bright areas and dark shadows that could provide hiding spots?
- Consider better, properly placed lighting rather than brighter lighting.
- Light coloured surfaces will reflect light better than dark surfaces. Example: parkades.
- Has the quality of the light been considered?



The well-lit plaza space in front of the Convention Centre on York Avenue, helps to maintain a comfortable level of security in front of the building.



Unhampered views and pedestrian friendly lighting make the Esplanade Riel a well-designed gateway for pedestrians walking to downtown Winnipeg.



The holiday season is celebrated on Portage Avenue through colourful lights creating a festive and safe atmosphere.