

# CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

## STRATEGIES FOR PARKS AND HEALTHY RETAIL

Crime Prevention Through Environmental Design, otherwise known as CPTED, is defined as “the proper design and effective use of the built environment that can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life.” CPTED strategies are internationally recognized as an effective approach to reducing crime in communities while increasing quality of life of residents.

### THE BASICS OF CPTED

CPTED strategies are broken down into four main categories<sup>1</sup> to help activate the built environment:

#### Natural Surveillance

Natural surveillance uses the placement of physical features, activities, and people to maximize visibility. Strategies include landscaping, lighting selection and placement, seating, and reduced placement of ads in retail windows or transit stops.

#### Natural Access Control

Natural access control uses the design of walking paths, landscaping, and building orientation to guide people through a space and identify points of entry. Strategies include wayfinding, celebrated points of entry, and clearly marked public pathways to entrances.

#### Territorial Reinforcement

Territorial reinforcement supports clear definition of public, semi-public and private property. Territorial reinforcement combines natural surveillance and natural access control to define ownership of a space. Strategies include fencing, pavement treatments, signage, and landscaping.

#### Maintenance

Routine maintenance of a space or property creates a sense of ownership that deters crime. By contrast, properties that lack regular maintenance signal a smaller consequence for negative activity offenders. Strategies include regular trimming and care for landscaping so as not to obstruct views, upkeep of building structures, and functional lighting. Parks and retail spaces can often address 85% of safety issues with a maintenance plan.

#### A NOTE ABOUT CRIME PREVENTION USING MECHANICAL STRATEGIES

Mechanical strategies include CCTV, high security fences, and other technological tools to support security of property. While mechanical strategies are often a property owner’s first instinct, they do not guarantee a reduction in crime or may even decrease the quality of life due to the appearance of a more hostile environment. Natural Surveillance, Natural Access Control, Territorial Reinforcement, and Maintenance strategies should be prioritized before resorting to mechanical strategies.

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<sup>1</sup> “CPTED Training | Crime Prevention Through Environmental Design, Basic CPTED Course.” *CPTEDTraining.net*, [www.cptedtraining.net/](http://www.cptedtraining.net/).

# HEALTH AND CPTED

Both public health professionals and CPTED professionals have agreed that the built environment can support positive or negative activity. Increased levels of crime associated with the built environment include low-lit vacant areas, vacant buildings, drinking establishments, and car dominant areas. However, the built environment can also influence opportunities for public health outcomes such as access to parks and recreational trails, access to healthy retail, active transportation infrastructure, improved air quality, and much more. The health and safety of communities are heavily influenced by design. CPTED best practices not only support safe environments for all users, but also help improve quality of life by encouraging active travel and social cohesion.

## WHO SHOULD BE INVOLVED IN CPTED?

CPTED is best facilitated through a multi-disciplinary approach. CPTED is most effective when considered from the beginning of a design processes, however CPTED treatments can also help improve and enhance existing environments. Public health professionals, planners, engineers, law enforcement, architects, elected officials, business owners, and residents all have a role to play in carrying out CPTED practices to improve quality of life in a community.

## APPLYING CPTED STRATEGIES TO PARKS AND RETAIL

The following two guides provide subject specific CPTED approaches for parks and retail. These resources are meant to provide a quick start guide for key stakeholders to begin a conversation about improving parks and retail sites using CPTED. These solutions are generalized with the understanding that each site is designed differently and may have site specific priorities stakeholders want to address. Use the guide for CPTED in Parks and CPTED in Retail as a starting point to identify easy-to-implement CPTED strategies and long term priorities for improving specific sites.

# CPTED IN PARKS

Parks are great community assets that can increase physical activity, improve mental health, foster social cohesion, and provide environmental benefits. However, parks can also feel isolated and create opportunities for crime and undesired activity. People are less likely to go to a park that feels unsafe, which reduces opportunities for physical activity and impacts health and wellness.

Crime Prevention Through Environmental Design (CPTED) focuses on designing the built environment to reduce the opportunity for crime to occur. For parks in particular, a CPTED approach aims to minimize confusion, reduce feelings of isolation, maximize visibility, and limit areas of concealment. Park activation and social programming are also key components of CPTED, as more people using a park increases the number of “eyes on the park” and deters criminal activity. By serving as gathering spaces for communities, parks develop social capital that strengthens neighborhood ties, reduces crime, and makes people feel safer.

## HOW TO USE THIS GUIDE

This guide is meant to help park districts, planners, and community members assess current conditions at parks and identify CPTED strategies to improve safety and encourage park use. This guide includes assessments for each of the four CPTED categories: natural surveillance, natural access control, territorial reinforcement, and maintenance. The assessments provide a series of questions to identify opportunities for improvement at park sites. This guide is intended to be used for park sites specifically. The Walk Audit Toolkit can provide more guidance to assess and address safety along routes to parks and throughout the surrounding neighborhood.

Once a park CPTED assessment has been completed, strategies can be identified to address areas of concern. A list of potential CPTED strategies for parks are included in this guide, with strategies listed alphabetically. Strategies include icons that identify which of the four CPTED categories are addressed by the strategy (natural surveillance, natural access control, territorial reinforcement, maintenance).

Note that appropriate CPTED strategies depend on the context of the park, which requires community partnership and consultation in order to ensure successful and equitable outcomes. Community members and park users should be involved as part of a park assessment in order to identify areas of concern and priorities for improvement.

### ADDITIONAL RESOURCES

- Walk Audit Toolkit
- Public Engagement Best Practices



Natural Surveillance



Natural Access Control



Territorial Reinforcement



Maintenance

# NATURAL SURVEILLANCE



Visibility and activation are key components of natural surveillance in parks. Natural surveillance reduces feelings of isolation by making the park feel active with other users and overseen by the surrounding community.

## Natural Surveillance Assessment

- ☐ What are the surrounding land uses near the park? Does the park feel isolated from neighboring activity?
- ☐ Is the park located near houses? Are houses oriented towards the park or away from it?
- ☐ Can activity **within** the park be clearly seen from outside the park?
- ☐ Can activity **outside** the park be clearly seen from within the park?
- ☐ Are restrooms and other community facilities or amenities located near activity areas? Are the entrances to restrooms and other community facilities located within clear line of sight?
- ☐ Are sight lines maintained throughout the park? Are there any potential hiding places or ambush points?
- ☐ Does landscaping create areas of concealment or block visibility along pathways, near amenities, or near activity areas?
- ☐ Are access points, walking paths, and activity areas well-lit at night? Do the lights create glare?
- ☐ Are programs provided at the park? If so, what kind of programs and when are they provided?

# NATURAL ACCESS CONTROL



Natural access control guides movement into and through parks to reduce confusion and make park users feel comfortable and safe.

## Natural Access Control Assessment

- ☐ Are park entrances clearly identified from outside the park?
- ☐ Are park exits clearly identified from within the park?
- ☐ Is the layout of the park easy to understand?
- ☐ Does signage direct people to park entrances, exits, and focal points?
- ☐ Does lighting direct movement between park destinations at night?
- ☐ Are primary routes clearly identified? Are routes to park exits clearly identified?

# TERRITORIAL REINFORCEMENT



Territorial reinforcement defines park boundaries and sets rules and expectations for positive behavior.

## Territorial Reinforcement Assessment

- ☐ Are park borders and access points clearly defined?
- ☐ Does the park have a sign that lists park rules? Is there a rule sign at every park entrance or in an easily identifiable location?

# MAINTENANCE



Maintenance is a critical component of CPTED in parks. Properly maintaining landscaping and lighting reduces areas of concealment and improves visibility. Good condition of amenities and removal of litter indicates ownership of the park, which encourages positive behavior and reduces likelihood of undesired activity.

## Maintenance Assessment

- ☐ Is landscaping well-maintained throughout the park? Are there any places where landscaping is higher than two feet from the ground? Are there any places where tree canopy is lower than six feet?
- ☐ Are lights in working condition? Are there any lights that are broken or in need of replacement?
- ☐ Is there litter or dumping in the park?
- ☐ Are amenities in good condition?
- ☐ Are there signs of vandalism or graffiti?
- ☐ Does the park have a maintenance plan? Does the park conduct regular maintenance?

# CPTED STRATEGIES FOR PARKS

The following strategies can help address safety concerns in parks and may be used in tandem with other strategies in order to minimize confusion, reduce feelings of isolation, maximize visibility, and limit areas of concealment. Strategies are listed alphabetically.



## Amenities



Source: Modus Australia Restrooms and Toilet Buildings

Park amenities and structures (restrooms, playgrounds, benches, etc) should be located near focal points and areas of activity. Entrances to structures (restrooms, community centers, etc) should be located within a clear line of sight. Ensure that signage and structures do not create hiding places or ambush points.

Strategies to improve visibility and reduce hiding places created by existing amenities include adding lighting, windows, mirrors at blind corners, and cutouts at the bottom of walls to see feet and movement.

Amenities and structures should be well-maintained in order to demonstrate ownership and community pride.

## Celebrated Entryways



Park access points should be easily identified. A celebrated entryway stands out as an entrance and is not hidden from view. Routes to parks and boundary-defining structures should direct people to access points. Celebrated entryways may include signage, art, or decorative elements and are an opportunity to show pride and ownership.



Source: Unlimited Play





## Fencing and Park Boundaries



Source: ACE Fencing

Fencing and other boundary-defining structures help guide movement to the main access points and clarify park borders. If fencing is used, it should be see-through in order to maintain clear sight lines into and out of the park. Fence height is generally four-feet or six-feet depending on community preferences. Boundaries may also be defined by natural features such as wooden planks, rocks, or landscaping. Natural features should be no higher than two feet from the ground to avoid creating areas of concealment.

## Landscaping



Landscaping is a common element of parks and provides numerous environmental, physical and mental health, and aesthetic benefits. However, poorly maintained landscaping can reduce visibility and create areas of concealment that contribute to a lack of personal safety.

Landscaping should be no higher than two feet from the ground and no lower than six feet for tree canopies. This helps maintain clear sight lines throughout the park and reduce potential hiding places.

When installing new landscaping, plants should be selected based on maximum growth size and potential maintenance costs. Placement of landscaping should consider whether full growth will create areas of concealment or block light sources.



Source: ASLA Northern California

## Lighting



Presence or absence of lighting is a significant factor in whether people feel safe using a park, especially at night and other low light conditions.

Lighting should illuminate access points, movement routes, activity areas, and potential hiding places. Lighting in parks should be pedestrian-scale and have a white light source to improve visibility. Fixtures should be oriented so as to avoid glare and light trespass into neighboring houses. Cut-off fixtures are preferable to minimize glare.

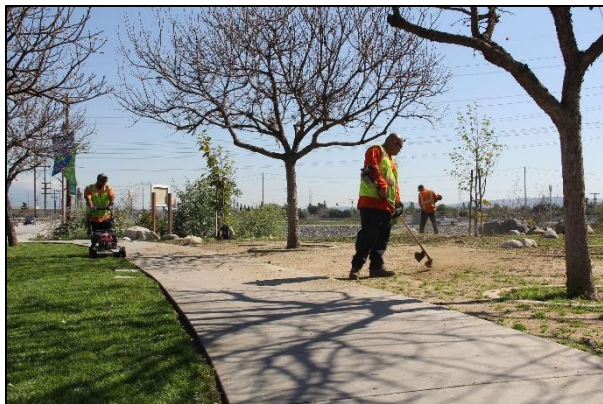
Light bulbs and fixtures should be regularly maintained in order to ensure that the park remains well-lit.



*Source: Auckland Design Manual*



## Maintenance



*Source: City of El Monte, CA*

Regular maintenance is critical for retaining clear sight lines throughout the park, reducing areas of concealment, and reinforcing territorial ownership. Overgrown landscaping should be trimmed to no higher than two feet above the ground and no lower than six feet for tree canopies. Lighting should be in working condition, with flickering or burnt-out bulbs replaced. Vandalized structures should be cleaned, and litter removed. A maintenance plan helps set a schedule for implementing regular maintenance.



## Park Siting



Parks should be sited near houses and residential land uses. Siting parks in residential neighborhoods not only makes it easier for people to access parks, but also increases natural surveillance and reduces feelings of isolation. Houses should be oriented towards parks in order to create a direct physical and visual connection to the park.



Source: Conservatory Green Pocket Park, Stapleton Denver



## Programs



Source: National Night Out

Programs help activate parks by providing fun and interesting things to do. Programs generate positive activity that increases natural surveillance and social cohesion. Community members can provide insight on the types of programs that they would like to see. Programs that are scheduled during different times of the year, week, and day can reduce opportunities for crime by ensuring that parks remain active

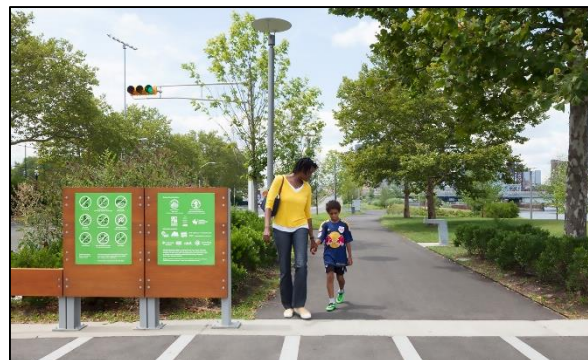
Examples of park programs include youth and adult sports, Walk with Friends or Walk with a Doc, Park After Dark, Movies in the Park, farmer's markets, community gardens, etc.

## Wayfinding



Wayfinding signage throughout a park helps ensure that the layout of the park is clear and easy to understand. Signage should direct movement to focal points and park entries and exits.

Wayfinding signage is most useful for larger parks where location of amenities and structures is not immediately clear.



Source: MTWTF Newark Riverfront Park

# CPTED IN RETAIL

Neighborhood retail locations can serve as a community asset and provide convenient access to healthy foods, while eliminating the need for frequent trips to grocery stores farther away that can prove time consuming and costly for low-income residents. Better and more affordable access to healthy foods can also increase the likelihood of residents meeting daily recommended dietary needs and reduce the likelihood of chronic diseases that result from poor nutrition. In addition to convenience, a well maintained and inviting retail location can make the difference in a customer choosing to shop at that location versus going to another location that may be less convenient but feels safer.

Crime Prevention Through Environmental Design (CPTED) focuses on designing the built environment to reduce the opportunity for crime to occur. For retail locations in particular, a CPTED approach aims to minimize confusion, reduce feelings of isolation, maximize visibility, and limit areas of concealment. Property activation and social programming are also key components of CPTED, as more people shopping at a retail location increases the number of “eyes on the business” and deters criminal activity.

## HOW TO USE THIS GUIDE

This guide is meant to help business owners, property managers, planners, and community members assess current conditions at retail stores and identify CPTED strategies to improve safety and encourage positive customer activity. This guide includes assessments for each of the four CPTED categories: natural surveillance, natural access control, territorial reinforcement, and maintenance. The assessments provide a series of questions to identify opportunities for improvement at retail locations. This guide is intended to be used for both large grocery stores or small neighborhood markets. The Walk Audit Toolkit can provide more guidance to assess and address safety along routes to retail locations and throughout the surrounding neighborhood.

Once a retail CPTED assessment has been completed, strategies can be identified to address areas of concern. A list of potential CPTED strategies for retail are included in this guide, with strategies listed alphabetically. Strategies include icons that identify which of the four CPTED categories are addressed by the strategy (natural surveillance, natural access control, territorial reinforcement, maintenance).

Note that appropriate CPTED strategies depend on the context of the retail location, which requires community partnership and consultation in order to ensure successful and equitable outcomes. Business owners, community members, and customers should be involved as part of a retail assessment in order to identify areas of concern and priorities for improvement. Many of the strategies are specifically designed for business owners or property managers to implement.

### ADDITIONAL RESOURCES

- Walk Audit Toolkit
- Public Engagement Best Practices



Natural Surveillance



Natural Access Control



Territorial Reinforcement



Maintenance

# NATURAL SURVEILLANCE



Visibility and activation are key components of natural surveillance at retail locations. Natural surveillance reduces feelings of isolation by making the retail location feel active with other users and overseen by the surrounding community.

## Natural Surveillance Assessment

- ☐ What are the surrounding land uses near the store? Does the store feel isolated from neighboring activity?
- ☐ Is the store entrance oriented towards the street or away from it?
- ☐ Can activity within the store be clearly seen from outside the store? Are windows free of obstructions, including landscaping, advertisements, or merchandise?
- ☐ Can activity outside the store be clearly seen from within the store? Are windows free of obstructions, including landscaping, advertisements, or merchandise?
- ☐ Are sight lines maintained throughout the store? Are there any potential hiding places or ambush points within the store (example: is shelving obstructing the view)?
- ☐ Are sight lines maintained outside of the store? Are there any potential hiding places or ambush points on property outside of the store (example: dumpsters or overgrown landscaping)?
- ☐ Is landscaping well-maintained on the store property? Is landscaping no higher than two feet from the ground and tree canopy no lower than six feet?
- ☐ Are access points, walking paths, and activity areas well-lit at night? Do the lights create glare?
- ☐ Are bike racks available on store property? Are they placed where they are visible from inside the store?

# NATURAL ACCESS CONTROL



Natural access control guides movement from the street or parking lot to inside of the store. Natural access control can help reduce confusion and make customers feel comfortable and safe.

## Natural Access Control Assessment

- ☐ Are store entrances clearly identified from outside the store? Are store exits clearly identified from within the store?
- ☐ Is there a clear path of travel for pedestrians and bicyclists to enter the store? Do they have to travel through a parking lot or other areas where there might be conflicts with vehicles?
- ☐ Are there signs indicating what the store is?
- ☐ Is there lighting along access paths and parking lots to help indicate movement?
- ☐ Is landscaping placed in a way that it could guide a customer to the front entrance or is it misleading?

# TERRITORIAL REINFORCEMENT



Territorial reinforcement defines property boundaries and sets rules and expectations for positive behavior. Territorial reinforcement combines strategies from both natural surveillance and natural access control.

## Territorial Reinforcement Assessment

- ☐ Is store information, including hours and property rules, clearly marked?
- ☐ Is there a clear transition from the public domain to private?
- ☐ Are store entrances clearly identified from inside and outside the store?

# MAINTENANCE



Maintenance is a critical component of CPTED at retail locations. Properly maintaining landscaping and lighting reduces areas of concealment and improves visibility. Good condition of amenities and removal of litter indicates ownership of the business, which encourages positive behavior and reduces likelihood of undesired activity.

## Maintenance Assessment

- ☐ Is landscaping well-maintained on the store property? Is landscaping no higher than two feet from the ground and tree canopy no lower than six feet?
- ☐ Is lighting well maintained and placed to eliminate blind spots?
- ☐ Is the property clean? Does it contain clear direction for where to place trash?
- ☐ Is the building well-maintained and does it appear welcoming?
- ☐ Is there vandalism or graffiti?
- ☐ Is there a maintenance plan to address regular upkeep of property?

# CPTED STRATEGIES FOR RETAIL

The following strategies can help address safety concerns at retail locations and may be used in tandem with other strategies in order to minimize confusion, reduce feelings of isolation, maximize visibility, and limit areas of concealment. Strategies are listed alphabetically.

## Advertisements and Windows



Windows at a property can help passerbys see what is in the store and draw more customers in. Windows should be clear of obstructions that prevent staff and customers from viewing what is going on inside of the store and outside of the store. Reducing obstructions to 10% or less of the available window space is recommended.



*Source: Winsight Grocery Business*



## Amenities



*Source: Forbes*

Store amenities (restrooms, ATM machines, cash registers, bike racks, benches, etc) should be located near focal points and areas of activity. Entrances to structures (restrooms, staff break rooms, etc) should be located within a clear line of sight. Ensure that signage and structures do not create hiding places or ambush points.

Strategies to improve visibility and reduce hiding places created by existing amenities include adding lighting, windows, mirrors at blind corners, and cutouts at the bottom of walls to see feet and movement.

Amenities and structures should be well-maintained in order to demonstrate ownership.



## Celebrated Entryways



Retail store entrances should be easily identified from the street. A celebrated entryway stands out as an entrance and is not hidden from view. Routes to the retail location and boundary-defining structures should direct people to access points. Celebrated entryways may include signage, art, or decorative elements and are an opportunity to show pride and ownership.



Source: Nugget Markets



## Fencing and Property Boundaries



Source: La Bella

Fencing and other boundary-defining structures help guide movement to the main access points and clarify pedestrian and vehicle borders. For example, retail locations with market seating can use fencing or boundaries to clearly define the space as a pedestrian only area and protect customers from vehicles. If fencing is used, it should be see-through in order to maintain clear sight lines into and out of the property. Fence height is generally four-feet or six-feet depending on community preferences. Boundaries may also be defined by natural features such as wooden planks, rocks, or landscaping. Natural features should be no higher than two feet from the ground to avoid creating areas of concealment.

## Landscaping



Landscaping provides numerous environmental, physical and mental health, and aesthetic benefits. However, poorly maintained landscaping can reduce visibility and create areas of concealment that contribute to a lack of personal safety.

Landscaping should be no higher than two feet from the ground and no lower than six feet for tree canopies. This helps maintain clear sight lines throughout the property and reduce potential hiding places.

When installing new landscaping, plants should be selected based on maximum growth size and potential maintenance costs. Placement of landscaping should consider whether full growth will create areas of concealment or block light sources.



Source: Pacific Coast Land Design, Inc

## Lighting



Presence or absence of lighting is a significant factor in whether people feel safe shopping at a retail location, especially at night and other low light conditions.

Lighting should illuminate access points, movement routes, activity areas, and potential hiding places. Lighting inside and outside of the retail location should be pedestrian-scale and have a white light source to improve visibility. Fixtures should be oriented so as to avoid glare and light trespass into neighboring houses. Cut-off fixtures are preferable to minimize glare.

Light bulbs and fixtures should be regularly maintained in order to ensure that the property remains well-lit.



Source: My LED Lighting Guide



## Maintenance



*Source: C&L Services*

Regular maintenance is critical for retaining clear sight lines throughout the property, reducing areas of concealment, and reinforcing territorial ownership. Overgrown landscaping should be trimmed to no higher than two feet above the ground and no lower than six feet for tree canopies. Lighting should be in working condition, with flickering or burnt-out bulbs replaced. Vandalized structures should be cleaned, and litter removed. A maintenance plan helps set a schedule for implementing regular maintenance.



## Programs



*Source: Heritage Community Association*

Programs help activate retail locations by providing educational and interesting things to do. Programs generate positive activity that increases natural surveillance and social cohesion. Community members can provide insight on the types of programs that they would like to see. Programs that are scheduled during different times of the year, week, and day can reduce opportunities for crime by ensuring that parks remain active

Examples of healthy retail programs include youth and adult cooking demos and classes, farmers markets, community meeting spaces if room is available, etc.



## Retail Siting



New retail locations should be sited near houses and residential land uses. Siting retail locations in residential neighborhoods not only makes it easier for people to access retail locations, but also increases natural surveillance and reduces feelings of isolation. Houses should be oriented towards retail in order to create a direct physical and visual connection to the retail location. Retail businesses can be small corner stores or larger full size grocery stores depending on what is appropriate for the surrounding land uses.



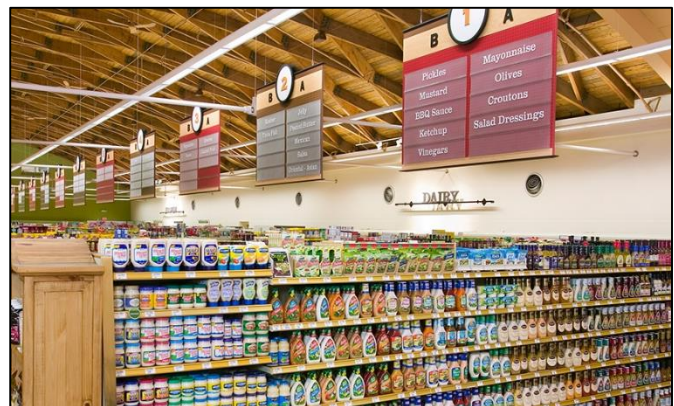
Source: Civil Eats

## Wayfinding



Wayfinding signage leading to a retail location and inside the store helps ensure that nearby customers are aware of the store and helps customers navigate through stores efficiently. The layout of the store should be clear and easy to understand. Signage should direct movement to focal points inside and outside of the store.

Wayfinding signage is can include essential directions, temporary event signage, and creative and engaging information.



Source: Guide Studio