

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN:

Durham Guide to Creating a Safer Community



Contents

PAGE

3..... I. I INTRODUCTION

4..... II. CPTED STRATEGIES

- Natural Surveillance
- Territorial Reinforcement
- Natural Access Control
- Maintenance

5..... III. CPTED TECHNIQUES

- Single Family Homes
- Neighborhoods
- Multi-Family Homes - Single Buildings & Complexes
- Institutions
- Commercial Drive-Throughs
- Commercial Storefronts
- Shopping Centers
- Office Buildings
- Industries
- Parking Garages
- Public Parks, Plazas & Open Spaces

23..... IV. TARGET HARDENING TIPS AND TECHNIQUES

- Residences
- Institutions
- Commercial Storefronts
- Malls
- Office Buildings
- Industries
- Parking Garages

25..... V. CONCLUSION

- Taskforce Names

26..... Where To Start

I. INTRODUCTION

We live with crime every day. Unfortunately, it has become a fact of life. Discussions on the subject have traditionally focused much more on arrest and punishment than on crime prevention; measures that cannot be taken until after a crime has been committed. Preventing crime offers tremendous savings to everyone. Traditionally, most people think of crime prevention in terms of target hardening or fortification: the use of devices to block unauthorized access or entry. There are other options.

Enter a new approach to crime prevention – Crime Prevention Through Environmental Design – or CPTED. Much more far-reaching than dead-bolts on doors or locks on windows, CPTED principles are applied easily and inexpensively during building or remodeling projects, and have been implemented in communities across the nation. Designers and architects have always integrated resistance to natural threats — fire, earthquakes, floods, harsh weather—into their works. In recent years designers and architects have begun to recognize crime as a man-made hazard which can be resisted through quality design.

What is the secret to CPTED? It is the use of design to eliminate or reduce criminal behavior while at the same time encouraging people to “keep an eye out” for each other. These are just a few of the ingredients that go into creating an effective CPTED environment... that is, safer, more livable communities.

This manual presents a wide selection of CPTED techniques and strategies as well as some traditional crime prevention methods. However, it cannot not replace the on site, professional CPTED survey. Evaluation of the site and the surrounding area is needed to properly survey a particular design.

“The proper design and effective use of the built environment can lead to a reduction in the fear and incidence of crime, and an improvement of the quality of life.” - CPTED, as defined by the National Crime Prevention Institute

II. CPTED STRATEGIES

CPTED design strategies have evolved over time. While many of the actual techniques have been in use for hundreds of years, it has only been in the last few decades that urban relationship between the built environment and criminal behavior.

Each of the following CPTED strategies offer guidelines which, as a property owner, builder, or remodeler, you can apply to reduce the fear and incidence of crime and improve the quality of life.

Natural Surveillance

The placement of physical features, activities, and people in a way that maximizes visibility is one concept directed toward keeping intruders easily observable, and therefore less likely to commit criminal acts. Features that maximize the visibility of people, parking areas, and building entrances are: unobstructed doors and windows, pedestrian-friendly sidewalks and streets, front porches, and appropriate nighttime lighting.

Territorial Reinforcement

Physical design can also create or extend a sphere of influence. Users are encouraged to develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. This concept includes features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, signage, and open (“CPTED”) fences.

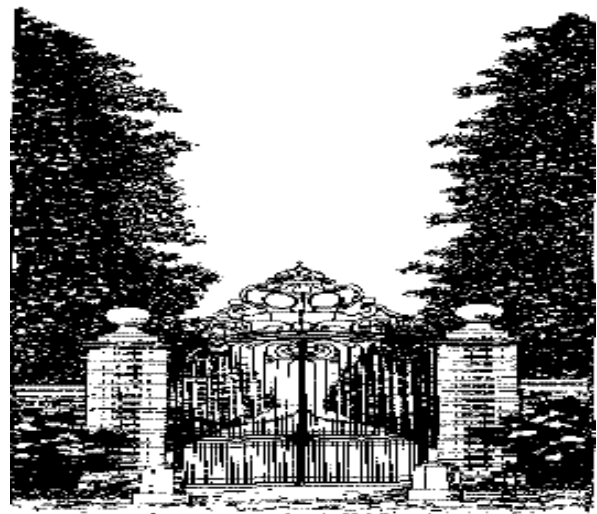
Natural Access Control

Natural access control is another design concept directed primarily at decreasing crime opportunity by denying access to

crime targets and creating a perception of risk for offenders. People are physically guided through a space by the strategic design of streets, sidewalks, building entrances, landscaping, and neighborhood gateways. Design elements are very useful tools to clearly indicate public routes and discourage access to private areas and structural elements.

Maintenance

Lastly, care and maintenance allow for the continued use of a space for its intended purpose. Deterioration and blight indicate less concern and control by the intended users of a site and indicate a greater tolerance of disorder. Proper maintenance prevents reduced visibility due to plant overgrowth and obstructed or inoperative lighting, while serving as an additional expression of territoriality and ownership. Inappropriate maintenance, such as overpruning shrubs, can prevent landscape elements from achieving desired CPTED effects. Communication of design intent to maintenance staff is especially important for CPTED related ideas to be effective.



III. CPTED TECHNIQUES



SINGLE FAMILY HOMES

Residential areas are the heart of a community. Our homes are the center of our lives, where we should feel most safe. And, while we may have multiple choices when it comes to walking through a certain part of town or using public transportation, we have few choices when it comes to the streets where we live.

The principle here is “know thy neighbor.” Streets and homes should be designed to encourage interaction between neighbors. Good examples include front porches, sidewalks, and property lines that are defined simply by low shrubbery instead of high fences.

Natural Access Control

- Use walkways and landscaping to direct visitors to the proper entrance and away from private areas.

Natural Surveillance

- Fully illuminate all doorways that open to the outside.
- Place the front door to be at least partially visible from the street.
- Install windows on all sides of houses to provide full visibility of the property.
- Provide appropriate illumination to sidewalks and all areas of the yard.
- Place the driveway to be visible from either the front or back door and at least one window.
- Properly select and install landscaping so that it allows unobstructed views of vulnerable doors and windows from the street and other properties.

Territorial Reinforcement

- Use front porches or stoops to create a transitional area between the street and the home.
- Define property lines and private areas with plantings, pavement treatments, or fences.
- Make the street address clearly visible from the street and alley with numbers a minimum of six inches high and distinctly or easily read.

Maintenance

- Keep trees and shrubs trimmed back from windows, doors, and walkways.
- Use exterior lighting at night, and keep it all in working order.
- Keep litter and trash picked up and the yard neat at all times.
- The house and garage should be kept in good repair.



NEIGHBORHOODS

Often the safety measures taken in subdivision communities, such as high fences can have a negative instead of positive effect on residents. The presence of security devices implies a need for them. CPTED guidelines, when applied to neighborhoods, can create a safer environment without the use of the more common, intimidating methods.

For instance, streets designed with gateway treatments, roundabouts, speed bumps, and other “traffic calming” devices establish territories and discourage speeding and cut-through traffic. And by keeping public areas observable, you are telling potential offenders that they should think twice before committing a crime.

Criminals prefer low-risk situations, and public visibility increases the chances a perpetrator will be caught.

These measures are simple, inexpensive to implement, and will have a much more positive effect on residents than gates and bars.

Natural Access Control

- Limit access without completely disconnecting the subdivision from adjacent subdivisions.
- Design streets to discourage cut-through or high-speed traffic.
- Install paving treatments, plantings, and architectural design features such as a columned gateway to guide visitors to desired entrances and away from private areas.
- Install walkways in locations safe for pedestrians, and use them to define pedestrian bounds.

Natural Surveillance

- Avoid landscaping that might create blind spots or hiding places.
- Locate open green spaces and recreational areas so that they are visible from nearby homes and streets.
- Use pedestrian scale street lighting in high pedestrian traffic areas to help people recognize potential threats at night.

Territorial Reinforcement

- Design lots, streets, and houses to encourage interaction between neighbors.
- Accentuate entrances with the subdivision name, different paving material, changes in street elevation, architectural, and landscape design.
- Clearly identify homes with street address numbers that are a minimum of six inches high and well lighted at night.
- Define property lines with post and pillar fencing, gates, and planting to direct pedestrian traffic to desired points of access only.

Maintenance

- Maintain all common areas to very high standards, including entrances, greenways and recreational areas, and right-of-ways.
- Enforce deed restrictions and covenants in addition to all applicable city codes.



MULTI-FAMILY HOMES - SINGLE BUILDINGS AND COMPLEXES

Multi-family homes (duplexes, tri-plexes and apartment complexes) pose the same problems as single-family structures, although these problems can be compounded by the number of dwellings and residents. Public areas — shared hallways, elevators, laundry rooms, and parking areas — present opportunities for crime or for crime prevention.

But multi-family buildings do not necessarily mean multiple problems. There is a certain amount of truth to the old saying, “There’s safety in numbers.” Management may need to create opportunities for neighbors to get to know one another. With neighbors who take responsibility for each other there is no reason why a multi-family dwelling cannot be a safe place to live.

Natural Access Control

- Keep balcony railings and patio enclosures less than 42 inches high and avoid using opaque materials.
- Define entrances to the site and each parking lot with landscaping, architectural design, or symbolic gateways.
- Block off dead-end spaces with fences or gates.
- Discourage loitering by non-residents; enforce occupancy provisions of leases.
- Use devices which automatically lock upon closing on common building entrances.
- Provide good illumination in hallways.
- Allow no more than four apartments to share the same entrance; individual entrances are recommended.
- Centrally locate elevators and stairwells where many users can watch them.
- Limit access to the building to only one or two points.

- If in higher crime areas pay telephones must be installed, use call out types only.

Natural Surveillance

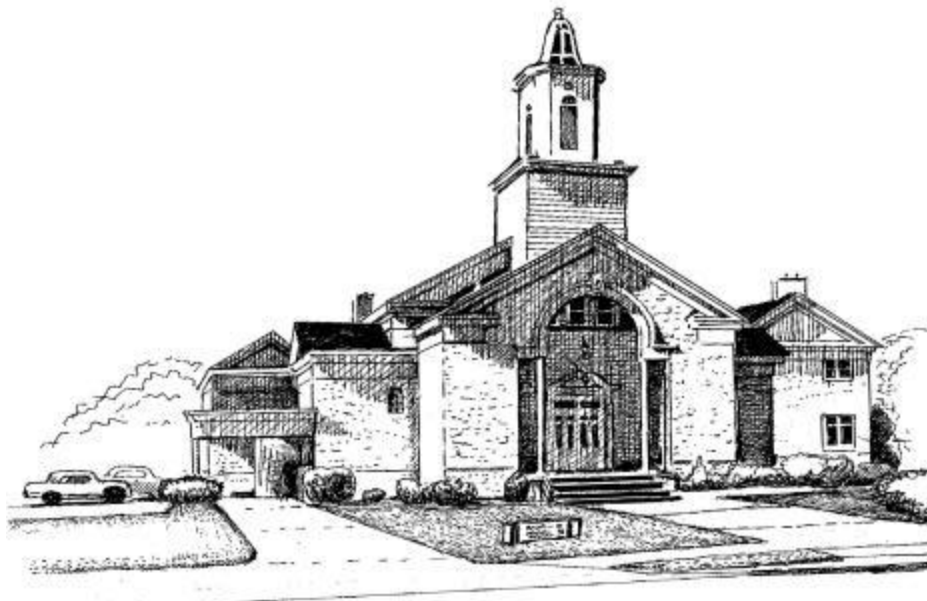
- Design buildings so that exterior doors are visible from the street or by neighbors.
- Use good lighting at all doors that open to the outside.
- Install windows on all four facades of buildings to allow good surveillance.
- Assign parking spaces to residents. Locate the spaces next to the resident's unit, but not marked with their unit number. This makes unauthorized parking easier to identify and less likely to happen.
- Designate visitor parking.
- Make parking areas visible from windows and doors.
- Adequately illuminate parking areas and pedestrian walkways.
- Position recreation areas (pools, tennis courts, club houses) to be visible from many of the units' windows and doors.
- Screen or conceal dumpsters, but avoid creating blind spots and hiding places.
- Build elevators and stairwells in locations that are clearly visible from windows and doors.
- Allow shrubbery to be no more than three feet high for clear visibility in vulnerable areas.
- Site buildings so that the windows and doors of one unit are visible from another (although not directly opposite).
- Construct elevators and stairwells to be open and well lighted; not enclosed behind solid walls.
- Place playgrounds where they are clearly visible from units, but not next to parking lots or streets.

Territorial Reinforcement

- Define property lines with landscaping or decorative fencing.
- Use low shrubbery and fences to allow visibility from the street.
- Accentuate building entrances with architectural elements, lighting and/or landscaping.
- Clearly identify all buildings and residential units using street numbers that are a minimum of six inches tall, and well lighted at night.
- Where possible, locate individually locking mailboxes next to the appropriate units.

Maintenance

- Maintain all common areas to very high standards, including entrances, greenway and recreational areas, and right-of-ways.
- Prune trees and shrubs back from windows, doors, and walkways.
- Use and maintain exterior lighting.
- Strictly enforce rules regarding junk vehicles and inappropriate outdoor storage. Disregard of these rules will make a site appear uncared for and less secure.



INSTITUTIONS

Churches, libraries, schools, and other institutions present their own unique challenges to crime prevention.

While safety at these locations is often a high concern within a community, few desire the installation of oppressive high-security devices and programs. The varied hours and variety of patrons and activities make good design all the more important.

Natural Access Control

- If in higher crime areas pay telephones must be installed, use call out types only.
- Highlight the main entrance in the design.
- Require that visitors pass a “checkpoint” attended by those in authority.
- Limit the number of entrances and exits, both to the building and parking lots.
- Keep bus drop-off areas, employee parking, and visitor parking separate from each other and from busy streets.

Natural Surveillance

- Do not cover the entrance windows with posters and announcements which obstruct natural surveillance.

- Avoid constructing large blank walls which limit surveillance opportunities and can serve as targets for graffiti. Use walls with windows, architectural details or foliage instead.

Territorial Reinforcement

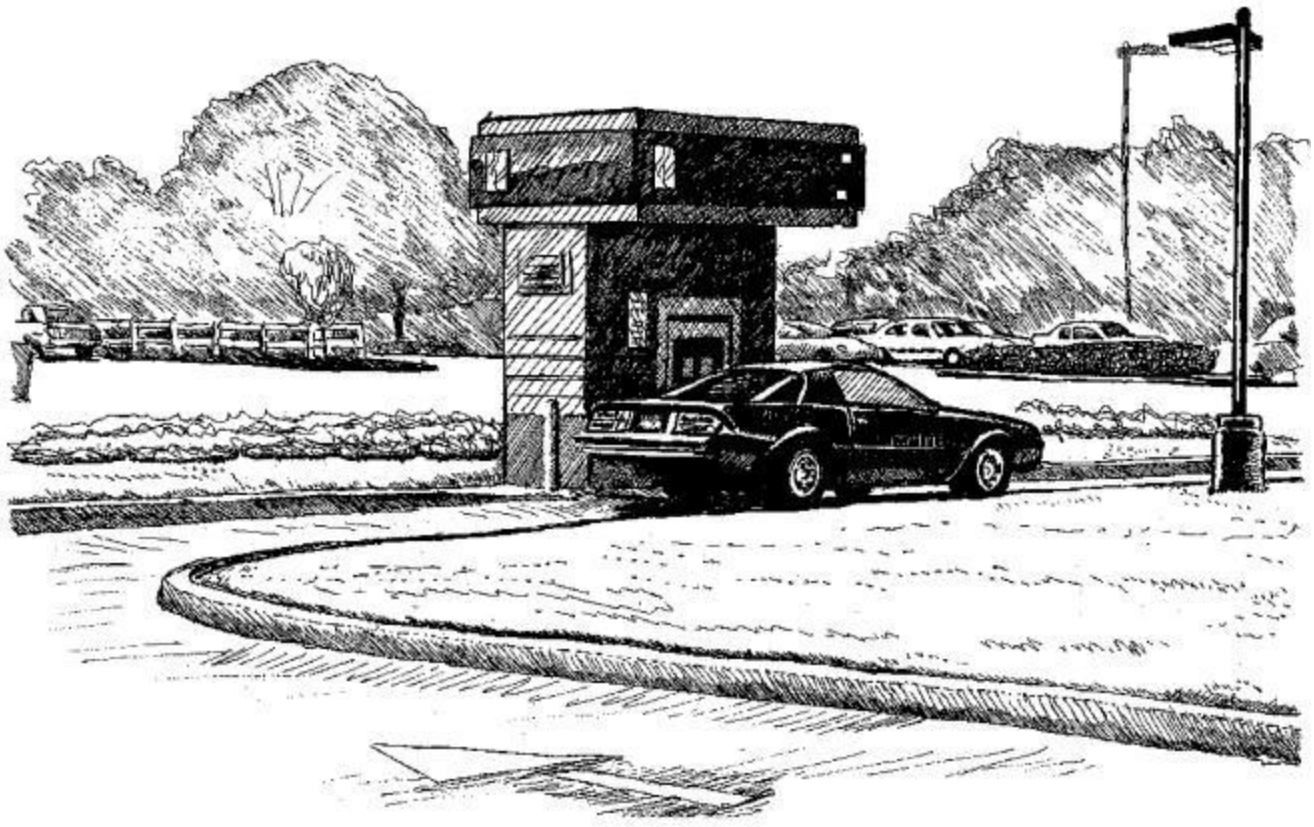
- Include highly visible, architecturally appropriate signage in the design.
- Make sure to clearly mark the boundaries of the property.
- Keep parking lot surfaces in good condition. Clearly mark the parking spaces to convey a neat and orderly image.

Maintenance

- Remove graffiti within 24 hours of its appearance.
- Use landscape plants chosen to mature within the available space.

Management

- Ensure that all employees and volunteers are familiar with the security system to avoid false alarms.



COMMERCIAL DRIVE-THROUGHS

The drive-through is potentially the perfect place for criminal activity. They are often used at odd hours, are hidden from view, and those using them will almost certainly be carrying cash.

The rule of thumb in the design of a drive-through can be reduced to one word: visibility.

Arrange convenient stores so operators can see all pumps. Use video to capture vehicle ID.

Natural Surveillance

- Locate ATM's to face main roads.
- Put the ordering station for a restaurant within sight of the interior and the street.
- Lighting should be especially good both at the window or ATM and along the queuing lane,
- Avoid fencing, landscaping, and walls whose design might provide hiding opportunities for those preying on patrons.



COMMERCIAL STOREFRONTS

For a healthy neighborhood to remain healthy, its local businesses must flourish; and for businesses to do well, they must be safe places to frequent.

As land uses become less mixed, and residents are less able to watch over commercial properties, it is essential that CPTED guidelines be followed when building or remodeling a commercial property. Safety is often cited as an important consideration in choosing one store over another. Ideas such as keeping customers and employees in view of each other can accomplish much in the way of making customers feel safe and secure.

Natural Access Control

- Locate check-out counters to the front of the store, clearly visible from the outside. Positioned near the main entrance, employees can better watch any activities.
- Clearly mark public paths. Make private areas harder for non-employees to access.
- Use signs to direct patrons to parking and entrances.
- Prevent easy access to the roof or fire escape from the ground.
- Provide rear access to shops if rear parking is offered.

Natural Surveillance

- Install rear windows to face rear parking areas for increased visibility.
- Allow window signs to cover no more than 25% of windows.
- Use interior shelving and displays no higher than five feet, even less in front of windows.
- Fully illuminate the exterior of the building and grounds at night.
- Design the loading areas to avoid creating hiding places for people and merchandise.
- Maintain clear visibility from the store to the street, sidewalk, parking areas, and passing vehicles.
- Design water retention areas to be visible from the building or street – they should be visual amenities, neither hedged nor fenced, which could allow undesirable activities to be hidden.
- Place all entrances under visual surveillance (monitored electronically if necessary).
- Place any pay telephones within clear view of employees.

Territorial Reinforcement

- Mark property boundaries, where possible, with hedges, low fences, or gates.
- Make private areas distinguishable from public areas.
- Identify shops with wall signs for those parking in the rear.
- Install awnings over rear doors and windows.
- Position parking areas to be clearly visible from the building or street with neatly marked spaces.

Maintenance

- Keep buildings and walks clean and repaired.
- Maintain parking areas to a high standard without pot-holes or trash.
- Remove faded posters, broken signs, and other displays that are beyond their useful lives.
- Keep plantings in good condition.

Management

- Set operating hours to coincide with those of neighboring businesses
- If public phones are available, use call-out types only.
- Fully illuminate interior spaces.
- Avoid shifts and situations where only a single employee is present.



SHOPPING CENTERS

Shopping centers often provide much of the public space in suburban communities and as such can be a mixed blessing. On the one hand, they perform the important function of town center, serving as a gathering place for the community. On the other, a mall can serve as an attraction for criminal activity.

While shopping centers continually grow in size and popularity, they also become a haven for abnormal users and the site of a growing number of parking lot crimes. It is now more important than ever that designers and remodelers implement CPTED principles.

Natural Access Control

- Clearly mark public entrances with landscape, architecture, and graphics/signage.
- Designate sidewalks and public areas with special paving and/or landscaping.
- Use landscaping to divide the parking areas into smaller lots.
- Separate loading zones, with designated delivery hours, from public parking areas.
- Allow no unsecured access to roof tops from within or from adjacent structures such as parking garages.

Natural Surveillance

- Position restroom entrances to be visible from main pedestrian areas, but away from outside exits and pay telephones.
- Brightly illuminate parking areas at night.
- Avoid creating dead end alleys or blind spots in loading areas.
- Design parking garages so that all levels, including the staircase, are visible from the street or ground floor
- Equip garages with high quality lighting.
- Use angled or perpendicular parking in front of stores rather than parallel to allow greater visibility between cars.
- Place water retention areas in locations visible from the building or street – they should be visual amenities, not hedged or fenced, if possible.
- Avoid exterior walls devoid of windows.
- Use baffle type restroom entrances — no doors to hinder surveillance. They should be well lighted.

Territorial Reinforcement

- Define property perimeters with landscaping, decorative fencing, gates, and signs.
- Have signs that clearly identify the interior businesses and site signage marking public entry points.

Maintenance

- Maintain high visual quality on site. Use appropriate landscaping to control maintenance costs.
- Keep buildings and walks clean and repaired.
- Maintain parking areas to a high standard with no pot-holes or trash.
- Install attractive displays in windows of vacant stores to avoid creating an abandoned image.

- Keep lines of sight open. Prune trees and shrubs to allow visual access to all parts of the site.

Management

- Close-in parking should be available to nighttime employees.
- Business associations should work together to promote shopper and business safety and the appearance of safety.
- Morning walkers provide additional natural surveillance before shops open.



OFFICE BUILDINGS

As structures grow in size and pedestrian and vehicle traffic increases, safety becomes an extremely important issue.

It is, however, important to avoid the adverse images which come with fortress hardware. Subtle, but recognizable security measures preserve the sense that security is present, but not a problem.

Natural Access Control

- Clearly define public entrances with architectural elements, lighting, landscaping, paving, and/or signage.
- Reduce the number of public access points to those which are watched by guards, receptionists, nearby tenants, or passing traffic.

Natural Surveillance

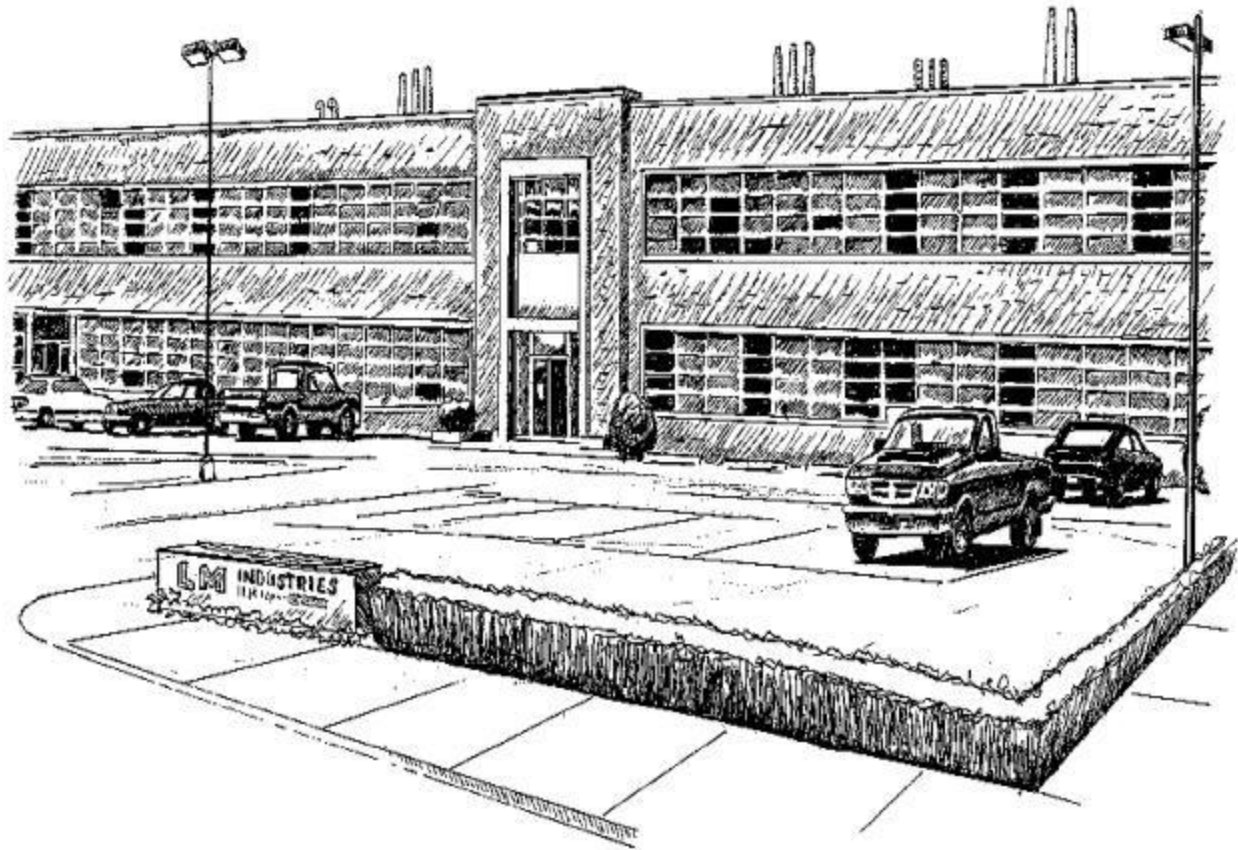
- Position restrooms to be observable from nearby offices or reception areas.
- Install and use good lighting at all exterior doors, common areas, and hallways.
- Keep dumpsters visible and avoid creating blind spots or hiding places, or place them in secured, locked corrals or garages.
- Design windows and exterior doors so that they are visible from the street or by neighboring buildings.
- Install windows into all facades.
- Place parking as to be visible from windows.
- Keep shrubbery under three feet in height for visibility,
- Prune the lower branches of large trees to at least ten feet off the ground and smaller trees to at least six feet.
- Do not obstruct views from windows.
- Design interior windows and doors to have visibility into hallways.

Territorial Reinforcement

- Define perimeters with landscaping or fencing.
- Design fences to maintain visibility from the street.
- Differentiate exterior private areas from public areas.
- Position security and/or reception areas at all entrances.
- Secure non-public entrances for employee access.

Maintenance

- Keep all exterior areas neat and clean.
- Keep all plantings looking well managed.



INDUSTRIES

In most industrial site design, the most important issue is the safety of those who will be working or traveling to these sites. Unfortunately, safety regarding crime is often given little consideration. After work hours, industrial areas are, for the most part, badly illuminated, seldom under any type of surveillance, and virtually deserted, which can in itself be problem enough. Add to this isolation the industrial danger areas – loading docks, service entrances, blind alleys and expansive parking areas – and you have the potential for an extremely unsafe environment.

Natural Access Control

- Avoid dead end driveways and street designs to increase surveillance opportunities from passing traffic and patrols.
- Use easily securable site entrances. Install entrance controls to employee parking areas (fence, gate, or attendant).
- Assign parking by shifts and account for latenight workers with close-in spaces.
- Restrict direct pedestrian and vehicular access to railroad tracks.
- Plan storage yards for vehicular or visual access by patrol cars.

- Restrict access to roofs by way of dumpsters, loading docks, stacked items, ladders, etc.
- Keep building entrances to a minimum, and monitor them.
- Use a separate, well marked, monitored entrance for deliveries.
- Have the employee entrance close to the employee parking and work stations.
- Keep the nighttime parking separate from service areas.
- Restrict access between different areas.
- Provide access to both the front and the back of the site so that the grounds can be patrolled.
- Use separate docks for shipping and receiving.

Natural Surveillance

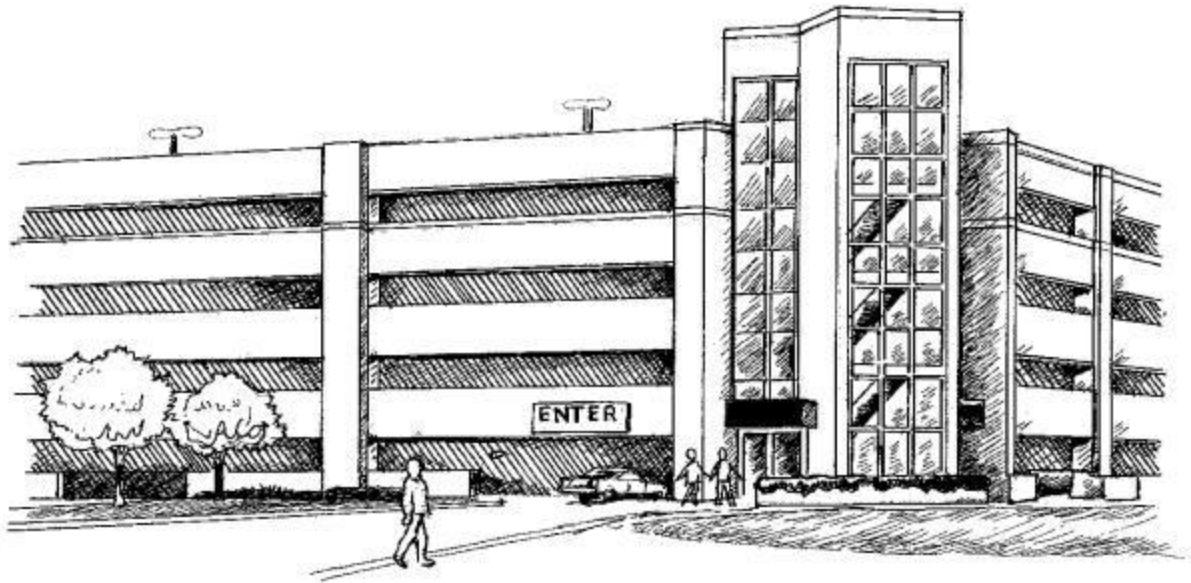
- Illuminate and define all entrances so that they are visible to the public and patrol vehicles.
- Make parking areas visible to patrol cars, pedestrians, parking attendants, and/or building personnel.
- Position parking attendants for maximum visibility of property.
- Design the reception area to have a view of parking areas, especially the visitor's parking.
- Use walls only where necessary and, if used, make them high enough to prevent circumvention.
- Avoid creating hiding places in alleys, storage yards, loading docks, etc.

Territorial Reinforcement

- Create a well-defined entrance or gateway with plantings, fences, gates, etc.
- Limit deliveries to daylight hours only, if possible.
- Define vehicle entrances with different paving materials and signage.
- Separate visitor parking from employee parking and shipping and receiving areas.

Management

- Set up operating hours to coincide with those of neighboring businesses.



PARKING GARAGES

Parking garages are a necessary component in the commercial and urban landscape. Garages that are well designed and that adhere to CPTED principles can be a safe area.

CPTED guidelines can do much in the way of improving parking structure safety without tremendous cost. With the simple addition of high intensity lighting, for example, a garage can quickly become a much safer area.

Natural Access Control

- Use attendants or cameras and sound monitors. Indicate their presence with signs.
- Position all pedestrian entrances next to vehicle entrances.
- Construct stairwells as to be visible, without solid walls.
- Place elevators close to the main entrance with the entire interior in view when the doors are open.
- Do not install permanent stop buttons in elevators.
- Limit access to no more than two designated, monitored entrances.

Natural Surveillance

- Monitor all elevators with cameras and microphones, or use see-through material for the car walls.
- Replace solid barrier walls with stretched cable railings for maximum visibility.
- Fully illuminate all parking areas and driving lanes.
Metal halide lamps provide the best color rendition or color corrected high pressure sodium lights.

Maintenance

- Keep all surfaces clean and light colored to reflect light (paint white if necessary, particularly if underground).
- Carefully maintain all lighting equipment.

Management

- Allow no unmonitored access to adjacent buildings without direct visual contact.
- Differentiate between public and private parking spaces.
- Set hours of use to reflect those of local businesses, with secure closing during non-use hours.

PUBLIC PARKS, PLAZAS AND OPEN SPACES

Public parks and open space provide a broad range of benefits to our society: mitigating air and water pollution, combating suburban sprawl, providing opportunities for recreation, fostering cohesive neighborhoods, attracting businesses, and stabilizing property values. Parks can also feel isolated, unkempt and unsafe. By employing CPTED principals in the design and maintenance of public spaces, the community can continue to enjoy and support it's greenspace.

Natural Access Control

- Walkways should be direct, follow natural pathways and avoid blind corners
- Illuminate walkways and access points to open spaces

Natural Surveillance

- Carefully select the types and location of planting to maintain visibility and surveillance and minimize opportunities for intruders to hide
- Use low ground covers and shrubs less than three feet in height and prune trees limbs to a height of 10 feet.
- Allow users to view entrances, exits, pathways and the immediately surrounding areas
- Ensure lighting does not produce shadows close to pathways and entries or exits.

Territorial Reinforcement

- Provide signage that is clearly visible, easy to read and simple to understand.

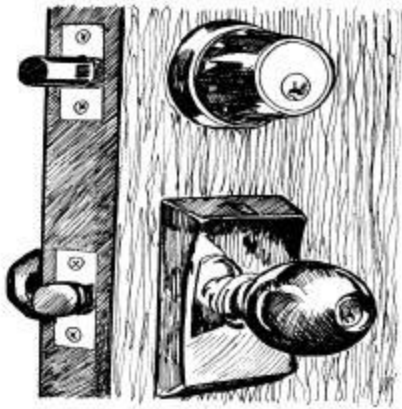
Maintenance

- Reduce the need for maintenance by encouraging pride and a sense of ownership within the community

IV. TARGET HARDENING TIPS AND TECHNIQUES

Traditional security measures, such as good locks, lighting, and alarms, are important tools in the prevention of crime. Generally they work in harmony with CPTED concepts and recommendations.

However, installation of such things as security gates, barbed or razor-wire fences, and barred windows can create an impression of high crime and danger, whether justified or not. This deters those with legitimate business from coming to an area, and making it safer by their presence. Such elements also indicate to the criminal that criminal behavior is expected or at least anticipated.



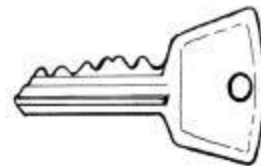
Regardless of how well designed a structure is, it should still be locked when unattended. The Police Department can help with the selection of security devices to protect property, often at more reasonable cost than so-called high-security measures. If heavy fortification is deemed necessary, CPTED principals can still be used to lessen the visual impact on the surrounding neighborhood. For example – White painted burglar bars mounted inside the windows rather than black ones bolted onto the exterior, or decorative metal fences rather than prison-yard chain link fences.

Lighting is an important element in any site design. Whether a single house or an industrial complex, appropriate lighting techniques should be used. Good lighting will help people to feel more comfortable with their surroundings. It should provide clear paths for movement and highlight entryways without creating harsh effects or shadowy hiding places.



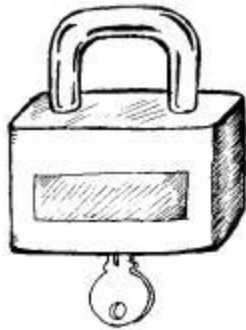
Residences

- Install double cylinder dead bolt locks to interior doors that connect a garage to the interior living quarters. (Keep keys handy, but concealed, for emergencies.)
- Locate door locks a minimum of 40 inches from adjacent windows where possible.
- Use single-cylinder dead bolt locks with a minimum one-inch throw on doors used as primary ground floor exits.



- Use two locking devices on all windows.
- Install glass sliding doors with the fixed position door on the outside, and equip the interior sliding panel with a locking pin and one or two more locks.

- Equip all solid exterior doors with 180-degree door viewers.
- Periodically change the code on your garage door opener and combination or keypad locking and alarm devices.
- Secure ladders, scaffolds, tools, and other climbable equipment when not in use.



Institutions

- Minimize entrances and exits, position work stations within view of the entrance.
- Lock up expensive musical instruments, audio/visual equipment, and computer equipment.

These are commonly targeted during burglaries.

- Light all exterior grounds, particularly if nighttime activities are scheduled.
- Install magnetic sensors in library materials if theft is a problem.
- Use security cameras to monitor low-visibility areas. Note: If cameras are installed, they must be monitored.



- Use baffle type restroom entrances — no doors, with motion sensor lights.
- In extreme or special situations metal detectors or trained dogs may be employed.

Commercial Storefronts

- Use cash drop safes during lower traffic hours.
- Avoid having a single employee making after hours bank deposits.
- Install and monitor video cameras, but hide VCR's (supply a decoy)
- Provide employees with safety training.
- Securely lock rear entrances.
- Use secure doors and frames.



- Put 180 degree door viewers in rear security doors.

Malls

- Install monitored video cameras.

Office Buildings

- Have security personnel vary their patrol schedule and routes.
- Take measures to avoid unmonitored exits from being propped open.

Industries

- Change locks frequently and limit the number of keys available.
- Do not leave open padlocks hanging in gates.
Thieves can have keys made or replace with similar locks with their own keys.

Parking Garages

- Provide emergency telephones with lights that flash upon activation on all levels.
- Use bright colors and large numbers to identify levels to reduce user disorientation and confusion.
- Use flashing lights to identify courtesy patrols.

V. CONCLUSION

Crime Prevention Through Environmental Design guidelines can go a long way in making a community safe.

It is not considered possible to make a building or area crime-proof. The recommendations included in assessments should, however, reduce the probability of crime if the CPTED strategies and directives are properly applied and maintained. There may be instances where information in this document conflicts with local building and fire codes. Consult a crime prevention trained police officer or security professional for suitable alternatives.

The CPTED Private Sector Taskforce:

Reyn Bowman, Chair - Durham Convention & Visitors Bureau
Representing: Visitor Related Business & Organizations

Trudy Burdette - Downtown Durham, Inc
Representing: Downtown Businesses & Residents

Ted Conner/Anne Peele - Greater Durham Chamber of Commerce
Representing: Durham Business Community

Sabrina Gendreau - West Village
Representing: Development Community

Eric Hester – CPTED Evaluator
Representing: Durham Police Department

George Kirschmann – George A. Kirschman Architect
Representing: Homebuilders Community

George Stanziale - Haden Stanziale, PA
Representing: Design Community

Madison Yarbrough – Y & J Furniture
Representing: Durham Businesses Against Crime

Sara Young - Urban Designer/Senior Planner
Representing: Durham City-County Planning Department

David Winer – Durham Congregations in Action
Representing: Faith Community

CPTED can eliminate problem areas: the badly lighted parking lot, the blind alley, the public telephone stuffed in the dark corner. Hopefully, along with the feelings of safety and security that CPTED brings, will come a feeling of responsibility for our neighbor. That is the greatest crime prevention technique of all.

“CPTED is not the total answer to community problems, but it does provide the community with the means to eliminate or reduce environmental obstacles to social, cultural, or managerial control.” - Timothy D. Crowe, Criminologist & CPTED Practitioner.



Special thanks to the following for supplying information and material for this publication:

National Crime Prevention Institute
Texas Crime Prevention Association
City of Orlando, Florida
City of Houston, Texas
City of Fort Wayne, Indiana

For Further Information:

Abandoned Vehicles on Private Property	City Housing Code Enforcement	560-4570
Abandoned Vehicles on Public Property	Durham Police Department or County Sheriff's Office	560-4209 560-0897
Cutting/Cleaning of City/State-Owned Property	City Property Facilities Management/State	560-4198
Excessive Noise	City/County Planning	560-4137
Graffiti Removal	City Public Works/Roadway Appearance	560-4105
Illegal Campaign Signs on Right-of-Way	City Public Works/Roadway Appearance	560-4105
Illegal Dumping of Oils or Hazardous Waste	City Housing Code Enforcement	560-4570
Illegal Trash Dumping in the County	County General Services	560-0431
Leaning or Damaged Power Poles	Duke Power	382-3200
Mosquito Control	County General Services	560-0431
Occupancy Requirements	City/County Zoning	560-4137
Old Appliances on Curbside	City Solid Waste	560-4185
Outside Rat Infestation	County Health	560-7800
Parking On Right-of-Ways	Durham Police Department	560-4209
Power Poles Needing Repainting	Duke Power	687-3200
Report a Dead Animal on Right-of-Way	City Public Works/Roadway Appearance	560-4105
Stray or Problem Animals	County Animal Control	560-0630
Trash on Right-of-Way/Median	City Public Works/Roadway Appearance	560-4105
Unkempt Grounds or Vacant Lots	City Housing Code Enforcement	560-4570