Crime Prevention Through Environmental Design (CPTED):

Design out Crime

Provided by
Apache Junction Police Department
Crime Prevention Unit
The following suggestions are made for the purpose of reducing the likelihood of criminal activity. While no guarantee can be stated or implied, the concepts of CPTED have proven themselves internationally. The Apache Junction Police Department offers the inspection as a public service, with the understanding that there is no way to predict or prevent all crime risks. The purpose of this information is to reduce formability of crime, by making a good faith effort to provide a safe environment.
Crime Prevention Through Environmental Design (CPTED): Design out Crime

**Five Basic Principles Guide CPTED**
Natural Access Control; Natural Surveillance; Territorial Reinforcement; Maintenance; Activity Support

- **Natural Access Control restricts access**
  Natural access control guides how people enter and leave a space through the placement of entrances, exits, fences, landscaping and lighting. It can decrease opportunities for criminal activity by denying criminals access to potential targets and creating a perception of risk for would-be offenders.

- **Natural Surveillance increases visibility**
  Natural surveillance guides the placement of physical features such as windows, lighting and landscaping. These features affect how much can be seen by occupants and passersby. Potential criminals are unlikely to attempt a crime if they are at risk of being observed. Similarly, we are likely to feel safer when we can see and be seen.
• **Territorial Reinforcement promotes a sense of ownership**
Physical design can create an area of territorial influence that can be perceived by and may deter potential offenders. Examples include defined property lines and clear distinctions between private and public spaces. Territorial reinforcement can be created using landscaping, pavement designs, gateway treatments, signs and fences.

![Territorial Reinforcement examples](image1.jpg)

• **Maintenance deters offenders**
A well maintained home, building or community park creates a sense of guardianship and helps deter criminals.

![Maintenance examples](image2.jpg)

• **Activity Support fosters community interaction**
Criminal acts can be discouraged in public spaces when we encourage activities in those spaces by residents, visitors and other legitimate users.

![Activity Support examples](image3.jpg)
While most of us desire privacy, landscaping should not create hiding places especially near building entrances. Entrances can be highlighted with landscaping through the use of trees, accent plants, and groundcovers without blocking views. The casual observations of residents, passersby, and motorists deter crime, so plantings should be designed and maintained so that everyone can clearly see across a parking area to common areas such as sitting areas, pools, recreation areas and building.

**Natural Access Control:** Natural access control employs elements like shrubs, trees, and plants to deny admission to private or restricted areas and to create a perception among unwanted users that there is a risk in selecting the target.

- Walkways and landscaping direct visitors to the proper entrance and away from private areas
- Entrances into parking lots should be defined by landscaping
- All types of well-maintained landscaping are effective in visually taking areas from private to semi-private to public
- Use fences, walkways and landscaping to direct visitors to the proper entrance and away from private areas
- Install plantings and architectural design features such as columned gateway to guide visitors to desired entrances
**Natural Surveillance:** Landscaping should not prevent building occupants from viewing the front entrance or sidewalk, nor should landscaping cover windows. Avoid conflicts between landscaping and lighting, especially lighting adjacent to canopy trees.

- Shrubs should be kept trimmed to no higher than 36 inches or 3 feet
- Tree branches should be kept trimmed to no lower than 6 feet from the ground
- Branches should be kept away from roofs
- Properly maintained landscaping provides maximum viewing to and from the house

**Territorial Reinforcement:** Territorial reinforcement employs such design elements as sidewalks, landscaping, and porches to help distinguish between public and private areas and helps user's exhibit signs of “ownership” that send “hands off” messages to would-be offenders. People take more interest in something they own or when they feel intrinsically involved

- Utilize trees and mid-sized shrubs as a buffer or barrier to separate conflicting uses
- A walkway with a well-maintained bed of flowers sends a subtle message about ownership
- Property lines should be defined by landscaping or post and pillar fencing
- Place hostile plantings below windows and along a fence as an additional barrier
- Consider plants such as dwarf rotunda holly, natal plum, crown-of-thorns, agave, roses, bougainvillea, and saw palmetto which strongly deter persons from passing through them
CPTED: Lighting (Natural Surveillance)

Sufficient lighting during the day and night is important so that people can see and be seen. The aim is to increase the real and perceived safety of the environment in areas where safe activity is encouraged. Traditionally, there has been a focus on traffic lighting the emphasis should now include the needs of pedestrians and cyclists. Lighting design must carefully take into account the context, as it is possible to attract people into risk areas by lighting the areas at night.

Factors to consider include:

- Lighting level- want to illuminate the required areas without causing light pollution or glare
- Spacing- allow for transitional lighting as the eye moves from one space to another consider the time to adjust. Ensure landscaping does not obscure or impact effectiveness of lighting
- Type- various types of lighting are used dependent on the area being illuminated
- Maintenance (cost of ensuring lighting is always kept correct levels)

Unit lighting should be:

- Energy efficient (used consistently)
- Non-tamperable (use special screws)
- Break resistant lens (polycarbonate-lexan)

Building lighting should:

- Illuminate building numbers
- Illuminate building accesses
- Illuminate front and back areas
- Illuminate porch lights under control of building, not the apartment user

Grounds lighting should:

- Provide a cone of light downward to walkways/common areas
- Provide a level of lighting between buildings to distinguish forms and movement
Lighting recommendations below:

- Lighting packs for exterior lighting:
  - Wall pack- full cutoff
  - Wall pack- semi cutoff

- Lighting considerations to avoid contributing to light pollution:

Bulbs/lamps for interior/exterior:

- Light Emitting Diodes (LED): Good color rendition* (reflects true colors), impact resistant, energy efficient (1.0-36 watts), lamp life of approximately 25,000-75,000 hours. While these bulbs can cost more, they last longer and emit a truer, consistent light which will allow the user to recoup the cost in the long run

- Metal Halide (MH): excellent color rendition, medium lamp life of approximately 11,000-15,000 hours These lights are typically used when color rendition is of primary importance; auto dealerships, grocery/convenience stores, and high risk areas like ATM’s and bars

*Color Rendition: The presentation of the true color spectrum measured while using natural sunlight.
Access Control is the physical guidance of people coming and going from a space by the placement of entrances, exits, fencing, landscaping, locks, and other barriers. For example, walkway bollards may be placed near the entrance of a park to prevent vehicle entry but allow pedestrian entry. This strategy works because it creates a barrier against improper vehicle movement into the park. In the event vehicles do enter the park, the presence of the bollards makes the inappropriate behavior clear to citizens passing by and they can notify police.

A component of Access Control is called Target Hardening. This refers to:

- Deadbolt locks
- Window locks
- Sliding glass door locks
- Alarms

Windows: Windows can provide natural surveillance of the areas outside of a residence, allowing residents to be the “eyes on the street” for their community.

- All windows should have locks.
- Window treatments on front-facing windows should be kept open and provide a view to the front of the property. Leaving the window coverings open on at least a few front-facing windows creates the perception with people passing by that you are watching and will witness any crime that occurs there
- If and when possible, replace any Jalousie (glass louvered) windows with more secure windows.
- Visit ajcity.net/CPTED for more information on specific window styles and locks

Doors:

- All exterior doors should be solid and made from the following materials:
  - Fiberglass
  - Solid wood
  - Solid wood core (a layer of veneer over solid wood)
• Metal (Note: make sure metal doors are reinforced inside, and have what is called a lock block. Otherwise, they can be bent out of the frame using a car jack)

• All doorways that open to the outside should be well lit.

• The front door should be at least partially visible from the street.

• Keeping the door locks at least 40” from windows prevents criminals from breaking the window, reaching through the hole, and unlocking the door to get inside your home.

• Sliding glass doors should have a locking device or locking pin on the movable portion of the door.

• Equip all solid exterior doors with 180-degree door viewers.

• Use single-cylinder dead-bolt locks with a minimum 1-inch throw on doors used as primary ground floor exits and install 3 inch screws into the strike plates.

• Detached storage sheds or other buildings should be equipped with lockable windows and doors.

• The driveway, or where you usually park your car, should be visible from either the front or back door and at least one window.

• Consider removing fences or walls that obstruct your view of the street. If you can’t see out, then these areas may also provide a criminal a good place to hide near your house, lay in wait for you, or conceal their efforts to break into your home or business.

• Periodically change the code to garage door openers and combination, or keyed, locking and alarm devices.

• Store ladders, scaffolds and other climbable equipment when not in use.

• ALWAYS keep keys handy, but concealed, for emergencies.
This is related to the neighborhood’s sense of ‘pride of place’ and territorial reinforcement. The more dilapidated an area, the more likely it is to attract unwanted activities. The maintenance and the ‘image’ of an area can have a major impact on whether it will become targeted. Maintenance, including cleaning, repairing and landscaping, needs to be performed routinely to encourage use of the space for the intended purpose and discourage abnormal and criminal use. Maintenance sends a clear signal that someone cares about the space and is likely to defend it against intruders or vandals.

When planning for spaces and activities, remember:

- All human space has some designated purpose.
- All human space has social, cultural, legal or physical definitions that establish desired and acceptable behaviors.
- All human space is designed to support and control the desired behaviors.

Whenever considering CPTED, specifically lighting and landscaping, the cost of regular maintenance and repair should always be taken into consideration and a maintenance schedule should be created.

- The properties that are normally not protected and that can easily be intruded should be defined by the presence of design features and maintenance. For example, poorly defined front and rear yards could be defined by a small fence or by regular maintenance of the surrounding landscape.

- Materials used for common facilities should be vandal resistant so that maintenance is minimal. Street furniture should be made of durable and vandal resistant materials.

- Properties should be well maintained to create a perception of ownership and safety. Building maintenance by law enforcement is a critical part of fostering a sense of ownership.

- Well displayed telephone numbers or web sites to call for repairs and report vandalism to properties, especially in public areas are desirable. For example, a broken lock, door or window or light could be reported.
• Offensive graffiti should be promptly removed either by the property manager or the public authority. Response to litter pickup and repairs should be prompt. A well maintained space gives an impression of ‘ownership’ and ‘care’.

• Keep all structures, including fencing and walkways, clean and in good repair

• Work with the city to have graffiti removed as quickly as possible

• Keep all litter and trash picked up at all times

• Keep trees and shrubs trimmed back from windows, doors and walkways.

• Keep shrubs trimmed to 3 feet and prune lower branches of trees up to 7 feet

• Efficient programming and management of spaces, formal surveillance and good maintenance, for example by the management corporations of condominiums, and town councils taking care of public housing, can also enhance personal safety. If prompt attention is not given to maintaining a property, the result of lack of maintenance can contribute to a sense of fear.
Criminal acts can be discouraged in public spaces when we encourage activities in those spaces by residents, visitors and other legitimate users. Casual use of public and semi-private open spaces by residents and their friends should be encouraged to increase surveillance opportunities.

Healthy communities create activity generators. Activity generators are uses or facilities that attract people, create activities and add life to the street or space and thus help reduce the opportunities for crime. Activity generators include everything from increasing recreational facilities in a park, to placing housing in the central business district or adding a restaurant to an office building. They can be provided on a small scale or be added as supporting land use, or intensifying a particular use.

When designing or maintaining your community, consider the following:

- **Key attributes**
  - Sociability
  - Uses & activities
  - Access & linkage
  - Comfort & image
- **Intangibles**: These things, activities, benefits of creating positive environments for residents (neighborliness, interaction, community pride, cooperation)
- **Measurements**: Ways to measure the success of your efforts- how to know if what you’re doing is working. This is important to know do adjustments can be made and resources are being used for things that do work and not wasted on those things that are not working.
Activities
Finding engaging, fun, and consistent activities is the best way to encourage positive use of your spaces by desired, welcomed, and legitimate users. Below are some ideas for activities you can implement in your communities:

- Safety Meetings- Work with the AJPD to identify a topic relevant to the park or the time of year. Either collect materials from the AJPD to discuss and distribute or schedule a time for the Community Resource Coordinator to provide a presentation by calling (480) 474-5442.
  - Bicycle/Golf Cart Registration
  - VIN Etching
  - Operation ID
  - RX Collection
  - Summer Preparation
- Coffee/Donut socials- Plan a few key items to go over at each meeting: community news, city events, announce birthdays/anniversaries, or introduce new arrivals
- Tournaments- find a common sport or game the community enjoys or vary them and have ongoing tournaments
- Community potlucks
- Cook off’s
- Shred events & Dump days- This will help keep your community clean and clutter free.
- Charity day- get together a collection or donation for a community charity
- Crafts
- Book clubs
- Community walking clubs

It may take time and lots of trial and error to find out what activities those in your community would enjoy and engage in, but ultimately it will be worth it for your community.
As a participant of the CFMH program, Phase III completion is the successful passing of the CPTED Evaluation. Once you feel you have met all the standards required to pass, contact the Community Resource Coordinator to schedule your evaluation. An initial evaluation consisting of a daytime and nighttime evaluation will be completed. You will then receive a report summarizing the evaluation listing ‘Requirements‘ - items that are required to be addressed to pass your evaluation, and ‘Recommendations‘ - items the evaluator recommends addressing to increase the appeal and safety of your community.

Below is a sample of the evaluation form used to complete the CPTED evaluation.

![CFMH Phase III: CPTED Assessment Form](attachment:image)