



# American Clearinghouse on Educational Facilities

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## Crime Prevention Through Environmental Design (CPTED)

CPTED refers to how the physical environment, in and around a school, is used as protection. The following list is a CPTED resource list intended to assist school officials in applying CPTED principles to increase school safety. This list is intended to focus on the physical structure and design components of a school which may improve school safety. However, this list does not address the equally important procedural components of school safety. School officials are encouraged to implement these safety measures while remembering the need to balance safety and security with the day to day operations of the school. For additional CPTED resources please visit the ACEF website, [www.acefacilities.org](http://www.acefacilities.org).

### CPTED Principles

**Natural Surveillance** – placing physical features to maximize visibility

**Natural access control** – guiding people with signage, well-marked entrances and exits, and landscaping while limiting access to certain areas by using real or symbolic barriers

**Territoriality reinforcement** – clearly delineating space, expressing pride and ownership, and creating a welcoming environment

**Management and Maintenance** – ensuring building services function properly and safely, exterior is properly maintained and organized with landscaping and plantings maintained and trimmed

### Natural Surveillance

- Create clear sight lines for building occupants into open areas such as sidewalks, playgrounds, driveways, parking areas and other approaches to the buildings.
- Consider the use of elevations in civil landscaping carefully. Landscaped berms may mitigate risks but may also create hiding spaces.
- Ensure office personnel have unobstructed views of visitor parking and approaches to the main building entrance, as well as the vestibule area.
- Leave corridors and hallways free of visual distractions that can inhibit either natural and mechanical surveillance or intrusion motion detection.
- Coordinate locations of parking areas with office windows so approaches to the building can be observed by staff.
- Trim trees from the bottom at least 8' and shrubs should be pruned between 32" and 36" tall.
- Remove dense shrubbery that could hide covert activity.
- Plant thorn-bearing shrubbery as natural barriers.

### Natural Access Control

- Place trees, dumpsters, and structures away from buildings to restrict access to low canopies, roof top, and natural access control.
- Place physical barriers around exterior gas, or water pipes, running along the building exterior.
- Increase standoff distances and place physical crash barriers to prevent vehicular access to building.
- Secure perimeter and playground gates when not in use.
- Secure as many doors from outside entrance as possible. Increase staff awareness around unlocked doors.

### **Natural Access Controlled continued:**

- Distinguish the main entry point of school with walkways, signs, and secure it with emergency hardware that can be locked down via an alarm button or other device.
- Provide clear and concise signage to parking areas directing visitors, deliveries, parents, and busses to appropriate areas of the building and property.
- Designate entry points for delivery and commercial deliveries away from high-risk areas.
- Mark classrooms, common areas, and administrative areas with clear and concise signage. Consider hallway designations with Alpha Numeric characters “A, B, C” or colors.
- Limit access to, and enclose mechanical equipment with barriers protecting the systems but do not inhibit natural surveillance of the area.
- Keep restroom doors open allowing staff members to listen and/or observe illegitimate activities.
- Identify, secure, and control access to utility services with natural and/or man-made barriers.
- Consider enclosing site perimeter allowing single vehicle entrance during non-peak hours.

### **Territoriality Reinforcement**

- Maintain clearly established transitional spaces between private, semi-private, and semi-public and public access spaces around the property. Consider the use of natural and manmade landscaping that does not limit natural surveillance or rod iron fencing that makes access difficult.
- Install uniform/adequate/security lighting around the exterior of the building. Coordinate lighting with the surveillance systems design and civil landscaping to reduce conflicts or shadow zones.
- Utilize landscape features to discourage access around windows or walls where graffiti may occur.
- Post signs around the property indicating the campus use of surveillance, trespassing policies etc.
- Post speed limit signs at all driveway entrances and coordinate traffic with local, or school district, law enforcement to regulate speeding on, or around, the property.
- Ensure crosswalks are clearly defined and staffed with personnel in, or near, traffic carrying two way radios, whistles, and wearing traffic safety vests.
- Establish visitor management processes including the use of brightly colored lanyards, credential exchange (e.g. keys for I.D.'s)
- Differentiate security levels with interior barriers.
- Consider relocating mailrooms, loading docks, storage areas, and lobbies away from high traffic areas or densely utilized areas.

### **Maintenance**

- Remove all evidence of vandalism, or graffiti, immediately.
- Keep walkways in good repair to reduce the threat of tripping hazards.
- Replace broken windows immediately to limit the impact on HVAC systems or security.
- Keep vegetation in order to prevent hiding areas or blocking natural or mechanical surveillance.
- Replace damaged or burned out lighting. Upgrading exterior lighting from older sodium based systems to newer systems, such as LED, may improve surveillance coverage.
- Ensure exterior door hardware and closers are in good working condition.
- Routinely test motion sensors in the intrusion system or access control systems. Test functions such as emergency lock down buttons to ensure programming.
- Ensure roof hatches are secured from the inside and that the padlocks are secure.
- Routinely check the building intercom system ensuring adequate coverage over open areas such as parking lots, pick up and drop off areas, and playgrounds.
- Verify staff radios are charged and function in areas outside the building (pick up and drop off, playgrounds).
- Implement periodic water quality testing procedures.