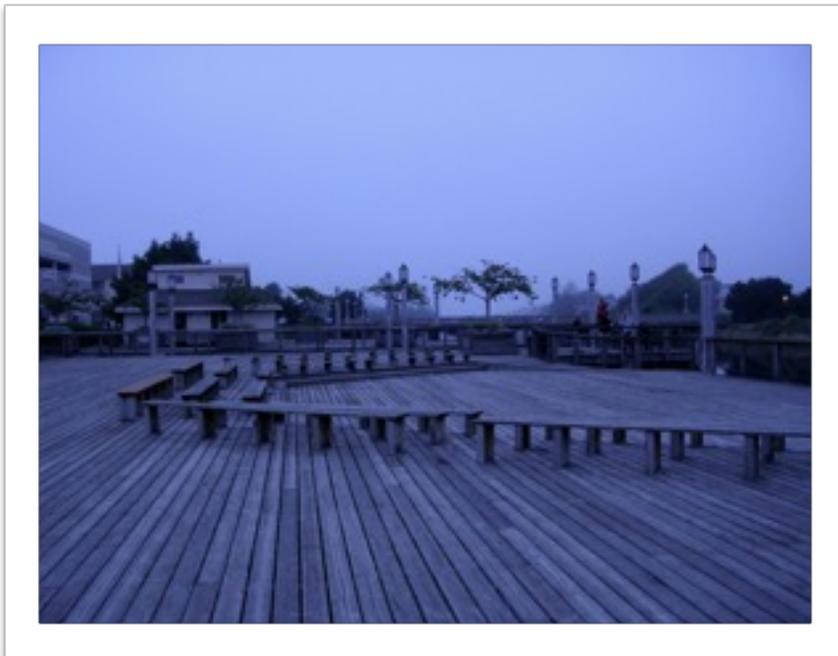


8. Tools to Choose Sites Using CPTED

The design of a toilet facility has to complement the site on which it is built and the choice of a site should complement the intended uses of the public toilet.

Facility design and site choice can be considered simultaneously. Or if you have a suitable site, available infrastructure and many other factors will dictate features you'll need to consider in the design of the structure. Conversely, if you've decided on a facility type, you need to take extraordinary care in choosing a site that will allow the public toilet to serve its intended function.



This public restroom in Seaside Oregon serves walkers, cyclists, users of the nearby boat launch and amphitheater audiences. They in turn keep an eye on the facility.

Best practices in site choice

An open space toilet facility needs to be integrated with its surroundings and fit its context. There is strong interplay between structure design and choice of site.

Environmental design looks at several environments all at once. The physical environment may be urban, suburban, rural or wilderness. Aspects to consider are climate, availability of water and sewer, terrain, soil quality, position of paths, trails, roads, and rail lines, and access to maintenance and treatment.

In a built or urban environment, site choice requires an understanding of where sewer and water pipes lay and the expense of laying and connecting new pipe. Early on in your site assessment process, you'll consult maps of underground infrastructure, preferably with the assistance of experts in your local planning or permitting department. There may be underground obstacles related to current transportation systems or leftovers from early industrial ventures, some of which may not be charted. Electricity to power the unit will need to be connected, or if you opt for a solar alternative, ensure that the sun is not obstructed by buildings, trees or snow. There are right of way stipulations that govern anything that is placed in or adjacent to a sidewalk, street, highway, or transit station. Mandated environmental impact assessments may require physical modifications.

Smooth technical functioning alone does not make a good restroom. Some of the social, cultural and historical factors may be covered in additional official reviews that take place before a structure is built. Many cities and towns require visual impact reviews so that streets maintain their character. Designated historic districts, which in many cities attract visitors day and night, will likely impose their own historic guidelines relating to construction type, material use, lighting, and signage. Understanding the multiple features of the physical

Case Story: Choosing a site for the Portland Loo

When the City of Portland decided to deploy its first sidewalk toilet in the Old Town Chinatown neighborhood, members of the Mayor’s Restroom Task Force were asked for input. Two members took a stroll around the neighborhood discussing strengths and weaknesses of various options. They knew that the Portland Loo fit a parking space and that the budget included a curb extension but little about the water and sewer pipes under the pavement. Six locations seemed fine in terms of user convenience plus offered sightlines that enabled passers by and people in buildings around and above to see the Loo.

One person photographed the other in each of the spaces. They printed the photos on letter sized paper and stuck them on a cardboard exhibit board they took to community meetings. Attendees were asked to choose and comment using sticky notes. The Task Force members then recorded comments and prioritized sites. Although a couple of locations were ruled out owing to the high cost of moving water and sewer pipes, the Loo was eventually installed at an ideal location - on a busy street near the bus station on a block bounded by two light rail stations.

Source: PHLUSH.

environment and the policy requirements that affect them is not enough, however.

What is more important in planning for public toilets, is the social environment. Is the toilet serving users in a historic district, on a city street, in a large urban park, at the beach or in a remote mountainous area. Who are these users? Why are they there? How do they behave? How do they misbehave? How much diversity is there in terms of users’ ages, abilities, cultures, and reasons for being in the space the toilets serve? What are their values and expectations? Are they comfortable using public toilets or do they avoid them? Apart

from users, what are the attitudes of neighboring residents, local businesses, and local officials?

Cities, towns and park districts vary, however, in the attention they give to the social environment. This is where activists can make a huge contribution. In fact, a public toilet project is not likely to succeed without citizen collaboration. And CPTED is a tool that enables collaborating stakeholders - including ordinary adults, teens and children - to discover the site-specific solutions for public toilet success.



This restroom in a New Orleans park illustrates CPTED features: location near right of way, co-location with other public activities, and all around pedestrian circulation, including door through the middle to the toilet stalls.

CPTED history, goal and definitions

The goal of CPTED (pronounced “sep-ted”) is to reduce specific crimes (and fear of them) by manipulating environmental variables. CPTED is a creative, holistic, and cross discipline collaboration among planners, architects, crime prevention specialists and community members. It anticipates and designs out security problems and safety vulnerabilities from the start.

The term *Crime Prevention Through Environmental Design* originated with C. Ray Jeffery in his 1971 book of that title. The 1972 work *Defensible Space* by architect Oscar Newman advanced the discussion.¹ CPTED found its fullest elaboration in the work of criminologist Timothy Crowe in the 1990s.²

Environmental design is defined like this:

Environment = physical surroundings + social surroundings
> **Natural access control**

Design = physical, social and management decisions that affect human behavior > **Natural surveillance**

Natural access control defines space in ways that “create a perception of risk in the mind of an offender.” Natural surveillance makes it easy for users and passersby to keep an eye on the facility. CPTED relies on natural, intuitive approaches. When people enter a place, they pick up on environmental clues and act accordingly. A well-designed restroom needs to signal to users that it is a safe place and they are not vulnerable. Conversely, it signals to potential trouble makers that it’s not safe to make trouble as it would put them at risk

of being caught. Natural access control can be supplemented by the presence of cleaners and attendants and by the placement of locks.

CPTED uses simple, transparent tools to analyze space in terms of designation, definition and design. Human space has a designated purpose, has legal, social or cultural definitions that determine acceptable behavior, and is designed to support or control the desired behavior.



This Portland facility benefits from the presence of café patrons as well as motorists who use a pay station on the curb opposite the door.

¹ Oscar Newman, “Creating Defensible Space, (Washington,” DC: U.S. Department of Housing and Urban Development, 1996), 9, <http://www.huduser.gov/portal/publications/def.pdf>, accessed October 10, 2015.

² Timothy D. Crowe, *Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts* (Boston: Butterworth Heinemann, 2000).

What's great about CPTED is that it empowers ordinary citizens to examine the relationship of the environment to human behavior and crime and to make their communities safer. Professionals can help. Local police understand the motivations behind inappropriate behavior and can provide crime statistics. Architects can help determine what construction options are feasible. Technicians can explain different types of doors and locks. Landscapers know how to replace thick foliage that blocks sightlines with planter boxes or lower vegetation that is both attractive and resilient.

But these professionals can't do the job alone. The normal users of a space - neighbors, business owners, visitors, potential toilet users, etc - can learn to apply CPTED concepts as well. Not only do they know more about what is going on in the neighborhood, they have a vested interest in the livability and safety of their immediate environment.

For CPTED principles applied to toilet facilities, see the *Publicly Available Toilets Problem Reduction Guide*.³

- Produced by the British Toilet Association in collaboration with a crime prevention design service.
- Easy to use 56-page illustrated guide is available free online.
- Considers location, building exterior, building interior, accessible toilet, family toilet rooms, automatic units, and street urinals.
- Looks at maintenance and income generation.
- Recommends ample plumbing chase that allows repairs to ducted systems without closing the facility.
- Notes that visible piping makes cleaning more difficult and allows visitors to hide illicit items.
- Design internal signage to be welcoming, to state expected standards of cleanliness, and to invite feedback.

- Since the presence of a disposal box for hypodermic needles can be controversial, include a safety pin on the sign to make it "less threatening and more user friendly."
- Design external signage with opening hours, symbols for wheelchair access and baby changing, the address of nearby facilities should the unit be closed, and telephone, text and email contact information where users can report problems.



Angled slats at the bottom of the Portland Loo allow passers by and law enforcement to see if a user has fallen while not compromising privacy. Most toilet doors can be fitted with similar slats.

³ "Hertfordshire Constabulary Crime Prevention Design Service and The British Toilet Association, "Publicly Available Toilets Problem Reduction Guide," 2010, <http://www.britloos.co.uk/wp-content/uploads/2014/01/PubliclyAvailableToiletsProblemReductionGuide.pdf>, accessed October 12, 2015.

CPTED for existing restrooms

You can apply CPTED principles to existing restrooms in your community. Your group probably knows most of the restrooms in your area by now, but why not take a tour to practice applying the tenets of CPTED and siting?

You can go back to the restrooms already on your list, visit sites in another part of your town or visit another town. Spending some time in and around each toilet facility helps develop your sense of what

Case Story: Lessons from a poor choice of site

Following a half decade of advocacy by a group championing the rights of its unhoused residents, the City of San Diego installed a Portland Loo on the edge of a parking lot adjacent to the baseball stadium. Within the first year of operation, crime had spiked around the facility and there were calls for its removal. What went wrong?

Although there had been outreach to stakeholders, it was not sufficiently thorough. Nearby businesses that had not been consulted voiced negative sentiments. Public works employees complained that high water and sewer connection costs could have been avoided had they been consulted on the location. The advocacy group liked the site for its proximity to the homeless community but had requested a security guard.

The following stakeholders needed to be involved in the site choice. Advocacy mustn't lag when funds are finally allocated. In cities lacking strong public engagement policies and procedures, citizen groups have to take the lead in ensuring the site will work.

Source: 'City mulls removal of downtown public toilet'.
Fox 5 News. San Diego. July 30, 2015 and PHLUSH.

works and what doesn't. You'll discover changes that can be made to the structure or the area around it to encourage bona fide users and discourage inappropriate users.

This is a tour you can take by yourself or in a group. The insights of individual 'toilet tourists' need to be balanced by others who represent as much diversity as possible. Once you exchange your new insights and the photos you'll take, your group will have a much deeper understanding of toilet design and provision. You can also take a group tour and invite the stakeholders that you've identified and need to involve in your project. The mom with the kids. The water and sewer engineer. Fellow advocates from partner organizations. The urban planner. The beat cop. The gender non-conforming person. The elderly person. The public toilet naysayer. The person with a disability. The non-profit leader. The dog walker. The transportation planner. The homeless person. The pedestrian commuter. Folks from the faith community. The architect. The skateboarder. The public health official.

Provide everyone with a copy of the toilet tour handout accompanying this Toolkit⁴ and enjoy your walkabout.

⁴ "A Toilet Tour Discussion Checklist." Public Toilet Advocacy Toolkit, <http://toolkit.phlush.org/>, accessed November 8, 2015.