

What Do We Mean By “Safe”?

by Evan Lowenstein

When we think about planning for safe communities, we need to start by asking two basic questions. What do we mean by safe? And what do we mean by dangerous?

For the past twelve years, Morgan Quitno, a national research and publishing company has released its annual *Safest and Most Dangerous Cities* reports. These reports enjoy widespread media coverage. But Morgan Quitno only looks at crime categories – murder, rape, robbery, aggravated assault, burglary, and motor vehicle theft – to determine, as the report puts it, “which cities and metropolitan areas were safest and most dangerous.”¹ Is an exclusive focus on crime the best way to measure how “safe” our communities really are?

University of Virginia planning professor William H. Lucy has instead focused on crime *and* on another aspect of safety: motor vehicle accidents. Lucy measured rates of fatal motor vehicle accidents (a sadly common occurrence) and rates of homicide-by-stranger (rare, but a crime widely feared).² A startling pattern emerged: the most dangerous parts of the metro areas were the most rural, exurban sectors. For example, rural Grundy County, Illinois (population just over 37,000) was, by Lucy’s



1 *City Crime Rankings, 12th Edition* (Morgan Quinto Press, 2005).

2 William H. Lucy and David Phillips, *Tomorrow’s Cities, Tomorrow’s Suburbs* (Planners Press, 2006).

measure, more dangerous than Cook County (Chicago). Why? Because the death-by-auto rate was three times higher than the rate in Cook County.

Lucy’s research provides an important service to planners by highlighting that while crime is the danger that preys most on Americans’ imaginations, there is more to safety and danger than just crime.

How can planners make for safer communities? One step is to scrutinize the way our communities are designed and laid out. Planners and public safety officials must look through the other’s lens to learn more about what can make their community safer.

IS AN EXCLUSIVE FOCUS ON CRIME THE BEST WAY TO MEASURE HOW “SAFE” OUR COMMUNITIES ARE?

William Lucy’s research shows us that the single most important thing we can do to increase the safety of communities is reduce the risk of high-speed automobile accidents. High-speed two-lane local roads and wide arterials are the riskiest for motorists *and* for pedestrians.

Seventy-seven percent of fatal auto accidents occur at high-speed in accidents on rural roads.³ In addition, in many of the fast-growing suburban and exurban regions of the country, the rate of pedestrian fatalities is going up, even though fewer people are walking.⁴

According to an American Associa-

3 William H. Lucy, “Watch Out: It’s Dangerous in Exurbia,” *Planning* (November 2000).

4 *Mean Streets 2004: How Far Have We Come?* (Surface Transportation Policy Project, December 2004).

5 *NCHRP Report 500: Vol. 10, A Guide for Reducing Collisions Involving Pedestrians* (Transportation Research Board, 2004).

tion of State Highway and Transportation Officials sponsored report, “a pedestrian hit at 40 mph has an 85 percent chance of being killed, while at 20 mph, the fatality rate is only 5 percent.”⁵ The danger is exacerbated by the fact that these roads – located in increasingly residential areas – often lack adequate aprons, sidewalks, and crosswalks.

Of course, while automobiles pose a major safety challenge, crime is also a real danger in our communities. Crime prevention is not the work only of law enforcement, but also very much the purview of planners. “Crime prevention through environmental design” (commonly referred to by its acronym, CPTED) is an approach that recognizes that “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 in the quality of life.”⁶ “*Understanding CPTED*”

The way uses are separated or mixed within a community can also influence the type and incidence of crime. Businesses and houses sited together within mixed-use neighborhoods can reciprocally watch one another, as their occupied and vacant hours tend to be complementary. Mixed-use development enables more “24-hour neighborhoods,” which can mean more eyes and feet on the street more hours of the day and night. Development characterized by separation of uses and significant distance from community cores often experience longer response times from police, ambulance, and fire services.

Density of development affects safety too. Despite the safety concerns often raised in opposition to higher-density development, research shows that well-designed, higher-density development can actually curb crime. An Urban Land Institute study of Greenwich, Connecticut revealed that higher-density housing

was substantially less likely to be burglarized than its lower-density, single family counterparts.⁶

Making communities safer through planning and community design poses many challenges and more than a few dilemmas. In its “Sustainable City Progress Report,” the City of Santa Monica, California describes one such dilemma. The city has implemented traffic calming measures to improve bicycle and pedestrian safety, addressing the increase in the number of reported accidents involving motor vehicles and pedestrians. However, fire trucks have difficulty navigating the speed bumps and traffic circles, and emergency response times have worsened.

Planners can play a vital role in mediating these discussions and helping the community balance conflicting needs. Can more and brighter lighting improve safety without changing the character of the neighborhood? Can landscaping be lush, or will this just create more places for intruders and attackers to hide? Do high-density and mixed-use development, sidewalks, and bike lanes fit with the character of rural areas? Does turning drivers into cyclists and pedestrians ever increase risk? Informed, creative community design can help address these challenging questions.

Professional and citizen planners, as key designers of our communities, are critical to this process. By focusing on the real dangers, planners and other public officials can apply design solutions that make our communities look, feel, and be safer. ♦

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⁶ Marcus Felson and Richard B. Peiser, *Reducing Crime through Real Estate Development and Management* (Urban Land Institute, 1997).



Cul-de-Sacs

William Lucy and colleague David Phillips explain in their book *Tomorrow's Cities, Tomorrow's Suburbs* that cul-de-sac streets may be more dangerous to drivers and pedestrians than many planners and residents think. Common belief is that cul-de-sacs are safer for children because they prevent through-traffic and slow traffic down. But Lucy and Phillips point out that cul-de-sacs' superior safety, while touted by real estate agents and accepted as fact by tens of millions of Americans, is not backed up empirically in planning and transportation research.



How do we make our communities safe places for kids to grow up in?

Understanding CPTED

by Timothy Crowe

CPTED is based on the theory that 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 in the quality of life. CPTED concepts can be applied to an individual building as well as to an entire neighborhood.

Using design to foster security has its origins in the early history of the development of communities. Early Sumerian codes (4,000 BC.) identified the importance of respect for property rights, while the Codes of Hammurabi (2,000 BC.) introduced the responsibilities of builders to their clients. Eighth century Chinese practitioners of Feng Shui promoted the design of harmony in space from the size of the smallest rooms to the planning of cities. Native American cliff dwellers at the same time were developing hierarchies of family and community identity and pro-

tection through the design of living space, building impregnable living areas on the face of cliffs accessible only by ladders.

CPTED is based on three overlapping strategies: natural access control; natural surveillance; and territorial reinforcement.

Access control is a design concept directed at decreasing crime opportunity. Surveillance is directed at keeping intruders under observation. Traditionally, access control and surveillance have emphasized mechanical or organized crime prevention techniques. More recent approaches to the physical design of environments have shifted the emphasis to natural crime prevention techniques.

This shift in emphasis has led to the concept of territoriality, which suggests that physical design can create or expand a sphere of influence so that users develop a sense of proprietorship – a sense of territorial influence – and potential offenders perceive this territorial influence.

Provide clear border definition of controlled space. Boundaries may be identified physically or symbolically, and can include fences, shrubbery, or signs. The underlying principal is that a “reasonable individual” must be able to recognize the transition from public to private space.

Provide clearly marked transitional zones. It is important to provide clearly marked transitional zones so that users know when they are moving from public to semi-public to private space.

Place safe activities in unsafe locations. Safe activities serve as magnets for normal users. Within reason, this strategy may be used to overcome problems on school campuses, parks, offices, or institutional settings.

Redesign or revamp space to increase the perception of natural surveillance. The perception of surveillance is more powerful than its reality. Hidden cameras do little to make normal users feel safer. Likewise, abnormal users do not feel at greater risk when they are oblivious to surveillance potentials. Windows, clear lines-of-sight, and other natural techniques are often as effective as the use of mechanical or organized (e.g., guards) methods.

Excerpted from Timothy Crowe, “Understanding CPTED,” in PCJ #16.