



57



6 MORE ACTIVE LIVING DESIGN IDEAS

This chapter discusses several design issues that extend beyond just pedestrian or bicyclist concerns. The following sections cover safety and security, construction and maintenance, and the design of public transportation, spaces, and parking.

Safety and Security

People are much more likely to walk or be active outdoors if they feel safe—safe from cars and other obstacles, *and* secure from crime. Community planners should consider design guidelines for physical safety such as these:

- Make sure that pedestrians and vehicles seldom occupy the same space.
- Help prevent pedestrian/vehicle crashes by using traffic calming vegetation, medians, raised pedestrian crossings, enhanced pedestrian crossing signals, and pedestrian-friendly signal timing.
- Remove obstacles such as brush and debris that block public sidewalks and shared-use paths or trails.



Pedestrians walking in this neighborhood of beautiful row housing in Brush Park are completely buffered from the street; regular lighting, houses oriented toward the street, and shallow, beautifully landscaped front yards enhance security. Photo credit: Pat Haller, Downtown Detroit Partnership.



Front porches in this neighborhood encourage neighbors to interact with people on the sidewalk and create a sense of oversight and safety. Photo credit: Dan Burden

Photo credit: © Matt Ramos, <http://www.iStockphoto.com>.

PERSONAL SECURITY THROUGH WATCHFUL EYES

To enhance security, planners should design pathways so that pedestrians are visible from cars, buildings, and front porches. People in cars and in buildings with windows on the street can watch over people on the sidewalk. Plantings that help separate pedestrians from cars work best when they are not too high for good visibility.

Even when sidewalks and crosswalks are present, motor vehicle traffic is slow, and debris has been removed, some residents do not walk because they feel vulnerable to crime. The principles of Crime Prevention Through Environmental Design (CPTED), which use design to prevent crime, are gaining in popularity among police departments and developers (Crowe, 1991). Reducing crime and its associated fears encourages people to walk and bike on the streets.

Research shows that the key to helping people feel safe is to create a sense of community (Sampson et al., 1997). When neighbors and people on the street feel a shared sense of responsibility for each other and their property, more eyes will watch the places where people walk, bike, sit, or wait for transit. The following design ideas help create a community feeling.

- Windows face the street so the people inside can watch out for the people outside.
- Building designs avoid long expanses of blank walls without windows, which can make pedestrians feel vulnerable and isolated.
- Neighborhoods have common spaces and events, such as pocket parks, community gardens, sidewalks, and block parties where neighbors can socialize. Creating mixed-use developments also helps—neighbors can meet each other while walking to the corner store.
- All public and private spaces are “owned” and well-maintained. Orderly, well-maintained spaces reduce fear. Beautification is contagious; when neighbors take care of their yards and nearby vacant lots, other people tend to follow their example.
- Good lighting design increases safety.
- Attractive public amenities such as fountains, street art, gardens, and street vendors attract more people to an area and create safety in numbers.
- Street design and traffic calming can also help. Neighbors socialize more on smaller streets with less traffic (Appleyard, 1981).



Grass, broken pavement, and heaving surfaces make this sidewalk difficult to maneuver. Photo credit: Dan Burden



This signed bike route needs to be maintained throughout the year. Photo credit: Phillip Toutant

Construction and Maintenance

The condition of hard surface areas (such as sidewalks, paths, trails, steps, ramps, plazas, and parking lots) affects the safety of all users but especially persons with disabilities, seniors, and young children. Of particular concern are pavement joints, surface finishes, and slopes, which should all be constructed with very smooth edges. A smooth fit and finish suitable for persons with limited physical abilities may go beyond conventional construction standards and local codes.

Ideally, surface areas should be designed to minimize maintenance costs. When damage occurs, street maintenance departments should repair sidewalks, paths, and trails soon after they show damage. Waiting until paved surfaces have seriously deteriorated creates obstacles for pedestrians, bicyclists, and especially for persons with physical disabilities.

Maintenance crews also need to clear snow and leaves from walks, bike paths, parking lots, and street crossings.

MICHIGAN THROUGH THE SEASONS

Michigan enjoys a four-season climate. Each season brings its unique beauty as well as specific challenges for pedestrians and bicyclists. When weather-related issues are properly addressed, people can benefit from year-round physical activity and appreciate the changing seasons as well as your community's many assets. The two main seasons to think about are the extremes of summer and winter.

Summer

During the welcome summer months, keep in mind the difficulties of physical activity in the heat. A few well-placed design elements can make it more pleasant and possible to walk and bike within the community.

- Well-planted trees in the space between the sidewalk and the road provide shade over the sidewalk, increasing pedestrians' comfort.
- Benches, especially those in protected places, provide a resting place.
- Drinking fountains should be considered for pocket parks within urban areas and recreational park settings.
- Covered bus shelters, especially at busy bus stops, protect people during all kinds of weather.



Summer. Customers can walk to and stroll in Holland's Eighth Street Market Place. Here customers enjoy the beauty and color of locally grown sunflowers. Photo credit: Dan Burden.

Winter

Cold weather often deters physical activity, but it doesn't need to. Minneapolis and Chicago are great examples of active living cities in cold climates. Many of Michigan's winter days can be enjoyed outdoors when people dress appropriately. Regular clearing of snow and ice is critical to



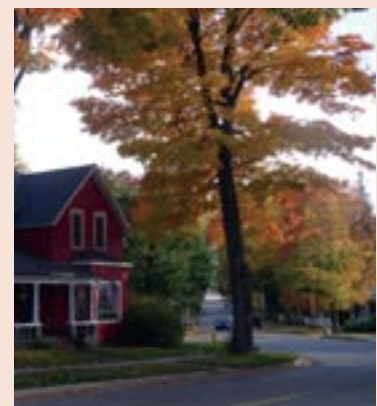
Winter. Our inland lakes provide a wonderful setting for a very aerobic game of hockey. Photo credit: © James Boulette, <http://www.iStockphoto.com>

creating safe and comfortable places for people to walk, bike, sit, or wait for transit during winter. Municipal programs can handle this maintenance, or communities can create and enforce ordinances requiring property owners to clear sidewalks of snow and ice. Design features can also help people engage in outdoor physical activity, such as:

- South-facing pedestrian and bike spaces can serve as warming pockets.
- Shelters at transit stops and at commercial, cultural, and civic facilities protect people waiting for buses or other rides.
- Heated pavement, increasingly seen in downtown areas such as Holland, promotes physical activity (and shopping) in winter by melting snow and ice, and helping to prevent slips and falls. It also reduces snow clearing costs for business owners!
- Outdoor skating rinks and sledding hills encourage people to get moving.



Spring. Early morning is a peaceful time to bicycle on Mackinac Island. Photo credit: Russ Soyring



Fall. The changing colors of autumn are delightful to see. However, fallen leaves can create barriers for bicyclists and pedestrians. Bike lanes and wide shoulders should be kept clear of leaves, as should sidewalks and shared-use paths. Photo credit: John Pratt

KEY CHARACTERISTICS OF PUBLIC SPACES THAT ATTRACT PEOPLE

- **Fun:** Public art, interactive fountains, play structures for kids and adults
- **Festive:** Music festivals, farmers' markets
- **Secure:** Well-patrolled, storefronts facing the street
- **Convenient:** Easy access for bicyclists and pedestrians
- **Efficient:** Multiple places people want to go, located near each other
- **Comfortable:** Seating, shade, water, and greenspace
- **Welcoming:** Features that invite people in (Burden, 2001b)



Children evidently enjoy the water park at Kent County's Millennium Park. Photo credit: Kent County Parks and Recreation

Public Places

Public places include plazas, school grounds, transit stations, libraries, government offices, shopping areas, and other places people frequent. These places enhance active living by creating attractive sites for people to walk or bicycle. Active living design for public places focuses on pedestrians and showcases attractive paving, benches, plantings, fountains, bus shelters, and other amenities. Automobile functions, such as passenger pick-up and drop-off, are located to the side of public places. For great ideas about creating public spaces, check out the Project for Public Spaces at <http://www.pps.org>.



Detroit's Campus Martius provides a year-round gathering place for residents, and in winter, a perfect place for an evening of skating! Photo credit: Downtown Detroit Partnership

Public Transportation

Public transportation can also promote active living; the goal when designing public transportation is to make transit stops safe and easy to use for pedestrians and bicyclists, with sufficient consideration for seniors and persons with disabilities. Well-designed transit systems:

- Provide frequent service
- Have bus stops or transit points that are conveniently located
- Offer transportation to key destinations
- Are easy and safe for seniors and persons with disabilities to navigate
- Ensure that pedestrians can cross the street at all transit stops
- Have suitable, well-lighted surfaces



This bus stop protects people from splashes from the road as well as bad weather. It is also highly visible, which enhances feelings of security. Photo credit: East Lansing Planning Department

- Can be easily cleaned of snow and ice
- Have easy-to-read and understandable signs
- Are separated from autos and the main stream of pedestrians and bicyclists
- Provide benches for people to rest (especially important for people with physical limitations)
- Provide trash receptacles for litter

Parking

Parking lots should be located at the sides or back of public spaces or facilities, not in the front, to create more attractive streetscapes.

People prefer to walk along streets that are defined by buildings, not parking lots. Dividing parking lots into smaller sections helps prevent the vast, inhospitable stretches of pavement often seen outside big-box retail stores. Some communities have adopted maximum parking standards and reduced the number of parking spaces required per square foot of residential and commercial space.

Other design choices also provide active living benefits.

- Facilities that attract visitors at different times of the day can share parking, rather than building separate lots for each. This can reserve more land for activity and leisure spaces.
- On-street parking helps reduce traffic speeds, provides close access to destinations, and offers an additional buffer for pedestrians.
- Attractive pathways (such as tree-lined sidewalks) through large parking lots specify where pedestrians can safely walk.



On-street parking adds to the appeal of this street by providing a buffer for pedestrians and framing the sidewalk. Photo credit: The Metropolitan Design Center Image Bank. © Regents of the University of Minnesota. All rights reserved. Used with permission.



Acres of solid pavement do not promote a healthy community. This vast, monotonous parking lot offers no safe paths for pedestrians, no trees to shade and cool parked vehicles, and no landscape features to collect and clean contaminated stormwater runoff. Photo credit: The Metropolitan Design Center Image Bank. © Regents of the University of Minnesota. All rights reserved. Used with permission.