

## **Shared Spaces**

In the Netherlands, they're called *woonerfs* (if they're residential) and *winkelerfs* if they're commercial.

In Britain, they're called *Home Zones*.

In Portland, they're called *Festival Streets*.

Whatever they're called, "shared streets" are the latest trend in designing pedestrian-friendly streets and calming traffic. The idea is to blur the division between pedestrian and vehicular areas and force vehicle drivers to slow and pay attention to pedestrian and cyclist traffic. This is often accomplished by "psychological traffic calming" -- removing sidewalks, signs, markings, and other traffic devices to create a seamless multi-purpose urban space. Proponents claim that the resulting uncertainty slows cars and is safer for pedestrians. Without any clear right-of-way, so the logic goes, motorists are forced to slow down to safer speeds, make eye contact with pedestrians, cyclists, and other drivers, and decide among themselves when it is safe to proceed. Hans Monderman, a Dutch traffic engineer, is credited with the first modern use of shared streets in Drachten, the Netherlands. U. S. planners and engineers, hoping to obtain the safety and livability benefits for non-motorized users that characterize many older European cities, are trying out shared streets in many places here.

In Portland's Chinatown, for example, massive granite planters with palm trees flank the entrance to the street, which opens onto a one-block space paved with concrete squares. There are no white lane dividers or sidewalks. Instead, rough-hewn granite columns distinguish places for pedestrians and places for cars. Some designs incorporate a speed table, raising the street surface to sidewalk level; some use bollards or planters to delineate the areas. In concept, the area is transformed into a pedestrian plaza, where vehicles are only tolerated, not given primacy. In urban areas, they can provide more space for sidewalk cafes and similar public gathering places. In residential areas, shared streets are intended to create safer places for children, eliminating speeding vehicles. Suburban areas without sidewalks have de facto shared streets, since the vehicular way becomes the default pedestrian network. Unfortunately, many of those streets do not incorporate other important traffic calming elements.

As attractive as these shared spaces may seem to some pedestrian advocates, they are raising concern for some individuals with disabilities, especially those who are blind or have limited vision. Even wheelchair users, who could be expected to like level, unobstructed spaces, are finding some designs problematic.

The elimination of the curb can pose serious problems for people who are blind or have low vision. The curb is often used as a "shoreline" by both cane and guide dog users. The building line usually offers a shoreline on the other side, but that line can be broken by street furniture, and especially sidewalk cafes, which often proliferate in these environments. A blind pedestrian who veers toward the street to avoid such obstacles may inadvertently end up in the vehicular way. Obviously, the "make eye contact with drivers" rule doesn't work for a blind person, either. Guide dogs are trained to find the curb to keep their owners out of harm's way, but may

not be able to do their job if there is no curb. Planters or bollards placed too far apart may not help either cane or dog users navigate the space. Wayfinding cues along and across an intended route may be less available.

Cars may be slowed, but cyclists may not be. One blind member of a British focus group on the subject of shared streets said he was hit and sent flying by a cyclist, who then yelled, "You'll get out of the way next time, won't you!" Cyclists are usually one of the beneficiaries for whom shared streets are planned, but they can also be part of the problem.

And wheelchair users who might be expected to appreciate not having to contend with curbs sometimes have trouble negotiating with vehicles. Lower to the ground, some wheelchair users may not be seen as well by drivers (the same is true for children). Moreover, some of the paving treatments meant to slow vehicles are decidedly unfriendly to wheelchairs.

There are several ways to lessen the adverse effects of shared streets on people with disabilities:

- Provide these treatments only where through traffic is limited.
- Ensure that pedestrians have the clear right-of-way and make sure both pedestrians and drivers are aware of this.
- Since a change in usual driver behavior is required, make sure drivers are aware that they have entered a new zone. Design elements, enclosure, paving treatments, bollards, plantings, and other cues (a sign is not sufficient) can signal the change to sighted users.
- If there is no curb, make sure there is a clear visual distinction between areas where vehicles are permitted and "safe" pedestrian areas; use contrasting surface treatments. Consider guidestrips, edges, and visual contrast to carry wayfinding cues. Detectable warnings (truncated domes) are not a wayfinding device and generally should not be used for that purpose.
- Use bollards, planters or landscaping to provide a consistent shoreline, with enough gaps for convenient crossing, but close enough together to provide cues for dog and cane users. Seattle has replaced some curb and gutter areas with swales containing earth and native plants to absorb runoff.
- Provide detectable warnings across pedestrian routes at intersecting roadways.
- Pay special attention to gateway and entry locations.
- Minimize the intrusion of sidewalk cafes into pedestrian walkways; where there is sufficient width, some seating areas can be placed at the outer edge, leaving the frontage zone free of obstruction.
- Ensure good lighting
- Standardize details to facilitate non-visual wayfinding.

Britain's Guide Dogs for the Blind Association has conducted focus groups in the United Kingdom and Holland on issues raised by Shared Streets. Summaries are available on the web at <a href="http://www.gdba.org.uk/index?id=2635">http://www.gdba.org.uk/index?id=2635</a>. Further research is planned.

Shared streets are not dissimilar in use from places we are already familiar with where right-ofway is shared between vehicles, cyclists, and pedestrians. Large parking lots – a wayfinding challenge -- are traffic-calmed by the numbers of pedestrians crossing them. Urban alleys are shared spaces, too, and market streets like Seattle's Pike Place mix users indiscriminately.

In some of these environments, pedestrians are expected to keep to the edges; in others, they may walk or roll anywhere. State and local vehicle codes and regulations rarely address liability when pedestrians aren't crossing at 'legal' intersections. Like roundabouts and other new-to-the-US roadway design schemes, shared spaces can disadvantage pedestrians who don't travel using vision if wayfinding information isn't provided in another 'format'.