Shared streets, also called flush streets or woonerfs, prioritize pedestrian and bicycle movement by slowing vehicular speeds and communicating clearly through design features that motorists must yield to all other users. Shared streets use various design elements to blur the boundary between pedestrian and motor vehicle space. The design should create conditions where pedestrians and bicyclists can walk or ride on the street and cross at any location, as opposed to at designated locations. This encourages cautious behavior on the part of all users, which in turn reinforces slower speeds and comfortable walking and bicycling conditions.

By slowing the travel speed of all modes, shared streets encourage social interaction and lingering. They support a variety of adjacent land uses including commercial and retail, entertainment venues, restaurants, offices, and residences, while still accommodating commercial loading and transit operations. Shared streets have also been shown to increase economic vitality and vibrancy.

FHWA encourages additional research and best practice review for shared streets, specifically relating to accessibility. Potential topics include existing European planning and guidance, design techniques to distinguish pedestrian-only and shared space, effects of surface materials (e.g., pavers, cobblestones, etc.), interpretation of hard versus soft edges, and impacts of grates, slopes, and crossing treatments.

**GUIDING PRINCIPLES TO REDUCE CONFLICTS**

**SAFETY**
The design, operations, and maintenance of shared streets should encourage lower vehicle speeds, reducing the likelihood and severity of crashes.

**ACCOMMODATION AND COMFORT**
Shared streets should communicate clearly that motorists are guests on the street and must proceed slowly and cautiously.

**COHERENCE**
Design details should communicate clearly that the shared street is a multimodal environment where pedestrians are given priority.

**PREDICTABILITY**
On shared streets, the lack of predictability of all users heightens awareness, thereby creating lower vehicle speeds and reducing conflicts.

**CONTEXT-SENSITIVITY**
The shared street should support adjacent land uses and support economic and livability goals.

**EXPERIMENTATION**
Shared street design should use creative means to delineate space for pedestrians with vision disabilities.
MULTIPURPOSE SHARED STREETS

Shared streets offer a great deal of flexibility in how the space is designed and used. Without vertical curbs, the street can be closed to offer space for events, or more comfortably provide outdoor seating space for cafés and restaurants. Designers have several options for drainage design and the delineation of space. Through the thoughtful use of urban design principles, these streets can enhance the sense of place and emphasize the pedestrian and bicycle priority of the street.

A multipurpose shared street allows different uses of the space on different days of the week, times of day, or seasons, extending the public space at times of celebration, special events, or festivals. Sidewalks, parking, and vehicle travel lanes can be available at various times. Movable planters, metal barricades, or signs can regulate the use of the space on a temporary or regularly scheduled basis.

REMOVING VERTICAL CURBS

Typically, shared streets do not use vertical curbs—the entire street surface is flush, with minimal separation between sidewalks and the travel way. While vertical curbs discourage motor vehicle encroachment, they have limited ability to prevent a vehicle from driving onto the sidewalk. There are several techniques available to designers to control drainage and help delineate the roadway edge, which are typical uses of curbs.

CONSIDERATIONS

- Surface or pavement materials of varying textures, patterns, and colors provide visual cues for each mode. Trench grates can provide a visual and tactile distinction between pedestrian-only space and space where motorists may be present. Vertical elements such as lighting, bollards, street trees, planters, and furnishings can also delineate the space.
- Stormwater can be captured without vertical curbs through proper grading and drainage techniques. A valley gutter can be provided along a flush curb, such as between parking and the travel way. Valley gutters can convey stormwater to inlets or to green infrastructure such as tree pits or rain gardens that may also provide shade and vegetation.
Shared streets should be designed carefully for people with disabilities. This can be done by providing a frontage zone along buildings where a traditional sidewalk is located. The frontage zone can be delineated with different paving treatments, drainage infrastructure, trees, street furniture, art, or parking. Paving textures in the frontage zone should be smooth and vibration free, with a minimum of 5 feet clear space. For more information, refer to the design topic on Accessibility.
CASE STUDIES

WINTHROP STREET  
CAMBRIDGE, MA

Many streets in Cambridge were first constructed centuries ago in constrained rights-of-way with narrow sidewalks that do not meet accessibility standards. As a result, pedestrians tend to walk within the roadway on these streets. The City’s regulations allow for shared streets in which vehicular traffic mixes with bicyclists, pedestrians, and loading activity. These streets are designed for motorists to yield to pedestrians, use caution, and travel slowly. Winthrop Street is designed so that the sidewalk and roadway are flush. Pedestrian-only space is delineated from space where vehicles are permitted by different-colored pavers, flush curbing, bollards, and planters. Movable planters are also used to close the street to vehicular traffic at certain times of day.

FIRST STREET NORTH  
JACKSONVILLE BEACH, FL

First Street is a beachfront destination, running parallel to the Atlantic Ocean and providing access to Jacksonville Beach, residences, restaurants, shops, and hotels. The City of Jacksonville Beach decided to implement the shared street concept by removing road markings and putting vehicles at the same plane as pedestrians. The street has pedestrians, vehicles, and bicyclists on even footing, with equal rights to the street. This causes drivers to slow and give way to other users.

As an additional benefit of the flush condition, the street creates universal access without the need for designated curb ramps. The City felt this was an important feature for accessibility as well as for those visiting the beach with coolers, chairs, and strollers.

FOR MORE INFORMATION


