

Shared Streets: Concepts

The shared street concept has become an important strategy both for improving communal interaction and reducing transportation fuel consumption, which are both seen as benefiting neighborhood sustainability. Making the urban experience desirable is essential to enjoying the social benefits of denser and more efficient urban communities. Equally important, the shared street concept has been shown to improve the environmental quality of urban environments by reducing carbon emissions and air pollution. The shared street concept is primarily applied to residential streets where through traffic is not encouraged.

A Brief History

Sharing streets for a variety of transportation, pedestrian, and other purposes was pervasive in most cities worldwide before the advent of motorized traffic. As a concept, shared streets took root in the Netherlands in the form of the *woonerf* (or residential yard), designed to increase useable outdoor space in dense urban neighborhoods. This concept went on to be adopted as a standard street design strategy in the Netherlands and elsewhere (elsewhere known as a shared space).



Stickball and other popular games played in streets exemplified the lack of public areas in most cities, and the need for multi-functioning streets. Left, photo by Lewis Hines, titled "Playground in Mill Village," 1909. Right, photo by Steve Schrackman, titled "Stickball," 1999.

In the United States, where a similar street culture was the norm in older urban neighborhoods, today's streets were designed during the early days of the automobile, and at a scale that could accommodate mass transportation and commerce. As a result, automobiles, busses, trucks, trolleys, and other vehicles took priority in American street culture, particularly in suburbs. For this reason shared streets have been slower to be incorporated in the U.S. as a sustainability strategy. Shared streets are often installed in commercial zones to provide easy pedestrian access to shops and restaurants, as cities seek to bring customers back to downtown areas.



Exhibition Road, London

Separation to Integration

Conventional street design has emphasized separating pedestrians from motor vehicles, giving the latter priority and often ignoring other traditional street uses such as social encounters, rest, or play. Conversely, shared streets are designed to integrate rather than separate users, making the space simultaneously accessible to all on an equal basis, improving safety and ambience, and making walking and biking more desirable and practical, and encouraging other active and passive uses of the street as outdoor space. By designing the street to integrate this variety of uses, the

primacy of motor vehicles is downgraded in importance but not eliminated. Pedestrians have access to the entire street, and with a slight advantage over motorized traffic; they establish the pace of street activity.

Characteristics of a Shared Street

The following are generally accepted characteristics of a shared street. These are primarily applied to residential streets where through traffic is not encouraged:

- Paved shared space occupied by pedestrians and cars, with pedestrian activity having priority.
- A shared street can incorporate a single street, a square, or a combination of connecting streets.
- Shared street entrances are clearly defined and marked.
- Straight stretches of pavement with raised curbs and demarcations for pedestrians and vehicle lanes are discouraged to limit vehicle speeds.
- Physical barriers such as planters, bollards and street furniture are located to create traffic deviations, limit speed and increase awareness of pedestrians.
- Auto access to dwelling fronts is provided, and parking spaces are included as needed.



Calle Macedonio Alcalá in Oaxaca, Mexico



Copenhagen Shared Space

Positive Environmental and Social Impacts

Shared streets is a design strategy best applied in limited areas where vehicular traffic is both moderate and local, and sociability and walkability are highly desired. Positive environmental impacts of shared streets can be both direct and indirect:

- Reduces vehicle miles traveled, air pollution, and carbon emissions by improving access to bicycles and pedestrians.
- Creates opportunities to incorporate trees and other green landscapes to reduce the heat island effect.
- Introduces the potential for water management options: zero-discharge streetscape; pervious pavement, bio-swales, planters, rain gardens, wetlands, street trees (infiltration strategies can be 73% to 99% effective in preventing runoff).
- Improves livability of urban neighborhoods and attracts a broader population.
- Increases the connectivity of within neighborhoods.

Additional Information

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