

# Traffic-Restricted Streets: Woonerfs and Transit Malls

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**Streets for Living:  
WOONERFS**



Traffic restricted streets offer new possibilities for creatively integrating social space with the p. Children play in the right-of-way in this European woonerf.

*Image: Hamilton 2000*

**Streets often constitute up to 1/3 of the land use in a city yet, in our municipal landscape they are often treated as utilitarian corridors rather than vital public spaces. This chapter looks at two street typologies that challenge this axiom: Woonerfs and Transit Malls. Both of which seek to balance the functional need for movement of people and goods with the basic desire we share as individuals and communities for opportunities for social interaction and cultural exchange.**

“Imagine driving down a street with no traffic lights, stop signs, lane dividers, or sidewalks. Pedestrians, cyclists, and playing children wander about the road at will, and trees and flowers are planted in the right-of-way. How do you avoid hitting anyone—or anything? Simple. You slow down, maintain eye contact with people around you, and stay alert.”

—Sierra Magazine January/  
February 2005



Residents living on Annas Straat in Utrecht set up temporary shelters to watch the Euro 2000 soccer championships.  
*Image: Hamilton 2000*

## Streets for People

Woonerfs are streets built with high quality urban design where the boundary between people space and car space is intentionally blurred. In doing so, the pedestrian space is extended from the sidewalk, and into the traffic zone. Whereas in a normal street, pedestrians are made to feel like guests in the cars space when they cross the street, woonerfs reverse this axiom. By designing high quality urban spaces, drivers moving through a woonerf are made to feel like guests and modify their behavior accordingly.

In Seattle and other American cities, coercive strategies are generally used to ensure safe driving in neighborhoods. Such tactics include extensive signage, traffic markings and of course traffic laws along with a fleet of traffic cops to enforce them. These methods are costly, create lackluster streets and are largely ineffective. Indeed since people tend to drive as fast as they feel they can control their vehicles, some of our tools for traffic engineering such as lane striping may encourage unsafe driving.

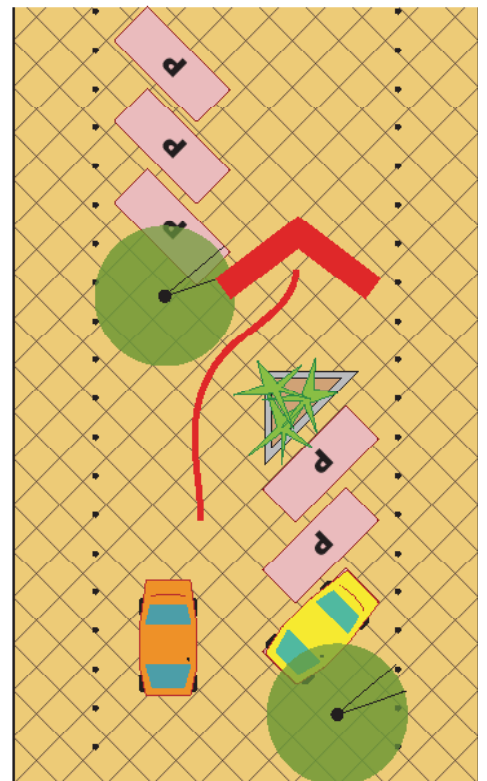
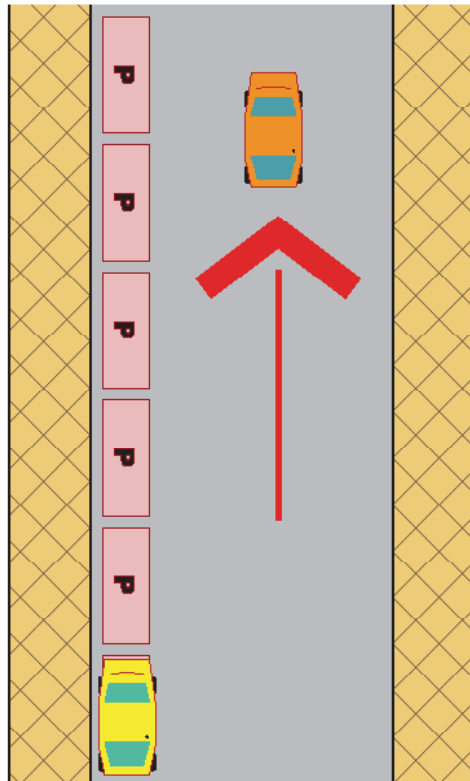
Rather than coerce people into driving safely, woonerfs incent them to do so by using design cues. They achieve this by using the principle of ambiguity. For example, by planting trees in the right-of-way, eliminat-

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*“...Designing streets so that walking, cycling, social activities, children’s play, parking and local car traffic could all share the same space struck me as such an eminently sensible idea...”*

*—Ben Hamillto*



## Streets for Living: WOONERFS

European studies have shown that woonerfs are significantly safer than traditional street configurations and surprisingly do not compromise travel time in residential settings. This is because, by eliminating stop signs, drivers are able to maintain a steady if slow constant speed that is similar to the average speed traveled in start/stop traffic over equivalent distances.



Gateway sculpture emphasizing transition to social space. *Image: Hamilton 2000*



Children and picnic tables share the street. *Image: Hamilton 2000*



Kids, bikes, and plantings in the street  
*Image: Hamilton 2000*



No traffic markings. *Image: Hamilton 2000*



Using parking configurations to obscure sight lines. *Image: Hamilton 2000*



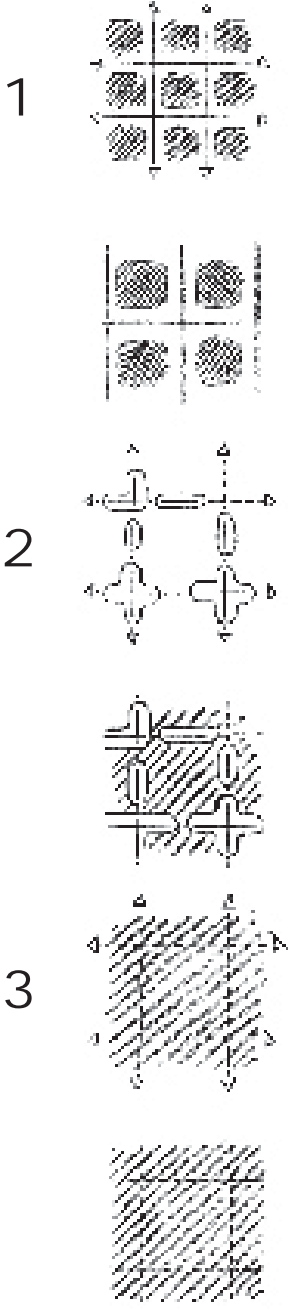
Intricate paving detailing. Note the lack of grade separation between the sidewalk and the street. *Image: Hamilton 2000*

### Essential Elements

Woonerfs offer a way for planners and designers to curb the deleterious effects cars can have on neighborhood streets.

There are several methods employed by woonerf designers use to reclaim the street right of way:

- Obscure sight lines
- Plant trees or place other features in the right of way
- Install detailed, intricate paving patterns
- Eliminate the grade separation between sidewalk and the carriage way



### Challenges

Woonerfs offer an exciting lens through which planners and designers can rethink the neighborhood street and interest in replicating this European model for streets continues to grow in the United States. There are challenges that have surfaced by American attempts at building Woonerfs in the different urban context of American towns and cities. Designers should expect to grapple with how to provide access for emergency vehicles, and will need to pay attention to accessibility issues for people with disabilities. Current engineering standards can for example render it impossible to build woonerfs in many American cities. None of these issues is insurmountable. Brookline, Massachusetts, and West Palm Beach, Florida have for example successfully implemented woonerf projects. The idea is likely to continue to spread to more north American cities.

### Possible / Implementation and funding Mechanisms

Green Street Projects

SPU stormwater projects

Incremental implementation following street maintenance, utility work and large construction bonds

Neighborhood matching funds

The mayors proposed downtown open space impact fee

### Possible / Opportunities for Pilot Projects

UW Campus Expansion, especiall the more urban southeast campus

South Lake Union redevelopment

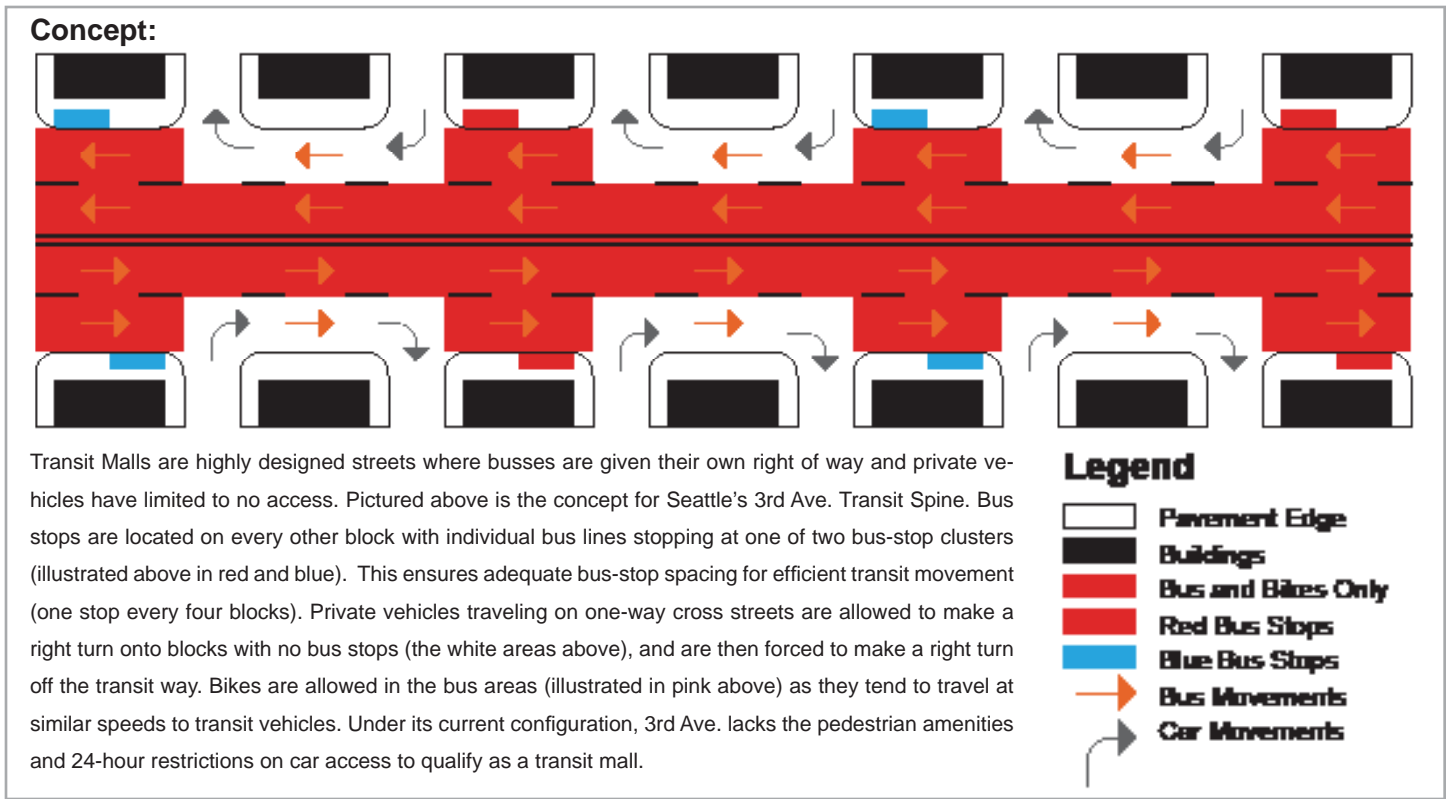
Downtown Alleys

Yesler Terrace Reconstruction

### Evolution of a System

1. Traffic flows seperate calmed residential areas.
2. Major arteries are adapted to overcome severance.
3. The city as a coherent social zone; traffic volumes determined by environmental capacity

Image: Hamilton, 2000



## Transit Mall

Transit malls can be effective tools to ensure the efficient movement of transit in congested urban corridors while providing quality pedestrian and in some cases, retail environments.

With the recent closure of the bus tunnel to renovate it for light rail, Seattle has created the nascent underpinnings of a transit mall along Third Ave. downtown. Third Ave. is uniquely situated for this role as it runs the length of downtown and is roughly equidistant from the water and I-5. The new "3rd Ave. transit spine" was initially conceived as be a transit-only street throughout the day, but the city caved at the last minute and the street currently acts as a transit mall solely during peak commute times when private cars are effectively restricted from the street.

Whether or not the street will remain a transit mall when the bus tunnel reopens remains to be seen. However the City Center Circulation Report, a policy document available on SDOT's website that was written in 2003 calls for the street to remain a bus only corridor.

Should the city choose to keep the street as a bus way, an opportunity exists to enhance the public realm with urban design treatments. Unique paving, street trees and street furniture a la San Francisco's Market Street or the Portland Transit Mall (see case study), can cement the 3rd Ave. as Downtown Seattle's Main St. Such a move would make 3rd Ave. a true spine for the city both as an organizational framework for our bus system as well as in the mental maps of the residents and denizens who inhabit our downtown.



## Streets for Living



Public amenities along the Portland Transit mall

Images: TriMet

### Case Study Portland:

The Portland Transit Mall was created in 1977 as the culmination of a two pronged strategy to improve transit flow downtown and spark downtown development, especially retail. Limited car access was provided in one lane on some parts of the transit-priority streets but on-street parking was removed and replaced with widened sidewalks, lavish street furniture, public art, fountains and street trees.

While the commercial space on did not develop to the degree city officials had hoped, transit flow was greatly enhanced. There have been issues with business owners along the mall wanting on-street parking. The city recently studied increasing parking supply, but decided against it because the street space was needed for a future light rail expansion.

Over time, the city has continued to tweak the transit mall's design and is currently undergoing a design process to update the corridor.

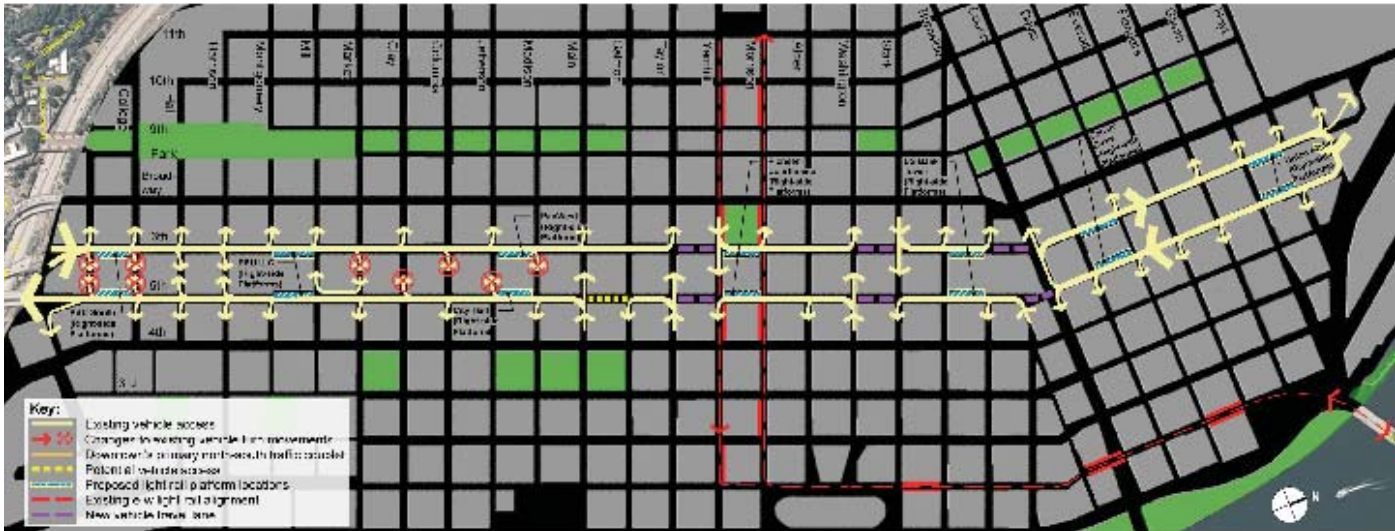
### Cities that have either implemented or are studying creating transit malls:

- Portland, OR
- Vancouver, BC
- Toronto, ON
- Sydney, Australia
- San Francisco, CA
- Seattle?

# Streets for Living: TRANSIT MALLS



Portland's Transit mall: Limited car access, and generous pedestrian amenities.  
Image: TriMet. <http://www.trimet.org/inside/photogallery.htm>



Car Access along the Portland Transit Mall. Image: TriMet