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Associated Sites:

- www.walkinginfo.org
- www.pedbikeinfo.org
- www.pedbikeimages.org
- www.saferoutesinfo.org

Bike lanes are defined as "a portion of the roadway which has been designated by striping, signing and pavement marking for the preferential or exclusive use by bicyclists". Bicycle lanes make the movements of both motorists and bicyclists more predictable and as with other bicycle facilities there are advantages to all road users in striping them on the roadway.



This bike lane has enough width for a bicyclist to comfortably ride between the curb and gutter and the adjacent travel lane.

Bicycle-friendly cities such as Madison, Eugene, Davis, Gainesville, and Palo Alto have developed extensive bike lane networks since the 1970s and more recently large cities such as Tucson, Chicago, Houston, Philadelphia, Portland and Seattle have begun to stripe bike lanes on their arterial and collector streets as a way of encouraging bicycle use. In general, bicycle lanes should always be:

- one-way, carrying bicyclists in the same direction as the adjacent travel lane
- on the right side of the roadway
- located between the parking lane (if there is one) and the travel lane

Critical dimensions

Bicycle lane width ([AASHTO Guide](#), pp. 22–24):

- 4 feet (1.2m): minimum width of bike lane on roadways with no curb and gutter
- 5 feet (1.5m): minimum width of bike lane when adjacent to parking, from the face of the curb or guardrail
- 11 feet (3.3m): total width for shared bike lane and parking area, no curb face
- 12 feet (3.6m): shared bike lane and parking area with a curb face

On-Street Facilities

- [Paved shoulders](#)
- [Wide Outside Lanes](#)
- [Signed shared roadways](#)
- **[Bike Lanes](#)**

[Shared Use Paths \(Trails\)](#)

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Bicycle lane stripe width:

- 6-inch (150mm): solid white line separating bike lane from motor vehicle lane (possibly increased to 8-inches (200mm) where emphasis is needed)
- 4-inch (100mm): optional solid white line separating the bike lane from parking spaces

Critical Issues and Frequently Asked Questions

How can I fit bike lanes onto a 44 ft wide urban road?

The City of Chicago, among others, is successfully striping 44ft roadways with two seven foot parking lanes, two five foot bike lanes and two ten foot travel lanes.

My city engineer says he can't reduce travel lanes below the AASHTO recommended width of 12 feet. Is that true?

No. In fact, the new AASHTO Guide for the Development of Bicycle Facilities says "another important reason for constructing bike lanes is to better accommodate bicyclists where insufficient space exists for comfortable riding on existing streets. This may be accomplished by reducing the width of vehicular lanes or prohibiting parking...". The Oregon Department of Transportation bicycle plan has an extensive section on restriping existing streets to incorporate bike lanes.

I am not sure a white paint line is enough. Can I use raised pavement markers or some kind of barrier or curb to separate the bike lane from motor vehicles?

Studies have shown that a simple white line is actually quite effective in channelizing both motorists and bicyclists and that both feel more comfortable with the line in place. Raised pavement markers can cause a cyclist to lose control and fall; barriers and curbs also prevent bicyclists from avoiding obstacles (or even passing another cyclist) and making a left turn, and make maintenance much more challenging (and unlikely).

Innovative bike lane designs

There are a number of innovative bike lane designs that have been tried and tested to overcome particular barriers to bicycling, or to solve a problem in a particular location.

Contraflow bike lanes

While bike lanes should normally carry bicyclists in the direction of traffic, there are some locations where there is a strong demand for bicyclists to travel against the normal flow of traffic, or to travel in both directions on a one-way street. For example, University Avenue in Madison, Wis., runs through the heart of the University of Wisconsin campus and carries heavy flows of

bicyclists and other road users. Because of the high demand for bicycle travel in both directions, several years ago the road was rebuilt with a bus lane, bike lane and three travel lanes in one direction and a bike lane only (separated by a raised median) in the other direction.

A number of communities have created short segments of contraflow bike lanes in order to provide bicyclists unique access to residential streets. For example, the cities of Madison and Portland have both used this technique to open up a network of routes on residential streets that are not accessible in both directions both motor vehicle-essentially creating a very short stretch of roadway that is two-way for bikes but only one-way for cars.

Colored bike lanes

Colored bike lanes have been a feature of bicycle infrastructure in the Netherlands (red), Denmark (blue), France (green) and many other countries for many years. In the United Kingdom, both red and green pigments are used to delineate bike lanes and bike boxes. However, in this country their use has been limited to a few experiments in just a handful of locations. The most extensive trial took place in Portland, Ore., where a number of critical intersections had blue bike lanes marked through them and the results were carefully monitored. The results of the study, conducted by the City of Portland Office of Transportation and the UNC Highway Safety Research Center, can be found [here](#).

Shared bike and bus lanes

A growing number of communities are using shared bus and bike lanes to give preferential treatment to both bikes and public transport. Examples currently include Tucson, AZ; Madison, WI; Toronto, Ontario; Vancouver, BC; and Philadelphia, PA. Often the lanes are also able to be used by taxis and right-turning vehicles. Because buses and bikes will pass each other in these lanes, lane width is an important issue. The city of Madison likes to use 16 foot lanes to allow a clear three feet of separation between the bicyclist and a passing bus, but if either bus or bike traffic is light and space is limited, the width of a shared lane might be 14 feet or even less.

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