



Buffered Bicycle Lane



DESCRIPTION

- Buffered bicycle lanes are one-way facilities designated by pavement markings and signing that run along the curb, shoulder, or on-street parking lane.
- A buffered bicycle lane is similar to a traditional bicycle lane, but with additional separation from the adjacent travel or parking lane by a buffer space.
- Drivers may cross through only to make a right turn or to enter/exit a parking spot. Bicyclists may use a buffered bicycle lane just as they would a traditional bicycle lane. A bicyclist may leave the lane to pass other users, make turns, or avoid obstacles.

CONTEXT

- A buffered bicycle lane is appropriate anywhere a traditional bicycle lane is installed or considered.
- A buffered bicycle lane is particularly appropriate on streets with higher speeds, volumes, or truck traffic, where greater physical separation for bicyclists can increase levels of comfort and safety for both motorists and bicyclists as compared to traditional bicycle lanes.
- A buffered bicycle lane is often considered on streets with extra lanes or lane width.

BENEFITS

- ✓ **Improved safety**
- ✓ **Improved comfort**
- ✓ **Traffic compliance**
- ✓ **Increased efficiency**



POLICY AND DESIGN GUIDANCE

- Wider bicycle lanes provide higher levels of capacity and comfort and they facilitate safer passing and side-by-side riding without needing to leave the bicycle lane.
- A double solid white line is often used to demarcate the lane. If wide enough, the buffer should include interior diagonal cross hatching or chevron markings. In some cases, the buffer area may use different paving materials, such as bricks or textured materials.
- Green pavement markings may be used to increase visibility of the bike lane, especially at the beginning of each block.
- Bicycle lane pavement markings should be periodically stenciled in the bicycle lane, especially following intersections.
- Buffered bicycle lanes typically cost \$85,000-\$320,000 per mile (high end assumes continuous application of green pavement markings in conflict areas).

For more information on **Buffered Bicycle Lanes** and other bicycle and pedestrian treatments, visit virginiadot.org/programs/bikeped/bicycle_and_pedestrian_treatments.asp



RESOURCES

Legal definitions and regulations:

[Code of Virginia](#)

Treatment applications and general design guidance:

[NACTO](#)

[AASHTO](#)

Geometric design guidance for Virginia:

[VDOT Road Design Manual](#)

Pavement markings, placement, and spacing:

[MUTCD](#)

[VDOT 2016 Road and Bridge Standards](#)

[Virginia Supplement to the MUTCD](#)

Rural applications:

[Small Town and Rural Design Guide](#)

Guidelines are provided for informational purposes only. For detailed design guidance, please refer directly to design manuals and standards.