

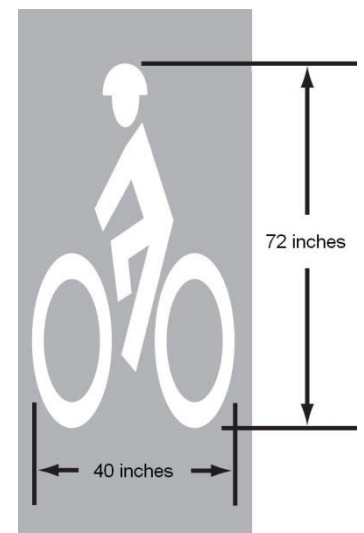
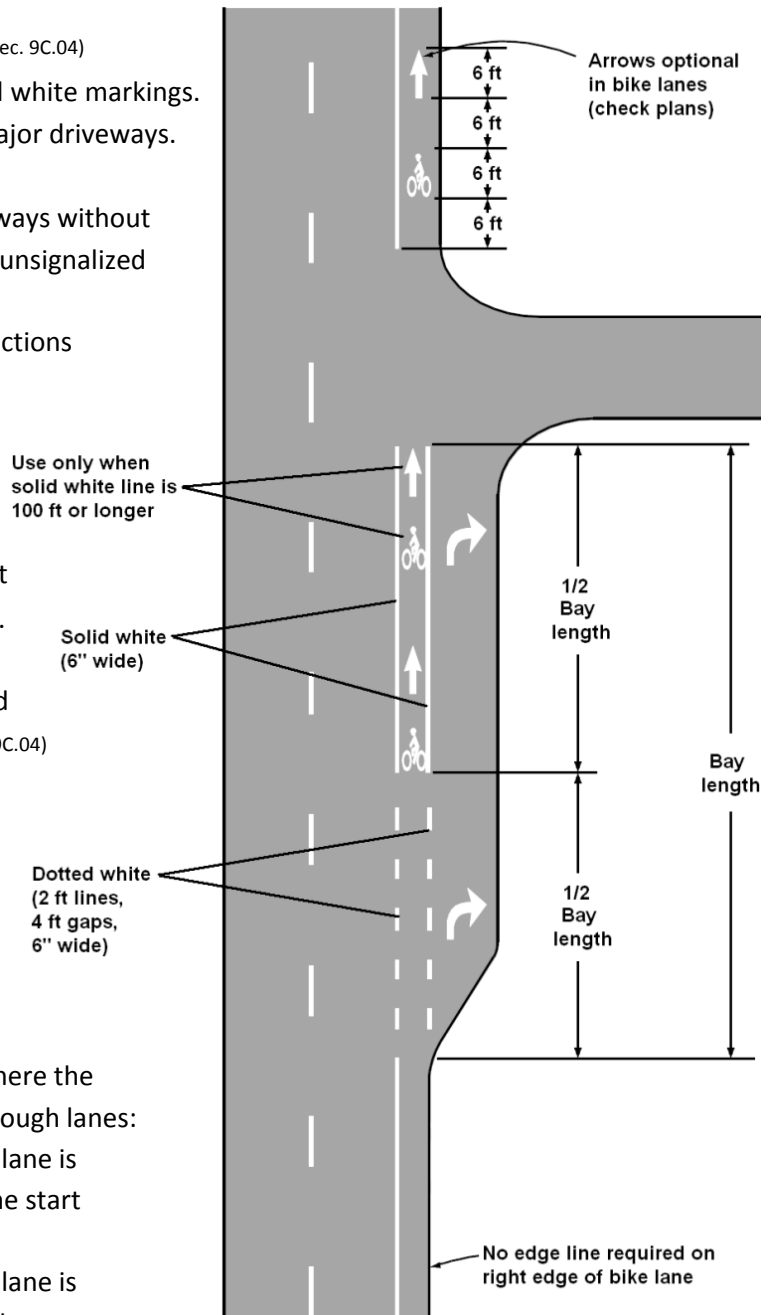
Bicycle Lane Lines (Source: [Virginia Supplement to the MUTCD](#) Sec. 9C.04)

- **Separate bike lanes from auto lanes** using 6" solid white markings.
- **Break bike lane lines** through intersections and major driveways.
- **Use dotted bike lane lines** (2' stripe, 4' gap):
 - On approach to intersections and major driveways without a dedicated right-turn lane (usually 50' where unsignalized and 100' where signalized)
 - In the first half of the right-turn lane at intersections with a dedicated right-turn lane
 - In other areas to communicate that motor vehicles may cross the bike lane

Bicycle Lane Symbols must exactly match the layout and size shown in the Virginia Supplement to the MUTCD. The size may be reduced only where the pavement is too narrow for the entire symbol, and if so, the symbol should be the same shape. (Source: [Virginia Supplement to the MUTCD](#) Sec. 9C.04)

Space bike symbols as follows:

1. Place a bike symbol 6' downstream of the curb return at every intersection and driveway where bike lane line markings are broken (except minor intersections less than 100' from other intersections.)
2. At intersections with dedicated right-turn lanes where the bike lane runs between the right-turn lane and through lanes:
 - a. If the solid white line defining the right-turn lane is less than 100' long, place a bike symbol at the start of the solid white line.
 - b. If the solid white line defining the right-turn lane is more than 100' long, place bike symbols at the start and end of the solid white line.
3. If the spacing of bike symbols placed by steps #1 and #2 leaves a gap between symbols of more than 500', then add more bike symbols as follows:
 - a. If the gap between symbols is between 501' and 1000', place an additional bike symbol halfway between the two surrounding symbols.
 - b. If the gap is between 1001' and 1500', place two additional symbols, $\frac{1}{3}$ and $\frac{2}{3}$ of the way between the surrounding symbols.
 - c. Etc.
4. If any bike symbol ends up in line with a driveway, move it 6' downstream of the driveway.
5. Move bike symbols as needed to avoid areas where the bike lane line is dotted.



Shared-Lane Markings (See also [Virginia Supplement to the MUTCD](#) Sec. 9C.07 and [NRO Traffic Engineering Practice](#) No. 901)

Shared-lane markings (also called “sharrows”) are placed within a travel lane, alerting motorists of the need to share the lane with bicyclists. Sharrows must exactly match the layout and size shown in the Virginia Supplement to the MUTCD.

Space sharrows as follows, after determining that they should be used on a street segment:

1. Select a maximum spacing. MUTCD guidance calls for a maximum spacing of 250’, but NRO experience suggests that this distance can be lengthened to as much as 500’ in rural or suburban areas with few curves, hills, driveways, and intersections and little or no on-street parking.

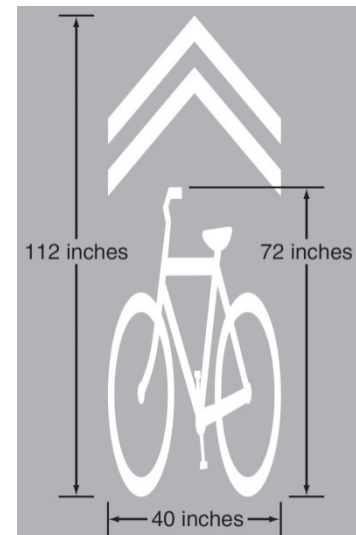
2. Do not place sharrows where:

<i>If on-street parking is permitted and heavily used:</i>	<i>If on-street parking is prohibited (or permitted but parked cars are normally so far apart that most cyclists ride in the parking area):</i>
<ul style="list-style-type: none">• The right lane plus parking lane is 23’ wide (including gutter pan) or more• The parking lane is 12’ wide (including gutter pan) or more• There is a turn lane or auxiliary lane to the right of the right lane (except that sharrows may be used at multi-lane intersections where conflicts make it desirable to indicate proper positioning)	<ul style="list-style-type: none">• The right lane, plus any paved area to its right, is 16’ wide (or 15’ wide plus gutter pan) or more• The paved area to the right of the right edge line is 5’ wide (or 4’ wide plus gutter pan) or more

3. In areas not excluded by step #2, place a sharrow 6’ downstream of the curb return at every intersection and major driveway (except minor intersections less than 100’ from other intersections).
4. If the spacing of sharrows placed by step #3 leaves a gap between sharrows of more than the maximum spacing from step #1, then evenly space more sharrows as needed to fill the gap. However, areas identified in step #2 do not count toward the gap length.
5. If any sharrow ends up in line with a driveway, move it 6’ downstream of the driveway.

Place sharrows laterally as follows, though generally in line along a segment:

- *If on-street parking is permitted and there is no stripe separating the parking lane and the right lane:*
 1. Measure the width of the right lane plus parking area (including gutter pan, if any) and designate this width as w .
 2. If $w > 19'$, then place the center of sharrows 11’ from the edge of pavement or face of curb.
 3. If $w \leq 19'$, then place the center of sharrows $\frac{1}{2}w + 4$ feet from the edge of pavement or face of curb.
- *If on-street parking is prohibited, or if permitted and there is a stripe separating the parking lane and the right lane:*
 1. Measure the width of the right lane (excluding gutter pan and parking lane) and designate this width as w .
 2. If $w > 11'$, then place the center of sharrows 4’ from the edge of pavement or face of curb.
 3. If $w \leq 11'$, then center sharrows in the right lane.



This document provides only a summary of practice. If it conflicts with a standard, specification or plan, the other document shall govern. For additional information, see:

- Virginia Supplement to the MUTCD (bit.ly/vasupp)
- MUTCD (mutcd.fhwa.dot.gov)
- VDOT [Road and Bridge Standards](#)
- [NRO Traffic Engineering Practice](#) No. 901

Questions? Call VDOT Northern Region Traffic Engineering Section, 703-259-2219.

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