

# Manual on Uniform Traffic Control Devices

for Streets and Highways

2009 Edition

Including Revision 1 dated May 2012  
and Revision 2 dated May 2012



U.S. Department of Transportation  
Federal Highway Administration

## CHAPTER 9C. MARKINGS

### Section 9C.01 Functions of Markings

Support:

- 01 Markings indicate the separation of the lanes for road users, assist the bicyclist by indicating assigned travel paths, indicate correct position for traffic control signal actuation, and provide advance information for turning and crossing maneuvers.

### Section 9C.02 General Principles

Guidance:

- 01 *Bikeway design guides (see Section 9A.05) should be used when designing markings for bicycle facilities.*

**Standard:**

- 02 **Markings used on bikeways shall be retroreflectORIZED.**

Guidance:

- 03 *Pavement marking word messages, symbols, and/or arrows should be used in bikeways where appropriate. Consideration should be given to selecting pavement marking materials that will minimize loss of traction for bicycles under wet conditions.*

**Standard:**

- 04 **The colors, width of lines, patterns of lines, symbols, and arrows used for marking bicycle facilities shall be as defined in Sections 3A.05, 3A.06, and 3B.20.**

Support:

- 05 Figures 9B-7 and 9C-1 through 9C-9 show examples of the application of lines, word messages, symbols, and arrows on designated bikeways.

Option:

- 06 A dotted line may be used to define a specific path for a bicyclist crossing an intersection (see Figure 9C-1) as described in Sections 3A.06 and 3B.08.

### Section 9C.03 Marking Patterns and Colors on Shared-Use Paths

Option:

- 01 Where shared-use paths are of sufficient width to designate two minimum width lanes, a solid yellow line may be used to separate the two directions of travel where passing is not permitted, and a broken yellow line may be used where passing is permitted (see Figure 9C-2).

Guidance:

- 02 *Broken lines used on shared-use paths should have the usual 1-to-3 segment-to-gap ratio. A nominal 3-foot segment with a 9-foot gap should be used.*
- 03 *If conditions make it desirable to separate two directions of travel on shared-use paths at particular locations, a solid yellow line should be used to indicate no passing and no traveling to the left of the line.*
- 04 *Markings as shown in Figure 9C-2 should be used at the location of obstructions in the center of the path, including vertical elements intended to physically prevent unauthorized motor vehicles from entering the path.*

Option:

- 05 A solid white line may be used on shared-use paths to separate different types of users. The R9-7 sign (see Section 9B.12) may be used to supplement the solid white line.
- 06 Smaller size letters and symbols may be used on shared-use paths. Where arrows are needed on shared-use paths, half-size layouts of the arrows may be used (see Section 3B.20).

### Section 9C.04 Markings For Bicycle Lanes

Support:

- 01 Pavement markings designate that portion of the roadway for preferential use by bicyclists. Markings inform all road users of the restricted nature of the bicycle lane.

**Standard:**

- 02 **Longitudinal pavement markings shall be used to define bicycle lanes.**

Guidance:

- 03 *If used, bicycle lane word, symbol, and/or arrow markings (see Figure 9C-3) should be placed at the beginning of a bicycle lane and at periodic intervals along the bicycle lane based on engineering judgment.*

**Figure 9C-1. Example of Intersection Pavement Markings—Designated Bicycle Lane with Left-Turn Area, Heavy Turn Volumes, Parking, One-Way Traffic, or Divided Highway**

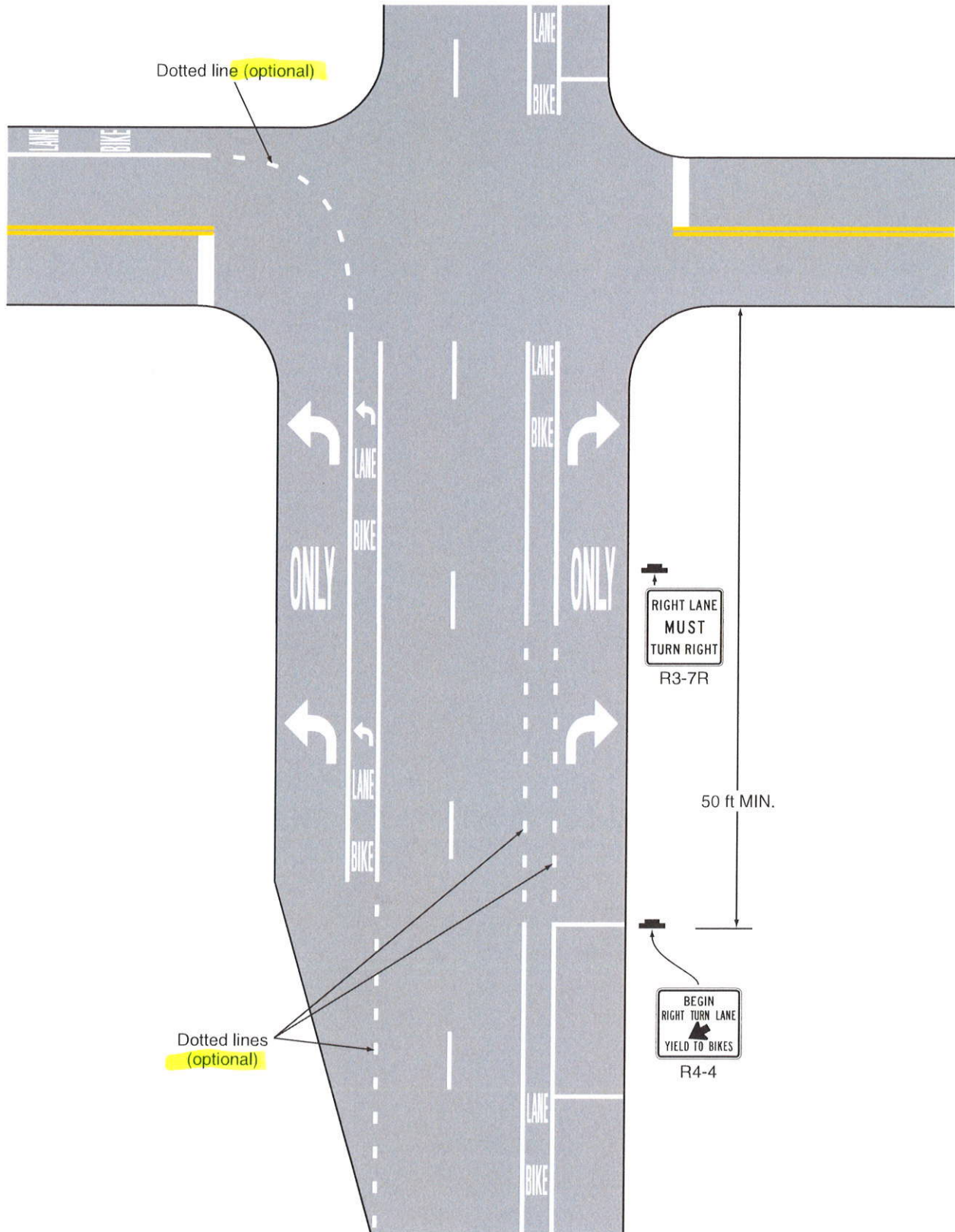


Figure 9C-6. Example of Pavement Markings for Bicycle Lanes on a Two-Way Street

