

**RRLRT Technical Committee Recommendations  
for Definitions Related to the Proposed New Section 8E of the MUTCD**

June 2016

The following recommendations comprise a substantial portion of a proposed new Chapter 8E – Busways to the next edition of MUTCD. Since the 2009 Edition of MUTCD, the RRLRT TC has made substantial proposed changes to Part 8. Some key changes involve traffic signal preemption, sidewalks at grade crossings, use of edge lines and tubular markers at grade crossings, use of medians at grade crossings and busways.

The effort to create new standards and guidance on busways was directed to RRLRT in order to standardize various new traffic control devices used at and approaching a busway. The proposed new chapter on busways has been previously approved by Council on 06/28/2014. In addition to these proposed additions in Part 8, there are a supporting definitions for Chapter 8E proposed for inclusion in Section 1A.13.

It is the understanding of RRLRT that the effort to recommend proposed changes to MUTCD are intended to be focused on new devices and not the use of existing devices.

Therefore, the RRLRT TC submits the following proposed sections to the proposed new Chapter 8E as recommendations for FHWA to consider in its efforts to facilitate the production of the next edition of MUTCD.

**Recommended Definitions for Section 1A.13:**

**Busway Grade Crossing Warning System** - the traffic control signals, with or without automatic gates, together with the necessary control equipment used to inform road users of the approach or presence of buses at busway grade crossings.

**Bus** —a highway vehicle, including an articulated vehicle, which operates on rubber tires and is designed to transport passengers from one location to another location usually operating on a fixed route. A van, taxicab, limousine, or recreational vehicle is not considered to be a bus.

**Bus Rapid Transit (BRT)** - is a mode of public transportation that employs buses that operate on streets in mixed traffic, on a busway in a semi-exclusive right-of-way or on a busway in an exclusive right-of-way.

**Busway** — A busway is a traveled way intended for exclusive use of buses in a semi-exclusive or exclusive alignment.

**Busway Grade Crossing** – A busway grade crossing is the general area where a roadway and busway cross at the same level, within which are included the busway, roadway, and traffic control devices for bus operators and road users traversing that area.

**Blank-out sign** - A sign that displays a single predetermined message only when activated. When not activated, the sign legend shall not be visible.

## **8E.02**

### **Bus Only Lane Sign**

#### **Section 8E.02 Bus Only Lane Signs**

##### Option:

A Bus Only Lane (R15-4d or R15-4e) sign may be used on a roadway lane limited to only bus use to indicate the restricted use of a lane.

The overhead R15-4e Bus Only Lane sign may be used as an alternative to the post-mounted R15-4d sign.

##### Guidance:

If used, the R15-4d Bus Only Lane sign should be installed on a post adjacent to the roadway containing the bus lane.

##### Support:

See Chapter 2G for additional information regarding preferential lane signing. See Chapter 3D for information regarding preferential lane pavement markings.

##### **Standard:**

**If used, the R15-4e Bus Only Lane sign shall be mounted over the lane to which it applies.**



[R15-4d](#)



[R15-4e](#)

### 8E.03

#### Blank-out Bus Approaching Turn Prohibition sign

#### Section 8E.03 Bus-Activated Blank-Out Turn Prohibition Signs

##### Support:

Busway operations can include the use of bus-activated blank-out signs for turn prohibition signs. The signs are typically used on roads paralleling a busway where road users might turn across a busway.

##### Guidance:

A bus-activated blank-out turn prohibition sign (R3-1, R3-2, R3-4, R3-18 or R3-27) should be used where an intersection is within 100' of a highway-busway grade crossing and is controlled by STOP sign, or is controlled by traffic control signals with permissive turn movements for road users crossing the busway.

##### Option:

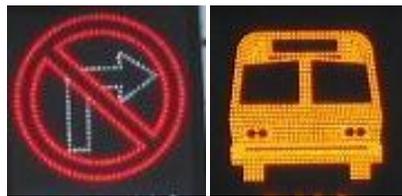
A bus-activated blank-out turn prohibition sign may include a blank-out BUS COMING message or a Bus Approaching blank-out warning sign (see Section 8E.05), or both. If used, the word message and the Bus Approaching sign may be flashed.

As an alternative to bus-activated blank-out turn prohibition signs at

intersections with traffic control signals, exclusive traffic control signal phases such that all movements that cross the busway have a steady red indication may be used in combination with No Turn on Red (R10-11, R10-11a, or R10-11b) signs (see Section 2B.54).

**Standard:**

**Turn prohibition signs that are associated with preemption or priority shall be visible only when the highway-busway grade crossing turn prohibition is in effect.**



**BUS  
COMING**

Bus-Activated Blank-Out Turn Prohibition Sign

**8E.04**

**Highway-Busway Grade Crossing Advance Warning Sign**

**Section 8E.04 Highway-Busway Grade Crossing Advance Warning Signs**

Guidance:

A Highway-Busway Grade Crossing Advance Warning sign should be used on each highway in advance of every busway grade crossing except in business or commercial areas where active highway-busway grade crossing traffic control devices are in use.

A BUSWAY supplemental plaque should be installed with every Highway-Busway Grade Crossing Advance Warning sign.



Highway-Busway Grade Crossing  
Advance Warning Sign

[The side view symbol of a bus is consistent with the side view symbols on vehicular traffic warning signs in Figure 2C-10. FHWA staff has confirmed that they will test alternative bus symbols before final approval of this sign]

## **8E.05**

### **Busway Warning Sign**

#### Section 8E-05 Busway Warning Sign

##### Option:

A Busway Warning sign with a one-direction arrow for one-way busways or a two-direction arrow for two-way busways may be used at the crossing point of highway-busway grade crossings where there are no active traffic control devices.

As an alternative to the Busway Warning sign, the legend "TWO-WAY BUSWAY" may be used at two-way busways.



[Busway Warning Sign](#)

[The design of this sign is consistent with the design of crossing signs in Figures 2C-10 and 2C-11 which use the W16-7P diagonal downward pointing arrow when the sign is placed at the location of the crossing point. FHWA staff has confirmed that they will test alternative bus symbols before final approval of this sign]

## 8E.06

### Blank-out Bus Approaching sign

#### [Section 8E.06 Bus Approaching-Activated Blank-Out Warning Sign](#)

##### [Support:](#)

[The Bus Approaching-Activated Blank-Out warning sign supplements the traffic control devices to warn road users crossing the busway of an approaching bus.](#)

##### [Option:](#)

[A Bus Approaching-Activated Blank-Out warning sign may be used at signalized intersections near busway grade crossings or at crossings controlled by STOP signs.](#)



Bus-Activated  
Blank-out Sign

[This sign is consistent with the front view symbol of LRT on the existing W10-7 blank-out warning sign]

**8E.08**

**Busway Automatic Gates**

**Section 8E-08 Busway Automatic Gates**

Option:

Automatic gates may be used to supplement traffic control signals at highway-busway grade crossings.

Standard:

Busway automatic gates, if used, shall conform to standards set forth in Section 8C.04 for Automatic Gates and shall be standard railroad size, striped with 16-inch alternate vertical, fully retroreflectorized red and white stripes. Flashing red lights in accordance with the Standards for those on railroad gates shall be included on the gate arm and they shall only be operated if the gate is closed or in the process of being opened or closed. In the horizontal position, the top of the gate shall be approximately 4 feet above the pavement.

Busway automatic gates, if used, shall be interconnected with the busway traffic control signals.

Support:

Section 8C.04 contains further details regarding automatic gates and Section 8D.06 contains details regarding pedestrian automatic gates.