



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

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Subject: **INFORMATION:** Traffic Control Devices
for Preferential Lane Facilities

Date: August 3, 2007

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In Reply Refer To: HOTO-1

To: Division Administrators

On March 2, a motor coach crashed after exiting at a left-side ramp from a High-Occupancy Vehicle (HOV) lane on Route I-75 in Atlanta, Georgia. The crash resulted in 7 fatalities of the 33 aboard. Early reports from this crash indicate that drivers might exhibit confusion at left-side direct exits from preferential lane facilities on freeways. A survey of selected HOV facilities nationwide by the Federal Highway Administration (FHWA) revealed that there is significant variation in the application of design principles for traffic control devices when applied to a preferential lane facility.

The purpose of this memorandum is to reiterate the current standards for traffic control devices applicable to preferential lane facilities and to encourage uniformity among such devices by expediting conformance with the requirements of the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD). Outlined are several enhancements to the required traffic control devices to provide positive guidance to motorists and help distinguish these devices from those applicable to traffic using general-purpose lanes.

We strongly encourage implementation of the current MUTCD standards, along with the additional recommendations prescribed herein by all public and private entities that operate preferential lane facilities. The FHWA is considering many of these provisions for the Notice of Proposed Amendments (NPA) for the next edition of the MUTCD. This NPA would clearly identify the proposed standards, guidance, and options and would provide the public an opportunity to review and comment.

The following provides specific information on traffic control devices for preferential lane facilities.

1. Guide Signs for Preferential Lanes

The MUTCD requires that guide signs use a white legend on a green background. To promote uniformity, FHWA recommends that all guide signs adhere to the basic design principles established by the MUTCD, whether applicable to a general-purpose or preferential lane facility, by employing a white legend on a green background.

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In addition, it is important to distinguish messages that apply to a preferential lane facility from those that apply to the adjacent general-purpose lanes. Thus, FHWA recommends that a header section be placed at the top of and across the entire width of the guide sign applicable to a preferential lane facility or exit from such a facility. The header contains a white background with a black legend to clearly indicate that the sign applies to a preferential lane or to a direct exit from the preferential lane facility. The diamond symbol plaque for an HOV lane is incorporated into the header section at the left edge. Examples of guide signs for preferential lane facilities and direct exits are illustrated in Figures 1 and 2.

In cases where a guide sign applicable only to a preferential lane must be mounted on the same overhead structure as a guide sign applicable only to the general-purpose lanes, the distinction between the applicability of the signs should be further emphasized by maximizing the lateral separation between the preferential lane signs and general-purpose lane signs on the structure.

2. Left-Side Direct Exits

Due to the fact that left-side exits tend to violate driver expectancy, the MUTCD provides the option of including a legend to indicate the fact that the exit is from the left side of the roadway. The FHWA recommends that all direct exits from a preferential lane facility contain such a message in the format of a plaque with the legend LEFT in black on a yellow background placed at the top left edge of any guide sign for a left-side direct exit maneuver. Use of the LEFT plaque with a guide sign is illustrated in Figures 1 and 2.

3. Sign Location

The MUTCD illustrates the combination of an Exit Direction sign and a Pull-Through sign at the departure of a direct exit from a preferential lane facility. The Pull-Through sign is of particular importance when the direct exit could be mistaken for the preferential lane that continues, such as on curved alignments or where other physical roadway features such as an overpass make it difficult to discern the exit geometry from the approach. Because of the unique combination of geometric features and lane restrictions of a direct exit from a preferential lane facility, FHWA recommends that a Pull-Through sign for the preferential lane be installed in conjunction with the Exit Direction sign to provide positive guidance to motorists. The combined installation of the Exit Direction and Pull-Through signs is illustrated in Figure 2.

4. Barrier-Mounted Guide Signs and Exit Gore Signs

Barrier-mounted guide signs are used to indicate access from a preferential lane facility to general-purpose lanes. The MUTCD requires that barrier-mounted guide signs be designed with a white legend on a green background and illustrates them with a header section with a white HOV diamond symbol on a black background. The FHWA recommends that barrier-mounted guide signs for preferential lane facilities employ this format. The FHWA

further recommends that the design of the Exit Gore sign for a direct exit from a preferential lane also employ this format. The Exit Gore sign for a direct exit from a preferential lane is illustrated in Figure 3.

5. Pavement Markings

The MUTCD requires that preferential lanes be marked with an appropriate pavement symbol or message, such as the diamond symbol for an HOV lane, spaced at regular intervals based on the prevailing speed of traffic. The FHWA recommends, in addition to the regular spacing interval, that the appropriate pavement marking be placed along preferential lanes at strategic locations, such as at major decision points, direct exit ramp departures, and along access openings with adjoining general-purpose lanes. To provide positive guidance, FHWA recommends that the marking be placed on all applicable lanes when used at a decision point to be visible to approaching traffic on all available departures.

The use of guide line markings across a direct exit taper can help minimize errant departure of vehicles from the preferential lane onto the exit, particularly at left-side exits.

Accordingly, FHWA recommends that dotted white guide line markings be used to separate an exit lane from a continuing through preferential lane to reduce the likelihood of unintended exit maneuvers. When extra emphasis is needed, word legend pavement markings of "EXIT" or "EXIT ONLY" should also be considered for use in the parallel or tapered deceleration lane for the direct exit and/or on the direct exit ramp itself just beyond the exit gore.

The FHWA will continue to work with the National Transportation Safety Board (NTSB) during its investigation of the Atlanta crash. In the interim, FHWA believes that the recommendations enumerated herein, along with the basic design principles established by the MUTCD, will promote safe, efficient operation of preferential lane facilities. Efficiency of operation will help gain acceptance of preferential lane facilities by the traveling public as realistic options for navigating through congestion. Should you have any questions about this information, please contact Mr. Kevin Sylvester by telephone at 202-366-2161 or by e-mail at Kevin.Sylvester@dot.gov.

Attachment

cc: Associate Administrators
Chief Counsel
Directors of Field Services
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Fig. 1. Example of an Advance Exit Guide sign for a direct exit from a preferential lane.

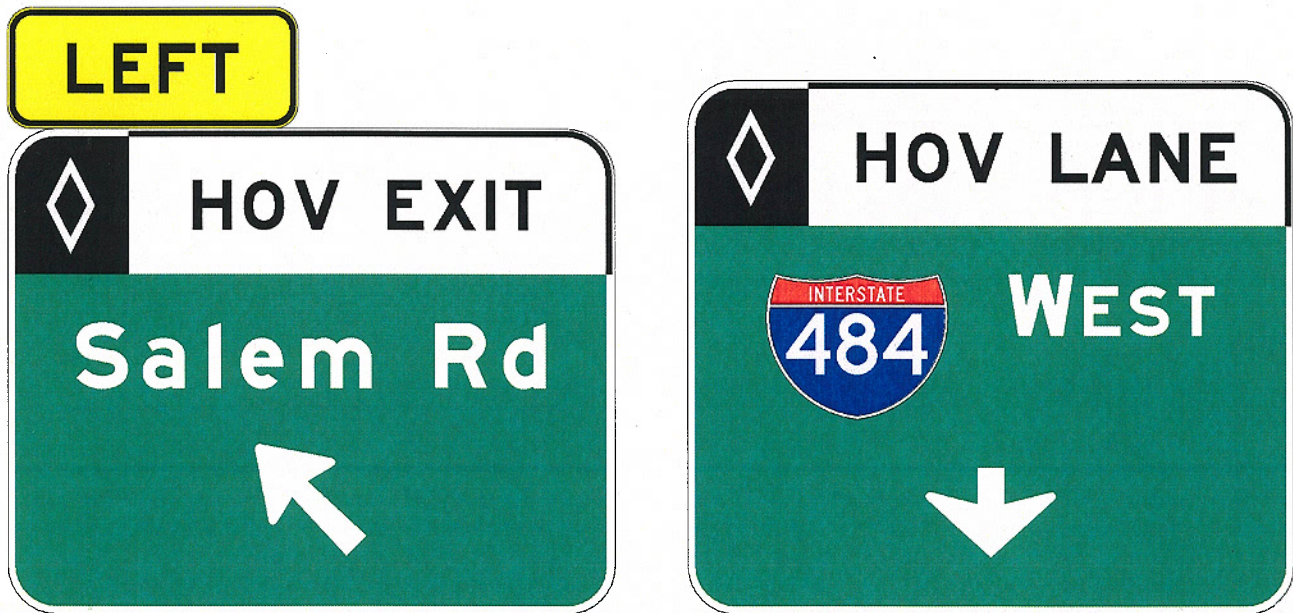


Fig. 2. Example of Exit Direction and Pull-Through Guide signs at a direct exit from a preferential lane.



Fig. 3. Exit Gore sign at a direct exit from a preferential lane.