



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: April 18, 2017

In reply refer to: H-17-4 through -7

Mr. Malcolm Dougherty
Director
California Department of Transportation
1120 N St. (MS-49)
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The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations to help prevent future accidents. In addition, we carry out special studies concerning transportation safety and coordinate the resources of the federal government and other organizations to assist victims and their family members affected by major transportation disasters. We are providing the following information to urge the California Department of Transportation (Caltrans) to act on the safety recommendations being issued in this letter.

On March 28, 2017, we adopted our report concerning the January 19, 2016, San Jose, California, crash.¹ In the predawn hours of January 19, a 2014 Motor Coach Industries International, Inc. (MCI), D4505 motorcoach, operated by Greyhound Lines, Inc., was traveling northbound on US Highway 101 (US-101) when it entered and traveled in an unmarked gore area, rather than the intended high-occupancy vehicle (HOV) lane, and collided with a crash attenuator. The crash occurred at the US-101–State Route 85 (SR-85) interchange, where a 990-foot-long gore separates the left exit HOV lane for SR-85 from the US-101 HOV lane. The gore widens to about 22 feet at the point where the nine-cylinder crash attenuator is in place, which was missing its retroreflective object marker. Following the impact, the bus traveled another 65 feet, rolled 90 degrees, and came to rest on its right side atop a concrete barrier, straddling two lanes of traffic. As a result of the crash, two passengers were ejected and died, and the driver and 13 passengers were injured. Additional information about this crash and the resulting recommendations may be found at the [NTSB website](#), under report number NTSB/HAR-17/01.

¹ See *Motorcoach Collision With Crash Attenuator in Gore Area, US Highway 101, San Jose, California, January 19, 2016*, Highway Accident Report NTSB/HAR-17/01 (Washington, DC: NTSB, 2017).

As a result of this investigation, we issued 11 new recommendations, including two to the Federal Highway Administration, one to the American Bus Association and the United Motorcoach Association, four to Greyhound Lines, Inc., and the following four recommendations to Caltrans:

H-17-4

Modify your work order tracking system to show completion status and to include a means of providing reminders when work orders, particularly those for proprietary devices, are overdue or incomplete.

H-17-5

Add the left exit plaque to the left exit sign at the crash location and to all left exit guide signs on California highways, as required by the Federal Highway Administration.

H-17-6

Delineate the neutral area of the gore at the crash site using the best traffic guidance practices, such as chevrons or diagonal cross-hatching.

H-17-7

Revise the California *Manual on Uniform Traffic Control Devices for Streets and Highways* to change the delineation of left exit gores, such as by using chevrons or diagonal cross-hatching, from an optional to, at minimum, a recommended guidance practice.

We also reiterated one previously issued recommendation each to the Federal Motor Carrier Safety Administration, the National Highway Traffic Safety Administration, and the state of California; and two previously issued recommendations to MCI.

These safety recommendations are derived from the NTSB investigation and are consistent with the evidence we found and the analysis we performed. Then-Acting Chairman DINH-ZARR and Members HART, SUMWALT, and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Robert L. Sumwalt, III
Acting Chairman