

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

FOR RELEASE: 6:30 P.M., E.D.T., JULY 14, 1976

(202) 426-8787

ISSUED: July 14, 1976

Forwarded to:

Honorable James B. Gregory
Administrator
National Highway Traffic Safety
Administration
400 Seventh Street, S. W.
Washington, D. C. 20590

SAFETY RECOMMENDATION(S)

H-76-25 and H-76-26

On October 11, 1975, a charter bus owned and operated by the Metropolitan Coach Company was eastbound, in heavy rain, on Interstate 495 in Bethesda, Maryland. As the bus negotiated a curve to the right at 50 mph, the rear wheels of the bus lost traction and the rear of the bus began to slide from side to side. In its final slide to the right, the bus rotated counterclockwise 160° and contacted the guardrail. The bus flipped over, rotated 270° about its longitudinal axis, and landed on its left side in a roadside ravine. Of the 29 occupants, 26 were injured.

At the request of the National Transportation Safety Board, the Maryland State Highway Administration ran American Society Test Materials (ASTM) E-274 skid tests on the pavement at the accident site. The tests established that the pavement coefficient of friction was 0.30. However, Safety Board analysis of the vehicle dynamics indicates that the bus could have maintained lateral stability if the frictional coefficient was 0.237 as calculated.

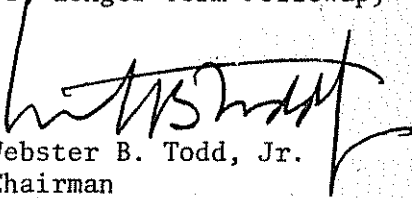
This lack of correlation is probably related to the different rubber compositions and tread designs of the ASTM test tire and of the bus tire.

The NHTSA tire grade program for passenger-car tires acknowledges that there is a tradeoff between wear characteristics and traction capability. There is some evidence that truck and bus tires wear better than passenger-car tires but that their traction capability is less than that of car tires. Since there is no standard for minimum traction capability for commercial vehicle tires, vehicle stability and stopping distances are difficult, if not impossible, to predict.

Therefore, the National Transportation Safety Board recommends that the National Highway Traffic Safety Administration:

Compare frictional coefficients obtained with a commercial vehicle tire to that obtained with an ASTM E-274 skid-test tire and publish the findings. Also, determine whether there is a greater tendency for commercial truck and bus tires than passenger-car tires to lose traction on wet pavements. (H-76-25) (Class III, Longer Term Followup)

Develop a Federal Motor Vehicle Safety Standard to require a minimum frictional coefficient for all commercial motor vehicle tires. (H-76-26) (Class III, Longer Term Followup)


By: Webster B. Todd, Jr.
Chairman

TODD, Chairman, McADAMS, HOGUE, BURGESS; and HALEY, Members, concurred in the above recommendations.

THIS RECOMMENDATION IS TO BE RELEASED TO THE PUBLIC ON THE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THE INFORMATION CONTAINED THEREIN SHOULD BE MADE BEFORE THAT DATE.