

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: January 10, 1980

Forwarded to:

Honorable Karl S. Bowers
Administrator
Federal Highway Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-80-2 through-4

On February 7, 1979, the driver of a tractor-semitrailer traveling east on I-70 at New Stanton, Pennsylvania, lost control of his vehicle and plunged down an embankment just east of a bridge spanning Legislative Route 117. The driver was killed and the truck was destroyed.

It was snowing at the time and the temperature was below freezing. Below-freezing temperatures and precipitation during the winter months had resulted in frost heaves throughout the area. At the bridge, the ice lifted the concrete pavement adjacent to the expansion joints 3 to 4 inches above the bridge deck. The condition was accentuated by the 40° skew of the bridge. The usual short-term maintenance practice is to feather the rise with bituminous material. No such feathering was in place at this location nor were there signs warning of the hazardous condition. Two other accidents occurred at this site within 2 days as a result of the frost heave.

Supervisory highway maintenance personnel had ridden over the bridge at the accident site daily and had failed to notice or report the condition. After the accident, only the eastbound lanes were feathered; the westbound lanes were not feathered until after the National Transportation Safety Board investigators visited the Pennsylvania Department of Transportation's county maintenance office the week after the fatal accident. Had feathering or adequate warning devices been in place, these accidents may have been prevented.

Since frost heaves at specific locations cannot be predicted, active surveillance by highway personnel during winter months is vital. The State's regional highway office has a night patrol, the basic responsibilities of which is to report on snow and ice conditions and to aid disabled or stranded motorists. The use of a night patrol in Pennsylvania is a relatively new program, and although innovative, its safety benefits could be increased significantly by instructing and training the patrolmen to recognize and report existing and potentially hazardous highway

conditions. Likewise, all other employees of the Pennsylvania Department of Transportation, especially maintenance personnel in supervisory positions, should be aware of the importance of recognizing and reporting existing or potentially hazardous highway conditions they observe during the course of their everyday activities.

In the Safety Board's October 9, 1979, response to the Notice of Proposed Rulemaking (NPRM) "Interstate Maintenance Guidelines," FHWA Docket No. 78-43 Notice 2, the Safety Board supported the American Association of State Highway and Transportation Officials (AASHTO) Yellow Book statement that maintenance personnel are frontline observers of highway conditions and they can and should become more active in improving highway safety. The Safety Board believes that maintenance personnel should be informed as to the importance of recognizing hazardous conditions and as to the need to report them.

Our review of the training courses available to the States through Federal Highway Administration, Institute of Transportation Engineers and the American Association of State Highway and Transportation Officials did not identify any that will serve this purpose.

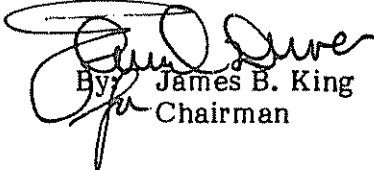
Therefore, the National Transportation Safety Board recommends that the Federal Highway Administration:

Require the States to establish a program which will assure prompt identification, reporting and correction of hazardous highway conditions. (Class II, Priority Action) (H-80-2).

Develop a course for use by State and local highway officials to train maintenance personnel to recognize hazardous highway conditions and the need to report them. (Class II, Priority Action) (H-80-3).

Require the States to include in their annual interstate maintenance program a description of the planned training for maintenance personnel. (Class II, Priority Action) (H-80-4).

KING, Chairman, DRIVER, Vice Chairman, McADAMS and BURSLEY, Members, concurred in these recommendations. GOLDMAN, Member, dissented.


By: James B. King
Chairman