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NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: October 21, 1980

Forwarded to:

Honorable Joan Claybrook
Administrator
National Highway Traffic Safety
Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-80-63

On June 6, 1980, about 11 p.m., two vehicles collided in the westbound lane of the south frontage road to U.S. 40 in Clayton, Missouri. The driver of an eastbound vehicle was passing two other eastbound vehicles, which were traveling at driver-estimated speeds of 50-55 mph, near a hill crest when he saw a westbound vehicle approaching in the lane. He braked and steered his vehicle to the left toward a clear, grass-covered area, but the westbound vehicle struck the right passenger door. A passenger in the eastbound vehicle and all four persons in the westbound vehicle were killed; the driver of the eastbound vehicle sustained minor injuries.

U.S. 40 at this location is a four-lane, divided, east-west highway with a two-lane frontage road on either side. The accident occurred on the south frontage road which consists of two 10-foot-wide traffic lanes for two-way traffic, with 3-foot-wide gravel shoulders. Traffic control consists of a dashed yellow centerline and a solid white edgeline on both edges. The road in this area has an off-peak 85th percentile speed of 54.5 mph and has a posted speed limit of 55 mph. The average daily traffic flow on the south frontage road near the accident site is 5,855. Road alignment is straight over rolling terrain. The accident occurred at the crest of a hill with a 2.65 percent descending grade to the west and 3.02 percent descending grade to the east. According to plan and profile sheets provided by the Missouri Highway and Transportation Commission, beginning at a point 850 feet west until a point 190 feet west of the point of impact, the passing sight distance is less than 900 feet. There were no "no-passing zones" marked.

The U.S. Department of Transportation's Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) states that, where centerlines are installed and a curve warrants a no-passing zone, it should be so marked where the sight distance is equal to or less than that listed below for the prevailing off-peak 85th percentile speed:

85th Percentile Speed (mph)	Minimum Passing Sight Distance (feet)
30	500
40	600
50	800
60	1,000
70	1,200

Section 3B-3 of the MUTCD makes the installation of no-passing zone markings mandatory when centerlines are installed. Thus, the MUTCD requires a passing sight distance of 900 feet at the location where the accident occurred. Since this 900 feet was not available, no-passing zone markings should have been in place at this accident location. Thus, in this particular incident, the State of Missouri was not in compliance with the MUTCD. Further investigation revealed that the Missouri pavement marking policy on no-passing zones was not consistent with the MUTCD. The Missouri Highway and Transportation Commission's policy as furnished by letter from its chief engineer states:

"No Passing Zones" are placed on main line routes with an Average Daily Traffic of 1000 or more. Local collector roads such as outer roadways, service roads, etc., are considered on an individual basis as to need, considering the type of traffic, speed of traffic, access points, terrain, and other factors for all types of stripings.

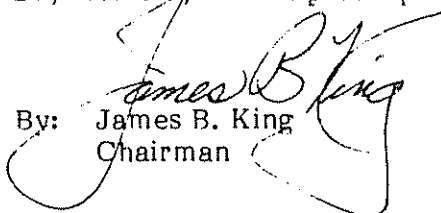
Since it is considered necessary to have uniform markings and signing on the highway for safety purposes, it is also necessary to have uniform laws and regulations. Uniform traffic laws and ordinances increase the likelihood that drivers will respond similarly and expectedly to the same conditions in any jurisdiction, thereby increasing the safety of the driving public. That is the purpose of the Uniform Vehicle Code (UVC) published by the National Committee on Uniform Traffic Laws and Ordinances. The National Highway Traffic Safety Administration's Highway Safety Program No. 6, Codes and Laws requires that each of the States have a program to achieve uniformity of traffic codes and laws that have the comparable provisions of the rules of the road section of the UVC.

UVC Section 11-307(b) states that "Where signs or markings are in place to define a no-passing zone — no driver shall at any time drive on the left side of the roadway within such no-passing zone or on the left side of any pavement striping designed to mark such no-passing zone throughout its length." However, the State of Missouri has no such legal prohibition against passing in a marked "no-passing zone." The "Rules of Road Rated, Volume 9, Traffic Laws Commentary No. 1" rates compliance of the States to the rules of the road found in the UVC for the year 1978. In this rating, Missouri was 51st out of the 52 United States jurisdictions and had the greatest number of regulations that were substantially different from the UVC.

Although the Safety Board could not determine if the lack of no-passing zone markings or laws directly contributed to this accident, we believe that marked no-passing zones and uniform markings and laws may have reduced the accident potential. Therefore, as part of the Board's oversight responsibility to insure that transportation safety standards are used, the National Transportation Safety Board recommends that the National Highway Traffic Safety Administration:

Review State laws for conformity to the Uniform Vehicle Code rules of section 11-307 and require States with nonconforming laws to implement a program to achieve uniformity. (Class II, Priority Action) (H-80-63)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and GOLDMAN, Members, concurred in this recommendation. BURSLEY, Member, did not participate.

By:  James B. King
Chairman