

NATIONAL TRANSPORTATION SAFETY BOARD
 WASHINGTON, D.C.



ISSUED: May 22, 1981

Forwarded to:

Honorable Ray A. Barnhart
 Administrator
 Federal Highway Administration
 400 Seventh Street, S.W.
 Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-81-20

The Safety Board has concluded a special study ^{1/} which examined vehicles colliding into trees. The Safety Board initiated this study due to the number and severity of these types of accidents. According to the National Highway Traffic Safety Administration's (NHTSA) Fatal Accident Reporting System (FARS) data, about 2,900 fatal accidents are occurring annually as a result of vehicle impacts with trees. Over 50 percent of these accidents occur on county, local, or other rural roads; county roads alone represented 27.7 percent of vehicle accidents with trees. Tree accidents tend to occur on curves at night, and in some accident locations investigated by the Safety Board, these curves were in need of warning signs and pavement markings.

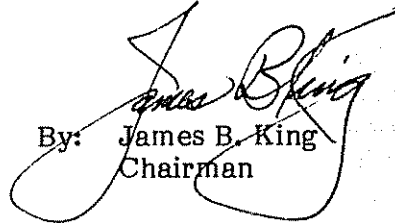
The accident statistics indicate that quite often these accidents involve young males and alcohol. Recent research suggests that using edgelines results in less driver weaving and greater centrality of vehicle position in the driving lane, especially on curves. Twenty-one to 28-year-old male subjects with alcohol contents as high as 0.08 BAC were used in the study. This research indicates that some accidents with trees could probably be eliminated if improved signing and markings were available at curves. There is a need to investigate the potential of various combinations of improved delineation.

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

^{1/} For more detailed information, read Special Study—"Motor Vehicle Collisions With Trees Along Highways, Roads, and Streets: An Assessment" (NTSB-HSS-81-1).

Develop several county-wide demonstration projects to evaluate the potential of reducing the number and severity of accidents with trees, especially at curves on county roads, by improving signing and delineation in various combinations. (Class III, Longer Term Action) (H-81-20)

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


By: James B. King
Chairman