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NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 22, 1981

Forwarded to:

Honorable Raymond A. Peck, Jr.
Administrator
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-81-21

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 accidents. According to your Fatal Accident Reporting System, about 2,900 fatal accidents are occurring annually as a result of vehicle impacts with trees. Fatal vehicle accidents involving trees are surprisingly overrepresented on curves (51.1 percent of the fatal vehicle accidents with trees versus 26.3 percent of all fatal vehicle accidents occur on curves).

In the past, roadways have been cleared of fixed obstacles for 30 feet or more to allow errant vehicles to return to the roadway safely. This 30-foot clearing is a result of research which showed that 80 percent of the accidents with fixed objects occurred within 30 feet of the edge of the road. Clear roadsides, especially where tree removal is involved, have been unpopular aesthetically to local citizens. In fact, some States no longer remove any live trees.

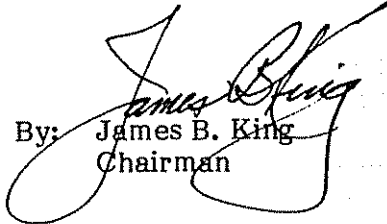
Another study and accident data developed as part of the Safety Board's study indicate that the percentage of vehicle accidents with trees that result in a fatality or injury increases with distance from the roadway. To assess the implications of these data, that the number of accidents decreases with distance cleared from the edge of pavement while severity of accidents increases with distance, more comprehensive data must be collected on the distance from the edge of the road to the fixed object struck and the curve radius or degree of curvature when present. Currently, these data are not available in computerized form from NHTSA's NCSS, NASS or FARS files, even though some of these systems require scale diagrams that should provide this information.

Therefore, the National Transportation Safety Board recommends that the National Highway Traffic Safety 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).

Revise the FARS form and other nationwide reporting forms to include, as a minimum, the measurement of the distance from the edge of the road to a fixed object struck and measure of road curvature (if curve is present). (Class III, Longer Term Action) (H-81-21)

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

By: 
James B. King
Chairman