



National Safety Council

Position/Policy Statement

Utility Pole Hazards

The National Safety Council urges officials of road agencies, utility organizations and companies, the US Congress and state legislatures to establish a systematic method to identify potentially hazardous utility pole installations. The National Safety Council urges public and private agencies to undertake corrective action regarding future and existing hazardous utility pole installations.

The National Safety Council urges the development of ongoing comprehensive policies to reduce utility pole roadside hazards in both urban and rural areas.

This position statement reflects the opinions of the National Safety Council but not necessarily those of each member organization.

Approved by the Highway Traffic Safety Division, October 1988
Approved by the Governmental Relations Committee, October 1988
Approved by the Board of Directors, October 19, 1988

PRO

Each year about 1,500 persons are killed in rural and urban areas as a result of collisions with rigid utility poles. While most states are required to accommodate the utilities within the highway right-of-way by law, many jurisdictions have no explicit policy related to the safety of the road user in the location, design or maintenance of utility poles. Although there is some general guidance related to installation and accommodations of utility poles in the right-of-way of highways, there is no comprehensive program to reduce the hazard of the over 80 million existing utility poles along the Nation's roadways.

Utility pole collisions account for nearly one of every ten runoff-road and fixed-object traffic fatalities, some 3% of all traffic deaths. Utility pole related fatalities are as common in urban areas as in rural areas.

Laws, regulations, and policies relating to utilities are not clear or unequivocal regarding the duty to provide safe roadsides to the highway user. Most road agencies are required to accommodate utilities within the highway right-of-way by law. Some utilities argue that it is the road agency's responsibility to make the poles safe, or as a minimum, to advise them that a hazard exists and to order corrective action, but on a site-specific basis. Utility companies must share the responsibility for highway traffic safety, rather than focusing exclusively on utility shareholders and the utility users as their only concern.

The Federal Highway Administration (FHWA) regulates utility pole accommodation within highway right-of-way for Federal-aid projects. When utility poles are allowed, they must be clear of the established roadside recovery area or appropriate countermeasures must be taken to reduce the hazard of collision (shielded by guard rail, crash cushions or made breakaway). However, the method of correcting existing hazards and the establishment of programs for carrying out these initiatives rests with the individual road agencies.

The American Association of State Highway and Transportation Officials' (AASHTO) policy recommends that longitudinal utility installations be located on a uniform alignment as near as practicable to the right-of-way line. For high speed rural highways, a clear zone width should be determined in accordance with the AASHTO Barrier Guide provisions. An 18 inch minimum lateral clearance for utility poles on urban streets is recommended in the 1984 "Green" book. Unfortunately, the National Electrical Safety Code, which is used by most utility companies for guidance on pole placement, recommends only a 6 inch lateral clearance from traffic. This is based on electrical safety considerations only and does not reflect sound highway safety practices.

FHWA research on the utility pole safety problem has produced a user's manual on Selection of Cost Effective Countermeasures for Utility Pole Accidents. In addition, research has developed a slip base breakaway wooden utility pole

which has been successfully crash tested. The states of Massachusetts and Kentucky are installing these devices to document experience on fabrication, installation, and operation in actual practice. A national plan, focusing upon roadside safety, must be developed to systematically reduce utility pole hazards through their potential hazard. The plan should include methods to identify hazardous installations, accident countermeasures for selected sites, and long range policies and programs to reduce utility pole accident hazards.

Working with AASHTO, NACE, APWA, ASCE, NACO, and the FHWA, highway agencies should develop policies and design criteria to routinely reduce utility pole hazards as part of all highway projects.

CON

There are over 80 million utility poles existing in highway right-of-way in the United States today. The cost to relocate or remove all utility poles from near the roadway will be prohibitive to both the utility companies and to highway agencies.

If drivers could be prevented from leaving the roadway, utility pole collisions would not occur. A far better approach to the problem of utility poles as driving hazards would be to educate drivers never to drive while impaired or drowsy.

Poles in close proximity to the edge of the roadway are struck far too often to be made breakaway. The current practice of "armoring" often-struck poles by the wrapping them in steel plates prevents their being knocked down by inattentive drivers and eliminates the expense of their repair.

The current minimum setback of 6 inches from the back of the street curbing to the face of the utility pole as set forth by the National Electrical Code is adequate in that any truck leaning outward from the cross-slope of the roadway will not touch the pole while driving next to the curb.