

14
November 4, 1996

R. D. Wright, Pres. & C.O.O.
Cambridge Electric Light Co.
46 Blackstone St.
Cambridge, Massachusetts 02139

Dear Mr. Wright,

My attached letters to your state's utility commission refer.

You are not the only entity on these poles that get hit by vehicles but, for many reasons, you are the primary problem.

Pole lines, primarily distribution wood pole lines, which carry electric power along roadways represent a very dangerous hazard to the motoring public. This is because of their compact and unyielding nature. Consider that at 45 mph a vehicle can traverse a typical 200 ft distance between common distribution wood power poles in about 3 seconds. If a vehicle for some reason leaves the road, then the driver's basic instinct is to avoid hitting an object like a stout wood power pole. Hence, the driver tries to turn to avoid hitting the pole. And, if the vehicle has exited the road fast enough, a sideways slide results with the vehicle continuing straight towards the pole. Any type collision with a stout wood pole can be deadly but side door collisions with stout wood poles are exceptionally deadly. With only the thin steel skin of the door for protection, the stout wood power pole can literally cut the vehicle in half.

There are certain types of accidents, and the driver's side door collision with a stout wood power pole can be one of these, where the best systems of seat belts, front air bags, side door air bags, etc. simply do not lessen the consequences. The stout wood power pole simply deforms everything moving at it or cuts the vehicle in half depending on your viewpoint.

The solution, hard as it may seem, is to locate pole lines carrying electric power a safe distance from the road so as not to endanger the motoring public. If this cannot be done, then the power facilities should be placed underground. Some communities, in varying degrees, use one or the other techniques.

For informational purposes, a copy of this letter and its attachments are being sent to selected city mayors and county commissioners within your service territory. This is because these respective entities have jurisdiction over their streets, roadways, and right-of-ways and what is placed in them.

Ken Sharp

Ken Sharp
9342 Oak Run Circle
Indianapolis, Indiana 46260

cc: Sheila D. Russell, Cambridge

September 1, 1994

Nancy Brockway, Gen. Couns.
Massachusetts Dept. of Public Utilities
100 Cambridge St.
Boston, Massachusetts 02202

Dear Ms. Brockway,

Sometime ago statistics from 1991 concerning fatalities, injuries, and property damage incidents in the United States resulting from vehicles hitting utility poles were reported to you. These were statistics from the National Highway Traffic Safety Administration. For a comparison, NHTSA statistics for 1992 resulting from vehicles hitting utility poles in the United States follow.

Fatalities	Injuries	Property Damage Incidents
1,848	75,000	129,000

In 1968 Paul C. Skeels, Engineer-in-Charge of Safety Test Engineering at the General Motors Proving Ground presented a paper dated Feb. 13, 1968 entitled "The Role Of The Highway In A Safe Transportation System" at the 65th Annual Convention of the American Road Builders Association. The following figure is an excerpt from that paper.

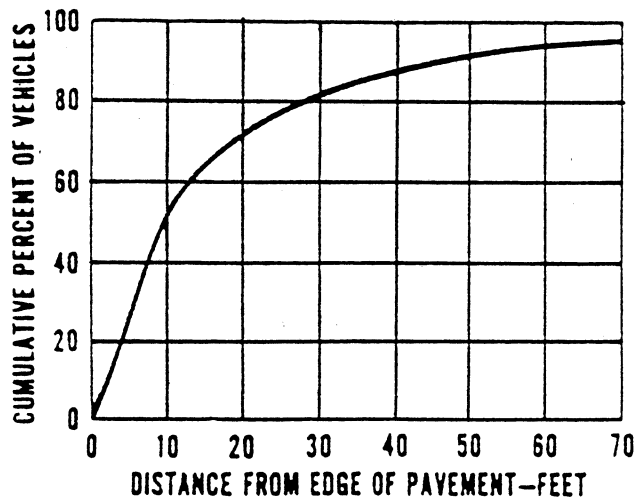
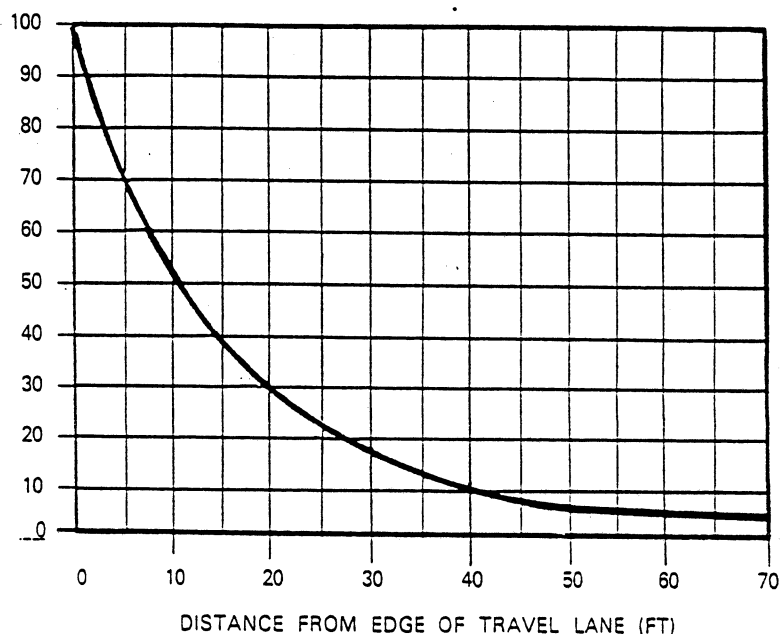


Fig. 19 - Distribution of 211 Proving Ground off-the-road accidents.

Thus, in illustration of Figure 19, if utility poles were located 30 ft from the pavement then approximately 80% of the vehicles leaving the roadway in the GM tests would not hit the poles.

Ken Sharp
9342 Oak Run Circle
Indianapolis, Indiana 46260

PERCENT OF RUN-OFF-ROAD
VEHICLES EXCEEDING
LATERAL DISTANCE



SOURCE:

"THE ROLE OF THE HIGHWAY IN A SAFE TRANSPORTATION SYSTEM", FEBRUARY, 1968, PAUL C. SKEELS. [GENERAL MOTORS PROVING GROUND RESULTS OF 211 RUN-OFF-THE-ROAD VEHICLES].

September 1, 1994

Nancy Brockway, Gen. Couns.
Massachusetts Dept. of Public Utilities
100 Cambridge St.
Boston, Massachusetts 02202

Dear Ms. Brockway,

My recent letter concerning fatalities, injuries, and property damage incidents resulting from vehicles hitting utility poles refers.

As shown above, the Dept. of Transportation of the State of Minnesota redrew Fig. 19 of Paul Skeels' paper for use in their Road Design Manual, Part II.

Ken Sharp

Consent Communication #14 S-564

Communication was received from Mayor Sheila Doyle Russell, transmitting a copy of a letter sent to Cambridge Electric Light Company from Ken Sharp, regarding statistics concerning fatalities, injuries and property damage incidents resulting from vehicles hitting utility poles.

In City Council November 18, 1996

Referred to the City Manager to

distribute to License,
Pole and Conduit and
Public Works Department.