

Mr. STONEX. We have done the best we could to make it available. We thought that it was a very good investment to get it as broadly understood as possible.

Mr. CONSTANDY. I would assume, or at least hope, that the lessons learned by you people might be incorporated in the design and construction of our public highways.

Mr. STONEX. We would sincerely hope so.

Mr. CONSTANDY. Before we get to the movie, you have a paper which you gave, if I can find it, entitled "Roadside Design for Safety." What was the date of that paper?

Mr. STONEX. That was 1960.

Mr. CONSTANDY. Mr. Chairman, that was an award-winning paper and we have a copy of it here. I would like to ask that it be made exhibit No. 10 and, if space permits, it be printed in the transcript; if not, to be retained in the files.

I would further like to ask that the slides be made exhibits 11 and 12.

Mr. CLARK. Without objection, so ordered.

(Exhibits Nos. 10, 11, and 12 were marked and are retained in subcommittee files.)

Mr. SCHADEBERG. Mr. Chairman, going back to the last few slides, I am not clear in my mind as to what the situation was when you talked about the number of feet off of the highway which would be safe.

Now, these cars that went off the highway; did these hit an object or did they not hit an object?

Mr. STONEX. In each of the distributions, these are the distances that the cars departed from the pavement. In other words, the maximum excursion.

On our proving ground road system, this is where the driver regained control and either stopped the car or turned back. In the other cases, in most cases, also in the Cornell and Route 66 studies, these were injury accidents and this is the distance they went out before striking an obstacle, before causing an injury or fatality.

Mr. SCHADEBERG. Was there any evidence as to why they went off the road, was it because they fell asleep or because they lost control of the car? Why did they leave the road?

Mr. STONEX. There is very, very little evidence. In the case of our drivers, where the accidents are investigated, occasionally it was pure carelessness. We have cases where a man reached over to pick up a package of cigarettes which had fallen off the seat onto the floor. We have another case where a driver reached over to pick up a data clip board which had fallen off the seat. We have numerous cases where they fell asleep and many cases where they do not even know why they left the road.

Mr. SCHADEBERG. Would there have been any help if there had been some sort of rumble in the road that would have awakened them or at least called attention to the fact that they were off the road?

Mr. STONEX. It is quite probable this would help in some cases. On the other hand, we did experiment for nearly 2 years in trying to devise some way of alerting people before they really got off the road, and this we concluded was not successful and would not be effective.

Mr. SCHADEBERG. I see.

Mr. STONEX. We find when people fall asleep, they frequently leave the road before their head even drops.