

connection with where do you use guardrail and where, if you use it, do you create more of a problem than you correct; and we have put out some information on the use of guardrail, particularly on slopes. If you notice the slope behind the sign from the roadway coming from the other direction, it appears as if it were somewhere in the neighborhood of three to one. We would normally not put a guardrail on a slope of that nature because in our investigation of several hundred accidents where cars have gone over slopes, and there has been a guardrail at the top, we find there would be less hazard to just let the car go over and go down the embankment.

Now, this may seem like not the thing to do, but this has been our experience, and I think on that slope down there we would not use a guardrail.

Mr. CONSTANDY. Thank you. Mr. Huff.

Mr. HUFF. I would like to make one observation in relation to the chairman's question why do you use guard fence when you do not need it and why do you not use it at the point where you do need it. I think there is confusion in the minds of a great many designers; this confusion as to whether you are putting up guardrail for protection of human life or protection of something they might run into or whether or not it is for delineation. Now there is a great deal of guard fence that is put up for a simple safe delineation that would serve the same purpose as guardrails.

Mr. CONSTANDY. Thank you.

Mr. CRAMER. I would like to ask a question.

Mr. PRISK. Surely.

(At this point, Mr. Johnson assumed the chair.)

Mr. JOHNSON. Yes, Mr. Cramer.

Mr. CRAMER. We have been sitting through better than 2 weeks now of hearings indicating that there are a number of death traps being built into these so-called modern lifesaving highways. The Interstate System, being built with 90-percent Federal money, was expected to save something like 8,000 lives a year. They have planted trees along the right-of-way, which themselves can be death traps.

You see studies giving more consideration to bridge design than to safety. We are finding all kinds of engineering mistakes or oversights relating to safety. We are seeing safety downgraded. We are seeing the construction of mileage being put first and safety features second. You have now adopted highway design and operational practices relating to highway safety, which I gather in future construction is going to have a substantial effect and make certain that safety is designed into the highway. Now, my question is, since over 50 percent of the Interstate System has been completed and we have seen ample evidence of deathtraps in the gore areas and what have you, what approach can be taken that will encourage the States in spending additional funds or spending funds in the future to upgrade safety on already constructed highways. The States obviously are going to want to finish the Interstate System; that is going to be their primary objective. What can be done to assure spending some of these funds for going back and taking these deathtraps out of the highway? There is no special fund available under the Highway Safety Act of 1966 for construction. As a matter of fact, we specifically prohibited spending funds for the construction of safety items. Research, yes, but actual construction, no. This is going to cost a lot of money.