

bridges—and that I can think of in particular—and were not able to do so on a participating basis with Federal funds paying the share of that cost.

Mr. MORRIS. Could I offer one comment here? There are various instances, I think, that are disturbing, maybe if certain rules are attempted to be promulgated here. And we have, for instance, a primary road, primary Federal aid—this is on a 50-50 matching basis—where we are occupying part of a river and valley on a rather high embankment. Our road was designed with 24-foot pavement and then a 10-foot paved shoulder on either side with the guardrail out at the 10-foot line.

We were asked to move the guardrail out and widen the shoulders to 12 feet. Well, we made some computations as to widening the shoulder 2 feet and setting the guardrail back 2 feet more. If I recall, to do a mile of that widening was going to cost us maybe \$70,000 or \$80,000 more. And I am sure it was our feeling, and the feeling of our people, that we were not buying 25 cents worth of safety for the expenditure of \$70,000 or \$80,000.

There are expenses of that kind where I feel we need to use certain judgments. We could spend a lot of money that would not be well spent.

Mr. W. MAY. Yes. You are going to have great difficulty in putting all the answers or directives in one book. You are going to have to still use your judgment each time for each item or each project.

Mr. MORRIS. If I might go back one step here. In the earlier question that you posed, that is these fixed objects. In my particular State, we have several thousand miles of rural State highway system that are bounded by stone walls in relatively close proximity to lines of travel. And certainly I mean you can view a stone wall to be as much a fixed object as almost any other thing.

Now, we have lived with this type of wall, and we know that it would be financially impossible for us to go in and take all of these stone walls down. In fact, some of them are rather prize possessions by the property owners. And so I feel that you learn to live with these objects in close proximity and sometimes because of that, why you do overlook other objects.

Mr. W. MAY. In the future on some roads you probably will still end up having stone walls. On freeway type roads, there will not be stone walls. What is relatively disturbing to the committee is having looked at some relatively new projects, new Interstate projects out through the country, and having found a series of this same type hazard: Gore areas, signs too close, massive supports, and that type of matter. And many, many times it would not have cost any more money—sometimes less money—to have done it safely.

That statement you made relative to expenditures, together with your mentioning that research is being done prompted me to go back and review some of the writings we had.

On December 12, 1950, an engineer addressed the Louisiana Safety Association Conference down in New Orleans. And he said:

I sincerely believe that the accident rate here in Louisiana or in any State can be cut 25 per cent without our having to learn a single new fact about designing for safety. What we must accomplish now will not come by research, it will only come by conscientious determination to give safety a better chance. Streets and highways are expensive, so from the time the first design plans