

Mr. W. MAY. Yes, I have in front of me a paper sent to us by the department. It says "Summary of Projects for Guiderail Alterations Program," lists the districts, and the total sum is \$15,058,000.

Mr. McALPIN. We have underway a \$47 million remedial treatment under the safety improvement program. This is underway, fully programmed; this encompasses the results of our survey of all hazardous situations that can be classified as spot improvements, other than rebuilding the roadway.

Mr. W. MAY. Do you have another slide?

Mr. McEWEN. Mr. Chairman.

Mr. BLATNIK. Mr. McEwen.

Mr. McEWEN. Before we pass this slide, what about the curb on this bridge; is that the present standard of design?

Mr. McALPIN. That is current standard design. This is a safety walk, I believe, 18-inch setback from edge of curb to railing.

Mr. McEWEN. What is the railing there? Is that steel or aluminum?

Mr. McALPIN. I believe this is a steel railing, sir.

Mr. McEWEN. Now, has that been tested by you people for stability to retain and deflect vehicles?

Mr. McALPIN. Yes, in our early work we tested all existing systems being used in the State of New York, which would include our use of aluminum rail, or our old standard aluminum, our old standard steels. I believe this is a new standard steel rail which encompasses continuity of railing throughout, rather than construction in sections. A little difficult to tell from the slide, but perhaps counsel would know.

Mr. McEWEN. In the films Mr. Beaton showed of the tests in California, I believe on the New Jersey type structure they use, concrete with the rail on top. Has that been tested in New York?

Mr. McALPIN. No; we have not tested this. New York uses very little of parapet type of design for bridge rails. At the time we entered this work in 1958, Mr. Beaton in California had already introduced a very extensive series, concentrating in the early days, I believe, on bridge rails. We followed this very closely, and not having a large usage of parapet type of rails in New York, we did not enter the field of testing.

Mr. McEWEN. Thank you.

Mr. McCARTHY. Mr. Chairman.

Mr. BLATNIK. Mr. McCarthy.

Mr. McCARTHY. On that safety walk. Last week we had a panel of experts, and the general agreement was that the term safety walk was a misnomer, and that it could be a hazard. The general agreement of that panel, as I remember it, Mr. Chairman, was that they would not in the future build safety walks.

I am wondering if you had the experience with this and if you are contemplating eliminating these so-called safety walks.

Mr. McALPIN. I certainly would not contest the misnomer of the term. This is under consideration by our bridge department. However, the use of curbs, whether or not you call them safety or make them 18 inches wide as this case illustrates, offer a drainage feature on the bridge itself. From this point of view, they deserve consideration in the overall bridge structure design.

We have, I believe, a major structure on the Interstate continuing into Connecticut, in which we have eliminated curbs. But at the present