

Now, there have been interpretations from this data which have purported to know that the 20,000 pound single is more damaging to a pavement—this is generality—than an 18,000 pound single.

I think it is important to always understand that the AASHO road test was set up as a traffic type damage experiment in which they built two-thirds of the pavement sections to known underdesign. In other words, they built these test sections, a high percentage of them, to break up under traffic so they could certain characteristics about these and about the traffic.

Now, it also should be understood that the AASHO road test was set up a destruct test under adverse climatic conditions.

In other words, they built this in an area on a very low quality embankment soil with low quality gravels and low quality crushed stones, and they placed on this high quality asphalt, concrete, high-quality poured cement concrete.

There is really only one question which comes to the forefront when you attempt to analyze the results of the AASHO road test, and that is: Does the equations which resulted from this destruct test—in other words, breaking up these 10 pavements—predict pavement behavior for adequately built pavements?

And the answer is a flat "No," it does not. Therefore, these relative damage coefficients which may result from this mathematical equation are meaningless. They do not predict pavement life.

We hear, for instance, that the 18,000 axleload is 5,000 times damaging as the 5,000- or 2,000-pound axleload. But 5,000 times zero is still zero. This holds all the way up and down the scale of axle loads which may come out of this equation.

I think the real value of the road test comes from its interpretations and its in-depth studies, such as are contained in this maintenance report, such as is contained in this Alabama Highway Research Report, where the States have taken these back to their own States and have tried to develop divine procedures from them. And we find that the other factors—the factors of locality, the factors of climate—have become dominant in the matter of pavement life and that the AASHO road test equations, the traffic relationships have virtually disappeared on adequately built pavements.

Mr. SCHWENGEL. The test did propose, there was 57 percent more damage on the increased weight in that test?

Mr. BRESNAHAN. Between the 20 and the 18?

Mr. SCHWENGEL. Twenty and 18.

Mr. BRESNAHAN. Yes, sir. There was a difference between the fact that something like the 5-inch concrete pavement failed under the 18,000 pounds single and there were some deterioration in perhaps the six and one-half pavement under the 20,000 single. Neither one of these pavements in terms of rigid pavement, of course, are built on our highway system, particularly interstate. We built them much heavier, 8 to 10 inches.

Mr. SCHWENGEL. While you fellows are still here, again I tip my hat to a great industry. I really mean this. You have been tremendous in the development of America. You have made great strides.

You are saying you made no advancements since we built the highways. Some of the people in your business I talked to indicated advances have been made, we have reduced cost of maintenance of your trucks, because of the Interstate System.