

Mr. Kachlein, in the introduction to his statement, said that we would have to, at some time, come to a determination of what the sizes and dimensions of these vehicles will be that we expect to use these roads.

Now, to ask a highway engineer to design a highway for an unknown quantity, such as the size and weights to be carried, not only on the roads but on the bridges of these roads, is a very unreasonable thing to do. At some point in time there has to be some understanding, some provision whereby when the highway engineer designs this facility, he has to know for what type of traffic and the size of the vehicles, and at least as best as he can foresee the volume of such vehicles. We do not have this in this legislation.

Mr. CRAMER. Well, if Mr. Turner's opinion is what you said it is, and he so testified before the Senate hearing on bridges, do you have any thoughts or information on how this report would have been set up recommending the higher by 2,000 pounds single axle weight and higher tandem axle weight by 2,000 pounds?

Mr. BRADY. Mr. Cramer, this is the report by the Department of Commerce. What the recommendations of the Bureau of Public Roads were to the Department of Commerce I do not know, but this is a question that perhaps you should ask them.

Mr. CRAMER. We are going to have them before us hopefully this afternoon. I will ask that question.

Now, in addition to that, the so-called bridge formula is the same as was recommended on the same page of the report as in the present bill. I guess it would not serve any purpose to have the same question relating to it as I did to the single axle and tandem axle weight. We will address those questions to Mr. Bridwell.

Let me ask you this question: Is it true or is it not true that actually permitting an 18,000- or 20,000-pound-vehicle axle maximum has a greater stress on bridges than a 34,000-pound tandem axle unit? So I mean, my point is, you are in favor of an 18,000-pound single axle, then is it not true that when it relates to bridge stress, a 34,000-pound tandem axle really has less bridge stress than does an 18,000-pound single axle?

Mr. BRADY. I am sorry, I am not a bridge design engineer, and I could not answer that off the top of my head. I could get the information for you and supply it for the record if you wish.

Mr. CRAMER. Is it not logical that an 18,000-pound single axle would have greater stress effect than a 34,000-pound tandem axle?

Mr. BRADY. It is possible. A great deal depends on frequency of such stresses, too, you know.

Mr. CRAMER. Now, you have here in your statement a study of the Defense Highway System and bridges in the respective States as it relates to whether they are H-10 or H-15 or H-20.

Is it your position that the proposed legislation could not even be properly carried on the H-20—S-16-type bridge?

Mr. BRADY. That is correct, sir.

Mr. Turner has testified, as you indicated, and as we indicated, that those limits, the 20-34, which is in the proposed legislation, would overstress interstate bridges by over 30 percent.