

of less than 10 feet. Present-day 96-inch wide truck units with safety mirrors and other devices extending about 1 foot out on each side cover a 10-foot lane completely with no room for passing safety. With the additional 6 inches of width proposed, there would be probably conflict on all highways with 10 foot lanes or less, and a very narrow margin of safety on even 11 foot lanes. It must be remembered that the width of a vehicle cannot be altered when it goes from the Interstate to any other system.

The proposed law does not include any length limitation. On two-lane highways, the length of a vehicle being passed directly relates to the time and sight distance involved in the passing maneuver. The longer a truck is, the longer the passing vehicle must be exposed to head-on or swiping-type accidents by being in the opposing lane. If the proposal advocated by many to increase the length to 105 feet from the present 55 feet is adopted, it doesn't take much of a mathematician to figure out that the passing vehicle would be in the opposing lane for just about twice the amount of time it is at present, and even now that, under some conditions, seems to be interminable.

In tests run in Idaho on double and triple bottom units approximately 100 feet long, the following results were obtained:

Unit: double bottom: 96.4 feet overall length; a truck tractor pulling a semitrailer 40 feet long which, in turn pulls a full trailer 40 feet long, on a hard left 90-degree turn—similar to a simple intersection—with a 50-foot steering radius, the last wheel of the semitrailer was 12 feet farther to the left than the left front wheel of the truck tractor and the last axle on the second trailer was 19.6 feet left of the front wheel of the truck trailer. This would require 8.5 feet plus 19.6 feet, or 28.1 feet of paved width, or about three 10-foot lanes for the unit to make such a turn—without any allowance for error. On a 75-foot steering radius, common at interchanges, the last axle on the semitrailer would be out of line with the steering axle by 6.5 feet and the last axle on the second trailer would be out by 15 feet.

Now, on our bridge inadequacies and safety; first, the members of the American Association of State Highway Officials, AASHO, as I understand, are practically unanimous in their expressed belief that it is not practically possible to have one set of standards for the Interstate System and another set for other highway systems. I could not agree with this position more.

Second, 64 percent of the Interstate System has now been built for 18,000-pound single axles, 32,000-pound tandem axles, and assumed gross loads of 73,280 pounds.

Third, in 1964, 53.3 percent of the bridges on the ABC systems—Federal-aid primary, secondary, and urban—were rated as H-15 or less. H-15, as I understand, means 15 tons. An H-15 bridge, highway 15-ton load, is built for trucks weighing 30,000 pounds gross, with a 24,000-pound tandem axle and a 6,000-pound steering axle with a 14-foot wheelbase. Ward Goodman, the AASHO bridge chairman, says that the new proposed weights would overstress H-15 bridges by as much as 40 percent, Virdeen Staff, the Illinois chief engineer, says that