

to 34,000 pounds if they want to—but, again, no State would be required to do so.

At this point, it might be useful to point out that the limits on individual axles, whether they are single or tandem axles, are designed to protect the road or highway pavement itself, as distinguished from bridges.

If there were no bridges on the highway system, there would be no need for a gross-weight limit, since proper limits on properly spaced axles are all that would be needed to protect the road itself.

The gross-weight limits are designed solely to protect bridges, and most States graduate the permitted gross weights according to the distance over which, and the manner in which, the total weight is distributed. For example, 70,000 pounds concentrated on a short vehicle will create more bridge stress than twice that weight properly distributed over a longer vehicle.

This is why the legislation under consideration would replace the present arbitrary gross-weight limit of 73,280 pounds with a scientific "bridge formula" developed and advocated by the Bureau of Public Roads and endorsed by the American Association of State Highway Officials.

Adoption of this formula will assure that any increases in gross weight which might be allowed by a State in the future would not create undue stress on bridge structures.

That brings us to the question of width.

The present Federal law provides a limit of 96 inches for motor vehicle width. The bill would increase the limit to 102 inches, as recommended in the 1964 report to Congress by the U.S. Bureau of Public Roads.

This increase of 6 inches would make it possible to increase the cubic capacity of cargo-carrying vehicles, and this has become increasingly important since a large portion of today's freight is light and bulky, and the cargo space frequently becomes filled long before maximum weight limits are approached.

Of equal importance, if not greater importance, a 102-inch width would make it possible to build a safer and more efficient vehicle. This was recognized 22 years ago in the 1946 AASHO Code, which recommended 96 inches for the roads in existence at that time, but suggested that as more modern roads were built, it would be better to allow 102 inches because of "... certain conditions inherent in the design of vehicles."

A 102-inch width would make it possible to mount more adequate tires; to space them better for cool running; to have adequate springs, and larger capacity brakes on an adequate frame. In addition, it would permit marked improvement in vehicle stability by increasing the lateral spacing of the springs.

The proposed 6-inch width increase also would enable the trucking industry to adjust to the distinct trend toward shipment of commodities in multiples of 8 feet.

For example, plywood is shipped in sheets of 4 feet wide by 8 feet long. Wallboard, sheetrock, and other similar products also come in this size. Many other items are shipped in cartons designed to be 4 feet wide, and these in turn are placed on pallets of the same width.

It is obvious, of course, that two 4-foot-wide sheets cannot be carried flat side by side in a van-type trailer which itself is only 8 feet wide