twelve-foot lane is the minimum width needed to accommodate a vehicle 102 inches wide.

Despite the glamour of the Interstate highway network, some 88% of our state Primary highways are two-lane, and the bulk of our travel is now and will continue to be over such two-lane roads.

Since the legislation before you would permit a vehicle over 102 inches, it will permit vehicles which are obviously too wide for the traffic lane. This creates a tremendous safety hazard. Over 70,000 miles of state primaries are two-laners with lane widths of less than ten feet.

VEHICLE WEIGHTS

Increases in axle weights have had direct and inevitable effect on the life of pavements and on the safety of bridge structures. H.R. 14474 would permit the maximum single axle weight to be increased from 18,000 lbs. to 20,000 lbs., and the tandem axle limit to be increased from 32,000 lbs. to 36,000 lbs.

Only eight out of every one thousand motor vehicles are truck combinations of four or more axles. Yet this small number of trucks places an additional burden on highway and street systems which has caused a substantial increase in the cost of future road construction in order to accommodate their particular needs. The small proportion of vehicle population is also a major factor in maintenance costs of existing highways and streets.

If the weight of trucks and combinations is further increased, existing roads and streets will deteriorate at an accelerated rate. The cost to replace bridges and roads thus prematurely destroyed will become an increasingly heavy tax burden on the operators of 78 million passenger cars and the 14 million light truck owners whose needs do not require these heavy facilities but who bear the major share of the cost of providing and maintaining them.

A pavement evaluation survey conducted by the American Association of State Highway Officials indicates that increasing the axle weights to those permitted under H.R. 14474 would reduce existing pavement life 20% and increase resurfacing costs 30%.

The 1968 Cost Estimate adds $1 billion to the 1965 Cost Estimate to accommodate heavier and more frequent truck loadings than originally forecasted. It is noteworthy that this increased cost was based on existing truck sizes and weights. If sizes and weights are increased, the $1 billion figure will have to be increased.

When a bill similar to H.R. 14474 was considered in the Senate, Senator John Sherman Cooper (R-Ky.) requested the Bureau of Public Roads to provide an estimate of the cost if axle limits were moved to the 36,000-lb. limit. He was advised that the increased cost for the Federal-aid road system would be more than $3.7 billion. The cost of increasing the weights to a 34,000-lb. maximum was set at $1.8 billion. The 34,000-lb. limit has been passed by the Senate. Total additional cost could reach $4.7 billion, depending upon the weight limit. This includes the cost of new construction as well as the necessary costs of upgrading construction already in place.

BRIDGES

The ability of a specific road network to accommodate trucks of a given size is to a great extent limited by the ability of the bridges to carry the sizes and weights operating over that system. Even the newest of our bridges—those on the Interstate System—have been designed to accommodate vehicles with axle weights no greater than 18,000 lbs. single, 32,000 lbs, tandem. Bridges designed to to less than this standard cannot accommodate the 18,000–32,000 lb. loads already encountered without overstresses which reduce the safety margin designed into the bridge.

In testifying before the Senate Public Works Committee on the subject of bridge design, Mr. Frank C. Turner, Director of the Bureau of Public Roads, indicated that increases to a 34,000-lb. tandem axle from the present limit of 32,000 lbs. would overstress Interstate bridges by 32 to 36%. He further indicated that the majority of bridges on our Primary and Secondary Systems are less than H–15 design. This is a bridge to carry a 15-ton load. Overstress on these bridges, brought about by increases in axle weights, would be much greater than on the Interstate bridges which are designed for heavier loads.