

This analysis indicated that any increase in maximum loading, such as is proposed from 18,000 to 20,000 pound axle loads, will result in a reduction of our pavement life, dependent on the type of pavement under consideration, and present bridge structures are of marginal adequacy for loads being carried at the present time. Forty-three percent are designed for H-20, which is a modern loading, and the balance, or 57 percent are designed for some lesser loading. It should, therefore, be obvious that we can expect increased maintenance costs and possible bridge failures if loads are substantially increased over those presently allowed.

The adoption of the 102 inch width would certainly be a safety consideration so far as 46 percent of the bridges being 24 feet or less in width. Also, Iowa has at the present time, some 1,600 miles of 18 foot pavement on the primary road system. In addition 1,000 miles of pavement is only 20 feet in width, and some 1,400 miles of pavement is only 22 feet in width. Some of these older, narrower pavements also have curbs which serve to reduce the effective width of pavement. Wider vehicles using these narrow pavements will represent some compromise in highway safety.

Testimony based on a study by the Motor Carrier Safety Bureau was recently given before the Federal Congress indicating that heavy commercial vehicles, even under present width limitations, do represent a higher accident exposure than normal vehicular traffic.

The mileage death rate for all motor vehicles for 1966 was approximately 5.7 deaths per 100 million vehicle miles of travel. The Bureau of Motor Carrier Safety study, however, reveals that the mileage death rate for inter-city movements of heavy commercial carriers was 12.4 deaths per 100 million vehicle miles.

The heavy inter-city truck is finding itself involved in more than twice as many highway fatalities on a rate basis as the normal traffic using our highway system. Certainly any increase in dimensions of vehicles will not reduce this level of accident occurrence.

It must be recognized that an increase in either weight or dimension of vehicle does not represent a substantial benefit to a majority of the commercial vehicles using our highways. A bread truck is never inconvenienced by an axle-load limitation. The average large truck combination encountered on our highways according to national surveys, is carrying less than 15 tons of load. The vehicle to whom the limitation in axle weights represents an inconvenience is a very small part of the total traffic stream. It seems inconsistent to compromise the level of service to the entire traveling public for benefit to such a small portion of the vehicles in the traffic stream. This is especially true in regard to the increased axle weight which has such a pronounced effect on the life of our highway facilities.

It must also be recognized that increased costs in freight handling occasioned by a limitation of axle loads are ultimately paid by the consumer for whom the freight was being transported. These costs are not absorbed by the trucking companies. They are passed on to the consumers who are the same people who ultimately are paying the costs of the highway. Their interest is best served by paying the incremental costs on the products transported rather than allowing the heavier loads to accelerate the destruction of their highways. The only benefit from heavier loads would be a betterment of the competitive position of the trucking industry with respect to other modes of transportation and freight handling.

The Federal Government has in the past been reluctant to approve designing for loads based on loading formulas greater than those currently allowed by state and federal statutes. We have attempted in the past, on occasion, to design heavier pavements to test their performance. This has been denied by the Bureau of Public Roads on the basis of lack of justification.

If the dictates of commerce and the economic benefits to be derived from carrying greater loads on the highways are in the best interests of the people of the State of Iowa, and if the legislature should see fit to encourage the hauling of greater loads on our highways, it would seem then to be necessary for them as a part of the same consideration, to provide those increased funds necessary to offer this higher level of service from our highway system. With the greater revenues provided and with the objective that heavier loads were to be allowed, then we could start building a highway system that at some point in the future would be capable of carrying such loads. That primary system does not exist today.