

The cost of the highway adequate for the basic vehicle is allotted to all of the vehicles on a uniform basis, and the successive additional structural costs are assigned successively to those vehicle groups that require the heavier construction increments.

No cost allocation method actually gives a final and indisputable answer for the problem has many ramifications, but the incremental method is so thoroughly grounded in results of highway engineering research and logic, that its findings command respect and confidence.

Basically, the incremental method shows that the larger trucks, even at their present sizes and weights, and not those that would be allowed under S. 2658, do not pay their total share of the highway cost.

We also observe that the trucks count their Federal excise taxes as part of their contribution to highway financing, and this is not the case for the automobile component of highway traffic, although cars too pay such excise taxes.

We do not raise this as a criticism, but point it out as a fact.

In all four methods that were probed by the Bureau of Public Roads in the 210 study, two basic facts appeared: (1) that the heavier trucks and truck combinations should be paying more in relation to the payments made by the lighter trucks, and (2) that vehicles using diesel fuel generally should be paying more than like vehicles using gasoline.

It was noted that the 210 study recommended that the findings of the differential-benefit study should be used to supplement those of the incremental study, but they should not replace the incremental findings nor is there any reason for averaging the cost allocation indications given by the two methods.

Permissible axle-load and gross-load limitations must, of economic necessity, be related to the capabilities of the pavements and the bridge structures to carry such loads and survive for a reasonable life expectancy.

Any contemplated revisions in such load limitations also must be viewed from the effects that they will have, not only on new construction, but on existing facilities which must remain in service.

Some significant results were obtained from the AASHO road test project regarding the reduction in pavement life that can occur from an increase in axle loadings.

The work at the project developed a method whereby various loads can be brought to a common denominator, such as equating any axle load with relation to the "equivalent number of 18,000-pound, single-axle load applications." The results of such studies indicated that the increase from the 18,000-pound to the 20,000-pound load can result in an average loss of the remaining life of between 25 to 40 percent. To increase it to 22,000 pounds can result in the loss of pavement life of close to 60 percent. To increase it to a 24,000-pound, single-axle loading can result in the loss of remaining life of about 70 percent.

In reviewing the effect of increased tandem-axle loadings, they should be equated as against their "companion single-axle loadings," that was also developed from the road test project.

The most part of our main highway system was designed for a maximum 18,000-pound, single- and a 32,000-pound, tandem-axle loading. In fact, this was the recommendation of our 1946 policy, and it is still