

latter period, since enactment of the 1956 Act, the annual average increase was 555 miles.

There is a substantial variation in annual miles per power unit by sections of the country. In New England for example the average annual miles per power unit was 39,000 in 1965 compared to an average of 87,000 in Rocky Mountain region. These differences reflect the greater distances that commodities must move in the West to reach markets.

*Question 8. What has been the increase of the gasoline mileage and the consequent savings of the cost of gasoline?*

Answer. When comparing fuel consumption on our older roads with consumption for travel on the Interstate System, there are several factors involved which tend to cancel out potential savings. Primarily, it is a case of higher rates of fuel consumption associated with increased speeds. As is the case with an automobile, trucks consume more fuel at high speeds than they do at lower speeds. Thus, while the elimination of stop-and-go driving on the older roads, with the attendant high consumption rates, will improve trucking fuel efficiency, the higher operating speeds on the Interstate System result in more fuel being used. On balance, then, these factors tend to cancel each other out.

*Question 9. What has been the reduction of cost of maintenance of trucks?*

Answer. There have been no significant changes in maintenance costs for the trucking industry since 1956. Improved vehicles and components have helped to keep costs down in the face of general increases in wages, parts, etc. Put another way, better, and more expensive vehicles, have given better service overall at relatively lower maintenance costs per mile.

The higher sustained speeds achieved on the Interstate System place greater stresses on engines, drive trains, cooling systems and bearings than is the case with operation on older roads at lower speeds. On the other hand, the reduction in the number of gear changes and brake applications, and the better roadway surfaces on the Interstate, result in less wear on transmissions, clutches, and suspensions. On balance, it appears that the savings through Interstate operation are balanced by the increased wear on some vehicle components.

It must be remembered, however, that the vehicles the trucking industry is using today are not engineered and designed for the type of operations truly possible on modern highways such as the Interstate System. We cannot achieve the fullest efficiency in vehicle operation until the size and weight ban is lifted and the vehicle can be matched to the road.

*Question 10. What has been your experience on the longevity of tires?*

*Question 11. Can you give us the average life in number of miles of truck tires for 1930, 1940, 1950 and 1960, as well as recent figures? How much of a saving has this item been to the trucking industry?*

Answer. A single answer is possible for these questions as they deal with tire wear and expense. There would be much variance between the actual mileage figure for truck tires in general. The type of operation, plus the brand, type, and grade of tire used all affect tire wear so that it is impossible to give a tire mileage figure which would be generally accurate industry wide. To avoid getting into meaningless numbers, it is best to say that in the past 30 years tire mileages for any operation have increased at least five times. It is well to note that not only have tire mileages increased but the loads and speeds which a tire will safely handle have also been increased.

The reason that the rate of tire wear has decreased and the speed and loads which a tire will safely handle have increased over the 30 year span is that roads and restrictions on trucking have changed, enabling the trucking industry to update its operations and giving tire manufacturers reason to develop different and better tires.

Changes in highways have resulted in better tire economy. Changing the road from a crowned, curvey, hilly section to the relatively flat, straight type of construction used for modern highways has changed the causes of tire wear and created the need for different types of tires. The older roads where crowns and curbs at the side of the road were common, caused tire wear through crown induced load transfer and direct, harsh abrasion caused by the curbs. Those problems don't exist on the Interstate System but the speeds which can be maintained on the Interstate System cause different types of tire wear problems.

The trucking industry today is using the best tires the manufacturers have ever been able to offer. As with any piece of fine equipment, however, the benefits of those tires can only be realized through their use. Utilization is the key to deriving maximum benefits from tires, then, and it is in the area of optimum