

24. The results of these investigations in respect of concrete slab roads further show that roads would have to be built of a certain minimum thickness if there were nothing heavier than ordinary passenger cars or farm trucks operating on them. This minimum thickness is determined not by the effects of any vehicular loads, but by the effects of climatic forces due to moisture, temperature, and, in certain parts of the country, frost conditions, which are constantly at work upon the road surface. The conclusion arrived at is that the minimum thickness required for resistance of these natural forces is greater than that required for the support of ordinary passenger vehicles and small trucks.

25. The abolition of the license fees for Classes A and B would have a further practical advantage. It was strongly contended by the Farmers' Union, and this was, in fact, the main point to which they directed their evidence, that the present system of license fees was unjust to the farmer, because he used his lorry so little in comparison with the commercial user, and because he alone of all lorry-users was unable to pass on the cost of his license or part of it to the consumer of motor transport. Mr. Polson, the representative of the Farmers' Union, informed us, however, that in his opinion an exemption from the tax of vehicles up to 3 tons gross weight would be "somewhere about" enough for the farmers' purposes. The arguments of the Farmers' Union for the exemption of farmers' lorries have some merit, but while not admitting the entire soundness of their reasoning in seeking exemption, we need not discuss the matter further because we are recommending what the Farmers' Union desires, though largely for different reasons.

26. In compiling the new scale of license fees which we recommend, we have had the benefit of the advice of the Chairman of the Highways Board, to whom we express our thanks for the time he has placed at our disposal. The old scale is based on vehicles with non-pneumatic tires, with allowances for pneumatic-tired vehicles. As the former are now almost obsolete, we have based our new scale on the pneumatic-tired vehicle, retaining the old scale for other types. It is obvious that a provision of this nature is essential, because of the damage done by the solid-tired lorry. In view of the fact that the six-wheeled vehicle has many advantages in distributing the weight of a load, and reducing wear of road surfaces, a greater allowance should be made for it than formerly was the case in adjusting the scale of fees. The wear of the roads is roughly proportionate not to the gross weight of the vehicle, but to the wheel load, combined with other factors, and this is sufficiently close in practice to the axle load, so in the six-wheeled vehicle an allowance of $33\frac{1}{3}$ per cent. should be made in the tax on the gross load to conform to this principle. We commence our new scale of fees at £7 10s. per annum for the pneumatic-tired four-wheeled vehicle in Class C (3 to $3\frac{1}{2}$ tons gross weight), and rise to £65 for the vehicle in Class P ($9\frac{1}{2}$ to 10 tons). We think the tax of £7 10s. is sufficient for Class C, and, as regards the heavier vehicles, our only doubt is whether these undesirable types pay enough: their number, however, is very small, there being only 1.17 per cent. of the total number of heavy vehicles of 8 tons gross weight and over. If vehicles in the heavier classes tend to increase in number, a revision of the scale may become necessary, because of the greatly strengthened roads that are necessary for their carriage.

MOTOR-OMNIBUSES.

27. In the case of the motor-omnibus the present scale of taxation is unjust and illogical. We are aware that the case for heavier taxation of these vehicles is based on the assumption that the mileage run by them is in excess of that run by the motor-truck; but this idea is not sound, because once the heavy motor-vehicle tax has been paid any extra running is adequately accounted for by the petrol-tax, which is exactly adapted for the purpose. Once the road has been built to the necessary standard for the heavy vehicle—which is the justification for the heavy-traffic fee—any additional wear due to extra running is paid for by the petrol-tax. To this extent, we think the contention of the Motor-omnibus Proprietors' Association is sound. We consider, therefore, that passenger vehicles should be on the same footing as regards the heavy-traffic fees as the goods vehicles. We shall refer later to the special aspects of the case for the Christchurch Tramways Board.

28. We attach an appendix setting out in detail the new scale of fees which we advise.

FINANCIAL EFFECT OF NEW SCALE.

29. The present amount derived from heavy-traffic license fees is £178,000, and this becomes part of the revenue of the local bodies controlling roads. If our recommendations are given effect to, there will be an estimated loss of revenue of £46,000, a sum equivalent to one-quarter of the whole fund, made up as follows:—

Estimated Yields.

	New Scale.	Old Scale.	Difference.
	£	£	£
Trucks	117,000	146,000	29,000
Passenger vehicles	15,000	32,000	17,000
	132,000	178,000	46,000

We do not think this loss of revenue should be borne by the local authorities. In the case of counties and smaller boroughs, this is the only fund (except, since 1931, the annual subsidy on rates) through which motor traffic contributes to the upkeep of roads and streets other than highways, and this