

The sharp increase in motor-vehicle petrol-consumption for 1947 is due mainly to the lifting of the wartime rationing on 1st June, 1946, and the additional number of vehicles on the road. The average annual petrol-consumption per vehicle for 1946 amounted to 261 gallons, as compared to 280 gallons for 1947.

Petrol-consumption for other purposes in 1947 has risen to approximately one-third over the figure for 1946; this is accounted for by an extension in farm mechanization, expansion of commercial aircraft services, the revival of aero-club-flying activities, and a considerable increase in petrol-driven plant and machinery used on general construction and road maintenance work.

ROADS

LIMITATION OF LOADS ON ROADS AND BRIDGES.—In most districts the rural roads have been classified according to their suitability for carrying heavy wheel loads. The classes of road are Class Three, where the maximum axle load permitted is $5\frac{1}{2}$ tons; Class Four, axle load 4 tons; and Class Five, with 3 tons as the maximum allowable axle load. In the case of multi-axled vehicles or trailers this limit in each class is reduced by one-half ton.

While on the one hand the lightly surfaced roads must be protected from undue damage by heavy wheel loads, on the other hand any reduction in the gross load of a vehicle can be effected only by reducing the pay-load. Such reduction will result in increased mileage to carry the same amount of goods, and thus an increase in transport costs and in charges to the user.

CONDITION OF BRIDGES.—Due to the serious condition of many of the older timber bridges throughout the Dominion, a great number of roading authorities have imposed special limits upon the loads to be carried by the bridges. In some instances these load-limits are very restrictive and will have the effect of seriously curtailing loads over the routes upon which the bridges are situated.

In a country as dependent as New Zealand is upon motor transport such restrictions upon the normal loading of heavy vehicles over important arterial routes, as well as secondary highways and purely local roads, will interfere drastically with the movement of produce and goods and will seriously affect the economy of the country.

ROAD USAGE.—Traffic volumes during 1947 (calendar year) are estimated to have exceeded the volumes of 1946 by 17 per cent., and, in fact, have exceeded the previous peak volumes reached in 1939 by some 10 per cent. These estimates of traffic are based upon the annual consumption of petrol by motor-vehicles, which in 1947 reached the highest figure yet attained.

ROAD FINANCE

DOMINION'S ROAD BILL, 1935-36 TO 1938-39, INCLUSIVE, AND 1943-44 TO 1945-46.—The Department has abstracted from various official sources the statistical data relating to road finance and analysed it to show the approximate cost of roads, streets, and bridges under the headings of construction, maintenance, and loan charges. The expenditure has been apportioned in the three primary groups of roads, &c.—namely, main highways, urban roads and streets, and other (rural) roads. To obtain the mileages of these groups some estimation has been necessary, as with certain aspects of the figures for the whole road bill. Any estimations have been conservatively made, and the figures are sufficiently close to accuracy to form a reliable basis for broad conclusions.

The road bill for the year ended 31st March, 1946, is the latest figure that can be computed from complete available information. It differs materially from pre-war road bills in that practically no construction was carried on during the war years, and