(c) Classification	n of	State	Highways	(Rural	Sections)	at	31st	March,	1949
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	Area.			State Highways.	Class Three.	Class Four.	Class Five.	Total Classification
North Island South Island				Miles. 2,966 2,150	Miles. 1,533 1,900	Miles. 1,262 48	Miles. 80 10	Miles. 2,875 1,958
Totals		••	• •	5,116	3,433	1,310	90	4,833

The present scale of weight-limits on classified roads is contained in the Heavy Motor-vehicle Regulations of 1940. Since these limits were fixed there have been changes in the design of heavy vehicles and also in the character of road transport. Longer hauls and other factors have created a demand for increased pay-loads, and the average gross weight of the licensed goods-service vehicle has risen from 4.69 tons in 1935 to 7.59 tons in 1948. On the other hand, due to lack of new construction and inadequate maintenance of surfaces during the war years, there has been some deterioration in the general standard of the roads.

Both roading authorities and those concerned in the use of heavy motor-vehicles have pressed for a review of the load restrictions at present in force having regard on the one hand to the needs of road transport and on the other to the preservation of existing road surfaces. A conference of all parties interested was held in Wellington during August, 1948, and subsequent discussions which have taken place have resulted in the formulation of certain proposals for amending the system of classifying roads. These proposals have been circulated to all concerned and it is hoped that a reasonable solution will be found.

LIMITATION OF LOADS ON BRIDGES.—Many of the timber bridge structures, of which there are still a large number throughout the roading system of New Zealand, have seriously deteriorated through age.

Roading authorities have been handicapped through lack of steel and cement with which to rebuild and through shortages of skilled labour and timber to keep up the maintenance of old bridges. As a result it has been found necessary to impose special weight and speed restrictions upon vehicles using a large number of bridges. Such restrictions are undoubtedly necessary for the safety of present structures, but until an extensive programme of replacement and strengthening is undertaken, and until the present-day arrears of maintenance are overtaken, transport by road of both goods and passengers will be seriously hampered.

TRAFFIC Engineering.—Technical advice has been given to local authorities, where so requested, on provision of traffic facilities and problems of traffic movement, parking, and congestion.

An automatic vehicle volume counter has been designed for the Department by the Dominion Physical Laboratory, and the first instrument produced has been in constant use. The counter records the number of vehicles passing a given point during half-hourly intervals, and, while different types of vehicles cannot be recorded, the daily number of vehicles and the variation in flow during the day can be tallied without the heavy drain upon man-power that is needed for manual counts.

The Physical Laboratory has also produced a micro-wave speed-measuring device which is being used for measuring the speed of vehicles as they pass along the road in the vicinity of this equipment. This device is being used extensively in determining traffic speeds at various locations, but also in checking excessive speeds of heavy motor-vehicles.

ROAD USAGE.—The volume of traffic using the roading system of New Zealand during 1948 continued at a high level.