

Classification of Main Highways.

			Main Highways.	Class II.	Class III.	Class IV.	Class V.	Total Classi- fication.
			Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
North Island .. ..	..	..	5,881	382	1,888	2,362	409	5,041
South Island .. ..	..	..	4,661	824	2,223	173	..	3,220
Totals .. ..	..	..	10,542	1,206	4,111	2,535	409	8,261

From the above table it will be seen that of the 8,000-odd miles of highways classified 50 per cent. are Class III roads, 30 per cent. Class IV, 14 per cent. Class II, and 6 per cent. Class V.

As pointed out in last year's report, the general policy is to adopt Class III as the maximum classification for the rural roads, and these figures make it clear that this policy is receiving more or less general support from the road controlling authorities.

(b) TIRES.

Under the regulations, tires are divided into three main classes—viz., solid tires, super-resilient tires, and pneumatic tires—and the speed-limits and heavy-traffic fees are so fixed as to encourage the use of pneumatics as is shown in the following table :—

Heavy Motor-vehicles other than Passenger-vehicles.

Class and Gross Weight.	Speed-limits.			Heavy-traffic License Fees.					
	Solid.	Super- resilient	Pneumatic.	Solid.	Super- resilient.	Pneumatic.			
	M.p.h.	M.p.h.	M.p.h.	£	s.	d.	£	s.	d.
Class E, 4½ tons	12	12	25	20	0	0	18	10	0
Class I, 6½ tons	12	12	20	36	0	0	33	6	0
Class P, 10 tons	12	12	15	75	0	0	69	7	6

During recent years there have been big improvements in practically all branches of truck design, but the most impressive advances have been in tire equipment. To quote one transport authority : " The rapid obsolescence of the solid tire is one of the most significant recent developments in motor transportation. Substitution of pneumatics, and particularly of low-pressure tires, make possible the carrying of heavier loads in lighter vehicles at greater speed and with less destructiveness both to vehicles and to road-surfaces. Between 1921 and 1931 the proportion of annual truck-production which was equipped with solid tires decreased from 28 per cent. to 3·1 per cent. Less than 5 per cent. of the heavier trucks and buses manufactured and equipped with pneumatic tires in 1928 carried low-pressure tires, but by the end of 1931 about 90 per cent. of these vehicles were so equipped. The tendency in the matter of tire equipment is clearly towards exclusive use of pneumatics with a preponderance of balloon tires in trucking operations which utilize the rural highways."

The Department is at present carrying out investigations in connection with pneumatic tires, and, although these investigations have not yet been completed, it is clear that tire-pressures have a most important bearing on the thickness of road-surfaces required to carry various axle loads.

The encouragement of the low-pressure tire on the heavy commercial vehicles is most desirable, and it appears that as a result of the investigations it may be proved that special concessions in relation both to taxation and weight restriction are warranted.

(c) SPEED.

Due largely to the provisions of the Transport Licensing Act, 1931, under which all licensed passenger-service vehicles run to time-table as set out in the license, the speeds of heavy motor-vehicles for the carriage of passengers may now be considered reasonable and the schedule of speeds as set out in the regulations are well observed. The position in regard to the speed of goods-trucks, however, is far from satisfactory, and, in general, there is very little observance by these vehicles of the speed-restrictions. If this practice proceeds unchecked, the deterioration of the non-dustless rural roads will be accelerated, with serious effects on road transport generally.

(d) ALLOCATION OF HEAVY-TRAFFIC FEES.

For the purpose of these regulations, New Zealand is divided into nineteen heavy-traffic districts, and the heavy-traffic licenses fees collected in each district are shared among the various local authorities in that district. The original regulations provided that if the local authorities were unable to come to an amicable agreement among themselves as to the allocation of these fees the whole matter was to be submitted to a Magistrate, who would then make the allocation, taking into