H.—40.

Table B. Comparing the Highway Mileage, Motor-vehicle Use, and Traffic Density on the North and South Island and New Zealand Main Highway Systems in 1937-38 and 1934-45.

Main Highway System,	Main-high	way Mileage,	4	Average Traffic Density.					
	Miles.	Percentage of Total Mileage,	Vehicle-miles,		Percentage of Total Mileage.		Motor-vehicles per Day.		Per- centage In-
	1937-38, 1934-3	5. 1937-38. 1934-35.	1937-38.	1934 35.	1937- 38.	1934-35.	1937–38.	1934-35	crease in Den- sity.
North Island South Island	$\begin{bmatrix} 6,478 & 6,206 \\ 5,232 & 4,970 \end{bmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	578,906,425 306,387,205	377,439,930 216,267,245	$65 \cdot 39 \\ 34 \cdot 61$		$244 \cdot 8 \\ 160 \cdot 4$	$\begin{array}{c} 166\cdot 6 \\ 119\cdot 2 \end{array}$	46·93 34·6
New Zealand	11,710 11,176	100.00 100.00	885,293,630	593,707,175	100.00	100.00	207 - 1	145.5	42.3

(3) Comparisons between Highway Districts in respect of Utilization of the Main Highways.

The highway districts where the volume of traffic is most dense are the Wellington West District, with an average density of 435 motor-vehicles per day, and the Auckland South District with 378 vehicles per day. The districts where the main highway traffic is most sparse are the King-country Highway District with an average traffic density of 112 motor-vehicles per day (74 in 1934–35) and the West Coast District (South Island), where the density is 116 per day as compared with 81 in 1934–35.

The district showing the greatest increase in traffic was the Canterbury North Highway District. In this area the average density of traffic on the main highways in 1934-35 was 72-1 motor-vehicles per day, while in 1937-38 the average reached 125-7 vehicles daily. Auckland South, Wellington West, and King-country were other highway districts where large increases were experienced. The district recording the least increase in traffic was the Gisborne Highway District, covering the whole of the Poverty Bay area and extending as far south as Wairoa. Here the traffic density averaged 133 vehicles per day in 1934-35 and 144-3 in 1937-38, the increase being only 8½ per cent.

Table C.—Main-highway Mileage, Vehicle-mileage, and Traffic Density: Comparison between 1937–38 and 1934–35.

Highway District.			Main-highway Mileage.			Daily Vehicle-miles on Main-highway System.			Average Traffic Density.		
No.	Name.		1937–38. Miles.	1934–35. Miles.	Percent- age Increase.	193738. Vehicle- miles.	1934–35. Vehicle- miles.	Percent- age Increase.	1937–38.	1934 - 35,	Percent- age Increase.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Auckland North Auckland South Tauranga Gisborne Napier King-country Taranaki Wanganui Wellington West Wellington East Nelson West Coast Canterbury North Canterbury South Otago Central		$egin{array}{c} 949 \\ 1,203 \& \\ 704 \& \\ 392 \& \\ \hline 714 \& \\ 449 \\ 5094 \& \\ 477 \\ 484 \& \\ 650 \& \\ 528 \& \\ 330 \& \\ 728 \& \\ \hline 820 \& \\ 820 \& \\ 820 \& \\ \hline \end{array}$	$\begin{bmatrix} 930^{\frac{1}{3}} \\ 1,022 \\ 680^{\frac{1}{3}} \\ 362^{\frac{1}{3}} \\ 702 \\ 652^{\frac{1}{3}} \\ 442^{\frac{1}{3}} \\ 455 \\ 474^{\frac{1}{3}} \\ 640^{\frac{1}{3}} \\ 330^{\frac{1}{4}} \\ 668 \\ 737^{\frac{1}{3}} \\ 749^{\frac{1}{3}} \\ 749^{\frac{1}{3}} \end{bmatrix}$	1.9 17.7 3.5 8.2 1.8 1.5 5.4 4.8 2.1 1.5 1.6 0.2 9.1 6.6 9.4	152,620 455,398 151,312 56,652 174,436 66,296 132,456 111,892 207,674 77,309 88,329 41,572 169,891 135,882	111,961 246,062 99,896 48,252 128,923 48,241 93,837 73,320 126,756 56,834 61,160 41,932 23,819 112,373 103,036 72,931	36·3 85·1·5 17·4 35·3 37·4 41·2 52·6 63·8 36·0 44·4 46·7 74·5 51·2 31·9 50·9	160 · 8 378 · 4 214 · 9 144 · 3 244 · 1 111 · 6 295 · 0 219 · 8 435 · 4 159 · 7 135 · 8 116 · 5 125 · 7 233 · 2 172 · 8 134 · 0	120 · 4 240 · 8 146 · 8 133 · 0 183 · 7 73 · 9 212 · 1 151 · 7 278 · 6 119 · 8 95 · 5 80 · 7 72 · 1 168 · 2 139 · 6 97 · 3	33·6 57·1 46·5 8·5 32·9 51·0 44·9 56·3 33·3 42·2 44·4 74·3 38·6 23·8 37·7
17 18	Otago South		5084 8784	165 859	$\begin{array}{ c c c }\hline 9 \cdot 3 \\ + 2 \cdot 3 \\ \end{array}$	100,646 131,549		$22 \cdot 1 \\ 38 \cdot 7$	197·8 149·7	177 · 1 110 · 4	11·7 35·6
	New Zealand		11,710	11,176	4.8	2,425,462	1,626,595	49.1	207 · 1	145.5	42.3

^{*} The decrease in this case is occasioned by a change in the boundary between the Nos. 2 and 6 highway districts.

(4) Distribution of Traffic Density on the Main-Highway System.

Table D classifies the main highways according to traffic density. Thus 5,177 miles, or 44 per cent. of the total mileage, carried less than 100 vehicles per day; 9,578 miles, or 82 per cent., carried less than 300 vehicles per day; and 10,646 miles carried less than 500 per day. Only 195 miles, or less than 2 per cent., carried over 1,000 vehicles daily, and 7 miles carried more than 2,500.

In 1934–35 there were 6,037 miles, or 54 per cent., carrying less than 100 vehicles per day; 9,821 miles, or 88 per cent., carrying less than 300; and 10,654, or 95 per cent., carried less than 500 per day. There were only 75\frac{1}{4} miles carrying more than 1,000 vehicles per day, and only 1\frac{1}{4} miles with a density in excess of 2,500.