Table J.—Estimated Annual Movement of Goods on Main-highway System.

Highways District.	Mileage.	Ton-mileage of Goods Annually.					Average Daily Tons carried by Main-highway System.
		L Plate Trucks.	Classes A to E.	Classes F to I.	Classes J to K.	All Trucks.	
Auckland North	930¾	1,725,355	4,978,600	2,232,340	106,580	9,042,875	26·6
Auckland South	1,022	3,960,615	5,930,155	8,846,505	1,361,450	20,098,725	53·9
Tauranga ..	680¾	1,747,255	3,044,100	2,903,210	657,730	8,352,295	33·6
Gisborne ..	362¾	532,535	1,342,470	2,290,375	298,570	4,463,950	33·7
Napier	702	2,167,005	2,435,280	4,274,880	1,600,890	10,478,055	40·9
King-country ..	652½	688,390	1,884,130	1,857,120	37,960	4,467,600	18·8
Taranaki ..	442½	1,484,455	1,468,395	3,320,040	840,230	7,113,120	44·0
Wanganui ..	483¼	950,460	1,236,620	2,224,310	734,380	5,145,770	29·2
Wellington West	455	1,806,750	1,680,095	4,459,570	1,853,470	9,799,885	59·0
Wellington East	474½	884,030	1,504,165	2,308,260	663,570	5,360,025	30·9
North Island	6,206	15,946,850	25,504,010	34,716,610	8,154,830	84,322,300	37·2
Nelson	640½	1,321,665	1,355,610	2,003,850	1,146,830	5,827,955	24·9
West Coast ..	519¾	824,535	1,369,480	2,659,390	646,780	5,500,185	29·0
Canterbury North	330¼	309,885	325,580	774,165	427,780	1,837,410	15·2
Canterbury Central	668	1,658,195	1,691,410	2,556,825	1,266,550	7,172,980	29·4
Canterbury South	737½	1,751,270	1,229,320	2,484,555	507,350	5,972,495	22·2
Otago Central ..	749¾	1,295,020	1,147,560	1,728,640	256,960	4,428,180	16·2
Otago South ..	465¼	1,418,025	1,354,515	1,861,500	346,750	4,980,790	29·3
Southland ..	859	1,812,955	1,854,930	3,991,275	834,390	8,493,550	27·1
South Island	4,970	10,391,550	10,328,405	18,060,200	5,433,390	44,213,545	24·4
New Zealand	11,176	26,338,400	35,832,415	52,776,810	13,588,220	128,535,845	31·5

(*i*) The Effect of Traffic upon the Maintenance-cost of Non-dustless Surfaces.

A comparison has been made of traffic densities and annual road-maintenance costs on non-dustless sections of the main-highway system. While it was found that extremely wide divergences of cost occurred on roads carrying similar volumes of traffic, sufficient data is available to establish the fact that the volume of traffic has a definite effect upon maintenance-costs of gravel and other allied types of surfaces.

It was not possible to analyse individual maintenance-costs according to the manner in which the expenditure was made, and hence the figure taken included, in addition to surface-maintenance, the cost of restoring damage from climatic causes and all other work undertaken under the description of maintenance apart from actual surface-maintenance.

It was found that there was a probable cost of about £35 per mile annually irrespective of traffic, but that with an increase of traffic there was a corresponding increase in the total maintenance-cost due to surface-wear. This figure amounts to 0·224d. per vehicle-mile in the North Island and 0·125d. per vehicle-mile on the South Island system.

The figures must, of course, be applied with caution, as varying conditions apply in different districts and on individual roads even in the same district. Important factors influencing costs are topographical and climatic conditions, costs of road metal, and varying standards and methods of maintenance.

The probable effect of traffic on the cost of maintenance of the North and South Island main highway systems is indicated by Fig. 8.