

I do not suppose my formula for reducing light to heavy traffic will escape criticism. It is a subject on which few people will agree. I trust, however, that the following will be accepted as not unreasonable. This formula is based on the definition of "heavy traffic" in section 139, Public Works Act, 1908, which is $1\frac{1}{2}$ tons to a pair of wheels. This, of course, means a dray $1\frac{1}{2}$ tons or a wagon or lorry 3 tons. I consider that a wagon or lorry is equal to two drays. A dray is usually equal to three light traps or carts. A light cart or trap usually can carry four people, and it is therefore equal to four bicycles. A motor-car may not be as heavy as a loaded wagon. It is often heavier than a dray, but as it has no horses, I conclude that its effect on the road when going at speed is equal to a dray. I therefore assess it as equal to a dray. I assess ten cattle or thirty sheep as equal to a lorry.

As already stated, the results of the tally of traffic shows that during the time it was taken 26,503 items of traffic used the road or parts of it. This number is equal to a use of the whole road of 12,364 items of traffic, and it is on this basis that the proportions of traffic in Result No. 1 are founded.

On exactly the same basis, and following exactly the same methods, but reducing all the traffic to an equality of heavy traffic in accordance with the above formula, I find that the 26,503 items of traffic are equal to the traffic of 3,575 lorries or wagons for the whole road, and the result as between the parties on this basis, which for the purpose of this report I shall call Result No. 2, is—

Wellington	..	..	..	..	1,693.04 = 47.36 per cent.
Petone	..	..	..	..	484.12 = 13.54
Lower Hutt	..	..	..	..	474.73 = 13.27
Hutt County	..	..	..	..	301.86 = 8.44
Onslow	..	..	..	..	108.26 = 3.03
Makara	..	..	..	..	355.50 = 9.95
Johnsonville	..	..	..	..	80.36 = 2.25
Miramar	..	..	..	..	9.56 = 0.27
Upper Hutt	..	..	..	..	55.58 = 1.56
Eastbourne	..	..	..	..	12.00 = 0.33
					3,575.01 100

Some of the parties contended that the true method of arriving at a ratio of traffic as showing its benefit to the various districts was to take the place of origin of the traffic. An attempt was made in taking the tally of traffic to ascertain the place of residence of the owners, but the return was not quite complete, owing to difficulties which the tally clerks experienced in obtaining the information. So far as it goes, it went to show that, not including bicycles, 17,467 vehicles, of which the owners are known, used the whole or parts of the road. The use of the road on this basis, which for the purpose of this report I shall call Result No. 3, was—

Wellington	..	..	..	..	7,640 = 43.74 per cent.
Petone	..	..	..	..	2,239 = 12.94
Lower Hutt	..	..	..	..	1,368 = 7.84
Hutt County	..	..	..	..	565 = 3.23
Onslow	..	..	..	..	2,228 = 12.75
Makara	..	..	..	..	2,425 = 13.90
Johnsonville	..	..	..	..	860 = 4.92
Miramar	..	..	..	..	30 = 0.17
Upper Hutt	..	..	..	..	58 = 0.32
Eastbourne	..	..	..	..	34 = 0.19
					17,467 100

This result is somewhat remarkable in so far as Wellington is concerned. It is almost the same as Result No. 1, and it is not very far removed from Result No. 2, and it is very close to the ratio of traffic for Wellington, as shown in Mr. Haselden's report, thus:—

Result No. 1	..	..	..	= 43.55 per cent.
Result No. 2	..	..	..	= 47.36
Result No. 3	..	..	..	= 43.74
Mr. Haselden's report	..	..	..	= 44.3

This clearly demonstrates the fact that at least 44 per cent. of the total traffic, or 47 per cent. of the heavy traffic, using the road either comes from or goes to Wellington.