Maintenance of Roads.

The maintenance of a road may be defined as the amount of work and materials required to keep it as nearly as possible in the same condition as it was when it was originally constructed.

Applying this definition to the metal- or gravel-road surfaces of this country, it is found that there has been a general deterioration amounting to approximately 33 per cent., and that the cost of restoring these surfaces to their original conditions would amount to approximately £5,000,000. Owing to the present financial stringency, the amount of money available for road-maintenance this year has been seriously curtailed, and it appears that, provided traffic conditions remain the same, this action will mean that the deterioration of the road surfaces will be accelerated.

As pointed out in previous reports, the condition of road-surfaces has a very material effect on motor-vehicle operating costs, and investigations carried out in the United States show that these costs are 8 per cent. higher on ordinary gravel than on best gravel surfaces.

It is estimated that the total annual running costs for motor-vehicles in this country, exclusive of capital charges, license fees, and insurances, amount to approximately £16,000,000, and of this amount approximately £10,000,000 is expended in travelling on the rural roads.

Taking into account the dustless surfaced roads and the 8-per-cent. increase in running costs, due to deteriorated surfaces, it is estimated that the extra cost to the motor operator, due to reduced maintenance, would, provided the total annual motor-vehicle mileage remained the same, amount to approximately £500,000.

The damages to gravel road-surfaces are due to climatic conditions and traffic, and it is estimated that as a general average the damage due to the former cause would amount to approximately 0·25 per cent. of the total. It is further estimated, as the result of a careful investigation, that a reduction in the average speed of motor-vehicles on rural roads by five miles per hour would result in a reduction in maintenance costs by over £250,000 per annum.

In view of the above facts the Department, in circularizing the proposed reprint of the Motor-vehicle Regulations, has included for consideration a maximum speed-restriction of forty miles per hour for all motor-vehicles, as it is considered that, apart altogether from the damage consideration, such a restriction would have a most beneficial effect in reducing the damage to road-surfaces by motor-vehicle traffic. Further, it is not considered that such a restriction would materially interfere with road transport, seeing that all commercial vehicles over 2 tons in weight are already subjected to speed-restrictions considerably below forty miles per hour.

The motor-vehicle operators themselves should realize that speed and weight restrictions are recommended only after very careful consideration, and that the cardinal principle of the "greater good to the greater number" is the prime consideration in any of these recommendations. To sum up, it may be stated that, with the limited funds available, unrestricted use of the rural roads by motor-vehicles will undoubtedly mean that these road-surfaces will rapidly deteriorate, and untimately the motorist will, of necessity, be restricted both as to speed and weight, while road transport costs will be materially increased. On the other hand, with reasonable restrictions of weight and speeds, the road-surfaces will be conserved, and road-transport costs kept at a reasonable figure, both as to vehicle-operation and road-maintenance. The main point is that excessive speeds mean high motor-operating costs, and high road-maintenance costs.

4. MOTOR-SPIRITS TAXATION ACT, 1927.

The motor-spirits tax was increased from 6d. to 8d. per gallon as from the 7th October, 1931.

The following data show the yield from and distribution of the petrol-tax for the year ended 31st March, 1932. The figures regarding the net yield for previous years are given for comparative purposes:—

(*a*) Yield.

	£
Gross yield	1,817,890
Deductions—	
Refunds and cost of making same	140,370
Net yield	£1,677,520

*Net Yield (*i.e., *Gross Yield less Refunds), Year ended 31st March.*

	£
1928	143,516*
1929	802,232
1930	961,907
1931	1,314,450†
1932	1,677,520‡
Total since inception of tax	£4,899,625

* Part year only. † Increase from 4d. to 6d. per gallon as from 22nd July, 1930. ‡ Increase from 6d. to 8d. per gallon as from 7th October, 1931.

There has been an increase in the applications for refunds since the tax was increased to 8d. There are two main reasons for this—firstly, the financial stringency due to the prevailing depression, and, secondly, the increase in the tax, which has now made it worth while for people to claim refunds that they did not worry about when the tax was 6d.