

It was gratifying to the Board to find during its recent tour that the general standard of maintenance on the highways traversed was very good indeed.

The replacing of one-way bridges on the principal main highways as part of the Board's programme and the magnitude and urgency of this work was very evident to the Board during recent inspections. This question will continue to be dealt with as fast as design can be arranged and finance made available.

The Board found evidence throughout its tours of continued good will and co-operation between the Board, the local authorities, and the motor organizations. Almost universally the last mentioned kept in close touch with the Board's representatives on highway matters of local import, and their views as representative of the road-users are often of great assistance.

Of particular gratification were the expressions from both local bodies and motorists of the high esteem in which the Board's representatives (the District Engineers of the Public Works Department) are held, and of the assistance and advice received from their officers.

In the course of the tours several important outstanding matters were the subject of discussions, and decisions finally arrived at of a satisfactory nature.

MEASURES TO PROMOTE ROAD SAFETY.

The Board has continued to give active assistance and co-operation to the New Zealand Road Safety Council with regard to measures calculated to make the highways system as safe as possible.

It is significant that while the percentage of accidents in urban areas has increased and on settlement roads has remained stationary that on highways has shown a reduction of 18½ per cent.

The prime consideration for promoting road safety is the geometrical layout. This aspect requires careful consideration to see that curves are properly transitioned and bear a suitable relationship to adjacent sections of highways. For instance, a 7-chain-minimum-radius curve joining two long flat tangents would be positively more dangerous than, say, a 3-chain-minimum-radius curve in rough topography. The same conditions apply to vertical curves at the junctions of different gradients.

All the other amenities, such as adequate paving width, shoulder width, superelevation, &c., are given due attention.

During the period some £12,179 has been spent on guard-fences. It has been estimated that 4 per cent. of the total length, or 500 miles, of guard-fencing is required on the highway system, and this is proceeding regularly as the more dangerous sections are reconstructed and placed on their permanent alignment. On certain sections in rough country where aesthetic considerations do not weigh, strong sheep-proof fences have been erected on the edge of the formation to serve the dual purpose of farm and guard fence. From the farmers' point of view this type often provides the only suitable fencing-line.

The painting of white lines to demarcate the traffic lanes, the placing of direction signs, and the printing of short, simple warning-notices on the pavement itself, are being energetically continued by the maintenance organizations.

Standard drawings and specifications for the guard-fences have been distributed; but, as regards the white-posting of highways, the topographical and other conditions vary so widely throughout New Zealand that no hard-and-fast rules can be laid down.

The clear definition of road-edges at curves is very valuable, but as an aid to night-driving, particularly under foggy conditions or when passing opposing vehicles, white posts also should be placed along straight sections of road. On curves, posts serve the double purpose of showing that a curve exists, and both by day and by night they indicate the radius or sharpness of the alignment. The motorist may not be conscious of this latter fact, but there is no doubt that a suitably defined curve does give a driver a mental picture of the speed at which that section of road can be negotiated. White posts and white lines are being extended as rapidly as funds permit.

During the year the Board took the opportunity of testing out a new method of advising motorists as to road edge and alignment. In this case the carriage-way is defined by a system of special reflectors mounted on posts. The reflectors are moulded from a kind of clear synthetic resin, and for the limited period of observation proved very effective. As a more extended and comprehensive test, sufficient of these markers for some 18 miles of highway have been ordered.

Special consideration has been given to the construction of footpaths adjacent to boroughs or where the conditions are of an urban character. One of the essential requirements is that footpaths should be sealed in order to ensure their use.

The Board also considered the question of cycle-tracks and has adopted as a general rule the policy of constructing such tracks where the motor-vehicle density has reached sixteen hundred on the average day.

In this connection, however, many difficulties are presenting themselves, not the least of which is the inadequacy of the 66-ft.-wide road reserve to make room for the segregation of the various road-users.

The greatest densities of traffic occur on the sections adjacent to the major centres, where it is necessary to face up to the world-wide problem of the high cost of providing extra width of right-of-way.