

nent method of surfacing than mere metalling. The result of their experiences, I am informed, has demonstrated that it is more economical to adopt this system than incur the expense of costly repairs incidental to the previously existing systems of construction and maintenance.

Much information has been collected by my Department regarding modern methods of main-highway construction, and other matters relating to the roading problem generally, all of which will be available for immediate use when the Highways Bill has been placed on the statute-book of the Dominion.

The estimates for roads this year have been prepared as far as possible on a system of factors representing areas, populations, productivity, loans raised by local bodies, mileages of formed roads, amounts required for roads still to be formed and metalled, and values of Crown and Native lands still available for settlement, the last two of which are of the greatest importance when consideration is being given to the claims of the several districts.

The construction and improvement of roads was jointly discussed by the District Engineers and the representatives of the various local bodies, and as far as practicable the allocation of the moneys available was mutually agreed to, and I desire to record my appreciation of the reasonable spirit shown by local bodies in recognizing the monetary limitations existing at the present time.

During the past year the Department has continued, to as great an extent as possible, to avail itself of local-body organization for the expenditure of Government grants and subsidies.

There has been a tremendous demand throughout the country for the putting in hand of road and bridge works, but financial considerations have dictated the necessity of the selection of works of special merit for authorization, rather than a general authorization for all works, and although this has meant deferring many undertakings of considerable local importance the great majority of local bodies have adopted a helpful attitude and have materially assisted the Department through a difficult period.

TELEGRAPH EXTENSION.

During the year 106 miles of new telegraph and inter-urban telephone pole line, carrying 998 miles of wire, were erected. The telephone-exchange plant (subscribers' lines) was also considerably extended by the erection of 555 miles of pole line, carrying 5,271 miles of open aerial wire, and 63 miles of lead-covered cable, containing 15,110 miles of wire. The substantial increase over the figures of the previous year is due to supplies of material which had been under order for a considerable time becoming available.

The telephone exchanges were increased by six during the year, while twenty-six others are in various stages of completion. The number of new subscribers connected with telephone exchanges was 9,259, and this increase necessitated additional switchboard capacity at forty exchanges. There are 6,132 applicants awaiting telephone connections.

During the year considerable progress has been made with automatic-telephone installations, new exchanges having been opened at Oamaru and Kelburn, while the installations at Palmerston North and Khandallah are almost complete. The installation of automatic exchanges is proceeding at several places in the Auckland metropolitan area, and also at Christchurch. At Wellington and Dunedin the installation of the main exchanges is in abeyance owing to the non-completion of the necessary buildings. With the completion of automatic-telephone exchanges at the larger centres the system will be extended to the country exchanges where continuous telephone service is desirable.

The necessary apparatus for a machine-printing telegraph system was received in New Zealand in October last, and an installation between Wellington and Christchurch was opened for traffic on the 5th December, 1921. The system is now being installed for operation between Wellington and Auckland. This will have the effect of releasing telegraph-wires and making them available for a continuous telephone service between the two centres.