

development of the telephone-exchange system in the metropolitan area was not as great as was anticipated at the beginning of the year. Nevertheless, much was done in overtaking arrears of work. The waiting-list was reduced from 660 to 60. This was accomplished by pooling the equipment which came to hand and bringing it into commission at Mount Eden, Remuera, Ponsonby, and Devonport, where congestion was most acute. As soon as the remainder of the equipment comes to hand and a few minor extensions are made to the cabling system the Department will be in a position to give telephone service in all portions of the Auckland metropolitan area upon demand. It is expected that this happy condition will stimulate telephone development in the northern city, and result in the proportion of telephones to the population showing a considerable advance on the present figure. At other exchanges in the Auckland District the demand for telephone connections has been normal, and it has been possible to overtake the arrears of work and, except at a few exchanges where switchboard or cable accommodation is not available, to give telephone service at very short notice.

Although most of the exchange areas other than Auckland are already well telephoned, it is expected that as a result of canvassing for business additional subscribers will be obtained. It is anticipated also that in areas in which power-line extensions are being made, and privately-owned earth-working telephone-lines exist, applications will be received for the conversion of the telephone-lines from earth-working to departmentally-owned metallic circuits, which are free from extraneous inductive interference. The comparatively low rate at which the Department provides lines in rural districts, and the fact that the erection and maintenance of lines by the Department is a much more satisfactory arrangement to the subscriber, will prove contributing factors in this development.

In the Hamilton district new connections exceeded relinquishments by 223, the chief increases being Hamilton, 71; Te Mata (new exchange), 64; Cambridge, 23; Te Awamutu, 22; Otorohanga, 20; Kawhia, 18; Ngaruawahia, 11; Ohaupo, 11. At Taumarunui and Te Kuiti there were reductions in the number of subscribers, the totals being reduced by 16 and 12 respectively. Partly as a result of a lessening demand for telephones, and partly on account of the provision of additional cable and switching accommodation at a number of exchanges, the list of waiting applicants has been practically eliminated. At nearly all exchanges in the Hamilton district new connections can be now given at very short notice.

A telephone exchange with sixty-four subscribers was opened at Te Mata on 20th July, 1927. The connection of these subscribers involved the erection of seventeen miles of pole line and sixty-eight miles of wire.

During the year switchboard accommodation was increased at the Hamilton, Huntly, and Te Kauwhata Exchanges; and the cable facilities were extended at the Hamilton, Te Awamutu, Te Kuiti, Taumarunui, Owhango, Orino, Taupo, Ohura, and Ongarue Exchanges.

*Wellington Engineering District.*—Extensive cabling-works were carried out in Wellington City and suburbs to meet the growing demands for telephone service, particularly in the outlying areas. The most extensive growth, which was in the Miramar, Seatoun, and Lyall Bay areas, necessitated the installation in the new automatic-exchange building at Miramar of two hundred lines of improvised apparatus pending the arrival of new equipment which is on order. The improvised equipment enabled practically all applicants in the areas mentioned to be connected.

The extension of the telephone service in the Hutt Valley also was phenomenal, and necessitated the providing at the Lower Hutt Exchange of additional switchboard accommodation. The applicants for telephone service on the waiting-list at Wellington at the end of the year were very few, and were confined to localities in which there is a temporary lack of cable facilities. Relief will be afforded in these areas as soon as cable now under order comes to hand.

The Alfredton Exchange was closed on the 4th August, the subscribers being connected with Eketahuna by means of rural and party lines. Other features of the year's operations in the Masterton district included the transfer of all subscribers but one from Makuri to Pahiatua, the completion of cable extensions at Masterton to provide for future development, the reconstruction of the aerial exchange plant, the conversion to metallic of a number of earth-working lines at Pirinoa, and a complete overhaul of the aerial lines at Pongarua.

Owing to the general financial depression, the development of the telephone-exchange system in the Palmerston North district was considerably below normal.

The ringing-facilities at the Otaki Exchange were improved by the installation of a motor-generator.

In order to provide more efficient local service at New Plymouth, the switching equipment, which is of the branching multiple type similar to that in use at Gisborne, Nelson, and Christchurch, was completely overhauled. No effort was spared to make the overhaul a complete success. The latest report indicates that the number of complaints from telephone subscribers at New Plymouth is not greater than is incidental to any telephone-exchange system, manual or automatic, and that the average time taken by operators to answer calls is but three seconds. Concurrently with the overhaul, the capacity of the New Plymouth switchboard was increased to 1,800 lines.

Owing to a falling-off in the number of applications for telephone service, development in the Napier district has not been as extensive as in previous years. Partly as a result of this, and partly on account of additional switching and cable equipment having been made available at a number of exchanges, the waiting-list of applicants has been eliminated, and it is now possible to give telephone service at short notice.

Both the underground and the aerial cabling-systems at Napier were considerably extended during the year. The open aerial-wire system was also reconstructed in conjunction with the installation of the automatic telephones.

Although the increase in subscribers' stations in the Gisborne district does not compare favourably with previous years, a good deal of work was carried out in providing departmentally-owned metallic circuits in place of privately-owned earth-working circuits. Originally about five hundred miles of privately-owned earth-working circuits were connected to the Gisborne Exchange. On account of power interference, however, and as a result of the Department's activities in canvassing, applications were received for the conversion to metallic of practically all privately-owned earth-working circuits,