

Small extensions have been completed at the following automatic exchanges: Mount Eden, Remuera, Ponsonby, Devonport, Takapuna, Wellington South, Roslyn, and South Dunedin.

To meet the heavy growth in the St. Heliers (Auckland) area, a temporary automatic exchange was established.

Small extensions are to be provided in the near future at Oamaru and Blenheim.

A new branching multiple switchboard has just been installed at Otorohanga, and similar equipment is about to be installed in the new post-offices at Thames and Tauranga, while at Greymouth the switching-system has been reconstructed extensively and modernized.

The following is a summary of other important operations during the year in the development and maintenance of telephone-exchange systems in the Dominion:—

The laying or erecting of 81 miles of lead-covered cables containing 17,721 miles of wire for subscribers' circuits.

The erection of 481 miles of pole-line and 4,795 miles of open aerial wire for the connection of telephone-exchange-subscribers' stations.

The reconstruction or partial reconstruction of open aerial systems at a large number of telephone-exchanges.

The replacement of existing switchboards at Paeroa, Waihi, Opotiki, Mohaka, Manakau, Tadmor, Takaka, and Cave.

The removal of the telephone-exchange equipment, &c., to new premises at Little River, Geraldine, and Milton, and the re-establishment in temporary premises of the telephone-exchange at Motueka, where the post-office building was destroyed by fire.

The provision of a further inter-office trunk cable between Wellesley Street, Remuera, and Devonport exchanges which, in addition to facilitating inter-exchange working, had the effect of improving speech-transmission from the North Shore to the eastern suburbs of Auckland.

The installation of ringing-machine apparatus at Kohukohu, Hikurangi, Ruawai, Paparoa, Waipu, Wellsford, Warkworth, Te Kauwhata, Taupiri, Ngauwahia, Otorohanga, Taradale, Leeston, Greymouth, Pleasant Point, Alexandra, Edendale, Riverton, Thornbury, Bluff, and Maitara, and the replacement of obsolete ringers at Papakura, Pukekohe, and Waiuku.

The installation of rectifiers which replaced primary-power units for exchange and toll dialling purposes at Dargaville, Hikurangi, Wairoa, Napier, Waipukurau, Miramar, Lower Hutt, Blenheim, Amberley, and Kaiapoi.

The rearrangement of the existing power units and the installation of an additional battery at Hamilton, and the replating of the main telephone-exchange batteries at Auckland Central, Mount Eden, and Dannevirke.

The conversion to metallic circuit of many departmental and privately owned telephone-exchange lines which previously operated on the earth-return principle. This has been made necessary by the rapid extension of power reticulation in the North Auckland and Bay of Islands power areas.

The installation of air-conditioning plant at Wellington South, and the complete overhaul of the existing air-conditioning equipment at the Wellington Central exchange.

The length of various items of telephone-exchange plant in existence on the 31st March, 1938 and 1939, respectively, was as follows:

	Pole-line.	Single Duct Line.	Cable.			Wire.				
			Under-ground.	Aerial.	Sub-marine.	In Under-ground Cable.	In Aerial Cable.	Sub-marine.	Open Aerial.	Under all Headings.
	Miles.	Chains.	Chains.	Chains.	Chains.	Miles.	Miles.	Miles.	Miles.	Miles.
In existence on 31st March, 1938	16,334	48,841	105,779	36,864*	1,246	417,786*	45,482*	1,889	116,271	581,428*
Erected during year	482	2,615	6,104	401	131	17,221	500	332	4,795	22,848
Dismantled during year	51	53	781	412	..	2,769	508	..	589	3,866
In existence on 31st March, 1939	16,765	51,403	111,102	36,853	1,377	432,238	45,474	2,221	120,477†	600,410

* Revised figures. † Includes 58 miles of earthworking circuit.

The percentages of the total wire-mileage in underground, aerial, and submarine cables and open aerial wire respectively for the year ended 31st March, 1939, are as under:—

Telephone-exchange wire in underground cables	..	..	72.0 per cent.
Telephone-exchange wire in aerial cables	..	..	7.6 „
Telephone-exchange wire in submarine cables	..	..	0.4 „
Telephone-exchange open aerial wire	..	..	20.0 „