## Construction.

During the past seven years the Board has been responsible for the closing-up of a large number of unmetalled gaps in the arterial road system. One of the most important links remaining in the Dominion has been that between Auckland and the North Auckland Peninsula. During the past three years special attention has been devoted to this work and considerable progress achieved.

In last year's statement it was possible to report that surfacing-work had reached the Township of Warkworth. This year it is gratifying to record that a temporary connection to the Far North was established before the present winter. This connection, being by a devious route via Wharehine is regarded as a temporary one only, but, nevertheless, is sufficient to allow light notor traffic to proceed to Whangarei and other northern centres under all-weather conditions.

Surfacing-work on the more heavily trafficked sections of main highway, principally adjacent to the main centres of population, has proceeded satisfactorily. In the South Island, in particular,

excellent progress has been made.

As mentioned previously, the year has been a most notable one as regards bridge-construction. Although the total expenditure on all construction was substantially less than in the previous year, nevertheless, the length of bridges completed is a record since the Board commenced operations. In the fifth annual report, to give an idea of the bridge programme immediately ahead of the Board, a list of important structures commenced or requiring to be put in hand in the next year or two was shown. The list included thirty-two important structures, all of an estimated cost of over £4,000. The present position is that nineteen of these structures have been completed, five are in hand, and the remaining eight have not yet been commenced. Some of the largest structures which have been completed in the year under review are as follow: Mangaoporo Bridge, consisting of four 80 ft. truss spans; the Awatere Bridge, consisting of plate girders and concrete deck, and having three 60 ft. spans and one 35 ft. span; the Mangatewai-nui Bridge, a reinforced-concrete structure, comprising two 40 ft. and three 50 ft. spans; the Manawatu Gorge Bridge, a handsome concrete structure, comprising four 80 ft. arch spans and six short spans; the Aorangi Bridge, a reinforced-concrete structure, 576 ft. in length; the Ruamahanga Bridge, consisting of eleven 40 ft. spans of reinforced concrete; Kokotau Bridge, also a reinforced-concrete structure, consisting of eight 45 ft. spans; the Newton River Bridge, a steel-truss structure, 180 ft. in length; the Little Wanganui Bridge, consisting of six 40 ft. spans; the Ahaura Bridge, 720 ft. in length; McDonald's Creek Bridge, 200 ft. in length; the Waimakariri River Bridge, consisting of plate girders with a concrete deck, and comprising twenty-nine spans of 40 ft.; the Selwyn River Bridge on the Darfield-Arundel Main Highway, a reinforced-concrete structure, 300 ft. in length; the Ashburton River Bridge, a reinforced-concrete structure, 1,120 ft. in length, furnished with a roadway 22 ft. in width and a footpath 6 ft. in width; the Clutha River Bridge, at Albert Town, consisting of six 50 ft. spans in reinforced concrete; and the Aparima River Bridge, at Riverton, a reinforced-concrete structure 440 ft. in length.

## RAILWAY-CROSSING ELIMINATION AND PROTECTION.

Principally on account of the financial situation of the Railways Department, only one railwaycrossing elimination was proceeded with on the main highway system during the year. This elimination is situated on the Auckland-Wellington Main Highway in the vicinity of the Borough of Waitara. The bridge structure has been completed and the approaches are now in the process of construction. The Railways Department during the year erected flashing lights and other protective signals at a number of crossings on the main highways, the Main Highways Board undertaking to find half the cost of both the installation and the future maintenance.

## ADVANCES TO LOCAL AUTHORITIES.

Under section 2 of the Main Highways Amendment Act, 1926, which authorizes the Board to advance moneys by way of loan to local authorities for highway purposes, a sum of £18,190 was advanced, making a total to the 31st March, 1931, of £57,377. All loans are made on the instalmentrepayment system, the local authorities being required to make equal annual payments, which include interest on the amount for the time being outstanding and part repayment of principal. The principal repaid to the 31st March, 1931, amounted to £7,213, leaving a balance outstanding of £50,164. The powers vested in the Board under the above-mentioned clause have been most beneficial, and are primarily responsible for the excellent progress made in the past three years in the South Island.

## Traffic-control.

As mentioned in last year's report, the Board suggested to local authorities that certain groups should combine for the purpose of efficiently administering the traffic regulations. In cases of approved joint schemes the Board indicated that it would subsidize the wages and expenses of a Traffic Inspector on a pound-for-pound basis. A number of local authorities have taken action in this direction, and schemes have already been approved and are in operation in the following areas :-

Hamilton Group, including Waikato County, Waipa County, Otorohanga County, Raglan County, Ngaruawahia Borough, and Huntly Town District.

Thames Group, including Thames County and Ohinemuri County.

Rotorua Group, including Rotorua County and Rotorua Borough.

Gisborne Group, including Cook County, Waikohu County, Uawa County, and Waiapu County. Napier Group, including Hawke's Bay County, Woodville County, Weber County, Dannevirke County, Waipukurau County, Patangata County, and Waipawa County. Taumarumui Group, including Ohura County, Taumarumui County, Kaitieke County, Tau-

marunui Borough, and Manunui Town District.