

Roads and Railways. One hundred and seventy-seven miles were surveyed during the year, the average cost per mile being £25. This work is falling into arrears, there being over 400 miles of roads requiring survey at the end of the year.

Inspections. Very few inspections have been made, those returned under this heading being more in the nature of investigations into old surveys found to be inaccurate on comparison with modern surveys.

Other Work.—The total cost of work which cannot be allocated under the separate headings amounts this year to £6,059 12s. Of this the location of pegs and boundaries not amounting to complete surveys accounts for £1,526; inspections and investigations to £893; maintenance of survey reference marks, £1,701; Police Court proceedings, £300; and office routine, reports, leave, &c., to £1,638.

OFFICE.

Plan Examination and Recording.—The number of plans examined and passed shows an increase of 5 per cent. on the very high total of last year, and the year has been exceptionally busy in this respect. Notwithstanding this number, a certain amount of arrears has accumulated, and, although not serious, an endeavour must be made to reduce these during the coming year. The new uniform system of recording is now generally in operation.

Computing Branch, Head Office. Tidal analysis has been continued during part of the year, but this work is now well in hand and no longer urgent. The times and heights of high and low waters for 1941 for the seven standard ports—Auckland, New Plymouth, Wellington, Lyttelton, Dunedin, Bluff, and Westport—were predicted by means of the machine at the Tidal Institute, University of Liverpool, from the harmonic constants computed by this branch.

Positions of points along the coast were supplied to the Admiralty survey ship H.M.S. "Endeavour," until this work was discontinued.

The adjustment of second-order triangulation, principally in the Auckland district, has now been completed and co-ordinates computed on the adopted projection.

Map Publications.—Details of these appear in the tables and reports of the Assistant Surveyor-General appended hereto.

Aerial Mapping.—The staff of this branch has been strengthened, and several other draughtsmen have been partly trained so as to be available if necessary. The lack of equipment is still felt, and until this can be overcome the output will not be as large as is desirable. In order to speed up the work extra ground survey had to be put in hand, especially for certain areas required for military purposes.

Town Schemes. Analysis of these show a falling off in the area subdivided. The percentage of the area set aside for recreation purposes is very low, this being accounted for by the number of small schemes and resubdivisions of previous schemes.

Warrants for Title, &c.—The number of warrants for certificates of title issued during the year was 246, and 11 proclamations of road-lines under the Native Land Act, 1931, were dealt with.

PROPOSED OPERATIONS, 1940–41.

Geodetic Triangulation.—The measurement of the three bases in the South Island should be carried out if equipment can be made available. The observations to connect the third base should be nearly completed by the end of the year, and the completion of the whole programme should then be within measurable distance.

Surveys.—Sufficient work is in sight to keep the staff busy for the coming year.

Office.—Routine work will be more than sufficient to keep the office staff fully occupied. No new work is contemplated, though the change to war conditions will affect the work being carried out.

Staff.—The recruitment of officers for service was being felt at the end of the year, but during the coming year its effect will be greatly accentuated. However, it is anticipated that the dropping of work not immediately necessary will not greatly impair the efficiency of the service, and the service absolutely necessary may be carried on.

STAFF.

I regret to have to record the deaths of two officers who have long and faithfully served the Department, Mr. J. L. Climie, Wellington, after thirty-two years, and Mr. A. G. Ensoll, Auckland, after twenty-five years.

By retirement on superannuation the services have been lost of Mr. P. W. G. Barlow, Chief Surveyor, Napier; Mr. H. M. Kensington, Standards Surveyor, Auckland; Mr. R. J. Crawford, Draughtsman in Charge, Aerial Survey Branch, Head Office; and Mr. P. E. Webb, Draughtsman, Napier.

The following young officers are on leave and with the Forces either overseas or undergoing training for that purpose: K. Gustofson (Auckland), H. Kercopa (Auckland), W. Kingsley (Auckland), T. Manahi (Auckland), A. E. Moore (Auckland), G. L. Frank (Gisborne), A. E. Christian (New Plymouth), G. E. Drake (New Plymouth), W. G. C. Gasquoine (Wellington), C. E. W. Evison (Blenheim), C. D. Bell (Nelson), T. P. Gibson (Christchurch), W. T. Pethick (Christchurch), A. J. Gillon (Dunedin), D. J. T. Sharp (Dunedin), D. C. Berry (Invercargill), H. D. McKechnie (Invercargill), C. W. J. Pierson (Invercargill).

In addition to these, many others have enlisted and are awaiting the call for service.

APPRECIATION.

I wish to express my appreciation of the loyal and efficient manner in which the staff has carried out its duties during the year under review.

H. E. WALSH, Surveyor-General.