

little now remains to be done, but in Auckland, owing to the growth of the city, many miles of streets are still without standard blocks. The high standard of accuracy so necessary in this class of work has been well maintained by the experienced officers above mentioned. After completing the Napier work Mr. Mountfort took up rural standard surveys in the neighbourhood of Feilding, where the trig. stations had in many cases become useless for checking work on account of the views between them, and from them, to check-points having become blocked by plantations and buildings.

SETTLEMENT SURVEYS.

Of these, which comprise Crown lands, land for settlements, and land for discharged soldiers, the bulk appears under the heading of "Rural" in Table A, the acreage there shown being 302,369 acres, while the remainder includes village and suburban and town lands totalling 1,309 acres. In Table B the rural acreage has been allocated to the various land districts.

NATIVE SURVEYS.

During the year staff surveyors completed the survey of 13,119 acres, while 228,808 acres was surveyed by private surveyors. The area surveyed in each land district is given in Table B. The surveys under this head have mostly been subdivision surveys of blocks of which the periphery surveys had been already completed.

GOLD-MINING SURVEYS.

The area returned under this heading is very small, being only 992 acres. The surveys were made by private surveyors, the fees being paid by applicants. The cost per acre cannot therefore be given.

COAL-MINING SURVEYS.

No surveys of coal-mining areas were made.

INSPECTIONS.

There being only one Inspector, the work of inspection has been carried on by Chief Draughtsmen and staff surveyors. In consequence there has not been so much of this very necessary work done as I could have wished. As pointed out in previous reports, absence of inspection has a tendency to induce carelessness in some surveyors, the more so as it is difficult for them to get good field hands. Generally speaking, I am pleased to note that the result of the inspections made has been to show that satisfactory work is being done, though an amount of remissness and carelessness has been revealed sufficient to show that more inspection-work is urgently required.

PROPOSED OPERATIONS FOR 1919-20.

Triangulation.—Owing to the depletion of the field staff and the need for economy during the war the major triangulation was for the time being discontinued, but it is hoped that a start may again be made some time during the coming year. No minor triangulation save such as may be absolutely necessary for the connection and control of settlement surveys will be undertaken.

Standard Surveys.—These surveys will probably be principally carried out in Auckland, though an endeavour will be made to organize a staff for this work so that in the near future it may be undertaken in a more comprehensive manner. The approximate cost of this class of work is about £50 per mile, and part of this cost—in ordinary cases two-fifths—is borne by the local body. The great value of these surveys is recognized by the City Councils of Auckland and Dunedin (in which cities for years past standard-survey work has been in progress), and they are only too pleased to contribute on these terms. In addition to the standard survey of Auckland, which will be continued by Mr. Kensington, the rural standard-survey work will be continued by Mr. C. A. Mountfort. In future all standard surveys will be controlled direct from Head Office.

Topographical Surveys.—Under an arrangement with the Defence Department the work initiated by Colonel Gibbon, of publishing topographical contour maps of the Dominion, is to be carried on by this Department. Up to the present it has not been possible to do so, but I hope during the ensuing year to be able to get together a small staff and make a beginning. The maps will be very useful to the travelling public, especially to motorists, and should meet with a ready sale, by means of which a large portion of the cost of production will be covered.

Settlement Surveys.—At the close of the year there were in the hands of the staff and temporary surveyors 596,856 acres of settlement lands and 75,670 acres of Native lands, while in the hands of private surveyors there were 30,826 acres and 287,977 acres respectively. The allocation of this work among the several land districts is shown in Table 4. As is always the case, and more particularly so at the end of last year, for reasons already given, these figures include a large acreage of which the field-work has been completed, but of which the mapping will not be finished till July or August, during which months many of the surveyors will be called in from the field to the office. In addition to the allocated work, Chief Surveyors had in sight 13,180 acres of settlement land and 3,970 acres of Native lands to be allocated later on. The work now in hand, together with that as yet unallocated, and the survey of estates that from time to time will be acquired for soldiers' settlements and for ordinary settlements, and of Crown lands to be offered for settlement, will occupy most of the staff surveyors fully for the ensuing year. As the urgency of providing land for discharged soldiers increases, it will probably be necessary to supplement the efforts of the staff by placing contracts in the hands of private surveyors.