The relative increase in salary expenditure is due to a slight increase in office staff and the effect of recent salary increases. The item "Topographical mapping" mainly incorporates special topographical surveys required for general Government development works, very little work having been carried out on the preparation of the national topographical map series. The schedule indicates the increased activity in land-settlement work, expenditure increasing from £4,212 to £12,412 since last annual report.

7

The total expenditure apportioned among the various Chief Surveyors' offices is as follows:—

	District.			,	Expenditure.	Percentage
				-	£ s. d.	
Head Office					11,912 8 5	9.1
Auckland and North Auckland					39,752 1 8	30.2
Gisborne					4,781 15 10	3.6
Hawke's Bay					9,216 10 4	7.0
Taranaki					7,084 6 1	5.4
Wellington					16,990 11 3	12.9
Marlborough					4,890 0 3	3.7
Nelson					5,451 13 0	$4 \cdot 2$
Westland				• • •	$2,224\ 15\ 7$	1.7
Canterbury					14,093 6 6	10.7
Otago					7,566 12 3	5.8
Southland					$7,547\ 13\ 0$	5.7
Total					131,511 18 2	100.0

## Specialized Activities

The following sets out the limited amount of survey work of a specialized nature that has been carried out during the year.

## Triangulation

Geodetic Triangulation.—In order to take advantage of the opportunity of employing the special base-line-measuring equipment loaned by the Tanganyika Government, the measurement of the three South Island bases were commenced in February, 1947. The tapes were standardized by the National Physical Laboratory, Great Britain, in November, 1946. Excellent progress has been made by the field party to date. The results of this work will be available for report later.

Opportunity was taken to employ survey cadets on this class of work in order that they might gain first-hand experience of precision methods of measurement and observation. It is anticipated that the measurement of the three South Island bases and the remeasurement of three of the North Island will be completed by August, 1947, when the equipment will be returned to Tanganyika as arranged.

It is intended to complete observations for La Place longitudes at a number of selected stations during the year, which will finalize all observational works for the geodetic triangulation of the Dominion which was commenced in 1911.

Second and Third Order Triangulation.—Except for a small network of triangulation required in connection with land-survey work, no work has been carried out under this heading. It is hoped to extend observational work in the Southland District this season in order to check up discrepancies in the original triangulation of that district.

## Precise Levelling

In last year's report it was indicated that precise-levelling work required for river control and drainage engineering in the Bay of Plenty district would be put in hand. Unfortunately, staff was not available. Tide-gauges have, however, been established by the Public Works Department at selected stations along the coast. It is hoped to put this work in hand as staff becomes available.