1890. NEW ZEALAND.

SURVEYS OF NEW ZEALAND.

REPORT FOR 1889-90.

Presented to both Houses of the General Assembly by Command of His Excellency.

Sir,— General Survey Office, Wellington, 2nd August, 1890.

I have the honour to furnish the following report on the work of the Survey Department

for the twelve months ending the 30th June, 1890, at which date the survey year ends.

Extracts from the reports of the Chief Surveyors in charge of the ten land districts into which the colony is divided will be found in the Appendices, together with detail progress-reports on each of the road-works carried out by the department, and tabular statements of surveys completed, &c., with maps illustrative of the same.

To facilitate reference to the results of the year's work, the following figures have been compiled, which show at a glance the totals, and the average cost of the work under the various

headings :—

		Area.	Rate per Acre.		. Cost. £ s. d.
Minor triangulation (without topography)		1,334,671 acres			
Topographical surveys		248,712 "	0 (0.46	$482 \ 19 \ 9$
Trigonometrical and topographical surveys		62,960 "	0 (0.84	$221 \ 19 \ 9$
Selection surveys under "The Land Act Amendr	$_{ m nent}$				
Act, 1887,		261,484 "	0 (3.33	3,633 16 1
Rural and suburban section surveys		431,695 "	0 - 1	3.7	28,249 1 1
Town-section survey (138 acres, 339 sections),	per				,
section			0.15	0.5°	255 2 6
Native Land Court surveys		805,364 acres	0 (2.6	8,924 18 6
Mining surveys		21,467 "	0 8	9.1	6,252 0 4
Roads, 408·16 miles, per mile		***	9 .4	: 0	3,755 16 10
Miscellaneous work	• • •			•	6,356 15 11
Total cost of field-work finished during the	year				£63,085 3 10

The total cost of field-work for the year was £49,816 8s. 9d., and the difference between that sum and £63,085 3s. 10d. represents field-work shown in the above totals that was commenced in the previous year, and also includes work done in the field, but not yet mapped.

The total cost of supervision, office-work, and publication, was £36,614 15s. 10d., so that the gross cost for the twelve months was £86,431 4s. 7d.; or deducting refunds for services performed for other departments, &c., the net cost of the department for the twelve months was £73,765 0s. 1d.

TRIANGULATION AND TOPOGRAPHICAL SURVEY.

Summarising the three first items above, it will be found that 2,572 square miles of country have been partly minor triangulated, and partly topographically sketched, at a cost of about \(^3\)4d. per acre. The largest area accomplished this year in one continuous survey has been in the Auckland District, by District Surveyor Cussen, where the work was necessary in order to cover the large area of surveys undertaken for Native Land Court purposes. Mr. T. N. Broderick, in Canterbury, and Messrs. Bullard, Smith, and Greenfield, in Nelson, also carried triangles over extensive areas in order to control the sectional and other surveys within those districts. Extracts from Mr. Broderick's report on the discovery of another pass over the Southern Alps, explored during the course of his survey, will be found in the Appendix.

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The only other item of any consequence under this heading was a triangulation of 113,034 acres in the rough wooded country between Gisborne and Opotiki, performed by Mr. Teesdale, to facili-

tate the subdivision of some blocks for settlement along the Motu Road.

The triangulation of the colony—either as major or minor work—is now well advanced, and its continuance in the future will be in somewhat small and detached portions where necessary to cover the settlement surveys as they advance; the cost, therefore, of this class of departmental work will be a gradually-decreasing one.

1—C. 5.