

The increased cost per train-mile is accounted for by the increased cost for providing improved stock to replace the old stock sold to the Western Australian Government, and to an increased amount of car and wagon conversions, all of which have been charged to working-expenses.

The usual returns have been forwarded.

I have, &c.,

T. F. ROTHERAM,

Locomotive Superintendent.

The General Manager, New Zealand Railways, Wellington.

APPENDIX C.

ANNUAL REPORT ON THE MAINTENANCE OF NEW ZEALAND RAILWAYS.

SIR,—

Chief Engineer's Office, Wellington, 12th August, 1897.

I have the honour to report on the maintenance of the New Zealand railways for the year ending 31st March, 1897:—

Mileage.—New lines were opened for traffic during the year as follows:—

	M.	ch.
Whangarei Railway, Waro to Whakapara	...	3 16
Kaihu Railway, Extension of	...	0 48
Catlin's River Railway, Tahora to Owaka	...	1 11
Total	...	4 75

The total mileage of railways opened for traffic at the 31st March, 1897, was therefore:—

	M.	ch.
Mileage at 31st March, 1896	...	2,013 11
Railways opened for traffic during 1896-97	...	4 75

Mileage open for traffic at 31st March, 1897 ... 2,018 6

Permanent-way.—The lines generally have been maintained in good running-order.

Rail Renewals.—There have been 34 miles 62 chains of permanent-way renewed.

Sleeper Renewals.—New sleepers to the number of 243,398 have been laid in the track during the year. Of that total 32,810 are an additional number laid per rail-length, the balance being ordinary renewals. These represent an average of 104 sleepers per mile of railway.

Ballasting.—Ballast trains have been employed on the Auckland, Napier, Taranaki, Christchurch, and Dunedin Sections, and minor ballasting has been done on other sections. A considerably increased amount has been done, on the whole, as compared with the previous year.

Slips and Floods.—There was an average share of slips and floods during the year, chiefly on the Napier-Taranaki, Dunedin, Invercargill, and Greymouth Sections.

Bridges.—A very large amount of bridge-work has been carried out during the year in repairs and renewals. All renewals have been built up to an increased standard of strength.

Several bridges have been more or less rebuilt, including—On the Auckland Section: Henderson Bridge rebuilt; Kaipara Bridge partly rebuilt; Swanson Bridge, Taupiri Bridge, two bridges near Runciman, and a bridge near Papatoitoi rebuilt. On the Napier-Taranaki Section: Reconstruction of Waipukurau Bridge; additional spans to the Pohangina Bridge; and the Oroua Bridge, on the Foxton Branch, entirely rebuilt. On the Wellington Section: Several bridges in the Wairarapa district renewed. On the Christchurch Section: The Waiareka Creek Bridge, on the Whitecliffs Branch, Opawa Bridge, on the Albury Branch, Eyre Bridge, on the Oxford and Sheffield Branch, all rebuilt; the Rakaia Bridge, seventy-seven spans redecked and ten piers rebuilt. On the Invercargill Section: Flodden Creek Bridge, on the Tapanui Branch, rebuilt; on the Makarewa Branch, bridges near Bransholme and Waimatuku rebuilt. On Picton Section: The Tuamarina and several other small bridges rebuilt; Picton Viaduct, two new concrete foundations for piers.

In addition to the bridges enumerated, repairs have been effected to a large number of bridges, large and small, on all sections.

Fences.—The fences have been maintained in fairly good condition. The total length of fencing is 2,925 miles. A large number of cattle-stops have been renewed, the cost of which is included in the expenditure for fences.

Water-services, Signals, &c.—These are in good working-order. Several water-tanks have been renewed, and in some cases enlarged.

Wharves.—Ordinary repairs have been carried out to the various railway wharves.

Buildings.—The repairs to station-buildings have been heavy; a large number of old timber platform fronts have been renewed in concrete. Painting has been carried out in a systematic manner.

New Works.—The following are some of the principal new works carried out during the year: Kaihu—station-building; Greenlane and Eilerslie—doubling line between; Mount Roskill—widening overbridge; Tirau—alterations for postal work; Matahiwi—goods-shed; Patea—improvements to goods-shed; Napier—wheel drop-pit; Eastown and Aramoho—point locking and sidings; Hawera—refreshment-rooms; Inglewood and Stratford—verandahs; Palmerston North—drainage of urinals; Feilding—platform extension; Eastown—wheel drop-pit; Napier—fencing station-yard; Woodville—improvements to station-yard; Newman—backshunt, &c.; Cross' Creek, Summit, and Upper Hutt—station improvements; Petone—extension of car- and wagon-shop and drainage of engine-pits; Rangiora, engine turn-table; Waipara—siding improvements; Rakaia—additional sidings; Ashburton—additions to refreshment-rooms and siding altera-