

1894.
NEW ZEALAND.

WORKING RAILWAYS

(FINAL REPORT OF THE LATE RAILWAY COMMISSIONERS, ON RETIREMENT, 20TH JANUARY, 1894).

Laid upon the Table by Leave of the House.

The RAILWAY COMMISSIONERS to the Hon. the MINISTER FOR PUBLIC WORKS.

SIR,— Government Buildings, Wellington, 20th January, 1894.

As the five years' term of office of the Railway Commissioners ends on the 22nd instant, we have the honour to submit a report upon the working railways which have been under our charge.

Since our report up to the 31st March, 1893, there have been opened for public traffic 4 miles of the North Island Trunk, 24 miles of the Rotorua line, 7 miles from Ngakawau to Mokihinui. 24 miles Greymouth to Hokitika, making the total length of Government railways now working 1,948 miles.

A further agreement has been entered into with the New Zealand Midland Railway Company, in pursuance of the terms of the Midland Railway Contract, for the conveyance of coals for export from the Blackball Mine. This agreement should, in terms of the statutes, be presented to Parliament next session.

The vote taken for the Working Railways, Class XI., for the year 1893-94 was £734,821. The state of this vote on the 31st December, 1893, is shown in Account No. 1 attached. From this it will be seen that the charges against the vote are within the estimate up to date.

An approximate account of the revenue and expenses up to the period ending on the 6th January last is attached (see Account No. 2). The net revenue up to the 6th January, 1894, is £315,999, as against £311,288 up to the end of the corresponding period on the 7th January, 1893. This must be regarded as satisfactory.

The revenue has been prejudicially affected by the rainy weather during various holidays, by the severe floods in Hawke's Bay, and by a certain dulness in trade consequent upon financial disturbances; but, as the three best months of the year have to come, and the expenses have been kept down, the net estimated results for 1893-94 are likely to be realised.

The Stores Report attached shows that during the Commissioners' term of office the value of the stock of stores in hand has been increased by £7,778.

The reports of the Locomotive Superintendent and the Chief Engineer for Working Railways, supported by the reports of the various district officers throughout the system, show the large improvement which has been made in the engine-power, rolling-stock, appliances, lines, and structures during the term of the control of the Commissioners from working-expenses, by means of which the capital value of the lines and the net profits have been increased.

The Napier line is being as rapidly restored after the late floods as circumstances permit, and by the end of the month it will be in fair order again. With this exception, due to circumstances beyond control, all the railways are now in exceptionally good order. The traffic officers report that the traffic staff is efficient.

The staff generally is in a state of excellent organization. Under the existing system of working and organization nearly fourteen years of careful training has prevailed.

The system introduced in 1880, of engaging lads only in different branches of the service and training and educating them for the various duties, and the system of classification of pay and promotion from the lower to the higher grades, have answered excellently. The service is now manned by officers and men for the most part trained to railway and telegraph work on the colonial railways under the regulations and scale of pay and promotion referred to.

The Commissioners are gratified at being able to bear testimony to the loyal and intelligent services rendered to the colony by the large staff of officers and men during their tenure of office.

We have, &c.,

JAMES MCKERROW,
J. P. MAXWELL, M.Inst.C.E., } Railway
W. M. HANNAY, } Commissioners.

The Hon. the Minister for Public Works.

56/37/94.

Locomotive Superintendent's Office, Wellington, 11th January, 1894.

The New Zealand Railway Commissioners, Wellington.

IN reply to your instruction of the 20th November, 1893, I have the honour to report as follows:—

The locomotives, rolling-stock, and plant in my charge are in good and efficient order.

Many additions and valuable improvements have been effected during the last five years at the cost of working expenses, the benefit of which is felt not only by the Locomotive Department but by the railways as a whole.

The aggregate power of the locomotives has been increased by rebuilding improved types, so that there is now much greater power available than in 1889. Out of the working expenses alone the power has been increased 81,356lb., equal to about 5 per cent., representing rather more than seventeen "F" locomotives. It has been found convenient to reduce the number of locomotives while increasing the aggregate power.

On the Hurunui-Bluff Section two powerful locomotives of a new design are under construction from working expenses, having cylinders 16in. by 20in., with 4ft. 6in. wheels. These two engines will be completed at an early date. The work of compounding two locomotives is also in hand.

Some of the improvements effected to the locomotives consist of the adoption and application of balanced slide-valves, sight feed lubricators, and general system of lubricating reservoirs, compensating levers, steam brakes, metallic packing, improved boilers to carry higher pressures, new and larger crank pins and coupling and connecting rods, improved boiler mountings and fittings.

The system of boiler inspection, and recording the condition of all boilers, has been gradually improved, until it is now thoroughly efficient and of the greatest importance to the department.

The carriage seating accommodation has been increased out of working expenses by over 7 per cent., representing about twenty-seven Class A carriages. This has been effected by rebuilding and improving, so that a much superior class of vehicle with double-bogies of improved type have replaced many of the old four- and six-wheeled stock.

The aggregate wagon capacity has been greatly increased. To effect this, many improvements have been made in general design and detail, and the standard wagons, both four-wheel and bogie, are now very complete and simple in construction. Much attention has been given to the very important work of renewing the old type of draw-gear, and no less than 1,683 vehicles have been fitted with standard continuous draw-gear during the last five years. The value of this improvement is very great; it increases the safety of trains, and prevents any undue strains and racking of the under-framing.

The brake-vans and brake power have been improved and increased by rebuilding several of the old four-wheel type into commodious and easy-running double-bogie vans, thus providing greater accommodation for luggage, &c., also increased brake-power. Five years ago the department had only six bogie brake-vans, there are now forty-two.

The effect of these various improvements to the locomotives and rolling-stock has been to reduce the failures and delays to traffic to a minimum, and the stock is more economically maintained and available for use for maximum periods.

Much attention has been given to the various workshops; many important additions and alterations both in buildings and machinery have been effected.

The department is now fitted with a very complete hydraulic rivetting plant; also first-class machinery for use in boiler construction.

The adoption of milling machinery, recommended by the late General Manager on his trip to Europe, has proved a great success. Altogether the department has, during the last five years, provided to the various workshops tools and machinery of the most recent and improved type, valued at between £7,000 and £8,000. The effect of this has been that the department has been able, within its own workshops, to build new locomotives, carriages, and wagons, and provide generally everything required in the railway; but as the whole of these improvements, &c., are carried out at the cost of working expenses, the progress can only be gradual, and there is yet something to be done; but the value of what has been effected has been distinctly felt, and will continue to make itself manifest more and more.

Much care and attention has been devoted to perfecting the regulations and instructions, so that the practice throughout the department shall be to a standard. This has resulted in many improvements and economies, and as members of the staff afford information and the results of their observation, these are made available for the whole department.

One hundred and seventy-two miles and six chains have been added to the mileage during the last five years, to supply which the following additional rolling-stock has also been provided from Capital Account, and manufactured in the railway workshops:—

Description.	Completed.	In hand.
Bogie carriages	4	...
L High sides	20	12
O Iron hopper	75	...
R Double-bogie high side	14	6
S " sheep	24	10
T " cattle	3	...
U " platform	12	...
V " freezers	20	...
F Four-wheel brake-van	2
F Double-bogie brake-van	1
U Locomotive, 16in. x 20in. cylinders, 4ft. 6in. wheels	2

Taken over from Westport Harbour Board : 1 Class F locomotive.

Taken over with Kaihu Railway : 1 Class A locomotive, 1 Class F locomotive, 1 Class D carriage, 1 Class F brake-van, and 16 Class M wagons.

Attached please find copies of reports from the various officers : District Managers, Kawakawa, Whangarei, Nelson, Picton, Westport, and Greymouth. Locomotive Engineer, Auckland ; together with report of Locomotive Foreman, Rolling-Stock Inspector, and Foreman Fitter. Locomotive Engineer, Napier-Taranaki and Wellington Sections ; together with reports of Workshop Foremen, Napier and Eastown ; Locomotive Foremen, Wanganui and Wellington ; Rolling-Stock Inspector and Foreman Fitter, Petone. Locomotive Engineer, Hurunui-Bluff ; together with reports of Workshop Managers, Addington and Hillside ; Locomotive Foremen, Christchurch, Dunedin, and Invercargill ; and Rolling-Stock Inspectors, Christchurch and Dunedin Districts.

T. F. ROTHERAM, Locomotive Superintendent.

MEMORANDUM for the RAILWAY COMMISSIONERS, Wellington.

No. 2147/77.

Chief Engineer's Office, Working Railways Department,
Wellington, 29th December, 1893.

Report on Condition of New Zealand Railways.

I HAVE the honour to report that the mileage of lines in my charge amounts to 1,948 miles 52 chains.

This includes an addition of 172 miles of new railways opened during the past five years.

The way and works generally have been maintained in good order.

Recent flood damages will shortly be fully repaired.

The lines have been very considerably improved during the past five years.

Relaying has been done as under :—

	M.	ch.
53lb. steel rails in place of 40lb. iron and 30lb. iron	110	20
53lb. steel rails in place of 40lb. steel	1	40
53lb. steel rails in place of 52lb. iron	22	40

Making a total of 134 20

of railway of improved weight of material.

The standard number of sleepers per rail length has during the last fifteen months been increased, involving the use of about 30,000 extra sleepers, giving additional stability to about 70 miles of main line.

Sleepers put in in the ordinary course amount to about 651,000 in five years ; these were 8in. by 5in. sleepers, replacing a large percentage of 7in. by 5in.

Considerable improvements have been carried out as under during the last five years : Improvements in grades and curves of the railway ; extensions of sidings ; river and foreshore protective works ; a number of bridges and culverts originally constructed of soft woods have been more permanently reconstructed in masonry, iron, and hardwood timbers ; foot-bridges and road-approaches ; level crossings and cattle-stops ; improvements to water services ; additional station-buildings and dwelling-houses ; additions to station-buildings and dwellings ; replacing timber platforms with solid ones having concrete fronts and asphalt surface ; cattle-yards ; additions to workshops ; overhead travelling cranes in goods-sheds and workshops ; grain-lifting appliances ; wharf extensions ; purchase of additional land for stations and ballasting purposes ; miscellaneous. These have all been done out of working expenses to the aggregate value of about £74,000.

I append hereto the certificates of the district officers.

I have, &c.,

J. HENRY LOWE, Chief Engineer.

MEMORANDUM for the RAILWAY COMMISSIONERS.

Stores Manager's Office, Wellington, 5th January, 1894.

In re Stock of Stores on 9th December, 1893.

I HAVE the honour to report that the value of stores on hand on 9th December 1893, at the various dépôts, amounted to £104,373 11s. 9d., as against £96,595 1s. 7d. on the 31st March, 1889.

The stock is in good order, and sufficient for our requirements. It has been carefully and systematically inspected every year.

R. CARROW, Stores Manager.

ACCOUNT No. 1.

WORKING RAILWAYS, VOTE No. 58, 1893-94.—£734,821.

Expenditure, 1st April to 31st December, 1893, as per Treasury books :—

	£	s.	d.
Final charges	481,612	1	7
Outstanding advances	81,966	6	10
Balance	171,242	11	7

£734,821 0 0

ACCOUNT No. 2.—RAILWAY WORKING ACCOUNT.

ESTIMATE showing the APPROXIMATE REVENUE and EXPENDITURE to the Termination of the Four-weekly period ending 6th January, 1894.

Miles open.	Revenue.	Expenditure.	Net.
1,948 ...	£ 866,772 s. 12 d. 2	£ 550,772 s. 15 d. 11	£ 315,999 s. 16 d. 3
Corresponding Period last Year, to 7th January.			
1,869 ...	£ 876,021 s. 12 d. 5	£ 564,732 s. 15 d. 0	£ 311,288 s. 17 d. 5

ACCOUNT No. 3.

PUBLIC WORKS FUND, VOTE No. 88, 1893-94.—ADDITIONS TO OPEN LINES, £18,978.

Works authorised and in progress	£ 16,995	s. 0	d. 0
Balance unallocated	1,983	0	0
						£18,978 0 0		

A. C. FIFE, Accountant.

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