

1929.
NEW ZEALAND.

RAILWAYS STATEMENT

BY THE MINISTER OF RAILWAYS, THE HON. W. B. TAVERNER.

MR. SPEAKER,—

In presenting the Railways Statement for the year ended 31st March, 1929, I have the honour to report that the gross income from all sources was £8,747,975, an increase of £223,437 on that of the previous year, whilst the expenditure was £6,849,383, an increase of £164,260. The net earnings were £1,898,592, as compared with £1,839,415, an improvement of £59,177 on the results in the previous year.

On the 31st March, 1929, the capital invested in the lines open for traffic, including the steamers and plant on Lake Wakatipu and other subsidiary services, was £56,568,598, an increase of £5,381,222 on the capital account for the previous year.

The increase in capital comprises £3,464,578 construction charges on 107 miles of new lines taken over from the Public Works Department during the year, £368,886 expended on new works and charged against capital account under "Additions to open lines," and £1,547,758 expended under the Railways Improvement Authorization Act, 1914, on works such as new workshops and the Westfield and Tawa Flat Deviations.

Included in the gross income is the sum of £498,937 credited in respect of developmental lines, a sum £9,369 higher than the amount received under the same heading for the previous year.

A sum of £655,986 was charged against revenue for depreciation and provision for renewals, and the amount expended from this fund was £258,836 for assets written off or renewals effected during the year. The accumulated credit balance in this fund at the 31st March, 1929, was £1,328,020, an increase of £397,150 over the balance at the 31st March, 1928.

Interest charges amounted to £2,331,335, as compared with £2,130,867 in the previous year, an increase of £200,468.

The deficit on account of revenue and expenditure on the year's working was £432,743, as compared with £291,452 for the previous year, an increase of £141,291; and this increase is principally due to the unprofitable nature of the new lines taken over during the year, the revenue from which was insufficient to pay working-expenses, thus leaving no margin for interest charges.

The revenue from passenger traffic totalled £2,124,746, as compared with £2,145,296 in the previous year, a decrease of £20,550, or 0·96 per cent. While these figures are more satisfactory than those for the previous year, when the decrease was £158,884, the fact must not be overlooked that the decrease in ordinary passenger traffic still continues. For the year under review the revenue from ordinary passenger traffic decreased by £148,476, but owing to the fact that Good Friday fell on the 29th March, 1929, as compared with the 8th April, 1928, the bookings for 1929 include the major part of two Easter holidays, and the heavy decrease in ordinary bookings is partially balanced by the increase in the holiday excursion issues.

It is satisfactory to note that the efforts of the Department in catering for week-end and picnic traffic and special events have resulted in an increase of £14,992 in the revenue from passengers carried at reduced fares.

Freight revenue totalled £4,846,125, an increase of £165,990, or 3·55 per cent., as compared with the figures for the previous year. The principal increases were in grain, butter, cheese, wool, agricultural lime, soft coal, road metal, benzine, and artificial manures.

The live-stock traffic totalled 10,319,768 head, an increase of 560,311 as compared with the previous year.

The gross expenditure was £6,849,383, as compared with £6,685,123 in 1928, an increase of £164,260. The principal increases were in maintenance of rolling-stock (£43,439) and traffic transportation (£65,506). The increase in the former item is due to the greater provision necessary for renewals and overhead expenses in respect to the workshops reorganization, while the larger expenditure on the traffic side is due chiefly to the expense incurred in working the additional mileage taken over during the past year and the cost of providing additional services such as the night expresses in the South Island.

Immediately on my assuming office I took the opportunity of making myself personally acquainted with so much of the railway system as circumstances permitted.

In the course of my tour I received many representations regarding a variety of matters affecting the Department's operations—a large proportion of these had reference to improvements that were desired. So far as these requests involved the undertaking of new works, I found myself considerably restricted in meeting the requests by financial considerations. The very large commitments in which the Department was involved to carry out the extensive works that are now in hand and must be carried to completion absorbed practically the whole of the available finance. I deal more particularly with the works in hand in another portion of this present Statement.

I have also given very careful consideration to the question of the financial position of the Department.

Dealing with the position of the railways from an historical point of view, we start from the point that the railways, in the first place, were undoubtedly constructed as a developmental institution rather than as a profit-making institution. Indeed, it is scarcely possible to conceive that much of the mileage of the present railway system, even of the main lines, would have been constructed at all if at the time when their construction was decided upon the question as to whether they should be gone on with or not had been decided on a profit-making basis. As the years have gone on this policy has been continued. Nor has it been confined to construction only; it has extended also to operations, and many services and tariff concessions have been given in the past on the basis of the developmental aspect of the railway policy.

It is, I think, absolutely essential to a proper interpretation of the railway accounts that we should keep these facts clearly in our mind. More especially do I think it timely to emphasize this fact, as there has undoubtedly grown a tendency to regard the deficit as shown in the annual Statement as a "loss."

In the light of the policy as above enunciated this is quite unjustified. It is beyond the possibility of question that the country has reaped very material indirect return from the existence of the railways. This return, however, has not been reflected in the annual Railways Statements. It is none the less real. The whole question resolves itself into one as to whether the time has arrived when the country is paying through the deficit on account of the railway work too much for the indirect returns that it is getting.

At this point a very great difficulty is encountered. It cannot be denied that the railway position in this as in every country in the world has been very adversely affected by the introduction of road-motor transport.

If we take the passenger figures alone we find that as compared with pre-war the revenue is down some £600,000. Taking also the natural increase that took place in the Department's passenger revenue prior to the advent of the road motor we could confidently have expected that the passenger revenue alone, but for the

influence of the road motors, would have approximated to the amount of the present deficit, and the extra revenue would have been earned with comparatively small increase in expenditure.

The question therefore arises as to what proportion of the railway deficit should be regarded as properly payable in respect of the developmental work of the railways. This obviously will depend on what the railways can be made to earn in the face of the fact that road-motor transport has now to be accepted as a permanent factor in the transport industry.

Before this can be determined it is essential that the respective spheres of railways and road transport should be determined and the fullest possible measure of co-ordination obtained. As matters are at present, it would be impossible to say with any degree of certainty what the railways are worth as a revenue-earning institution. The first step, as it appears to me, clearly is to so regulate the transport industry that the true value of each method of transport can be made clear.

The policy of the Government in this connection has already been enunciated in the Budget and need not be here repeated. I desire only to emphasize my firm conviction that the carrying-out of that policy is the first and most essential step in the development of a policy for a solution of the financial problem in regard to railways.

WORKSHOPS REORGANIZATION.

The position in regard to the carrying-out of the scheme of the reorganization of the workshops is fully set out in the report of the General Manager. As I understand the genesis of this scheme, it arose out of two factors—(1) The unsuitability of the old workshops for the purpose for which they were being used, and (2) the direct financial benefit that was to be obtained from the undertaking of the scheme.

With regard to (1), there seems to be no doubt that with the age of the shops—and the fact that they had developed, as was unavoidable, on more or less of a patchwork system as requirements necessitated from time to time—they had arrived at the stage when their operation could not be carried on with a degree of convenience and comfort to the staff that one would wish for. This would in itself raise a question as to the desirability of undertaking some scheme for improving them, but it still remains to be determined whether the particular scheme that was adopted was the one that should have been undertaken.

This raises the second question—*i.e.*, the financial results that were expected to accrue from the expenditure that has been undertaken. Estimates on such a matter as that seem to me to hinge very largely on the question of the full utilization of the shops when completed. This in turn will depend on the future requirements of the Department and the ability of the country to provide the finance necessary to enable the various works to be undertaken. Whatever the position in regard to these matters may have been when the scheme was formulated and decided upon, it is undeniable that at present it is obscure. The future expansion of the railways can hardly be as great as it has been in the past, while the pressure of other State activities on public finance will tend to make it more difficult to provide money for the railways on the same scale as has been done in the last decade. What the actual financial result of the reorganization will be is a matter that lies very much in the future and depends on factors that cannot in present circumstances be determined with any real degree of certainty.

One of the salient features of the workshops-reorganization scheme was the centralization of the heavier varieties of work. There seems to be some misunderstanding as to the question to which the work of centralization is being carried. All running repairs and the lighter types of work to rolling-stock will be undertaken at the various centres, much as has been the case hitherto. It is only the heavier repair work that is being centralized. This work requires the provision of up-to-date machinery. This machinery is expensive and requires to be worked to its maximum capacity, in order that the full economies of its installation may be obtained. It would not be economical to duplicate it, as there is not enough work in either Island to keep more than one set of the heavy machinery employed.

Another aspect of the question of centralization that I would like to touch on is that of the haulage of rolling-stock that requires to be dealt with at the centralized

shops. It is not correct to assume that the centralization of the heavy repair work will involve the dead haulage of the rolling-stock that will be dealt with at those points. Except in the case of disablement, the rolling-stock will be "worked" to the centralized points. Engines, for example, as and when they come due for overhaul, will have their runs so arranged that they will do work on their way to the shops. The cases of total disablement are a comparative small proportion of the heavy repairs that are carried out, and the amount of dead haulage should not be a very serious matter. It may be added that under any arrangement a certain amount of dead haulage is unavoidable.

NEW WORKS.

I have paid much attention to the matter of new works which the Department have in hand and which are in contemplation as disclosed by the programmes that have been formulated. All those in hand will, with the exception of the Palmerston North Deviation, be carried to completion. These works are of considerable magnitude, and the sums required to enable them to be carried on have, as far as the present year is concerned, absorbed all the money that could be made available to the Railway Department for the purpose of new works of this character, and this position is likely to continue for at least the next year or two.

As far as Palmerston North Deviation is concerned, an announcement has already been made regarding that work, and I think this may be a convenient place to put on official record the reasons which led to that decision.

The broad basis of the decision to undertake the work of the deviation at Palmerston North was the fact that the increase in traffic at and passing through that station had up to the time when the decision was made been such as to indicate that if the increase were maintained the traffic would within a few years outgrow the facilities. Subsequent traffic developments have shown that the increase has not been maintained. This obviously called for a review of the situation, and on going into the whole matter it was found that, due partly to the failure of the traffic to develop as was expected and partly to the recasting of the traffic arrangements, the pressure at Palmerston North had been much relieved, and it was possible to evolve a scheme of improvements on the present site that would enable the work to be carried on there with a reasonable measure of convenience.

The cost of these improvements is estimated to be in the vicinity of £33,000; against this we have an estimated cost to complete the deviation and facilities in connection therewith of approximately £725,000. On the basis of cost, therefore, it was quite clear that the completion of the deviation would not be justified unless some other very substantial advantages were definitely in view.

Further examination showed that no such advantages could be perceived. On the contrary, there were further material disadvantages associated with the removal of the station from its present to the proposed site. On the new site the station would be removed a considerable distance farther from the business centre of the town, and, having particular regard to the keen competition from road carriers with which the railways are now faced, such a circumstance could not do other than operate to the disadvantage of the railways. Furthermore, there was no economy in working to be obtained by the change; on the contrary, it is estimated that the new station and yards as designed would involve an increase in the operating expenditure of some 50 per cent.

All these facts made an incontestable case in favour of the stoppage of the work and amply justified the Government's decision not to carry on the work in connection with the deviation and to provide the improved facilities on the present site.

As regards other works in the programme which have not yet been completed, I desire to say that I propose to review these progressively as time for their commencement approaches. I do not think it wise at the present time to make any final decision as to what might be done some years ahead, principally for the reason that the railway position is in such a state of flux as may make a decision to-day more or less valueless in a few years. The correctness of this position has, I think, been already amply demonstrated. An outstanding example is the case of the

Palmerston North Deviation, as to which, however correct the decision might have been at the time when it was decided to undertake the work, there is not the slightest doubt that the conditions as they exist to-day called for a review of the situation, and justified the Government in its decision to stop the work.

For those reasons I do not think that any other course of action can be fittingly adopted under present circumstances than to do as I have already indicated—namely, carry to completion the large works now in hand, and as financial possibilities and other circumstances permit review all other propositions for railway-improvement.

One of the aspects of new works required to be undertaken that I think is important is that of the means of communication. From my own experience in moving about, and from consideration of the great changes that have taken place in the machinery of communication during recent years, I gathered the decided impression that the Department was working at great disadvantage so far as these facilities are concerned. The matter has been specially investigated, and the report shows that it is very necessary for efficiency and will certainly make for material economy if improvements are made in the Department's communication facilities.

On the economy side special significance attaches to the system of train-control; a system by which movements of trains on the various sections are controlled from a central office by means of a special telephone system. Train-control is already in operation on certain parts of the railways, and experience has shown that very considerable economy has resulted and much more satisfactory service has been made possible from the point of view of the more expeditious working of the trains.

The system of train-control has a special value in New Zealand with our high proportion of single-line working, which calls for a higher standard of organization to reduce delays to trains resulting from initial delay of any particular train. In the allocation of available finance in future I propose to pay special attention to the requirements of the Department's means of communication. For the year now current the sum of £51,000 has been allocated under this heading.

TRAIN SERVICES.

I have commenced an investigation into the train services with a view to seeing whether improvements might not be possible to ensure better running or improved services. Some adjustments have already been made in the schedules affecting passenger trains in the South Island and on the Rotorua and East Coast Main Trunk lines.

The running of the night trains in the South Island has been continued, and has given a large measure of satisfaction, especially to the business community. It will be my policy to develop night-passenger services as far as possible, as I am convinced that this is a field in which the railways should have considerable scope for the development of a traffic that should become both profitable to the Department and increasingly appreciated by the community.

ROAD-MOTOR SERVICES.

Another matter of growing importance, and one which will come more frequently up for decision in connection with the Department's operations in the future, is that of the working of traffic by the Department through the medium of road vehicles.

My own view is that such operations should be decided upon with very great caution. We are by no means in a position to say that the road-motor operations that are now being carried on in the community are on a sound basis, and I feel that any action on the part of the Department in the direction of embarking on road-motor operations to any great extent requires careful examination as it might have serious results on the Department's financial position.

I can quite realize, however, that there may well be cases where the Department could, with advantage to itself and for better service to the community, undertake road-motor work; and when a case is clearly established for sound working on these lines then I think there is no good reason why the Department should not undertake the work.

I am impelled to make these observations, because there have been suggestions that the Department should not carry on road-motor services. I do not think that the matter can be carried to the point of absolute prohibition of any such action on the part of the Department; first and foremost the Department is a transport institution and its duty is clearly to give the transport service for which it is provided by the cheapest and most efficient means. Only when a road proposition is definitely ascertained by examination of all the facts to be the cheapest and most efficient means, and not till then, should the Department turn to that form of transport to enable it to carry on its services.

MAINTENANCE OF BUILDINGS.

As I have moved about the railway system it has been increasingly borne in upon me that the standard of the railway buildings is not up to modern ideas. Many of the buildings are very old, and, though they may be reasonably adequate for the purposes of the business, they are architecturally out of date and have the effect of giving the railway surroundings a somewhat drab appearance.

The great majority of the buildings are constructed of wood, and have done duty in many cases over a very long period of years. Especially with wooden buildings, maintenance costs tend to grow proportionately higher with increasing age, and I think we must look forward in the near future to rising maintenance-costs in respect of our buildings.

LYTTELTON TUNNEL ELECTRIFICATION.

This important improvement was completed and the length opened for traffic on 14th February, 1929. The total cost of the work was £145,000. While the expenditure is not expected to bring in any substantial increase of revenue, it was undoubtedly justified from the standpoint of comfort and is in accord with the demand for better travel facilities, a demand, it may be mentioned, with which the Department is faced in many other directions.

BRANCH LINES.

Considerable attention has already been given to investigating the position of the branch lines so as to determine their value as compared with possible alternative forms of transport.

As far as the internal working of the Department is concerned, and assuming that the branch lines still remain, consideration of the matter at once raises the question of the more extended use of rail-cars. A committee of executive Officers of the Department, representing every phase of railway operation that may have a bearing on the question, is now undertaking a thorough and systematic examination of the position with a view to the formulation of definite recommendations—firstly, as to the best method of working the traffic: that is, whether by rail-cars, road services, or trains; and, secondly, in the event of rail-cars being recommended, what is the most useful type for the particular service required in each case. In this latter connection the rapid development that has taken place in recent years in connection with various types of rail-cars, particularly Diesel electric and other similar types, renders it very desirable, more especially in view of the very large issues involved, that we should have first-hand information regarding the most modern types of vehicles and their adaptability to our conditions. To that end I propose to send abroad immediately a competent officer to inquire on the spot into the actual performance of the various kinds of rail-cars on railway systems where they have been adopted. I confidently expect that during the coming year we shall be able to formulate definite proposals.

LOCOMOTIVES.

The standard of our locomotives has been a matter that has come pointedly under my notice. This has been brought about by some failures of locomotives of a greater or lesser magnitude, in some cases involving disorganization of the passenger service. Investigations made at my request have shown that certain difficulties which appeared unavoidable have had a direct bearing on the question of the efficiency of our locomotives.

It was inseparable from a change over from the old workshops to the new ones that the work of passing the locomotives through the shops should become somewhat disorganized and fall into arrear. Joined with this fact was the circumstance of a peak pressure of traffic. We had during the concluding portion of the year a record tonnage, and our locomotives were kept continuously employed, considerably restricting the opportunities for running repairs and general overhaul. This conjunction of circumstances is, however, a passing phase, and definite arrangements have now been made for the overhaul of locomotives to be rigorously pursued so that the standard of efficiency of our engines will be fully up to requirements for the next ensuing busy season.

A further aspect of the question that has engaged my attention is that of the cleaning of locomotives. The necessity for rigid economy has prevented the same standard of polish being given to engines as was the case in past years. I desire to make it clear, however, that economy in this direction will be confined only to such parts of the cleaning process as do not affect the efficiency of the engines. All moving parts will require to be thoroughly cleaned, and my policy will be to see that there is no sacrifice of efficiency to economy in this connection.

While so laying down the policy, however, I would mention that in the matter of the cleaning of the essential parts of the engines we are pursuing investigations with a view to enabling the work to be done more cheaply than has been the case in the past. This will generally take the line of adopting other methods than hand-cleaning of the engines, and a practical commencement has already been made by the installation at Dunedin of a process of cleaning by means of a steam jet. The results will be carefully watched, and if proved satisfactory and economical the system will be further extended.

UTILIZATION OF NEW ZEALAND COAL.

The figures supplied in the General Manager's report under the heading of "Coal Supplies" indicate the pleasing fact that the quantity of New Zealand coal utilized during the past year amounted to the unprecedented figure of 356,724 tons representing 84·25 per cent. of the total coal consumed.

It will also be noted that whereas in 1925 the total importations from overseas amounted to 313,107 tons, which represented a percentage of 76·84 of the total consumption, this figure dropped in the year under review to 66,675 tons, or a percentage of 15·75.

It is very gratifying to be able to record that the Department has been able to utilize the local product in an increasing ratio, thus assisting in the maintenance of one of our great national industries.

RENEWAL FUND PROVISION.

I desire to record the fact that prior to 1925 the railway accounts did not include a Renewal Fund for the replacement of items of plant which had become obsolete or worn out. A Renewal Fund was established in that year with a contribution from the Revenue Account of £553,891. Up to the end of the financial year 1928-29 a total contribution of £2,397,988 had been made out of revenue. During the same period the fund had been called upon to the extent of £1,069,968 for the purpose for which it was established, leaving a credit of £1,328,020 as at 31st March last.

It is necessary to point out that the making of adequate provision for renewals in a system as vast as that of the railways, and one in which such a large amount of capital has been invested in assets, which rightly must be regarded as of a wasting nature, is a matter on which opinions might differ as to what is or is not adequate provision. It is admittedly difficult when any business is conducted at a loss to keep contributions of this nature up to a correct standard. At the same time it is obvious and needs no demonstration that unless that standard of contribution is maintained the ultimate strain upon the revenue of the Department for renewals and replacements must be in an increasing ratio as the years pass.

The position in this regard is very vividly brought out by the reference made in the General Manager's report under the heading of "Bridges."

The Department has over fifty miles of bridges, many of which are now due for renewal or strengthening. This will call for a heavy outlay, and the point that I would emphasize at the present juncture is that the additional financial provision that now has to be made for renewals in consequence of the inadequate provisions made in the past cannot be rightly regarded as loss on present or future working. The country in making up this deficiency is simply paying back something it should not have had in the first place.

CONCLUSION.

In conclusion, I would like to say that in the time afforded me since assuming office there has not been opportunity for working out a detailed policy in connection with the Department. It will be understood that in consequence of a change in the administration not only in respect to the Ministry, but also in respect to the management, much inquiry was necessary, in order that a sound foundation of data might be obtained for the building-up of a policy for the future.

I have in the course of this statement dealt with some of the matters of more immediate moment that we have been able to deal with to a greater or less extent up to the present. Further than that I can but lay down the general lines of my policy, which, stated in the fewest possible words, will be to give the greatest measure of service to the community at the lowest cost that the circumstances will allow. The strictest economy consistent with proper efficiency will be aimed at so far as the internal working of the Department is concerned. As regards its external relationships with other factors in the transport industry, it will be my policy to work to the fullest possible degree in harmony with other forms of transport, constantly endeavouring to give the fullest measure of usefulness to the community out of the transport industry as a whole.

The acquaintance which I have already formed with the detailed working of the Department has convinced me that we have a staff able and enthusiastic, imbued with high principles of service and desirous not only of carrying out their daily vocations as a means of livelihood, but also to make the railway service something that will stand to the credit of the Dominion.

Before concluding I desire to express my personal appreciation for the invaluable assistance rendered to me by Mr. H. H. Sterling, General Manager, in my endeavour to grasp the intricate details of railway-management.

I regard Mr. Sterling as a man of exceptional ability, and one in every way capable of carrying out to successful conclusions the extremely important work in which he has been engaged by the State.

RESULTS OF WORKING.

The following is a statement of the results of working for the past four years:—

PARTICULARS.	Year ended 31st March,			
	1929.	1928.	1927.	1926.
Total miles open for traffic	3,287	3,180	3,164	3,138
Average miles open for year	3,254	3,178	3,157	3,103
Capital cost of opened and unopened lines ..	£62,276,214	£58,797,458	£56,028,477	£53,716,455
Capital cost of open lines	£56,568,598	£51,187,376	£49,183,916	£47,608,676
Capital cost per mile of open lines	£17,210	£16,097	£15,545	£15,172
Gross earnings	£8,747,975	£8,524,538	£8,434,654	£8,460,762
Working-expenses	£6,849,383	£6,685,123	£6,490,880	£6,468,428
NET EARNINGS	£1,898,592	£1,839,415	£1,943,774	£1,992,334
Interest charges	£2,331,335	£2,130,867	£2,043,433	£1,913,311
Appropriation for betterments	..	..	..	£58,000
Unappropriated surplus	..	..	..	£21,023
Deficit	£432,743	£291,452	£99,659	..
PERCENTAGE OF TOTAL WORKING-EXPENSES TO GROSS EARNINGS ..	78-30	78-42	76-95	76-45
PERCENTAGE OF NET EARNINGS TO CAPITAL INVESTED	3-45	3-64	3-99	4-35
Railway operating earnings	£7,524,864	£7,343,845	£7,423,472	£7,589,274
Railway operating expenses	£6,374,579	£6,302,119	£6,158,283	£6,164,570
NET RAILWAY OPERATING EARNINGS ..	£1,150,285	£1,041,726	£1,265,189	£1,424,704
PERCENTAGE OF RAILWAY OPERATING EXPENSES TO EARNINGS	84-71	85-81	82-96	81-23
Operating earnings per average mile open ..	£2,312	£2,310	£2,351	£2,446
Operating expenses per average mile open ..	£1,959	£1,983	£1,951	£1,987
NET OPERATING EARNINGS PER AVERAGE MILE OPEN	£353	£327	£400	£459
Operating earnings per train-mile	d. 162-50	d. 162-62	d. 166-14	d. 176-51
Operating expenses per train-mile	137-66	139-55	137-82	143-37
NET OPERATING EARNINGS PER TRAIN-MILE	24-84	23-07	28-32	33-14
Passengers, ordinary	9,074,993	9,299,157	10,305,065	11,813,480
Season tickets	656,169	632,763	585,094	600,292
Total passenger journeys	25,574,843	25,379,665	26,002,137	27,653,414
Goods tonnage	7,086,680	6,854,865	6,833,436	6,808,603
Live-stock tonnage	535,951	511,897	475,013	447,539
Train-mileage	11,113,482	10,838,594	10,723,864	10,319,407
Engine-mileage	16,150,146	15,383,051	15,212,086	14,657,039

For the current year I anticipate the revenue will reach £8,800,000, and the expenditure £6,658,579.

ANNUAL REPORT OF THE GENERAL MANAGER OF THE NEW ZEALAND GOVERNMENT RAILWAYS.

The Hon. the Minister of Railways.

New Zealand Government Railways,
Head Office, Wellington,

SIR,—

2nd September, 1929.

I have the honour to report on the working of the railways for the financial year 1928–29. On retirement of the members of the Board of Management I entered upon office as General Manager on the 1st June, 1928. Owing, however, to its being found impossible to at once release me from the position then held by me as general manager of the New Zealand Co-operative Dairy Co., Ltd., I was not able to give my full time to the work of the Department until the termination of my period of service with that company on the 30th November of that year. I assumed full control of the Department on the 1st December, 1928.

Before dealing in detail with the various branches of railway working I purpose reviewing briefly the year's results and commenting upon some of the more important aspects of the Railway Department's activities.

FINANCIAL.

On the 31st March, 1929, the capital invested in the lines open for traffic, including the steamers and plant on Lake Wakatipu and other subsidiary services, was £56,568,598, as compared with £51,187,376 on the 31st March, 1928, an increase of £5,381,222.

This increase in capital includes £3,464,578 construction charges on lines taken over from the Public Works Department during the year, £368,886 expended on new works and charged against Capital Account under "Additions to Open Lines," and £1,547,758 expended under the Railways Improvement Authorization Act, 1914.

The financial results for the year under review as compared with the preceding year are as follows:—

					Year ending 31st March, 1929. £	Year ending 31st March, 1928. £	Increase. £
Gross revenue	..	..	..	..	8,249,038	8,034,970	214,068
Credit for developmental lines	..	..	..	..	498,937	489,568	9,369
Total	..	..	..	..	8,747,975	8,524,538	223,437
Gross expenditure	..	..	..	..	6,849,383	6,685,123	164,260
Interest	..	..	..	..	2,331,335	2,130,867	200,468
Total	..	..	..	..	9,180,718	8,815,990	364,728
Deficit	..	..	..	..	£432,743	£291,452	£141,291

The gross receipts for the year, inclusive of the credit for developmental lines, were £8,747,975, as against £8,524,538 for the previous year. The gross earnings, which exclude the credit for developmental lines, were £8,249,038, an increase of £214,068, or 2·66 per cent., on the previous year's figures.

The gross expenditure totalled £6,849,383, an increase of £164,260, or 2·46 per cent., on the figures for the year ending 31st March, 1928.

It will be noted that on the figures tabulated above the revenue, excluding the credit in respect of developmental lines, increased by £214,068, equal to 2·66 per cent., while the expenditure increased by £164,260, equal to 2·46 per cent., an improvement in revenue on these figures of £49,808. In order, however, to get a comparison of this year with the previous year in true perspective it is necessary to make allowance for certain circumstances which arose during the year under review and which have a differentiating effect as between the two years. In other words, in order to make a true comparison for purposes of framing a judgment on the financial results of the Department it is necessary to bring the figures of both years as nearly as possible to the same basis.

The first and largest differentiating factor is the new lines that were taken over during the year, and for which *credit for loss* was not received by the Department. These were the Kirikopuni and East Coast Main Trunk Sections. The operating revenue on the Kirikopuni Section from the time it was taken over until the end of the year was £2,495; the expenditure was £7,481. The expenditure on the East Coast Main Trunk Railway was £72,689, while the revenue was £49,678. The total operating expenditure on the two lines was £80,170, and the operating revenue was £52,173. Deducting these figures from the revenue and expenditure as shown in the figures for 1928–29 tabulated above, we find that if these two lines had not been taken over the expenditure would have shown £6,769,213 and the revenue £8,695,802, giving a net revenue on that basis of £1,926,589, as compared with a net revenue on the same basis last year of £1,839,415, an increase for this year of no less than £87,174. In addition to this, it has to be noted that during the year under review there has been put aside out of revenue for the general renewals and Depreciation Fund and the Insurance Fund no less than £43,680 more than last year, all of which money, of course, was actually earned by the Department as revenue over its operating-expenses.

It will be seen, therefore, that if we consider the railways from the point of view of operating revenue and expenditure, the Department has made substantial progress during the year.

Coming to the non-operating aspect of the figures, we find that the net income was equal to 3·45 per cent. on the capital invested in lines open for traffic. The interest charges for the past year totalled £2,331,335, an increase of £200,468 as compared with the figures for the previous year.

The sum charged against revenue for depreciation and provision for renewals was £655,986, and the amount expended from the Depreciation and Renewals Fund was £258,836 for assets written off or renewals effected during the year. The accumulated credit balance in this fund at the 31st March, 1929, was £1,328,020, an increase of £397,150 over the balance at the 31st March, 1928.

The position in regard to the undermentioned equalization funds is as follows :—

—		Credit Balance brought for- ward from 1928.	Contributions, 1928-29.	Expenditure, 1928-29.	Credit Balance at 31st March, 1929.
		£	£	£	£
Slips, Floods, and Accidents Fund	..	26,600	21,504	21,202	26,902
Workers' compensation		18,260	44,582	44,344	18,498
Insurance		18,129	15,642	8,952	24,819
		62,989	81,728	74,498	70,219

The extension of the railway from Miller's Flat to Roxburgh, which was taken over on the 18th April, 1928, resulted in an increased loss on the total section from Clarkesville to Roxburgh of £10,093. This is included in the credit received on account of developmental lines.

No credit was received in respect of the Waiotira-Kirikopuni and Tahawai-Taneatua lines, which were taken over during the year, and the loss on these two sections was £40,428 and £90,547 respectively, including interest for the period for which the lines were under the control of the Railway Department.

COMPARISONS WITH THE RESULTS OF PREVIOUS YEARS.

The extent to which the accounting and financial reorganization brought into operation on the 1st April, 1925, has affected the annual statement of results and the financial position of the Department is not generally recognized.

If the differentiating factors are not allowed for, erroneous deductions and misleading comparisons may easily be made. This remark applies more particularly to the expenditure shown in the accounts in respect of maintenance of the permanent-way and works and the rolling-stock and equipment.

Under the old system there was no provision for setting aside reserves to meet accrued depreciation or obsolescence, or for equalizing the widely fluctuating expenditure resulting from fire, flood, or accident. The railway accounts were not charged with the cost of subsidies to the Superannuation Fund, and interest was computed at a policy rate, which, at least in later years, was considerably below the actual rate.

The following summary makes a comparison of some of the main items charged against expenses during the four years ended 31st March, 1925, and 31st March, 1929, respectively :—

		Four Years ended 31st March,	
		1929.	1925.
		£	£
Reserves accumulated for renewals and depreciation..		1,328,020	..
Reserves against fire, flood, and accident		70,219	..
Old and obsolete rolling-stock and equipment written off		415,596	89,435
Superannuation Fund subsidies		706,477	80,000
		<u>£2,520,312</u>	<u>£169,435</u>

In addition to these items the higher rate of interest now payable on capital increased the interest bill by £910,995 in the four years ended in 1929.

The total amount of credit received in respect of the working of non-paying lines in the same period was £1,793,266, or little more than sufficient to meet the additional cost of interest and Superannuation Fund subsidies.

I regard the foregoing as important, as already some public writers have been led to make false deductions regarding the railway situation as a result of their failure to take account of the circumstances mentioned.

EARNINGS.

The income in respect of railway operation under the main headings, and the percentage under each heading to total income, compared with the two previous years is as follows :—

—	1928-29.	Per Cent. of Operating Revenue.	1927-28.	Per Cent. of Operating Revenue.	1926-27.	Per Cent. of Operating Revenue.
	£		£		£	
Passengers, ordinary	1,868,048	24·82	1,886,833	25·69	2,045,348	27·56
Season tickets	256,699	3·41	258,463	3·52	258,832	3·49
Parcels, luggage, and mails	378,141	5·03	379,933	5·17	377,367	5·08
Goods	4,846,125	64·40	4,680,135	63·73	4,596,166	61·91
Labour, demurrage, &c.	175,851	2·34	138,481	1·89	145,759	1·96
	<u>7,524,864</u>	<u>100·00</u>	<u>7,343,845</u>	<u>100·00</u>	<u>7,423,472</u>	<u>100·00</u>

The increase in the operating earnings for the current year over the year ended 31st March, 1928, is 2·46 per cent. The passenger earnings in the same period have decreased by 0·96 per cent., while the goods earnings have increased by 3·55 per cent.

The operating receipts from the North and South Island Main Lines and Branches, shown separately, are as follow :—

	North Island Main Line and Branches.			South Island Main Line and Branches.		
	1928-29.	1927-28.	1926-27.	1928-29.	1927-28.	1926-27.
	£	£	£	£	£	£
Passengers, ordinary ..	1,195,259	1,213,778	1,313,574	644,118	645,488	702,402
Season tickets ..	171,034	172,816	170,391	81,478	81,055	83,696
Parcels, luggage, and mails	241,009	239,667	236,749	128,486	131,938	132,574
Goods ..	2,721,384	2,625,540	2,578,047	1,938,634	1,869,774	1,826,351
Labour, demurrage, &c...	93,300	69,400	78,969	69,389	56,643	54,292
	4,421,986	4,321,201	4,377,730	2,862,105	2,784,898	2,799,315

The operating earnings per average open mile and per train-mile are as follow :—

	Per Average Mile open.		Per Train-mile.
	£	d.	
1928-29	2,312	162·50	
1927-28	2,310	162·62	
1926-27	2,351	166·14	

The operating earnings for the North and South Island Main Lines and Branches are as follow :—

Year.	North Island Main Line and Branches.		South Island Main Line and Branches.	
	Per Average Mile open.	Per Train-mile.	Per Average Mile open.	Per Train-mile.
	£	d.	£	d.
1928-29	3,202	158·27	1,760	167·72
1927-28	3,289	160·05	1,721	165·05
1926-27	3,386	164·11	1,730	167·79

Subsidiary Service Revenue.—The revenue from subsidiary services amounted to £724,175 as compared with £691,125 for the previous year, and an analysis of the figures is as follows :—

	1928-29.	1927-28.	1926-27.
	£	£	£
Lake Wakatipu steamers	10,941	9,885	10,273
Refreshment service	123,382	122,220	129,612
Advertising service	53,984	52,600	47,387
Departmental dwellings	105,897	93,643	83,375
Leases book-stalls, &c.	19,455	20,542	20,462
Road-motor services	102,385	32,487	8,744
Miscellaneous	308,131	359,748	266,108
	<u>724,175</u>	<u>691,125</u>	<u>565,961</u>

EXPENDITURE.

The total expenditure for the year ended 31st March, 1928, was £6,849,383, an increase of £164,260 as compared with the previous year's figures.

	1928-29.	1927-28.	1926-27.
	£	£	£
Expenditure on train operation ..	6,374,579	6,302,119	6,158,283
Subsidiary services	474,804	383,004	332,597

	1928-29.	Per Cent. of Operating Revenue.	1927-28.	Per Cent. of Operating Revenue.	1926-27.	Per Cent. of Operating Revenue.
	£		£		£	
Maintenance—Way and works	1,111,229	14.77	1,147,067	15.62	1,074,334	14.47
Maintenance—Signals ...	112,206	1.49	102,871	1.40	100,861	1.36
Maintenance—Rolling-stock ..	1,424,165	18.93	1,380,726	18.80	1,303,444	17.56
Examination, lubrication, and lighting of vehicles	67,023	0.89	62,512	0.85	60,095	0.81
Transportation—Locomotive	1,583,770	21.05	1,599,562	21.78	1,609,257	21.68
Transportation—Traffic ..	1,825,965	24.26	1,760,459	23.97	1,752,998	23.61
Head Office and general charges	80,943	1.07	75,048	1.02	82,287	1.11
Superannuation subsidy ..	169,278	2.25	173,874	2.37	175,007	2.36
	6,374,579	84.71	6,302,119	85.81	6,158,283	82.96

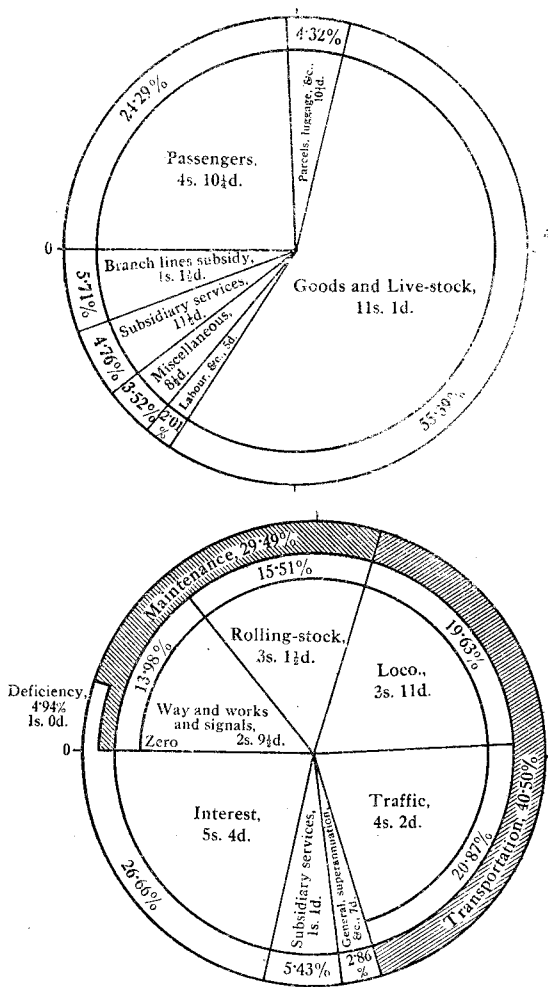
The operating expenditure per average mile open and per train-mile is as follows :—

	Per Average Mile open.	Per Train-mile.
	£	d.
1928-29	1,959	137.66
1927-28	1,983	139.55
1926-27	1,951	137.82

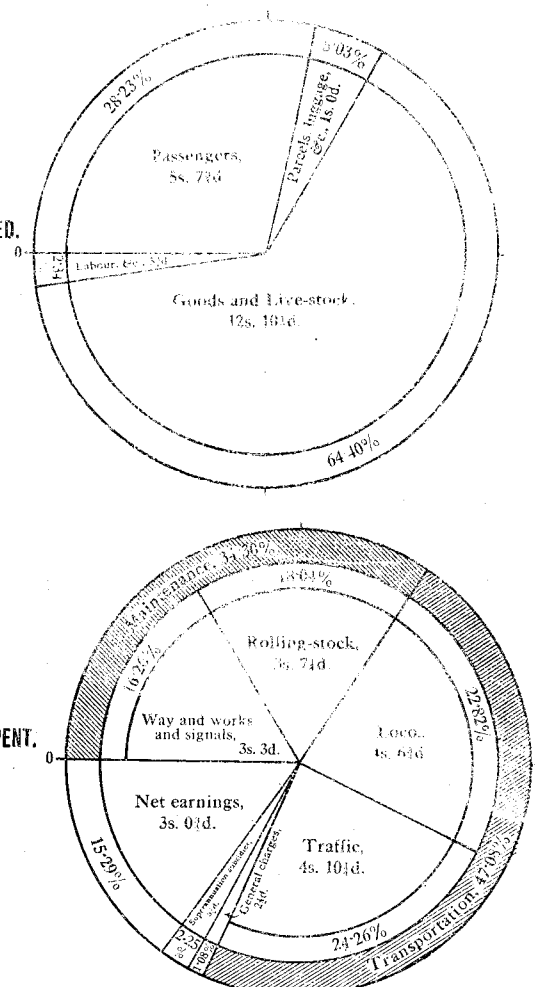
Subsidiary Services Expenditure.—The particulars of the expenditure in connection with subsidiary services are as follow :—

	1928-29.	1927-28.	1926-27.
	£	£	£
Lake Wakatipu steamers	17,425	15,627	15,859
Refreshment service	116,391	114,644	119,567
Advertising service	50,720	48,921	42,509
Departmental dwellings	170,073	162,263	137,547
Leases book-stalls, &c.	8,483	8,828	8,271
Road-motor services	111,712	32,721	8,844
	474,804	383,004	332,597

THE WHOLE UNDERTAKING.



TRAIN OPERATION.



PASSENGERS.

An analysis of the passenger revenue for the year is as follows :—

	1929.	1928.	Variation.	Per Cent.
Passenger journeys—				
Ordinary	9,046,267	9,272,547	—226,280	2.44
Season	16,496,596	16,075,694	+420,902	2.62
	25,542,863	25,348,241	+194,622	0.77
Revenue—	£	£	£	
Ordinary	1,868,048	1,886,833	—18,785	1.00
Season	256,699	258,463	—1,764	0.68
	2,124,747	2,145,296	—20,549	0.96
Passenger train-miles.. .. .	4,833,991	4,644,905	+189,086	4.07
Revenue—				
Per mile of line	£653	£675	—£22	3.26
Per train-mile	105.49d.	110.85d.	—5.36d.	4.84

The variations, exclusive of season tickets, were distributed as follows :—

	1929 compared with 1928.		1928 compared with 1927.	
	Journeys.	Revenue.	Journeys.	Revenue.
	Number.	£	Number.	£
Ordinary fares	—413,648	—148,476	—613,643	—136,994
Suburban fares	—195,186	—10,912	—268,574	—16,036
Holiday excursion and week-end	+114,476	+108,997	—32,548	—6,461
Other reduced fares	+268,744	+14,992	—87,566	—8,767

The revenue from passenger traffic was £2,124,747, a decrease of £20,549 as compared with the figures for the previous year; and, while these figures show an improvement on the previous year's results (when the decrease in passenger traffic was £158,884), the shrinkage of passenger earnings is still proceeding.

The figures for the year under review show that the decrease in ordinary and suburban tickets is again the principal cause of the decline in passenger revenue. This decrease is due to the extensive use of the private motor-car, together with (in a lesser degree) the service-car organizations which have established services throughout the Dominion. The mobility of the motor-vehicle is such that for certain classes of travel the railway cannot hope to compete with it on an economic basis, and further decreases in passenger traffic by rail under the headings mentioned must be expected. For example, the service-car organizations run a number of services between the principal towns at stated hours daily, and this smaller and more mobile unit is at a great advantage in catering for the passengers who may not find it convenient to travel by the scheduled trains which run between those places. It would obviously be quite unsound for the Railway Department to endeavour to cater for this class of traffic by providing additional trains for the small number of passengers which a service-car conveys. There is another factor which, in my opinion, contributes largely to the decline in passenger traffic. People in country areas cannot conveniently use the rail for travel between neighbouring stations, because in respect to their intended journeys the location of the railway-station in many instances involves a more or less substantial measure of travel to and from the railway-stations. On the other hand, the motor-vehicle can give continuous service all along the road, whereas with trains the railway can only do so at stations which are in most cases some miles apart.

So far as the remaining figures are concerned, the results obtained from holiday excursions, week-end, and other reduced fares indicate that the railway still has a definite field in catering for bulk movement of passengers in addition to the long-distance traveller, and it is satisfactory to note that during the past year the efforts of the Department in catering for special excursion, week-end trips, and picnic parties have resulted in an increase in this class of traffic. Owing to the fact that Good Friday fell on the 29th March, 1929, as compared with the 8th April, 1928, the bookings for 1929 include the greater part of two Easter holidays. After allowing for the Easter traffic, however, the returns from holiday-excursion tickets are approximately £50,000 ahead of the previous year's figures.

The number of season tickets issued increased by 23,428 : of this number 21,853 were workers' weekly tickets, which are by no means remunerative to the Department, but represent a concession to the suburban residents concerned, the value of which it is impossible to state in terms of money. This class of ticket enables many workers to leave the congested city areas and reside in congenial surroundings some distance from the city, and this cannot but be beneficial to these people, the majority of whom are thus enabled to purchase homes of their own. This is but one instance where the Government railways provide a service which is not remunerative in so far as railway revenue is concerned, but is one which means better living-conditions for the people, and brings added prosperity not only to the districts served, but to the Dominion as a whole.

For the year ended 31st March, 1929, the number of passenger journeys, exclusive of season tickets, was 9,046,267, and this is smaller than the number carried in 1907, when the figures were 9,600,786. In other words, the railways are back to the basis of twenty-two years ago so far as the number of ordinary passengers is concerned. The peak of the passenger traffic was in 1921, since when there has been a steady decline in this branch of the railway business. The figures below show that whereas in 1907 the population made 9.98 railway trips per head, the population in 1929 made an average of only 6.15 trips per head.

Year.	Passengers carried, exclusive of Season-ticket Holders.	Population.	Per Head of Population—Number of Trips.
1907	9,600,786	961,604	9.98
1921	15,315,640	1,268,046	12.08
1929	9,046,267	1,470,649	6.15

Passenger journey figures for season tickets are not available for 1907, but a comparison of the total passenger journeys, including season tickets, for 1929 as compared with 1921 is as follows :—

Year.	Passenger Journeys—Total.	Population.	Per Head of Population—Number of Trips.
1921	28,821,783	1,268,046	22.72
1929	25,542,863	1,470,649	17.37

The United States of America have conditions somewhat similar to those of New Zealand in that in both countries the proportion of automobiles to the population is very high, and it is interesting to note that a result somewhat similar to that in New Zealand has arisen in the United States so far as passenger traffic is concerned.

The peak year of passenger traffic in the United States of America was 1920, and the figures for 1928 are 37.9 per cent. below those for 1920, as compared with a decrease in New Zealand as between 1921 (our peak year) and 1929 of 11.3 per cent. The number of passengers carried in the United States in 1928 was smaller than in any year since 1905, and the average number of trips per inhabitant had decreased from 8.77 in 1905 to 6.57 in 1928.

Reflection on the passenger business shows that the problem presents itself in the following aspects : (1) On the expenditure side there is the question as to whether such traffic as we are able to retain or regain cannot be worked more cheaply than by the methods at present in operation on our system. (2) On the revenue side are the questions (a) of retaining the business at its present level ; (b) of regaining some of the traffic which has been lost ; and (c) creating new traffic.

Dealing with the first question—namely, that of the more economical working of the traffic at present handled by the Department—I feel that there should be possibilities in this direction by the use of smaller units of transport production, which may be in the form of rail-cars or engines of smaller size or special type. This is one of the questions to which I gave consideration soon after I assumed the full duties of my office, and it is now the subject of comprehensive investigation. On the completion thereof definite proposals will be immediately formulated. To the end also of reducing operating costs there has already been substituted in some cases on our system road motor-buses for trains, and where this can be done to the financial advantage of the Department I can see no sound reason why the Department should not protect its revenue by such means, and continue to give the transport-service to the people of the districts affected that before the development of the road motor-vehicle was given by rail.

On the revenue side (a) and (b) are closely related, but unquestionably the regaining of lost traffic must be more difficult than retaining the traffic now possessed. It is in connection with these aspects of the passenger problem that we find an almost insuperable difficulty in the increasing use of the private motor-car. The more limited mobility of a railway as compared with the private motor-car places the railway at a disadvantage that is not nearly counteracted by its cheapness.

The railway encounters a difficulty in this connection not only arising from its physical nature, which requires it to run on rails, but also resulting from the fact that it deals with traffic in the mass, while the mobility of the private motor-car depends practically entirely on the necessities of very few individuals.

Experience has shown that the question of cost has a very remote influence in overcoming the handicap that the railways suffer in this connection. We find people freely using their motor-cars at a cost, when taking all factors into account, that must be considerably higher than that at which transport could be secured by rail. A further difficulty in connection with the competition of private motors is to be found in the practice, which is assuming large proportions in this country, of private motor-car owners who make regular use of their cars in travelling between the suburbs and the cities, picking up their friends *en route*. Allied to this there is also the practice which has arisen at holiday times of persons sharing their motor-cars with their friends for the purpose of extensive trips throughout the country. This must inevitably have an effect on the holiday traffic at such periods as Christmas and Easter. The railways have endeavoured to counteract these factors by increasing the attractiveness of their service, more particularly from the points of view of safety, comfort, and speed.

It is in these aspects that the railways will, it seems to me, be able to set a constantly improving standard that will always have a limiting effect on the development of the service-car business. So far as safety is concerned the superiority of the railways cannot be seriously challenged by the road-vehicles. The record of the railways as regards injuries to passengers is one with which the road services cannot compare, and from the nature of the two forms of transport it seems beyond question that the advantage in this connection will continue to remain with the railways. So far as the maintenance of our present standard may depend on mechanical appliances I would say that our system is well equipped with the best modern equipment that is applicable to our conditions. These are almost wholly designed to reduce the possibility of danger from human error. There will, however, always be a residuum of human responsibility. To meet this there has been constantly inculcated into our staff the necessity for the highest possible standard of care. On both aspects of the safety question it will be our constant endeavour to work continuously to a higher standard, both by the adoption of such mechanical improvements as will tend to that end and also by so directing the viewpoint and capacity of our staff by training in a practical way, education by "Safety first" literature and discussion and (more remotely) by a judicious administration of our disciplinary system, as will reduce the factor of human error to a minimum.

On the question of comfort we have a rather extraordinarily paradoxical position. We find the public continually demanding an increasing standard of comfort in the railway-carriages, while on the other hand we find the public willing to sit more or less cramped in service-cars with a comfort that must often be conspicuous by its absence. The freedom of movement and the greater measure of convenience that railway travel affords makes me feel that this position cannot be regarded as a permanent one, and when the novelty of motor transport has, as I think it will with the passage of time, ceased to be a factor, I think that the advantages which the railway has in the matter of comfort will make themselves felt and will make it increasingly difficult for the road-motors to maintain their position.

I regard it, however, as imperatively necessary that an improvement should be made in the standard of our passenger rolling-stock. We have drawn up a programme of rolling-stock construction to this end, but our capacity to carry out this programme is, of course, limited by the amount of finance that can be made available, and I desire to express the opinion that the improvement or, indeed, the maintenance of the position of the railways will depend on the making of such financial provision as will not hamper our efforts in this connection.

As regards the matter of speed, I think that improvements in this connection will be in the direction of running long-distance trains with fewer stops while working the intermediate traffic requiring more frequent stoppages at the less important stations by means of smaller rail units having a relatively high rate of acceleration, or by road services. As I have already indicated, we are now actively investigating the position in this regard with a view to collating the data necessary to enable sound decisions as to the modes of future development in this direction to be arrived at. We are also reviewing time-tables and rolling-stock. The former will be the subject of progressive development, and the latter is already covered.

So far as the competition of the hired road-vehicle affects retaining or regaining of traffic, the position is that the principal factor is undoubtedly the large motor-omnibus operating between the cities and the suburbs. An unfortunate aspect of this business from the point of view of the railway financial returns is that the railways are still left with the unremunerative workers' traffic while the buses reap the benefit of the better-paying casual suburban traffic. This is very vividly brought out in the passenger figures shown in this report. It will be seen that while the casual suburban business fell off as compared with last year by no less than 195,000 passenger-journeys, the workers' suburban traffic increased by no less than 262,000 passenger-journeys. The point here is that while the railway revenue for its passenger business in the suburban areas has substantially decreased, the quantity of service which it has rendered to the public in those areas has actually increased. In other words, if the position of the railways in the community as regards this branch of its business could be judged by units of service instead of by units of money received, the position of the railways would take on quite a different aspect.

The bus also has the advantage that, so far at least as its physical characteristics are concerned, it can keep in immediate contact with the areas of greatest traffic, whereas the railway route is fixed, and may be, and is, more or less remote from the traffic areas. The smallness of the bus also

as a transport production unit enables it to pick up traffic *en route* in a way that is not practicable in the case of the railway, and this is of a special significance so far as the suburban passenger traffic is concerned. The necessity of walking to and from a railway-station is one of the most potent features operating against the railways in connection with this class of traffic.

So far as the hired road-vehicle is concerned, with traffic outside the suburban areas I feel that it is not nearly so serious a competitor as it is in the suburban districts. It has, of course, the advantage of a door-to-door traffic, and in some cases where the rail route between given points is more circuitous and more affected by adverse conditions than the road route the service-car is able to maintain its position against the railway. The service-car also tends to create a traffic for itself by reason of its being able to make journeys for a comparatively small number of passengers, and in cases where people desire to travel at abnormal times the service-car will have a traffic of its own. I feel, however, that service-car competition with the railways is not responsible in any great measure for the continuance of the decline in railway passenger traffic.

In the foregoing brief review I have not hesitated to state what I conceive to be points of weakness in the position of the railways from a competitive point of view. I do not, however, do this in any pessimistic sense (because I think that for many years to come there will continue to be a large field open for railway activity), but because I think that a recognition of these points and the causes underlying them is a necessary preliminary to the devising and applying of proper remedial measures where such are found possible.

Coming to the question of the methods that might be adopted by the railways to meet the position, I would express the opinion that as to the suburban areas the railways will continue to work the great bulk of the workers' traffic, but will not be able to successfully compete for the casual traffic. Even if electrification could be justified by circumstances such as intensity of traffic and the other conditions which form the economic basis of that form of transport, I am doubtful whether the railways in New Zealand could even then maintain their position as regards this latter traffic.

So far as the traffic other than suburban is concerned, I think the railways will continue to hold the long-distance traffic against its road competitors by improved methods of traction combined with development of higher standards of services and facilities. The traffic lying between long-distance traffic and the suburban traffic will continue to feel the effect of motor competition, but I think that it might be possible to meet the position in some measure by the institution of more frequent services by means of rail-cars or road services having a greater measure of elasticity in the matter of stopping-places than is possible in the case of trains.

We still have the third point to deal with—namely, that of creating new traffic. It is obvious that with the high proportion of fixed charges that is inevitable in the railway industry anything that can be done along this line is of special value. In this connection we have been active in the development of touring trains and special point-to-point excursions, and we have already created quite a substantial amount of new business along these lines.

I think also a field of new traffic that might be developed is that of night passenger services. In the South Island we have already made a commencement in that direction, and the results have been sufficiently encouraging to warrant the belief that this matter might be pursued with benefit to the Department both from a financial point of view and from the point of view of service to the public. The latter aspect has a bearing that I regard as important. In the South Island, for instance, although the night passenger-trains have not resulted in a very striking addition to the total number of passengers carried, they are nevertheless giving a degree of service that the reports show to be very much appreciated by the public at large and by the business community in particular.

The great advantage to business men of being able to travel long distances in comparative comfort by night, enabling a full measure of business to be done during the day, is one that is being increasingly appreciated by them. The points between New Plymouth and Wellington, and Napier and Wellington, seem to offer the most attractive prospects at present. It seems certain, however, that for some time to come the traffic is not likely to be large enough to warrant the running of trains, but I feel that it may be possible to develop a rail-unit to suit the traffic, and apart from the general question of the use of rail-units we are prosecuting particular inquiries in regard to this traffic.

I am hopeful that the new traffic which we shall be able to create in the directions I have indicated will do much to counteract the losses we are suffering in passenger traffic in other directions.

PARCELS, LUGGAGE, AND MAILS.

The revenue under this heading totalled £378,141, a decrease of £1,792 as compared with the figures for the previous year.

An analysis of this branch of the Department's revenue is as follows:—

	1929.	1928.	Variation.
	£	£	£
Parcels	200,387	201,462	—1,075
Excess luggage	13,956	14,429	—473
Left-luggage, checks, bicycles, and dogs	47,798	48,532	—734
Mails	116,000	115,510	+490
	<u>£378,141</u>	<u>£379,933</u>	<u>—£1,792</u>

The decrease in parcels revenue is due to motor competition, and the decrease in luggage receipts is in sympathy with the falling-off in passenger traffic.

GOODS AND LIVE-STOCK.

The revenue from goods and live-stock for the year ended 31st March, 1929, was £4,846,125, an increase of £165,990, or 3·55 per cent., as compared with the figures for the previous year. A comparison of this year's results with those of the previous year is as follows :—

	1929.	1928.	Variation.	Per Cent.
Revenue	£4,846,125	£4,680,135	+£165,990	3·55
Tonnage	7,613,445	7,358,388	+255,057	3·47

The tonnage of goods and live-stock carried was the highest for any year on record, and the following figures illustrate the tonnage carried since 1925 :—

<i>Tonnage.</i>					Increase over Previous Year.	
Year.				Tons.	Tons.	Per Cent.
1929	..	..	..	7,613,445	255,057	3·47
1928	..	..	..	7,358,388	49,939	0·68
1927	..	..	..	7,308,449	52,307	0·72
1926	..	..	..	7,256,142	222,683	3·17
1925	..	..	..	7,033,459	107,942	1·56

<i>Revenue.</i>					Increase over Previous Year.	
Year.				£	£	Per Cent.
1929	..	..	..	4,846,125	165,990	3·55
1928	..	..	..	4,680,135	83,969	1·83
1927	..	..	..	4,596,166	97,006	2·15
1926	..	..	..	4,499,160	381,414	9·28
1925	..	..	..	4,117,746	168,159	4·25

While the total tonnage handled continues to increase, the fact must not be overlooked that the gain is principally in low-rated commodities such as artificial manures, grain, coal, and road metal. Until towards the close of the financial year the goods traffic showed slight variation as compared with the previous year, but in the last three months of the year a considerable improvement was made. The Railway Department shared in the beneficial effects of the favourable season, and the tonnage of live-stock, wool, grain, and dairy-produce handled was such as to tax the available rolling-stock to the limit.

The principal increases during the year under review were as follow :—

	North Island.	South Island.	Revenue.
	Tons.	Tons.	£
Grain and flour	10,533	46,592	24,546
Butter	6,051	595	4,674
Cheese	23,770	535	14,171
Wool	2,273	3,063	6,598
Lime, agricultural	11,277	14,237	8,628
Coal, New Zealand hard	1,048	14,181	2,498
Coal, New Zealand soft	2,151	16,207 <i>dec.</i>	3,951 <i>dec.</i>
Road metal	26,190	47,553	8,689
Benzine	8,287	25,177	26,955
Manures, artificial	92,499	33,954	65,530

With the continued decrease in passenger traffic, to which I have already referred, the railways must look more and more to the goods revenue for the major part of the receipts. The ton-mile receipt for the year under review was 2·41d., and in order to balance the accounts (exclusive of the credit received in respect of developmental lines) a ton-mile receipt of 2·86d. would have produced a revenue for goods traffic of £5,812,395. While at first it may appear a somewhat easy matter to increase the rates by an amount representing an increase of 0·45d. per ton per mile in railage, the problem becomes somewhat difficult when all the factors of the situation are taken into consideration as is hereunder set out at more length.

There are three ways in which theoretically the deficiency may be removed : (1) Reduction in working-expenses to enable transportation to be produced more cheaply ; (2) an increasing traffic sufficient to make good the loss now involved ; (3) increased charges on the traffic now conveyed by rail.

With regard to No. 1 : This is a matter that is constantly engaging the attention of every railway authority. No condition is regarded as permanent, and the whole scope of operations is from time to time kept under review and checked up by reference to statistical matter, reports and contact of supervisory staff with the actual operations of the Department. Such matters as the provision of more powerful locomotives, the strengthening of structures to enable this to be done, rearrangement of running duties, reorganization of workshops, and other similar matters are all directed to this end. There is scarcely a day goes by that some aspect of the Department's operations is not being rearranged or modified in order to secure reduced working-costs, and the statistical matter which is presented in this report will indicate that the year has not been barren of achievement in this direction. As costs are brought down so further reductions tend to become more difficult. Frequently progress along these lines depends upon the discovery of new processes or inventions that

cannot now be foreseen, and this makes it difficult to forecast the future so far as the matter of reduced working-costs is concerned. All that can be said in this connection is that a policy of constant review will be rigorously pursued, and there will be no relaxation of effort in this connection. The matter of working-costs is dealt with in more concrete form in the comment set out in this report under the heading of "Statistics."

Regarding No. 2, this is a matter which not only lies with the Department but also with the community. So far as the Department is concerned, we are, by improved facilities and the adoption of commercial methods in seeking and attracting business, endeavouring to develop rail-borne traffic. In this connection, however, we find ourselves faced with serious difficulties arising out of motor competition, which is dealt with subsequently in this report under the heading of "Regulation of Transport."

Question No. 3 involves considerations of policy which do not come within the province of the management as such. A few thoughts, however, might be helpful as possibly clarifying the issues. In the first place I would say that it should not be impossible to raise the rates to an extent that would be sufficient to produce the revenue required to meet all charges. It will be seen that an average increase of 0.45d. per ton-mile would be required. The capacity of the railways to raise the rates on the commodities in the higher classes is very definitely affected by the motor competition, such competition being confined, as it almost wholly is, to traffic in those classes. The great volume of the tonnage is, however, in the lower classes, and the amount by which those classes would require to be increased would not be substantially more than the figure above mentioned. Whether the rates of these lower classes should be so increased is the policy question involved. I desire, however, at this stage to emphasize the aspect of the effect that is likely to accrue from a growth of the practice of allowing the road motors to take high-class goods, while leaving those in the lower classes to the railways. The inevitable results of such a procedure are, I think, such as call for the very serious consideration of every member of the community.

The capital invested in the railways is irretrievable, and it is, moreover, borrowed capital. The overhead costs remain more or less fixed, and, however good the management may be, costs cannot be reduced in proportion to the loss of business diverted to the roads. The expenses hitherto recovered from passenger or high-grade-goods traffic must be recovered from the business that remains or be passed on to the taxpayer. If such expenses are charged against the long-distance or lower-grade traffic a serious position must arise. An increase in the long-distance rates will penalize the inland areas, which, being almost entirely dependent on rail transport, will pay more for their imports and can export only at higher cost. The cost of primary production will rise owing to increased freights on such low-rated goods as coal, fertilizers, timber, grain, fruit, live-stock, and road metal, whether for long or short distances.

Coastal districts that already reap the benefit of short-haul-road-transportation rates will receive no additional benefits, but will pay more on bulk traffic.

Speaking broadly, it appears that the tendency will be to reduce the cost of imported goods in districts adjacent to sea ports and to increase the costs of primary production in all districts, a tendency which may result in disaster to a country depending so largely on its exports of primary products.

The further question arises out of the ambiguity of the phrase "making the railways pay." This may mean either of two things: Firstly, whether the revenue accruing from the railway operations should be sufficient to meet the railway expenditure and interest charges, or, secondly, whether the railways are to be regarded not in an abstract way, but as a community investment bringing advantages to the community both directly financial and indirectly in other respects. If the former interpretation of the phrase is adopted, then we have the advantage of knowing, so far as the position is disclosed by the railway accounts, the amount that would require to be made up through the medium of an increase in rates. On the other hand, we would be undoubtedly placing a burden on the railways that would not be expected of a privately-owned railway, and which might lead not only to wrong judgments regarding the efficiency of the organization, but also to inequity by placing a burden of advantage on the shoulders of those who are not necessarily the sole beneficiaries thereof.

So far as the first matter is concerned—namely, the question of wrong judgments as regards the working of the organization—it will be clear that if certain concessions are allowed as a matter of "policy" which would not be allowed by a privately-owned railway established for the earning of dividends, then if the organization is required not only to earn the dividend which the privately-owned railway would earn but also to make up the deficiency involved in the "policy" concessions, then, to the extent that we may presume that the privately-owned railway is extracting every penny out of the industry that it economically can, an impossible burden is being placed on the State-owned railway in asking it not only to do this but also to make up the additional margin involved in the policy concessions.

As regards the second, it seems undoubted that there are many policy concessions given through the medium of the railways, the justification of which is not the concession to the individual so much as the community benefit that will result. An outstanding illustration of this principle is to be found in workers' tickets and concessions in connection with our primary and secondary industries. As regards the workers' tickets, it is generally recognized that the policy in this connection is justified by the social betterment accruing to the community by the facilities afforded for better living-conditions and the prevention of slums in our city areas. Policy concessions to our industries are generally founded on the benefit that will accrue to the community as a whole through the development of those industries that are helped by the concessions; but, inasmuch as the community as a whole benefits, should not the community as a whole make some payment in the sense that as the railways stand the primary loss involved (which is the investment made)

they should be credited with the resulting advantage. It is true that it may be difficult to state the value of such community advantages in terms of money so as to present a complete account showing the financial position of the railways as a community investment, but this difficulty does not in any way affect the principle involved. *Prima facie*, when a concession of this kind is given it is because it will "pay"—i.e., it is worth while in the interests of the community that the concessions should be given; and in assessing what deficiency there is in the railway return for the purpose of the matter now under consideration—namely, that of an increase in rates—it would certainly seem that there are definite questions of policy that require to be considered before the quantum of increased revenue that should be obtained through this medium is determined. True it is that the Department under the form of accounts as now adopted receives some credit for its community service through the medium of the allowance made in respect of what are called developmental lines. The question may be raised here, however, as to whether this allowance, while admitting the principle, covers the whole field. It would seem that consideration of the matter in terms of service rather than in terms of more or less arbitrary sections of the line would be more logical though undoubtedly somewhat difficult of practical application. When the Department works a line which is not able to meet all charges it is simply giving a service that is not radically different from any unremunerative or not wholly remunerative service it may give in any other respect, such as workers' tickets, low rates for the carriage of fertilizers, &c. Certain it is that before the question of an increase in rates can be settled the prior question of the amount of increased revenue required has also to be settled, and this involves the questions I have attempted to set out above. The impossibility of calculating the benefits in terms of money will undoubtedly make any such assessment more or less arbitrary, but this seems clearly to be unavoidable in any system that might be adopted.

Prompted by consideration of railway charges and by recent experiences which we have had in connection with the transport business of the rural community, I desire to make the following remarks, which I think might be worthy of consideration by the farmers of the Dominion:—

The transportation of the products of our farms is attended by difficulties which are not always recognized. For example, live-stock must be handled with promptness in special wagons. Fat-stock traffic is such that in season the demand for wagons is so abnormal that many additional services require to be provided to facilitate the turnover of stock-wagons. By way of illustration of this point it may be mentioned that in the North Island the peak stock month of the year 1928–29 was the four weeks ended 2nd March, when 1,143,471 head of sheep were conveyed by rail. Taking the number of sheep-wagons on the North Island Main Line and Branches as 1,321, it will be seen that the handling of this traffic called for a turnover of all such wagons three and a half times per week. In the South Island the peak stock period is slightly later, and for the four weeks ended 31st March a total of 940,789 head of sheep was conveyed on the South Island Main Line and Branches. The number of sheep-wagons on the latter section is 1,096, and to handle the peak traffic all these vehicles would require to be turned over three and one-third times per week.

During the slackest months of the year the traffic in sheep drops to 56,000 and 51,000 per four-weekly period in the North and South Islands respectively, and from my brief remarks regarding the peak traffic it must be apparent that for traffic such as this it would not be a sound proposition for the Department to construct sufficient rolling-stock to cope with the peak traffic when such equipment would be lying idle for approximately nine months of the year.

Moreover, a fair proportion of other farm-products are seasonal, and result in an unusual demand at certain periods for transport equipment, and this involves expensive empty-wagon haulage in order to have the wagons at the various loading-stations to meet requirements.

The railways also afford direct advantages to the farming community by concessions that have been frequently stated and are well known, such as low rates for agricultural lime and artificial manures, &c., and these concessions represent a definite investment by the community at large in the ventures of the farming industry. It is really equivalent to the community finding some portion of the capital necessary for the adequate development of the business of the farmer. What is the community entitled to expect from the farmers in return? Surely no less than that the farmers will, by making use of the railways, give the community an opportunity of recouping itself at least in some measure for its outlay on their behalf. It is regrettable indeed that we find on some occasions farmers' organizations taking an all-too-narrow view of their obligation in this regard. They entirely ignore the advantages they have received from the policy of the railways and have deserted the national institution that has done and is doing so much for them to accept a comparatively small advantage that in many cases must be evanescent in character. Such a policy on the part of the rural community if persisted in must have an inevitable reaction. Unjust conditions cannot be permanent. It is obviously unjust for the Railways to make sacrifices in the interests of the farmer who, when the opportunity arises for him to show appreciation of this in a practical way, declines to pursue that course. I do not wish my statement in this regard to be misconstrued into a threat—nothing of the kind is intended—I merely state the obvious fact that the searchlight of public criticism is being directed on the financial policy of the Railways. Its financial operations must come under review, and if the community does not, through the failure of certain sections to recognize and act up to their moral obligations, obtain the return from its investments on behalf of the rural community to which it is morally entitled, action will be compelled by the interests of public finance, which cannot indefinitely sustain a growth in the financial burden which the railways may be on the taxpayer. We have found that the greater proportion of the farming community appreciate the position and accord us their loyal support. I would plead with the remainder to consider the position well, as they are in danger of doing an injury not only to themselves, but to the farming community as a whole.

I am well aware of the necessity of providing rates for the conveyance of our valuable exports on a scale which will enable them to compete successfully in the world's markets, and I think it it will be found that, when all the circumstances of the case are taken into consideration, the rates charged for the commodities which constitute the principal items in the railage bill of the man on the land are now on such a basis as will achieve this desirable object and at the same time assist materially in the further development of the agricultural and pastoral wealth of the Dominion.

I am optimistic enough to think that with the development which has taken place in the top-dressing of the lands of the Dominion (in which low railway rates for fertilizers play no small part), and the valuable research and experimental work being carried out by the Agricultural Department, the two agricultural colleges, and the various experimental farms throughout the Dominion, the indications point to a considerable increase in our export trade. For bulk transport, which constitutes the major part of our exports, the Railway Department has the facilities and equipment to deal efficiently with such traffic, and there is no doubt that the railways alone can in the future, as in the past, provide that measure of assistance to our rural industries through the medium of transport that is so necessary for the expeditious development of those industries. But to do this adequately the railways themselves must be in a healthy condition, and any action that tends to weaken the railways will likewise affect adversely their power for service, and the rural industries will undoubtedly suffer.

STATISTICS.

I have already mentioned that, considered from the point of view of the financial return from the Department's operations, substantial progress has been made. I do not, however, regard these figures as adequate for the purposes of any judgment on the Department from a managerial point of view. I have dealt with some of the reasons for this (though from another standpoint) in my comment regarding the question of increasing rates for the purpose of making good the difference between revenue and all charges. Summarizing the position, it is that while on the expenditure side the *whole of the costs* necessary to give the service to the community that is given through the railways (including both "policy" service and what might be called "commercial" service) are included, the *whole of the return* to the community resulting from such expenditure is not reflected in the railway revenue statement. Whether the revenue and expenditure accounts may be a sound foundation for a judgment on the railway results from a standpoint that comprehends the whole railway issue (including the policy under which the railways are worked) is not a matter that can be here discussed, but I do submit that in considering the railways from a *managerial* point of view these accounts are not necessarily a sound basis for judgment, and they may be positively misleading. To conclude that a debit balance as between these accounts is evidence of defect in the management is as unfair as it is incorrect, inasmuch as it ignores factors vitally bearing on the balance on these accounts, over which the management, as such, has no control whatever. Such factors may be collectively subsumed under the heading of "policy" and those factors, *qua* policy, are non-managerial.

Are we then to have no test of managerial efficiency? To answer this question I think we must consider what can and should be expected of the management. Stated in the fewest words, it seems to me that the duty of the management of a railway system such as ours is to carry out the policy set for the working of the Department at the lowest cost that the carrying-out of such policy permits of. Obviously we cannot eliminate *all* the factors that might be held to vitiate the test, but we can get a nearer approximation to such elimination than the above-mentioned accounts afford. I think that better information on the internal working of the Department can be obtained by reference to the operating statistics. Even these do not wholly eliminate non-managerial factors. As being principally concerned (as regards the financial figures) with the working-costs, they will be affected by such non-managerial questions as decisions of the staff Appeal Board (the constitution of which, among other things, takes the final determination of all appeals in respect of the remuneration to be paid for First Division positions out of the hands of the management); the policy in respect to unemployment (which may require the Department to carry a larger staff than is really necessary for the demands of its business); the policy regarding preference to locally-made or Empire-made materials (which may require the Department to pay more for its materials than it otherwise would). I do not wish to be misconstrued as implying any judgment (adverse or otherwise) on these matters. I merely mention them in an endeavour to assist towards a clear judgment on the railway position; and while an interpretation of the statistics may entail consideration of, and allowance for, such factors as those mentioned, I think they approach much more nearly to an elimination of non-managerial factors than the mere balance of the revenue and expenditure accounts.

In order to apply such practical tests of managerial efficiency, advantage has been taken of the gross ton-mile statistics now available to compile unit costs and operating-performance statistics for each locomotive and traffic district. The value of the figures is somewhat discounted by the overlap between Locomotive and Traffic districts, such districts not being coextensive, making it difficult to get a complete statement of all transportation costs or performances in any one district. This defect will, however, be overcome in the future by an arrangement for the further development of divisional control as elsewhere outlined. The statements are, however, as complete as it is possible to make them, and as an indication of operating efficiency will repay careful study. The basic figures on the one hand are the costs in terms of money and in man-hours, fuel and oil consumption, and on the other the production measured by several different units such as train-miles, train-hours, gross and net ton-miles, vehicle-miles, engine-miles, and engine-hours. From these figures are derived the cost per unit of production, and indexes of operating efficiency such as the average train-speed, average train-load, gross and net ton-miles per train and engine-hour, net ton-miles as a percentage of gross, vehicles per train, average wagon-load, and percentage of empty to total wagon-miles.

Proceeding to an examination of the statistical figures, the following may be interesting and helpful:—

FREIGHT TRAFFIC AVERAGES.

<i>Per Mile of Line:—</i>	1928-29.		1927-28.		Variation.	
	No.		No.		No.	Per Cent.
Freight tonnage	2,343		2,315		+ 28	+1·21
Freight net ton-miles	149,893		147,236		+ 2,657	+1·80
Freight gross ton-miles	481,593		467,168		+14,425	+3·09

These figures are a reflection of the increase in the goods tonnage carried.

<i>Per Freight Train-mile:—</i>	1928-29.		1927-28.		Variation.	
	No.		No.		No.	Per Cent.
Train-load, gross	232		228		+ 4	+1·75
Train-load, net	87		87		..	..
Number of vehicles, loaded	18·81		18·65		+0·16	+0·86
Number of vehicles, empty	9·12		8·91		+0·21	+2·36

These figures indicate that we have been able to get better loading for our trains but that more empty haulage was necessary, a condition which usually accompanies abnormal peak demands, such as were experienced during the year.

<i>Per 1,000 Gross Ton-miles:—</i>	1928-29.		1927-28.		Variation.	
	£		£		£	Per Cent.
Freight revenue	3·09		3·15		—0·06	—1·90
Net ton-miles	No. 376		No. 380		No. 4	—1·05

The decreased revenue per 1,000 gross ton-miles is due to the greater proportion of empty haulage.

<i>Wagon user:—</i>	1928-29.		1927-28.		Variation.	
	£		£		£	Per Cent.
Revenue per ordinary goods vehicle	183		176		+ 7	+3·98
Revenue per live-stock vehicle	173		169		+ 4	+2·37
Average wagon-load	Tons. 4·64		Tons. 4·65		Tons. —0·01	—0·22

The decreased wagon-load is due to the net ton-mileage of traffic with a relatively low wagon-load such as live-stock and merchandise, increasing in a greater ratio than heavy traffic such as minerals and timber.

	1928-29.		1927-28.		Variation.	
	No.		No.		No.	Per Cent.
Average miles per wagon per day	22·48		21·38		+1·10	+5·14
Average net ton-miles per wagon per annum (ordinary goods)	23,429		22,484		+ 945	+4·20
Average net ton-miles per wagon per annum (live-stock)	11,827		11,343		+ 484	+4·27

These figures show that the turnover of the trucks has been much better. Each truck travelled farther, and carried more goods.

COACHING TRAFFIC VARIATIONS.

							Per Cent.
Coaching revenue decreased	..	..	..	..	..	..	0·88
Coaching train-miles increased	..	..	..	..	..	..	4·07
Coaching train-hours	..	..	..	..	..	..	3·13
Coaching vehicle-miles	..	..	..	..	..	..	2·47
<i>Coaching Revenue:—</i>							
Per train-mile decreased	..	..	..	..	..	..	4·78
Per train-hour	..	..	..	..	..	..	3·90
Per vehicle-mile	..	..	..	..	..	..	2·64

FREIGHT TRAFFIC VARIATIONS.

Freight revenue increased	..	..	..	..	..	4·22
Freight train-miles	..	..	..	..	..	3·78
Freight train-hours	..	..	..	..	..	0·93
Freight gross ton-miles	..	..	..	..	..	5·55
Freight net ton-miles	..	..	..	..	..	4·51
Freight vehicle-miles	..	..	..	..	..	5·17
Net ton-miles as a percentage of gross decreased	..	..	..	..	..	0·97
Empty-vehicle miles as a percentage of total vehicle-miles increased	..	..	..	..	..	1·02

Freight Revenue:—

Per train-mile increased	..	..	..	..	..	0·41
Per train-hour	..	..	..	..	..	3·26
Per thousand gross ton-miles decreased	..	..	..	..	..	1·26
Per thousand net ton-miles	..	..	..	..	..	0·28
Per vehicle-mile	..	..	..	..	..	0·78

RAILWAY OPERATING AVERAGES: COACHING AND FREIGHT.

						Per Cent.
Operating revenue	increased	..	..	..	..	2·46
Operating expenditure	„	..	..	..	..	1·15
Train-miles	„	..	..	..	..	3·90
Train-hours	„	..	..	..	..	1·60
Engine-miles	„	..	..	..	..	3·44
Engine-hours	„	..	..	..	..	2·35
Gross ton-miles	„	..	..	..	..	4·91

Revenue.			Expenditure.		
		Per Cent.			Per Cent.
Per train-mile	decreased	1·52	decreased		2·65
Per train-hour	increased	0·85	„		0·45
Per engine-mile	decreased	0·94	„		2·22
Per engine-hour	increased	0·11	„		1·16
Per thousand gross ton-miles	decreased	2·33	„		3·59

The above figures require little comment. They show an increase in total revenue and a lesser increase in total expenditure. The decrease in the revenue per train-mile and engine-mile is in sympathy with the lighter loading of wagons and the increased empty haulage, as indicated in the figures showing the proportion of net ton-miles to gross ton-miles. The increase per train-hour and per engine-hour as compared with the decrease per train-mile and engine-mile indicates greater efficiency in the handling of trains and better utilization of locomotives and rolling-stock.

RAILWAY OPERATING EXPENDITURE.

Railway operating expenditure increased by £72,460, or 1·15 per cent., as compared with an increase of £181,019, or 2·46 per cent., in the revenue. The principal variations are as follow:—

Maintenance of Way and Works:—

	1928-29.	1927-28.	Decrease.
Total expenditure	£1,111,229	£1,147,067	£35,838
Per mile of line	£340·35	£359·24	£18·89

The expenditure on the running-tracks decreased by £35,689. The expenditure of the previous year was high, as it was found necessary to improve the condition of the track owing to the greater volume of fast and heavy traffic.

The average mileage of line under maintenance for the year was 3,268 miles, as compared with 3,192 miles in the previous year.

Maintenance of Signals and Electrical Appliances:—

	1928-29.	1927-28.	Increase.
Total expenditure	£112,206	£102,871	£9,335
Per mile of line	£34·37	£32·22	£2·15

The increase under this heading was due to the growth of the work of the Branch by the extension of signal, interlocking, and electrical appliances, also to increased maintenance charges on the automatic signalling on the Midland line, as a result of damage done by snowstorms.

Maintenance of Rolling-stock.

	1928-29.	1927-28.	Variation.
	£	£	£
Superintendence	29,344	33,056	— 3,712
Locomotives	586,105	593,454	— 7,349
Cars and vans	248,795	237,861	+10,934
Wagons	559,921	516,355	+43,566
Totals	£1,424,165	£1,380,726	+£43,439

Cost per Vehicle.				Cost per Vehicle-mile.		
	1928-29.	1927-28.	Variation.	1928-29.	1927-28.	Variation.
	£	£	£	d.	d.	d.
Locomotives	870	860	+10	8·69	9·10	—0·41
Cars and vans	119	113	+ 6	1·49	1·46	+0·03
Wagons	20	19	+ 1	0·71	0·69	+0·02

Locomotives.—Owing to increased wagon repairs and the greater volume of capital work (mostly on account of workshops reorganization), the direct cost of locomotive repairs decreased by approximately £31,080, but additional overhead expenses in connection with workshops reorganization (£9,475), increased contributions to Locomotive Renewal Fund (£5,416), and amounts for engine-hire previously credited to this account but now credited to revenue, have reduced the decrease to £7,349.

Cars and Vans.—The direct cost of maintaining cars and vans decreased by £4,070, but additional overhead charges (£9,763) and increased contributions to Car Renewal Fund (£5,241) are responsible for an increased expenditure of £10,934.

Wagons.—The greater number of wagons requiring repair increased the expenditure on this account by £9,821. The balance of the increase (£33,745) is due to contributions to Wagon Renewal Fund (£15,198) and additional overheads (£18,547.)

The increased cost of maintaining rolling-stock is due to two main causes—viz., greater provision for renewals and overhead expenses arising out of the workshops reorganization. It is anticipated that expenditure under this heading will remain somewhat above normal until the reorganization is completed.

Locomotive Transportation.

	1928-29.	1927-28.	Decrease.
Total expenditure	£1,583,769	£1,599,564	£15,795
Cost per engine-mile	23·49d.	24·52d.	1·03d.

Locomotive-running Statistics.

	1928-29.	1927-28.	Increase.	Increase.
	Number.	Number.	Number.	Per Cent.
Total engine-miles	16,183,798	15,658,700	525,098	3·35
Total engine-hours	1,635,310	1,598,358	36,952	2·31
Gross ton-miles	2,326,926,374	2,218,085,881	108,840,493	4·91

The ratio of increase in engine-miles is higher than in engine-hours, giving indication of greater efficiency in handling the traffic.

Averages :—	1928-29.	1927-28.
	d.	d.
Cost per engine-mile	23·49	24·52
Cost per train-mile	34·20	35·42
Cost per engine-hour	232·44	240·18
Cost per 1,000 gross ton-miles	163·35	173·08
Engine-miles per engine-hour	9·90	9·80
Engine-miles per locomotive-day	79·20	78·40
Gross ton-miles per engine-hour	1,423	1,388

The principal variations in locomotive transportation costs were an increase in drivers' and firemen's wages of £25,000, and a decrease in fuel of about £40,000. Increased train-services chiefly accounted for the increase in wages. Particulars regarding fuel are as follows :—

Total Tons.		Total Cost.		Locomotive Coal Haulage in 1000's of Net Ton-miles.	
1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.
409,677	402,005	£726,430	£768,357	44,670	36,762

The total number of tons consumed increased by 7,672 tons, or 1·91 per cent., while net ton-mileage of locomotive coal hauled increased by 21·5 per cent.

There has been a saving in cost of fuel consumed of about £40,000, against which has to be set the increased haulage (7,908,000 net ton-miles) resulting from the increased use of New Zealand coal. Allowing for this at, say, $\frac{3}{4}$ d. per net ton-mile, it will be seen that there has been a saving on account of fuel of about £15,000.

Traffic Transportation.

1928-29.	1927-28.	Increase.
£1,825,965	£1,760,459	£65,506

The principal variations under this heading are as follow :—

Publicity and Commercial Branches account for about £10,000 increase. These are two new branches that have been brought into being as a result of the conditions now obtaining. Expenditure in respect thereof will tend to increase with the greater pressure of competition.

The introduction of the train-control system, scale increases in salaries, and printing and advertising account for an increase of about £11,000.

Under the subheading of " Station Expenses " an increase of approximately £26,000 is accounted for by the addition of the East Coast Main Trunk line to the working railways system, the working of Middleton marshalling-yard, and increases in goods-shed and wharf working-expenses due to shipping traffic at Lyttelton.

Under the subheading of " Train Expenses " there is an increase of £12,600, principally on account of the additional week-end excursions that have been run, the inauguration of night trains in the South Island, the opening of the East Coast Main Trunk Railway, and the appointment of train attendants on the mail and express trains. Miscellaneous expenses increased by £4,700 on account of the Glenhope-Murchison cartage contract. This is an arrangement that was entered into whereby a cartage service was instituted between the places mentioned, the charges between Glenhope and Murchison being on the basis of railway rates. The sum mentioned represents the deficit incurred by the Department on account of that service.

General Charges.

1928-29.	1927-28.	Increase.
£250,221	£248,921	£1,300.

Under this heading are included charges for Head Office, Appeal Board, Chief Accountant's Branch, Divisional Superintendents, and superannuation subsidies. The variation does not call for any special comment.

TRAFFIC.

The following are the leading features of the traffic in the various districts in comparison with the previous year:—

Kaihu Section.—Revenue, £7,158; increase, £496. Passengers decreased 1,331; parcels, &c., increased £81; sheep decreased 399; timber decreased 57 tons; all other goods increased 415 tons.

Gisborne Section.—Revenue, £36,601; increase, £2,562. Passengers increased 3,891; parcels, luggage, &c., increased £166; cattle increased 66, and sheep decreased 8,378; timber increased 132 tons, and all other goods increased 1,130 tons.

North Island Main Line and Branches.—Revenue, £4,421,986; increase, £100,785. The principal items of traffic were: Passengers, 4,826,844; decrease, 191,636. Season tickets, 480,421; increase, 16,483. Parcels, luggage, and mails—revenue £241,009; increase, £1,342. Live-stock, 5,343,070; increase, 229,357. Goods tonnage, 3,155,752; increase, 131,728 tons. Timber decreased 27,621 tons; all other goods increased 159,349 tons. The revenue per mile of railway decreased from £3,289 9s. 1d. to £3,202 8s. 5d., and decreased per train-mile from 13s. 4d. to 13s. 2d.

The variations in the individual districts were approximately as follows:—

Northern District.—Revenue, £2,125,834; increase, £66,029. Passengers decreased 54,190; season tickets increased 5,633; parcels, luggage, &c., increased £4,569; cattle increased 91,343, and sheep 126,658; timber decreased 18,923 tons, and all other goods increased 86,376 tons.

Middle District.—Revenue, £500,082; decrease, £6,991. Passengers decreased 13,246, and season tickets increased 241; parcels, luggage, &c., decreased £615; cattle increased 4,479, and sheep decreased 12,762; timber decreased 9,464 tons, and all other goods increased 8,991 tons.

Western District.—Revenue, £491,582; increase, £8,204. Passengers decreased 11,023, and season tickets increased 61; parcels and luggage decreased £1,556; cattle increased 51,460, and sheep decreased 21,575; timber increased 1,765 tons, and all other goods increased 27,225 tons.

Southern District.—Revenue, £1,304,488; increase, £33,543. Passengers decreased 113,177, but season tickets increased 10,548; parcels and luggage decreased £1,056; cattle increased 26,218, and sheep decreased 36,464; timber decreased 999 tons, and all other goods increased 36,757 tons.

Picton Section.—Revenue, £37,516; decrease, £334. Passengers increased 601, and season tickets decreased 291; cattle decreased 118, and sheep increased 24,202; timber decreased 466 tons, and all other goods 3,629 tons.

Nelson Section.—Revenue, £24,753; increase, £3,315. Passengers decreased 3,792, and season tickets increased 24; cattle increased 568, and sheep 8,829; timber increased 10 tons, and all other goods 922 tons.

Westport Section.—Revenue, £134,746; decrease, £3,011. Passengers decreased 7,660, and season tickets 153; parcels, luggage, &c., decreased £74; cattle increased 66, sheep decreased 909; timber increased 1,060 tons; all other goods decreased 16,575 tons.

South Island Main Line and Branches.—Revenue, £2,862,105; increase, £77,207. The principal items of traffic were: Passengers, 3,944,353; decrease, 26,353. Season tickets, 173,650; increase, 7,395. Parcels, luggage, and mails—revenue, £128,486; decrease, £3,452. Live-stock, 4,634,221; increase, 307,023. Timber, 260,969 tons; increase, 24,410. All other goods, 2,879,950 tons; increase, 91,841 tons. The revenue per mile of railway increased from £1,721 4s. to £1,759 10s. 1d., and increased from 13s. 9d. per train-mile to 14s.

The variations of traffic in the individual districts were approximately as follows:—

Northern District.—Revenue, £1,271,901; increase, £60,562. Passengers decreased 2,214, and season tickets increased 1,138; parcels, luggage, &c., decreased £491; cattle increased 707, and sheep decreased 2,365; timber increased 31,039 tons, and all other goods increased 67,141 tons.

Middle District.—Revenue, £991,305; increase, £126,001. Passengers increased 69,531, and season tickets 6,239; parcels, luggage, &c., increased £1,712; cattle increased 7,545, and sheep increased 349,159; timber increased 16,162 tons; all other goods increased 145,913 tons.

Southern District.—Revenue, £598,899; decrease, £109,356. Passengers decreased 93,670, and season tickets increased 18; parcels, luggage, &c., decreased £4,673; cattle decreased 7,686, and sheep 40,337; timber decreased 22,791 tons, and all other goods decreased 121,213 tons. The general decrease in the Southern (or Invercargill) District was caused through the reallocation of districts. Balclutha and Catlins River Branch figures, which were formerly included in the Southern District, are included in the Middle (or Dunedin) District.

Lake Wakatipu Steamer.—Revenue, £10,941; increase £1,056. Passengers increased 2,116; sheep decreased 2,717; timber increased 295 tons; all other goods increased 599 tons.

TRANSPORTATION.

The total revenue train-mileage was 11,113,482 miles, as compared with 10,838,594 miles for the previous year, an increase of 274,888 miles. Of the total train-mileage 4,833,991 were passenger-miles and 6,279,491 were goods-miles, an increase of 189,086 and 85,802 respectively over the figures for the previous year. This additional mileage is due principally to the train services provided on the new lines taken over during the past year, and also to additional services run to cope with heavy seasonal traffic.

The particulars of the mileage run in the various sections of railway are as follows :—

Section.						1928-29.	1927-28.	Increase.
								Miles.
Kaihu	..	..	..	..	..	17,393	17,738	Dec. 345
Gisborne	..	..	..	..	..	76,586	82,211	Dec. 5,625
North Island Main Line and Branches						6,705,512	6,479,921	225,591
South Island Main Line and Branches						4,095,546	4,049,450	46,096
Westport	..	..	..	..	..	92,311	94,140	Dec. 1,829
Nelson	..	..	..	..	..	59,725	63,292	Dec. 3,567
Picton	..	..	..	..	..	66,409	51,842	14,567
						11,113,482	10,838,594	274,888

During the past year fast passenger-trains have been provided between Wanganui and New Plymouth, and between Napier and Palmerston North. The Wanganui - New Plymouth train has a connection from Marton with the Limited express from Auckland, while the Napier - Palmerston North train connects at Palmerston North with the Limited express for Auckland and with a fast train for Wellington. The provision of these services has therefore opened a good connecting-link with the Auckland-Wellington Limited expresses. The Auckland-Whangarei-Opua expresses which terminated at Whangarei on three days of the week during a portion of the year were made through trains from September, thus giving the northern district facilities for daily communication with Auckland.

The suburban services radiating from the main centres received close attention during the year. Additional trains were provided, and a number of adjustments were made to better meet the convenience of passengers. In the Wellington suburban area it was possible by co-ordination of the Department's road and rail services to effect substantial economies, certain of the trains during the slack portion of the day being eliminated and the passenger traffic transferred to the Department's buses.

PUNCTUALITY OF TRAINS.

The record of train punctuality, while not up to last year's standard, is satisfactory, considering the many and varied adverse circumstances contended with. Certain seasonal commodities have been heavy this year, and, instead of producing a steady flow of traffic over a period, weather conditions have caused peak rushes to form. An extraordinary peak tends to congestion, from which initial delays expand and have far-reaching effects. The sheep traffic this year, for instance, was somewhat later than usual in moving, and the unusual movement is reflected in the time-keeping of trains towards the close of the year.

The Easter traffic for 1929 was handled in March, and the consequential delays which arise out of heavy holiday traffic have caused an inflation of the figures for the 1928-29 year.

A number of mishaps (engine-failures, derailments, and other line-interruptions) have occurred at a time of the day which caused a maximum of interference with passenger services. Severe damage caused in August by a storm to the sea-wall protecting the Hutt line has been responsible for much late running of the suburban trains. The unpunctuality is not confined to the suburban area only, and its effect is far-reaching. The checks received in the suburban area are often reflected on trains passing through the Wairarapa, and even affect express and other trains connecting at Woodville.

AVERAGE LATE ARRIVALS OF TRAINS, YEAR ENDED 31ST MARCH, 1929.

Year ended	Period ended														Average for Year in Minutes
	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March 2.	March 31.		
Express and Mail Trains.															
31st March, 1929	8-48	7-20	6-62	5-06	4-32	4-84	3-19	3-97	3-75	9-95	6-25	9-09	13-76	6-65	
31st March, 1928	10-15	5-50	6-25	3-77	10-34	10-98	2-40	3-06	3-11	9-10	6-46	5-65	4-05	6-22	
Long-distance Mixed Trains.															
31st March, 1929	11-43	8-64	6-28	4-67	4-33	4-70	4-73	4-85	5-64	8-35	7-68	11-47	13-39	7-40	
31st March, 1928	11-87	7-81	6-26	4-35	5-96	4-23	3-27	3-95	3-84	6-37	6-79	6-26	7-96	6-07	
Suburban Trains.															
31st March, 1929	0-62	0-50	0-58	0-61	1-69	2-90	0-93	1-13	0-79	1-33	1-18	1-36	1-67	1-17	
31st March, 1928	1-47	0-77	0-76	0-62	0-71	0-55	0-46	0-55	0-58	0-76	0-78	0-93	0-69	0-79	

These figures include delays arising from all causes, including floods, slips, washouts, engine and other mechanical failures, and traffic delays at stations.

LAKE WAKATIPU STEAMERS.

					1929. £	1928. £	Variation. £	Per Cent.
Revenue	..	..	..	..	10,941	9,885	+1,056	10·68
Expenditure	..	..	..	..	17,425	15,627	+1,798	11·51
Net loss	..	..	..	..	<u>£6,484</u>	<u>£5,742</u>	<u>+ £742</u>	<u>12·92</u>

The revenue from the lake steamers shows a substantial increase, due to the good year experienced in tourist traffic, and in traffic in motor-cars, merchandise, and timber. Live-stock shows a slight decrease. Large quantities of pipes for irrigation works at Arrowtown were carried in the closing months of the year. The increase is made up as follows :—

	£
Passengers	234
Parcels, luggage, and mails .. .	22
Goods	763
Miscellaneous	37
	<u>£1,056</u>

The cost of repairs to steamers for the year was £3,850, as against £2,197 last year—increase £1,653—this item being mainly responsible for the large increase in expenditure and for the increase in net loss on the year's operations. The steamer "Ben Lomond" was completely refitted during the year.

The mileage run for the year was 24,225, as compared with 23,928 for the previous year, an increase of 297 miles.

The Lake Wakatipu steamer service has been a losing proposition to the Department for some years. The service being self-contained there is no real justification for this, and the matter seems to be resolving itself into the position that the charges for the services rendered are too low.

I have had the matter very carefully gone into with a view to seeing whether any material savings can be effected, but it does not appear that much can be done in this direction if the services are to be maintained at their present standard. On the contrary, I conclude that the time has now arrived when we have to give consideration to the question of supplementing the fleet on the lake by a new vessel if the standard of the service is to be kept up, or any improvement in that respect is to be made. It would, however, be difficult to justify the expenditure on a new vessel unless there is some reasonable prospect that an increase in revenue can be obtained not only to meet the present loss, but also to balance the additional charge that would be involved by the provision of a new vessel.

The fleet at present consists of the "Earnslaw," the "Ben Lomond," and the "Mountaineer." The "Earnslaw" is in quite good condition, and is the mainstay of the service. The "Ben Lomond" has just been reconditioned, but it is a very small vessel, and cannot be regarded as any other than an emergency unit in the fleet. The other vessel, the "Mountaineer," is a paddle steamer of obsolete type. It is slow and not of a standard generally that would enable it to give a satisfactory service comparable to that of the "Earnslaw." Whenever the present service cannot be maintained with one vessel it is necessary that the "Mountaineer" be used, and this gives rise to public dissatisfaction. The "Mountaineer" is due for complete overhaul and refitting this year. It is difficult to estimate what the cost of refitting will be, as many defects are not disclosed until dismantling is commenced. On such an examination of the vessel as is now possible it appears doubtful whether the vessel will be worth repairing for this service. For the purpose of the following calculations, however, I have assumed that the boat might be given another ten years' life by an expenditure of £3,000. I have gone into the question of the provision of a new boat, and in the following table a comparison is made of the annual capital charges on the assumption that the cost of refitting the two old boats is capitalized and the whole amount written off in an estimated remaining life of ten years, while the rate of 3 per cent. written off the "Earnslaw" since 1926 remains unaltered, and the new boat is written off at 2½ per cent. on the original cost (forty-years life). Interest is computed at 4½ per cent. The ships will have little or no residual value.

	"Ben Lomond."	"Mountaineer."	"Earnslaw."	New Boat.
	£	£	£	£
Original cost	2,567	7,433	22,678	25,000
Less depreciation (four years) .. .	309	891	2,720	..
Present book value	2,258	6,542	19,958	25,000
Cost of refitting, add	1,800	3,000	..	..
	<u>£4,058</u>	<u>£9,542</u>	<u>£19,958</u>	<u>£25,000</u>
	£	£	£	£
Annual depreciation over remaining life .. .	406	954	690	625
Interest	183	429	898	1,125
Annual capital charge	<u>£589</u>	<u>£1,383</u>	<u>£1,588</u>	<u>£1,750</u>

The annual capital charges on the two old boats would be £1,972, as compared with £1,750 on the new boat. The latter, being a larger and faster boat, would require two additional men (one deck hand and one fireman)—say, £500 per annum—and would cost about £700 per annum more for coal.

The total comparative costs per annum of the service under the two proposals would be as follow :—

					(A.) Three Boats. £	(B.) Two Boats. £
Shore expenses	..	..	..	..	1,900	1,900
Running expenses—						
Salaries and wages	..	..	..	..	5,400	5,900
Coal and stores	..	..	..	..	2,800	3,500
Repairs—						
Steamer	..	..	..	..	2,000	1,900
Wharf	..	..	..	..	700	700
Insurance	..	..	..	..	150	195
Depreciation—						
Steamers	..	..	..	..	2,050	1,315
Structures	..	..	..	..	234	234
Interest	..	..	..	..	1,995	2,508
					<u>£17,229</u>	<u>18,152</u>
Allow for amortization, interest and principal, old boats	..	..				1,077
						<u>£19,229</u>

The total cost of proposal B, including an allowance for writing off interest and principal on the two old boats in about twelve years and a half, would be £2,000 in excess of the cost of proposal A for about ten years, after which the provision of a new boat must be faced. The revenue averages about £10,000 per annum.

REVENUE.

In considering the possibilities of increases in the lake traffic and revenue in the future a survey of the business since it was taken over by the Department in November, 1902, will be useful.

In 1903 a general reduction of 25 per cent. was made in the charges in force on the lake.

From 1902 until 1924 the number of passengers carried showed little variation except for a substantial decrease during and after the war. Since 1925 an increase of 3,000 to 4,000 passengers per annum over 1904 has been recorded, equal to about 15 per cent. Passenger revenue remained at practically the same level (£3,300) until 1920, and it is now about £4,300, or about 30 per cent., above 1904. The fare basis is now 25 per cent. higher than in 1904 owing to the war increases, but the revenue has not increased in proportion to the number of passengers and the ordinary fare basis, much of the additional traffic having been induced by specially cheap excursion fares. The fare basis is still about 6 per cent. below the rates ruling in 1902.

The total tonnage of goods carried showed a decrease of 28 per cent. between 1904 and 1919, the decline in the mining industry being the principal contributing factor, and the traffic did not get back to the 1904 level until 1928. The quantity of live-stock carried doubled in the twenty-five years, but timber decreased by 35 per cent. Goods carried by weight were practically the same in 1928 as in 1904. Freight revenue is now 40 per cent. above the 1904 level, the respective figures being £3,231 and £4,525, due to the tariff increases arising out of war conditions. Notwithstanding the latter increases, the goods rates are only 5 per cent. higher than they were in 1902.

The revenue from parcels, luggage, and mails increased from £400 to £1,000, and the total revenue from £7,000 to £10,000, or by 43 per cent., in the twenty-five year period.

I do not think it safe to anticipate any marked increase in passenger traffic in the near future. A faster and more comfortable boat on the Head of Lake service would, however, undoubtedly popularize the Paradise trip, which is becoming of steadily increasing importance owing to the large number of tourists arriving in Queenstown by road from Cromwell or Wanaka, from whom the Department may derive no revenue if an attractive service is not provided.

A great handicap on the lake is the seasonal nature of the passenger traffic, which varies between two thousand and seven thousand passengers per four-weekly period in the season December to April, and between four hundred and one thousand passengers for the rest of the year.

With respect to goods traffic, it is understood that irrigation works now proceeding in the vicinity of Arrowtown will bring 7,000 to 8,000 acres of land under cultivation for grain-growing, creating a considerable amount of additional traffic on the lake.

There does not appear to be much prospect of any material improvement in either the mining or the pastoral industries.

EXPENDITURE.

The expenditure on the lake service was maintained at slightly in excess of £5,000 per annum until 1912, when the "Earnslaw" was put into commission. During that period the earnings were sufficient to pay working-expenses, interest, and depreciation, although no allowance for the latter was made in the accounts, and the cost of the new boat was wholly capitalized.

As a result of commissioning the "Earnslaw" working-expenses immediately increased by £1,000 and capital charges by £1,400 (including depreciation). Additional wharves and a new slipway were

constructed, largely for the accommodation of the bigger vessel, at a capital cost of £4,300 and an annual cost of £300. In all, the increased annual expenditure due directly or indirectly to the new boat was at least £2,700. The increase in business was negligible, and no adjustment of charges was made to cover the cost of a much improved service. It should, however, be noted that the outbreak of war made it impossible to gauge the effect of an improved service on the passenger revenue, and it is only of recent years that tourist traffic is getting back to normal.

Since 1914 the cost of wages and salaries has increased by 75 per cent., coal by 200 per cent., and the total working-costs by 100 per cent. (£6,000).

Since 1904 working-expenses have increased from £5,000 to £12,000, capital charges from £1,000 to £3,500, and the total expenses from £6,000 to £15,000, as compared with a revenue increase from £7,000 to £10,000.

To cover increased costs and provide for accrued depreciation the revenue requires to be raised from £10,000 to £17,250 (proposal A) or £19,250 (proposal B).

Two questions call for immediate consideration at this juncture—(1) That steps should be taken to balance the accounts of the lake service; (2) whether a new steamer should be provided.

With regard to the former question, this clearly resolves itself into the question of the revision of the lake tariff. Definite proposals in this connection are now being formulated, and, in accordance with the policy that is being adopted, will be discussed with the parties particularly interested before being finalized. Arrangements are being made for this to commence practically immediately.

With regard to the second question, this is largely dependent on what is done in connection with the revision of the tariff, and is also directly affected by the matter of the construction of the new road from Queenstown to Kingston. I am definitely of the opinion that if this road is carried to completion we would not be justified in incurring the expenditure that would be necessary for the provision of the new boat.

ROAD-MOTOR SERVICES.

The total number of passengers carried by the Department's road-motor services during the past year was 2,919,605, of which the Hutt Valley service was responsible for the largest proportion—2,336,651 passengers.

The balance of expenditure, including interest and depreciation, over revenue in the road-motor services accounts was £9,327. While we aim, of course, to obtain the best possible return from the running of the buses themselves, the foregoing sum must not necessarily be regarded as a loss from the Department's point of view. Railway authorities generally run road services for one or both of two reasons—namely, (1) to protect its business against competition, and (2) to enable savings to be effected on its train services where it is found that the traffic can be worked more cheaply by means of road-vehicles than by means of the rail. The position, however, as disclosed by the accounts is such that, I believe, will afford room for improvement, and I desire to comment on these services as follows :—

HUTT VALLEY SERVICES.

Of the aforementioned sum these services account for £7,200. This is principally due to the very high maintenance costs that were incurred during the year. The difficulty with which we found ourselves faced was that the buses which were purchased from the various private concerns running on the Hutt Road had arrived at the stage where maintenance had become a very considerable item. Indeed, a thorough investigation showed that many of the buses were not in a condition to justify the large amount necessary to keep them in proper condition.

The position was very considerably accentuated by the coming into full operation of the Motor Regulations, which requires a very much higher standard than had previously been the case. We also found ourselves faced with the necessity for reducing the seating in order to comply with the regulations, and this, of course, had a directly depressing effect on the earning-capacity of the various vehicles.

A complete review of this fleet brought us to the conclusion that it was hopeless to expect to give satisfaction in the matter of service or to show a reasonable financial return with the vehicles that were purchased from the various private concerns that were operating the service prior to the Department taking it over. It was therefore decided to at once purchase ten more buses, and tenders were duly called and a tender accepted. These buses are now in course of delivery, and are already enabling us to materially improve the service. The whole of these ten buses were of the four-wheeled single-decker type. Further buses will be required during the coming year to replace vehicles that have ceased to be economically efficient. Before embarking on further purchases, however, inquiries are being made as to the suitability of other types of buses, such as six-wheeled single-decker and double-decker buses, in order that we may build up the fleet in a way that will give us the best results both from a traffic and financial point of view.

Another very material factor affecting the financial return on the Hutt services has been the writing-off of the amount represented by goodwill in the purchase price of the buses. The difference between the valuation of the buses as taken over and the total amount paid to the previous owners is £16,530, and this, of course, represents the amount paid by way of goodwill. I think it is desirable that this should be written off as quickly as possible, and we are aiming to eliminate it from the accounts in five years. This involves a writing-off of £3,300 each year, and this amount, of course, represents a burden on the working-expenses that will continue until the total sum is finally disposed of.

Another factor which bore materially on the financial results was the imposition of the petrol-tax that was brought into operation during the year. This accounted on the Hutt service for no less than £2,284.

By way of set-off against the debit on account of the buses, we have the saving on account of adjustment of train services which was made possible by the running of the buses. This saving is estimated at £5,000 per annum.

NAPIER—HASTINGS SERVICE.

This service showed a debit of approximately £600, this being brought about by an increase in costs resulting from an additional 59,525 miles having to be run owing to the diversion of traffic during road repairs, also to the imposition of the petrol-tax, which alone was responsible for approximately £760.

As in the case of the Hutt services, maintenance costs were very high, showing an increase over the previous year of £891. Here again we find the fleet arriving at the stage where extensive maintenance work has to be undertaken, while the alterations necessary to comply with the Motor Regulations helped to swell the bill. This service has been the subject of some complaint, and in order to enable the public need to be more adequately met arrangements were made for the fleet to be augmented immediately by the addition of new buses. These will considerably increase the earning-power of this service, and with the superior type of bus and lower maintenance costs we could, if other factors were equal, look confidently for a better return.

Unfortunately, this service has been made the subject of some very keen and irregular competition by taxi-cars of the ordinary motor-car type, a number of which are now running in direct opposition to our service, notwithstanding that additional omnibus licenses were not granted by the licensing authority. I do not doubt the ability of our service to ultimately cope with this competition, but in the meantime a grave injustice is being done to the Department, which holds the necessary licenses for this service and is providing a fleet that is quite ample for the needs of the traffic. The net result is that harm is being done to the authorized service, and I am confident that in the long-run no benefit will accrue to those who are engaging in this irregular competition. It is certainly unfortunate that such a state of affairs should be allowed to continue.

The saving in train services as a result of the bus operations is estimated at £2,500 per annum.

CHRISTCHURCH—MIDLAND SERVICE.

This service shows a debit of £1,114, which has been largely contributed to, as in the case of the other bus services, by the imposition of the petrol-tax.

We have also had a special debit on this service respecting the altering and repairing of one of the buses, which is of a non-recurring nature.

This service is essentially one that has been put on in order to protect the Department's business, though it has also allowed some economy to be effected in train-working, the cost of which it is practically impossible to estimate.

OAMARU—TOKARAHI SERVICE.

The debit on this service is £380, as compared with £655 last year. This service is run to enable economies in train-working to be effected on the Ngapara and Tokarahei Branches. It is estimated that the saving on the train services amounts to £800 per annum.

In conclusion on the question of the bus services, I desire to say that in my opinion this is a branch of the business of the Department that must inevitably grow. The improvement in the roads and in the design and efficiency of road-motors will, I consider, necessitate the Department undertaking road services for both the reasons that I mentioned at the opening of my remarks under this heading—namely, in order to protect its business and to effect savings in providing the various facilities.

The immediate care of a road-carrying organization is one that is becoming a work requiring a great deal of specialized knowledge which can only be gained by a person devoting himself only to this type of transport and building up an organization that will make for efficiency and economy. To that end a Bus-manager has been appointed whose duties will be to control the whole of the operations connected with our road-motor services; and with the advance in knowledge and experience that we will get from the specialized work of the Bus-manager and the organization under him, coupled with the improvements that are being made in the bus fleets, I feel confident that we may look for better financial results from these services in the future.

THROUGH BOOKING OF PASSENGERS, PARCELS, AND GOODS BETWEEN NORTH AND SOUTH ISLANDS.

A branch of our service that has been instituted in recent years and which is being increasingly availed of by the public is the through booking between the North and South Islands.

During the past year the value of the parcels and goods traffic under this heading was £21,481, as compared with £17,094 in the previous year. This shows an increase of approximately 25 per cent. in one year. The passenger bookings also showed an increase of 13 per cent.

We have received many expressions of appreciation of our services in this connection, and the foregoing figures will show that these sentiments are shared by the community at large, as is evidenced from the rapid growth that has taken place in this branch of our business.

Hitherto the service has been confined to transport between Wellington, Lyttelton, Picton, and Nelson. The scope of the arrangement has now been considerably extended so as to cover transport from many of the other ports of New Zealand that are served by rail.

ADVERTISING SERVICE.

	1929.	1928.	Variation.	Per Cent.
	£	£	£	
Revenue	53,984	52,600	+1,384	2·63
Expenditure	50,719	48,921	+1,798	3·68
Net profit	£3,265	£3,679	— £414	11·25

The increase in revenue is mainly due to the increase in new business obtained this year, and to additional miscellaneous work done for other branches and departments.

New business written up during the last three years is as under :—

	1928-29.	1927-28.	1926-27.
	£	£	£
Outdoor advertising	72,230	44,454	66,245
Publications	4,597	2,079	2,551
Printing	2,633	2,802	2,926
Miscellaneous	1,534	1,063	2,045
Buses	1,019	874	..
	£82,013	£51,272	£73,767

It should be noted that the net profit of £3,265 on the operations of the Advertising Service during the year does not represent the whole of the revenue derived by the Department from advertising, but the figures have been shown as above in order that a comparison might be made with last year, when they were shown in the same form. By way of further elucidation of the figures I would mention that, in accordance with the policy that was adopted when the accounts were reorganized, of putting the subsidiary services as nearly as possible on the same basis as independent businesses, the Advertising Service has been debited with charges for the right to display advertisements on railway premises, rent for land and buildings, commission on cash collected by other branches, railage at ordinary tariff rates, and interest on the capital employed in the business, amounting in the aggregate to £15,879. These all represent money earned by the Advertising Branch. The total financial benefits derived from advertising was therefore £19,144, being the balance between actual earnings and actual expenditure of the branch (including depreciation).

The substantial increase in new business written up during the year ended 31st March, 1929, will not, however, be reflected in the revenue of the branch until the advertisements have been erected, and this should show a substantial improvement during the current year.

Some very large contracts were obtained during the year, and in most cases these were from clients who have been using the Department's advertising service for a number of years, indicating satisfaction with the results they are obtaining from railway advertising and the service the Department is rendering. Apart from the outdoor activities of the branch, considerable progress has been made with publication advertising—*Railway Magazine*, *Pocket Guide*, &c.—and for the more efficient handling of this class of business two specialist salesmen were taken on during the year to handle publications exclusively. The art and signwriting studios were kept working at high pressure throughout the whole year, and the indications are that the new financial year will be a very busy one indeed in the branch.

A pleasing feature of the year's operations has been the fewness of the complaints that have been received from the public and local authorities with regard to the erection of our hoardings. This I ascribe to two main factors—namely, the high artistic standard that has been maintained, and the readiness of the Department to meet all reasonable objections. Whenever any local authority or individual has indicated objection to the erection of a particular hoarding we have made a point of discussing the matter in a broad light. It is quite recognized by the Department that every location may not be suitable for the erection of hoardings, and that a generous consideration should be given to all features that tend to render the erection of a hoarding in any particular locality undesirable. This policy will continue to be pursued. I feel that the Department might carry on with its present service with full confidence as to both its success as a revenue-producer, and the favourable light with which the public generally will regard its activities.

DEPARTMENTAL DWELLINGS.

	1929.	1928.	Variation.	Per Cent.
	£	£	£	
Revenue	105,897	93,643	+12,254	13·09
Expenditure	170,073	162,263	+ 7,810	4·81
Net loss	£64,176	£68,620	—£4,444	6·48

The increase in revenue is due to rentals received from houses completed in accordance with the Department's housing scheme and to houses taken over from the Public Works Department. The revenue per dwelling is—1929, £31 10s.; 1928, £29 6s.

The following is an analysis of the dwellings expenditure :—

—	1929.	Per Dwelling.	1928.	Per Dwelling.	Variation.	Variation per Dwelling.
	£	£ s. d.	£	£ s. d.	£	£ s. d.
Maintenance ..	54,670	16 4 11	56,543	17 14 5	—1,873	—1 9 6
Depreciation ..	33,612	9 19 10	30,918	9 13 9	+2,694	+0 6 1
Interest ..	77,380	22 19 11	70,742	22 3 5	+6,638	+0 16 6
Insurance ..	4,411	1 6 2	4,060	1 5 5	+ 351	+0 0 9
	170,073	50 10 10	162,263	50 17 0	+7,810	—0 6 2

The decrease in maintenance is due to heavy expenditure incurred last year, renovating houses taken over from the Architectural Branch and built five years previously. The increase of £9,683 for depreciation, interest, and insurance is due to increased capitalization.

It is hardly to be expected that our housing will be a source of revenue to the Department, but it does seem that the cost to the Department in the way of the loss on the housing of the staff has grown to a magnitude that calls for serious consideration. There are also anomalies in connection with the charging of rents, more especially as between the more recently erected houses and those of the older type, and these anomalies give rise to some dissatisfaction among the various members of the staff. I propose to give consideration to this matter during the coming year, with a view to seeing whether something cannot be done to meet the position without imposing any undue burden on the staff who occupy departmental dwellings.

During the year 50 houses were cut at the Frankton Junction House-factory, 91 which had been cut the previous year were on hand on the 1st April, 1928, and 96 were under erection (incomplete) on the 1st April, 1928, making a total of 237.

For the Department 177 houses were erected during the year, for the Hutt Valley Housing Committee 27, and for the Public Works Department 16, making a total of 220.

The number of houses in course of erection and incomplete at the 31st March, 1929, was—Departmental, 12; non-departmental, nil: total, 12. Since the inauguration of the housing scheme the total number of houses erected is—Departmental, 1,277; non-departmental, 314: total, 1,591.

A number of hot and cold water services have been provided, and electric light and sewerage installed where available.

The house-factory and sawmill adjacent thereto at Frankton Junction, which were established in 1923 for the primary purpose of enabling houses to be constructed for the staff, have, with the completion of the housing programme, been closed. As much of the machinery as can be made economical use of is being transferred to the workshops, and the Realization Account in respect of the factory and sawmill is being credited with the value thereof. Some machinery that cannot be transferred to the workshops will still remain and will require to be realized upon to the best advantage. Similar considerations apply also to the land and buildings.

It seems inevitable that there will be a debit to be disposed of when the accounts of the factory and sawmill are finally wound up, and this will principally fall on the Housing Branch. This will make the debit on account of our housing operations as above set out rather greater than appears at present.

LAND BRANCH.

The number of leases registered during the year was 536, the aggregate annual rental of these amounting to £4,584 16s. 11d. The total number of leases current on the 31st March, 1929, was 6,910, the total annual rental being £54,348 6s.

The total fees for preparation of deeds, dealing with documents, and for supplying advices to the Valuation Department was £780 16s.

The number of Proclamations, Orders in Council, notifications, and other documents issued taking and giving up land was 47. The number of transactions purchasing land by certificate of title was 23, the compensation paid for the land acquired totalling £40,999 5s.

During the year the work of reviewing our leases of railway land has been carried on, and in a great number of cases improved leases have been arranged under the legislation that was passed in this connection in 1928. This has given lessees a better tenure of the lands and has enabled them to use the land to better advantage. The change undoubtedly will work to the benefit both of the Department and of its tenants.

An investigation into the use of lands that are lying idle has also been carried on during the year, and, where possible, the lands have been let. It is fully realized that even when it is necessary to let lands at a very low rental it is better to have them in occupation than lying idle. We are experiencing some difficulty in this connection, however, owing to the state of the law in regard to rating. Many of our lands, by reason of their being in boroughs, become liable for rates that render them an uneconomical proposition to prospective tenants. We find ourselves in many cases unable to give a tenancy that would warrant the use of the land for building purposes, and the amount of the rates renders them unprofitable for farming purposes. Within the limits, however, of the difficulties we encounter in the various places we are aiming to have all railway lands made some use of.

REFRESHMENT BRANCH.

	1929. £	1928. £	Variation. £	Per Cent.
Revenue	123,059	122,220	+ 839	0.69
Expenditure	116,090	114,644	+1,446	1.26
Net profit	£6,969	£7,576	— £607	8.01

An analysis of the revenue discloses the following variations:—

	1929. £	1928. £	Variation. £
Dining-rooms.. .. .	26,005	27,371	—1,366
Counter-rooms	94,063	92,472	+1,591
Miscellaneous.. .. .	2,991	2,377	+ 614
	£123,059	£122,220	+ £839

The opening for traffic of the East Coast Main Trunk Section of railway to Taneatua necessitated the erection of a refreshment-room at Tauranga. This room was opened in December last, and the Department now controls twenty-nine refreshment-rooms, in addition to the catering on the Lake Wakatipu steamers.

The refreshment-room revenue for the year amounted to £123,059, or £839 more than last year. The expenditure was well regulated, with the result that the year's trading was satisfactory.

The refreshment-rooms derived considerable business from week-end and excursion trains, and additional business was obtained through placing sales-boys on some of these trains for the purpose of vending ices, sweets, smokers' requisites, fruit, &c.

The inauguration of the dining-room service in the Hillside Workshops, with the proposed extension to the Hutt and Otahuhu Workshops at an early date, and later at Addington Workshops, marks a new era in departmental catering. In the well-equipped dining-room the men may obtain light luncheon at a nominal charge. Facilities are also provided to enable those who do not desire to partake of a full lunch to obtain tea or coffee and consume same in the dining-room. A counter, at which smokers' requisites, &c., are obtainable, is also provided.

Arrangements are now being made to provide kitchenettes in the De Luxe sleeping-cars on the "Limited" express trains, for the purpose of enabling all sleeping-car passengers who desire it to be supplied in the morning with tea, coffee, bread roll, bread and butter, or hot scones. It is anticipated that this service will enable the requirements of passengers on this train to be met quite satisfactorily.

The system of cushion-hire has now been extended to the South Island, and also to the principal daylight express trains. The number hired during the year was 99,939, compared with 82,143 in 1927-28. During the holiday periods there is a heavy demand for cushions, and this service is most popular.

PUBLICITY BRANCH.

Extended scope has been given to the operations of the Publicity Branch during the past year. The main objective has been to make more generally and easily available any information likely to be helpful in letting the public understand the range and quality of services which the Department has available for its patrons. Allied to this has been such action as would tend to remove those misunderstandings which arise from uninformed criticism of the Department. A further application of railway publicity has been in the direction of creating and stimulating interest in travel within the Dominion.

The publicity campaign has included regular weekly features in the principal newspapers, and in each issue of several magazines, dealing with special phases of railway operations. This has been supported by a liberal use of hoardings and other effective means of reaching the public.

The principal passenger services, and tables of fares, have been comprehensively advertised thrice weekly in the city newspapers of the Dominion. Special articles and "write-ups" have been supplied to, and published by, the press and vocational journals in New Zealand and abroad.

An extensive distribution has been made of a number of specially prepared publications such as "The State Railways of New Zealand," and "Top Dressing for Top Prices," the latter being issued to show how railway freights for artificial manure assist primary production.

A new illustrated booklet entitled "Freight by Rail" explains briefly the advantages obtainable by the people of New Zealand in the use of their own railways. For the first time a comprehensive time-table of goods-train services has, through this medium, been made available to business houses.

Two maps of the North and South Island respectively, indicating by colours the contour and other surface characteristics of New Zealand in relation to the railways system, have been prepared for suitable distribution.

The "Romance of the Rail, No. 2," descriptive of travel by the South Island Main Trunk Railway, was also published during the year.

A competition, open to all art students, for a poster design advertising the New Zealand Railways, was arranged during the year. The response was particularly good, and the standard of work was of a high order. The two prize-winning designs were distinctly modern in conception, and effective examples of finished poster-work.

An essay competition, open to all primary, secondary, and technical school pupils, caused a great deal of interest in railway matters and produced some thoughtful contributions. The winning essays were published in the *New Zealand Railways Magazine*.

From time to time lecturettes on railway subjects have been broadcast by wireless, in addition to descriptive accounts of trips to scenic resorts reached by rail, and other information likely to be of assistance to travellers.

Particular attention has been paid to publicity in connection with week-end, seaside, and farmers' excursions. The principal mediums employed were electric talking signs, theatre screens and programmes, newspaper advertisements, local window displays, large calico signs, attractive handbills, tramcar dash-boards, three-coloured posters, and two-coloured art circulars. A suitable mailing-list is also used to give a wide distribution of publicity matter featuring these excursions.

The work of the Publicity Branch is co-ordinated with that of the Government Overseas Publicity Board. This is designed to avoid overlapping of functions and makes for the wider use of modern publicity in featuring the Department's work.

THE NEW ZEALAND RAILWAYS MAGAZINE.

The Department's official monthly *Magazine* has now entered upon the fourth year of its publication, and continues to receive a most favourable reception from the Railway Staff, the press, and the public throughout New Zealand and overseas.

The *Magazine* has a circulation of twenty-three thousand copies monthly. It is an eminently convenient and effective medium for the diffusion of current railway information to the employees of the Department, and also to the commercial and farming community immediately interested in the business of railway transport in the Dominion. The publication of special articles by accredited experts in the science of transportation, and of articles and news items by members of the staff featuring the many activities of the Department, is serving to accumulate a definite store of authoritative knowledge of great value to the Railway service as a whole.

Moreover, as a publicity medium within the Dominion and overseas the *Magazine* can rightly be regarded as a valuable departmental investment. "The *Magazine* constitutes one of our main information sources regarding New Zealand," is an opinion received from the Institute International du Commerce, Brussels, Belgium. Equally impressive communications indicative of the utility of the *Magazine* in its publicity aspects are being constantly received.

There has been a substantial increase in the number of advertisers, and it is safe to predict that when the advertising side of the *Magazine* is more fully developed the revenue from advertisements will materially lessen the cost of production, which is already low in relation to the size, quality, and circulation of the journal.

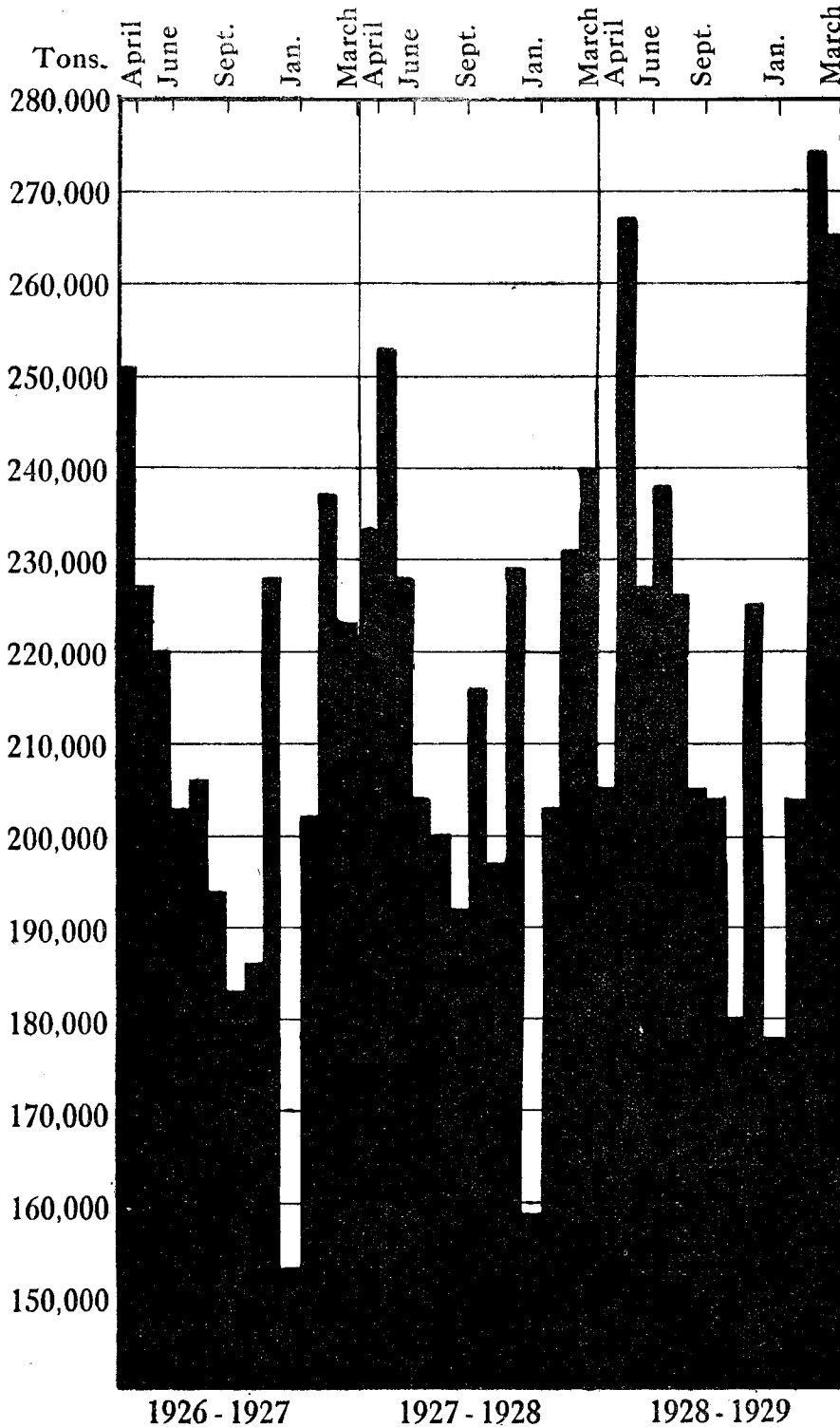
All branches of the service are proud of their own *Magazine*, to which they look for light and guidance in coping with the difficulties surrounding the operations of the Department.

SHORTAGE OF ROLLING-STOCK.

The question of shortage of rolling-stock is an ever-recurring one, and is one in regard to which there is a good deal of misunderstanding. There seems to be a conclusion, all too hastily arrived at, that whenever a full supply of trucks cannot be placed at every point as and when required there is a shortage of rolling-stock. Such circumstances do not necessarily justify any such conclusion. A little consideration of the incidence of railway traffic must make it obvious to any one that the Department could not possibly maintain a supply of rolling-stock to meet the needs of every period of peak loading, however short that period might be.

During recent months the question has been more particularly felt in the South Island, and in order to make the foregoing position clear I append hereunder a graph showing the variations in the goods traffic in that Island from 1926 to 1929. This graph brings out very vividly the traffic shocks which the Department is expected to absorb. The variations, as will be readily seen, cover a very wide range, and it will be noticed that in 1929 we reached a record of traffic. Within a period of eight weeks in 1929 the traffic varied from below 180,000 to above 270,000, while the general average of traffic over the five years was in the neighbourhood of 220,000. To have maintained a quantity of rolling-stock

sufficient to meet the peak loading in 1929 would have meant that at least some of that stock would have been continuously out of traffic right up to the time when that period was reached. Clearly that would not be an economical proposition, and any attempt to arrive at that stage would require a substantial increase in the railway deficit.



The statistics which are dealt with elsewhere in this report show that the efforts of the Department to meet the position with the available rolling-stock were well directed in that we had a more rapid turnover of the wagons. It is in this connection that the users of the railways can do much to help themselves.

We find in periods of so-called shortage of rolling-stock that wagons are held up at country stations awaiting unloading for periods that very considerably restrict the Department's turnover of its rolling-stock, while the vagaries of the shipping traffic are an ever-recurring difficulty which is practically beyond the control of the Department. Trucks are ordered to load for ships at given times, and the spectacle is not uncommon of having large numbers of trucks under load waiting for ships which

have not arrived at the time for which loading was made. The difficulties associated with shipping are felt in New Zealand to a degree not generally experienced in other countries. This is due to the relatively large number of ports dotted along our coast, and the high proportion of the total quantity of rolling-stock that is engaged in connection with shipping traffic.

Such occurrences as bad weather, delay in working of ships in ports, also retard the turnover of wagons.

All these shocks, however, the Department is expected to absorb, and does so to the best of its ability. In times of stress we do not hesitate to put on special train services at short notice to facilitate the transfer of rolling-stock to points where it is most needed, while in mapping out our rolling-stock programme from year to year we are constantly aiming to improve the supply of vehicles of the types most required. As I have remarked elsewhere, our ability to augment our stock is almost invariably limited by the amount of finance that can be made available to us.

It will be seen, therefore, that the conditions which give rise to difficulties regarding the supply of rolling-stock during periods of shortage are almost wholly beyond the control of the Department. I feel sure that, having regard to the circumstances, more particularly the violent variation in the traffic as indicated in the graph, the business is carried on with a minimum of inconvenience that on an impartial review of the situation may well be claimed to be creditable to the Department.

REGULATION OF TRANSPORT.

As I have already indicated in this report, we find ourselves, in connection with the increasing of our business to make good the present financial deficiencies, faced with serious difficulties, the chief of which is, of course, the unregulated competition of road motor-vehicles. These services start with the great advantage of having a road provided for them, a circumstance which has no counterpart in connection with railways. Large sums of money are being spent on the improvement of roads paralleling the railway, thus making increasingly possible the competition of road services with the railways. To the extent that this is being done the country is duplicating, and in some cases (as when sea transport also exists) triplicating, the means of transport. More especially in a country such as New Zealand, where the railways are the property of the community, this raises a definite question as to whether it is in the interests of the community that this should continue. If the community by the expenditure of money on a new facility depreciates an existing one, then on any adequate review of the situation such depreciation should be taken into account and provided for. True, the community may prefer road transport to rail transport even at the expense of duplication; but the money invested in the railways has to be provided for, and the two services have inevitably to be paid for though only one is used. The difficulty arises largely from the fact that the responsibility is communal, while the advantage is largely individual. Individuals desirous of running, or taking advantage of, motor services clamour for improved roads to be provided by the community, while the benefit is reaped by comparatively few. It must be remembered that the railways are still an indispensable factor in our transport system. It would not only be a physical impossibility for road services to cope with the whole of the traffic, either passenger or goods, but it would be an economic impossibility also. This will be quite clear from a consideration of the fact that the average revenue per ton-mile necessary to have covered all railway charges last year would have been only 2·86d. (without the necessity even for a credit on account of developmental lines). Obviously road services could not produce the necessary transport at that price. As the figures show, the competition by road services is confined to the more highly rated commodities. The net result of this is to weaken the position of the railways from the point of view both of service and price, and the community as a whole suffers. Nor is the competition of road services on a basis of equity or economic soundness. As already mentioned, the road hauliers start with a road already provided; they skim the cream of the traffic, having a scope for choice of what they will transport that is incomparably wider than that which exists in the case of the railways; and they have a power of differential treatment that has an immense influence on their power to secure traffic by bargaining, and which is almost entirely absent in the case of the railways.

There is no doubt that much of the motor competition with the railways is not on an economic basis. We are repeatedly coming across cases where prices are quoted by motor-lorry owners that cannot possibly be remunerative if all costs are taken into account. There are a large number of owner-drivers operating on our roads who have had no business training whatever, and it is not surprising, therefore, to find that their operations show little evidence of capacity to see ahead and calculate in a businesslike way what prices they can afford to charge. It may be replied that these people will inevitably drop out. So they do; but not only does the supply seem to be inexhaustible, but during the course of their career they do an infinite amount of harm, and they enable the individuals who make use of their services to get an advantage at the expense of the community, which not only pays through the expenditure on road repairs and deficiencies on the railways, but has also in the long-run to bear the losses arising out of insolvency of individual enterprises (a factor too apt to be overlooked).

It was inevitable that the rapid development of road motor traction that has taken place should have a very disturbing effect on the transport industry. As in the case of every new thing of this kind, it was nurtured in its infancy by propaganda. Its principal competitor, the railways, was depreciated to an exaggerated degree, and the "infant" was just as extravagantly and undeservedly extolled. Railways were talked of as a thing of the past, an assertion which even a cursory examination of the facts would have shown to be quite unjustifiable. The result was confusion of thought, and an unfortunate degree of competition where a friendly spirit of "get together" would have produced benefits to all concerned of a more real and lasting character. There are not wanting signs that improvement is taking place in both these aspects, but the process of stabilization by "natural forces" is likely to be a long and painful one.

A further very vital matter calling for rectification of the conditions now ruling in the transport industry is the impossibility of framing any permanent policy within the industry while such conditions continue. The introduction of the motor-vehicle into the transport industry has created a totally new position, to which that of the other sections of the industry, such as the railways, have to be adjusted.

The first essential to a proper adjustment is a determination of the proper economic position of each part of the industry. Uneconomic conditions such as unfair or unsound competition can on the plea of "natural forces" only be met by uneconomic action. A policy framed on such action cannot possibly be permanent, and it might well be that on the adoption of a policy on that basis the last position might be worse than the first. It is inevitable that later, when the long and painful process of adjustment by natural forces had worked itself out, there would have to be another adjustment of relationships, and there seems no good reason why two such adjustments, separated only by a long and undesirable period of time, should be adopted if the result can be obtained by more expeditious and desirable methods. To illustrate the position by referring to a concrete case, I may refer again to the fact that we find traffic lost to the railways in many cases through the quotation by road hauliers of prices for the transport of the goods concerned that we know cannot possibly be on an economic basis. Obviously, as it was the price that lost the traffic, we may assume that if we quoted a price below that of the road hauliers we would retain the traffic; but such quotations, being forced by uneconomic conditions, cannot possibly be permanent, and it is not difficult to imagine the disturbance that would take place if the Railway Department adopted a policy of quoting rates based on uneconomic conditions, and, when such action forced the competitor out of business, it raised its rates again. Such action would undoubtedly lead to ill will and the upsetting of business relationships by the uncertainty that would arise in regard to actual transport costs, and we would have confusion worse confounded. We certainly seem justified in at least saying that if the occasion for such action can be avoided, then it should be avoided.

All these circumstances seem to me to justify resort to the regulative power of the community to expedite the bringing of the industry on to a proper basis. There is nothing new in such action—and it has long been known in the transport industry, where it has been applied to railways practically from their inception, and has already been developed to some extent in connection with the passenger side of road transport. In the case of State-owned railways such as in New Zealand, this community power operates through the railway statutes, and the effect of public opinion as reflected through the parliamentary institutions. In the case of privately-owned railways, they have been rigidly controlled by statutory authorities such as (in England) the Board of Trade and (in the United States of America) the Interstate Commerce Commission. Two principles have been the basis of this action—first, that the community interest in transport shall be adequately protected (this has led, *e.g.*, to the limitation of financial return, the fixation of rates, and the running of certain essential services, such as "cheap" trains); and, second, that all persons shall have equal treatment—there shall be no undue preference. Such regulation was no doubt felt to be irksome by railway authorities, as it might also be expected to be by some sections of the motor-transport industry (especially those whose business is not a sound community proposition). But that does not prove that such regulation is inherently wrong—rather the contrary. The railways survived and extended under it with a rapidity and vigour that was phenomenal; but essentially the general interest was protected by the regulative power of the community actively operating through legal enactment. Such regulation is sometimes objected to as "legislating the motor-carrying industry out of existence" or "bolstering-up the railways." It seems to me that both of these statements are nothing more than unjustifiable assumptions. The motor-vehicle is here to stay, and unquestionably has a place in the transport industry. But why should such objectors assume that proper regulation will push the motor-carrying industry out? Such an objection would seem to imply a more or less conscious weakness in their case, with a consequent disinclination to face the issue. The railways under private enterprise were regulated, but they did not go out of existence—they flourished and did undoubted good work for the community; and if history means anything at all we may rather assume that the same may happen to the motor carriers. Similar considerations apply to the "bolstering-up of the railways." Opprobrious epithets are not arguments: they generally rather betoken an absence of valid grounds. If on examination of *all* the facts it were found that a particular service could be given by road-motor more economically than by rail (and there would be many such cases) it would be irrational to perform the service by rail, and no regulating institution whose decisions were irrational could long survive.

For the foregoing reasons I conclude that regulative action is necessary and desirable to expedite the stabilization of the transport industry, and I believe that such stabilization would be in the best interests of the motor-carrying industry itself as well as of the railways and the community at large.

Another matter in connection with road transport that I think worthy of mention is the desirability of there being prepared by some responsible authority an annual balance-sheet of the road operations of the Dominion. At present the information regarding expenditure and revenue in respect of roads is more or less scattered throughout the various records. Especially in view of the fact that the question of the distribution of transport-costs among the various sections of the community is such a live one, I think it would be very advantageous if the whole facts were brought together in a comprehensive and readily understood annual statement. The whole question of railway and road finance is really one of the distribution of the total transport costs of the community, and in order that clear judgments may be formed as to the equity or otherwise of such distribution the first essential seems to be to have all the facts of revenue and expenditure in connection with the transport operations clearly before us.

PUBLIC RELATIONS.

Public relations are an aspect of the Department's work to which I have given particular personal attention since assuming office. I have felt strongly impressed with the increasing necessity, with the growth of competition, of having a proper understanding in the minds of the people of what the Department is able and willing to do in the way of service to its clients. A valuable channel has already been established through the medium of the Magazine and the Commercial Branch, both of which have materially assisted in bringing knowledge to the people and in clearing up misunderstandings.

It was inevitable that, with such conditions as arose from the rapid development of competition with the railway, many issues should be clouded by the upsetting of well-established ideas, and more particularly by the dissemination of propaganda of the kind that is almost invariably associated with the introduction of a new competitive factor into an industry. The necessity for some counteracting influence has made the question of public relations a paramount one in connection with the Department's business. We have accordingly taken every opportunity that has been presented to get into personal touch with representative bodies and individuals with a view to obtaining an exchange of ideas regarding the problems confronting the transportation industry in general and the Department in particular.

I desire in this connection to express my great indebtedness to the various Chambers of Commerce, Farmers' Unions, Progress Leagues, importers' associations, commercial travellers' associations, and other bodies who have been good enough to extend to us invitations to be present at their gatherings and speak on railway matters. The receptions which we have received on these occasions have been very gratifying and even where, as must inevitably happen, there has arisen difference of opinion, I am happy to say that the discussions have been carried out in a constructive and friendly spirit and have very much helped in the solution of the problem of equating the transport supply to the demand so far as the railways are concerned. We have had through the medium of contact thus established very many valuable suggestions, which we have not hesitated to follow up, and, when found to fit in to our conditions, to put them into operation and make due acknowledgment to the originators.

I desire to take this opportunity of indicating that I warmly welcome the co-operation of every section of the community in making the railways the power for service that we would all wish them to be. Criticism of a constructive type is always helpful, even though the ideas of the critic may not be agreed with by the railway authorities, as such criticism tends to turn one's thoughts inwards, so to speak, and develop a process of self-examination which is the surest way to understanding shortcomings and paving the way to removing them. I recognize that the fullest measure of usefulness from work on the railways cannot be the result of the efforts of any one individual or even of all those who make up the Department's staff. The efforts of all those must be supplemented by the co-operation of the public both as owners and users of the railways (in both of which capacities they have a definite responsibility), and I feel that with that co-operation the railway staff will be encouraged to that degree of effort in the application of their knowledge and experience as will enable the railways to give the maximum satisfaction to the community that their nature and circumstances permit.

COMMERCE TRAINS AND FARMERS' EXCURSION TRAINS.

A feature of our working that has been particularly developed during the past year has been that of the running of special excursion trains for commercial men and farmers. The Commerce Train, which was arranged under the auspices of the Auckland Chamber of Commerce, was an outstanding success from every point of view. The train covered a wide extent of country, and not only demonstrated the Department's capacity for efficient service and organization, but also enabled a valuable work to be done for the Dominion in bringing the business men of the town into immediate contact with the rural people.

Similarly, in the case of the Farmers' Trains, we have given a valuable service to the rural community, and have enabled them to gain knowledge of their country that would probably not otherwise have been afforded them.

The development of the farmers' excursions took its rise in the first place from the many requests we had from time to time for concessions in the matter of fares to farmers during the slack season in the farming industry. We could not, as a matter of railway economics, justify an issue of excursion tickets to farmers alone as a class. We felt, however, that the matter should not be allowed to rest at that, and it was concluded that, if conditions could be created that would assimilate the farmers' traffic to that of an excursion traffic which has its principal justification in large bodies of people travelling together, it might be possible to do something to meet the demand of the rural community in the matter of the above-mentioned request. To that end the Department has organized farmers' excursions from point to point, and their efforts in this direction have been entirely successful. We have received many expressions of very warm appreciation of our efforts in this direction. The success of the Department's work has not only again demonstrated its capacity for service in a direction that is peculiarly its own, but has also provided a means for the betterment of the Dominion as a whole by affording facilities for the farming community in the various districts to exchange views with one another, to the undoubted enrichment of their knowledge and their capacity to get the best results from their farming operations.

Dependent as this Dominion is for its welfare on its primary products, it will be apparent that the expansion of knowledge among the farmers afforded by means of these excursions must have a value far beyond the comparatively small outlay involved in making the various trips.

I cannot pass from this subject without expressing my appreciation of the co-operation of the local authorities, farmers' unions, and other organizations in the various places visited by the farmers' excursions for the way in which they have risen to the occasion and have helped to make the excursions the undoubted success that they have been.

NEW WORKS.

The position in regard to the various new works that are being carried out, and the new rolling-stock that has been constructed during the year or is now on order, is set forth in the report of the Chief Engineer and the Chief Mechanical Engineer attached hereto, and need not be here repeated.

The large works involved in the workshops reorganization, the Auckland–Westfield Deviation, and the Auckland new station and yard are now coming towards completion. The contractors for the erection of the station building at Auckland are well up to time in the progress of their contract, and it is expected that the station will be ready for use towards the end of next year. Goods traffic on a single line is expected to be commenced on the Auckland–Westfield Deviation early in September, 1929, and the double line will be brought into full working at the same time as the new station and yard at Auckland are brought into operation.

The work in connection with the Wellington new station and yard is also proceeding steadily, though some delay in carrying out the necessary reclamation has occurred through difficulties which have been encountered in constructing the storm-water culverts across the reclaimed area. These culverts are now nearing completion, and the work of reclamation will then be resumed and carried to finality. The land is being cleared for the construction of the new goods-shed, and tenders for its erection will be called at an early date. Plans are also in course of preparation for the station building itself. As soon as the new goods-shed is completed the present shed at Lambton will be removed to permit of work being carried on in preparation for the new yard and new station-site.

TRAIN-CONTROL.—TELEGRAPH AND TELEPHONE FACILITIES.

A commencement has already been made in the adoption of the principle of central train-control. Under this system the whole of the working of the trains in the controlled areas is co-ordinated and brought into harmony so as secure the most expeditious handling of the traffic. The utility of the control system is particularly felt in making the rearrangements that inevitably follow—and which have to be made at a moment's notice—whenever a train runs late and gets away from its time-table schedule. Through this method of control the controller has the whole of the train operations immediately under his view, and is able to make such arrangements as will not only do the best possible for the train affected, but will also minimize the ill effects that must result from such circumstances, especially on a single line. This has not only led to a better handling of our trains from the point of view of working them forward, but has also enabled us to effect very considerable economy in that better use is made of the train appliances and the time of the staff. Train-control essentially depends for its efficacy on good means of communication. This is an aspect of our business that opens up very material room for improvement. There seems little doubt that our means of communication have become obsolescent and have not kept pace with the demands of the business. This matter not only affects the extension of the train-control system, but also has a very direct bearing on the general carrying-on of the business of the Department. In a system such as the railways, which extends throughout the length and breadth of the country, good means of communication have a very direct bearing on general efficiency and the capacity of the Department to satisfactorily handle its business. Improvement on our present facilities I regard as absolutely essential, and proposals therefor have been embodied in the programme of works that will require to be undertaken.

COLLECTION AND DELIVERY: CENTRAL BOOKING-OFFICES AND PARCEL-DEPOTS.

One aspect of the problem of increasing the usefulness of the railways to which I have given considerable thought, and regarding which I have had many suggestions from prominent business men, has been that of the collection and delivery of parcels and goods requiring to be transported. The delivery side does not present so great a difficulty as the collection side. So far as parcels are concerned the railways in this country have been able to give a service that has apparently given substantial satisfaction to the public in that it has not given rise to complaint. The difficulty is, however, that the first transporter that obtains possession of the parcels has a definite advantage in the matter of their ultimate carriage to their destination. It is on this point that the motor carrier is placed in a very advantageous position as compared with the railway. Realizing the importance of this factor we have gone very carefully into the question of the collection of parcels for the purpose of transport by rail. Consideration of the various factors with particular reference to the incidence of the traffic has shown that the institution of collection services is, by reason of the sparsity of traffic in any particular locality, not an economic possibility at the present stage. The greatest proportion of the parcels traffic has its origin from the cities outwards, and experience has shown that one of the most potentially operating factors against the transport of the parcels by rail is the necessity of having them carried greater or less distances to a railway-station. It was felt that even if we could not institute a regular parcels-collection service we could go a very considerable distance along the lines of meeting the difficulty. To that end we have established passenger-booking offices and/or parcels-depots at the following localities: Queen Street, Auckland; Karangahape Road, Auckland; Upper Symonds Street, Auckland; and Tennyson Street, Napier. We are about to establish one at Courtenay Place, Wellington. A similar depot had previously been established at Hereford Street, Christchurch. In addition to the places mentioned, we have a passenger-booking office in Wakefield Street, Wellington. In every case we have selected sites where it appeared they would be of most service to the public. Except at Queen Street, Auckland, and Wakefield Street, Wellington, parcels can be consigned at these offices, and there are regular cartage services between the offices and the railway-stations which are so arranged as to fit in with the train services. The volume of traffic which is already flowing through these offices shows that they are meeting a real need, and I do not doubt that they will serve to hold much traffic to the railways that would otherwise have been lost.

On the goods side we are making it our policy to work as far as possible through established carrying concerns. I feel, however, that there will still be a fairly large measure of potential business that will, in some places at any rate, render it necessary for the Department to supplement the services of the carrying concerns with an organization of its own. This is a matter that is now in hand.

Another means by which we are endeavouring to get closer to our customers is by the appointment of suitable persons or firms as railway agents. These people will work in much the same way as central booking-offices and parcels-depots, and will, as the number increases, become a valuable connecting-link between the Department and the public.

LEVEL CROSSINGS.

During the year the problem of level crossings has continued to engage our attention, and the policy of progressive development in the protection of level crossings has been pursued. A few figures in connection with this work may be of interest. The Department employs a total of eighty crossing-keepers at thirty-seven crossings, at an annual cost of £13,122, of which £1,107 is recovered from local bodies. The expenditure on the elimination of crossings by overhead bridges or subways has been approximately £150,000. There have been warning-bells installed at fifty-four crossings, "wigwag" signals at thirty-two crossings, and flashing light signals at four crossings, at a total cost of £19,080. Every crossing has been provided with standard "Warning" notices at a cost of approximately £26,000. The total expenditure on the protection of level crossings is in the vicinity of £195,080, of which amount the Highways Board has spent £13,000 and the local bodies have spent £24,000, and there have been minor amounts provided by other persons or bodies, such as associations of motor interests. The annual cost to the Railway Department of the upkeep of warning-devices amounts to £3,880. Adding this to the wages-bill for the crossing-keepers it will be seen that the recurring expense to the Department on these two aspects of its operations is approximately £16,000.

During the year consideration was given to the question of the state of the law governing the use of level crossings. The position as it existed prior to the 1928 session of Parliament was that every person driving a motor-vehicle was required to stop before driving over a level crossing no matter how good the view might be thereat. It was felt that this was an unnecessary restriction on the freedom of action of motor-drivers, and that it tended to bring the law into disuse. After consultation with representatives of motor interests it was decided to promote an alteration in the law in the direction of classifying level crossings into those at which it should be compulsory to stop before going on to the crossing and those at which it was unnecessary to do this. This amendment was duly passed by Parliament, and came into operation on the 1st June, 1929.

In the meantime all crossings were classified as indicated above, and the necessary notices, in the form laid down by the Regulations under the Motor-vehicles Act, have been erected at compulsory-stop crossings.

I venture to express the hope that motorists will see that, in thus assisting to ease the law, the Department has given consideration to their convenience, and that they will give a closer adherence to the law as it now stands, which is designed for their own protection as well as for that of those who travel on the railway. I cannot help but think that it is too often overlooked when a collision occurs at a level crossing that the motorist who, by neglect of adequate precautions, was the cause of the same not only jeopardized his own safety, but also that of the passengers and crew on the train. The present provisions are the minimum that can be reasonably required for safe working, and should not be found to be unduly irksome to motorists.

A further aspect of the level-crossing problem to which consideration has been given is that of the signal which is shown by crossing-keepers. Hitherto crossing-keepers have shown a green flag by day and a green light by night to indicate the approach of a train, but with the growth of motor traffic and the adoption of signals for the regulation thereof it has become recognized that the colour indicating a danger signal to a motorist is red. This has tended to cause some confusion at level crossings, and it could not be but concluded that the time had arrived when some change should be made to avoid this difficulty. This is being done in consultation with representatives of the motor associations, and it is expected that new signals for crossing-keepers will shortly be decided upon, which will in future entirely obviate any difficulty such as that mentioned above.

The foregoing will, I think, serve to indicate that the Department is anxious to do its best to provide for the safety and convenience of the motorists, and I feel sure that if they will respond with their active co-operation in the matter of the careful use of level crossings, and obedience to the law and various signals established for their protection, the problem of the level crossing should assume very small dimensions.

ORGANIZATION OF THE DEPARTMENT.

It will be recollected that some few years ago it was decided to organize the operating side of the Department on the divisional plan with a view to bringing those branches of the Department that are more directly concerned with operating into more intimate contact with one another, and generally bring about closer liaison between the various branches than exists under the departmental system. I feel, however, that we have not yet reached the stage of obtaining the fullest measure of advantage from the divisional system, and the observations which I was able to make in Australia regarding the operation of divisional control there confirm me in that view.

Although we have instituted Divisional Superintendents, we still have district officers organized on the departmental system, and there is a tendency to think in terms of the departmental rather than the divisional system. The bringing of the Maintenance, Locomotive-running, and Traffic officers

under the control of the Divisional Superintendents has undoubtedly had some tendency to bring these officers into more intimate contact with one another. It seems to me; however, that we need to carry the matter further from the departmental system of district officers, each with his separate office organization, in the direction of unifying the administrative activities of these officers under the single organization of the Divisional Superintendents. I think the district officers (in the operating branches, at any rate) instead of being regarded in the light of district officers, as they have been in the past, having a greater or less degree of independence and autonomy as district officers, should be actually on the staff of the Superintendents.

The superimposition of the Divisional Superintendents on the old departmental system has taken the matter a certain distance, and I feel that it should go still further, and may do so advantageously both from the points of view of efficiency and economy. I think that the Traffic Section might be completely merged into the position of Divisional Superintendent, the Locomotive-running officers being technical members of the Superintendent's staff. This would entail the entire abolition of the offices of District Traffic Manager. Under the present organization the Locomotive (Running) Engineers are on the staff of the Divisional Superintendents, and would so continue.

The office of General Superintendent of Transportation would continue, much as at present, to be a branch of the general management, operating to collate the various matters affecting the transport side of the business and maintaining a general control, under the General Manager, of all matters connected with the traffic side. The Chief Mechanical Engineer would fix the standards and act in an inspectorial capacity for the purpose of seeing that the standards set were maintained. He would also have charge of all capital works on the mechanical side, and would have control of the workshops, while the running-repair depots would, as at present, be under the charge of the Superintendents. The Chief Mechanical Engineer would not have direct contact with the Locomotive Engineers, but would work wholly through the organization of the Divisional Superintendents.

The foregoing is a general outline of the mode by which I think divisional control could be further developed, and concrete proposals in connection therewith will be worked out during the coming year.

RAILWAY WORKSHOPS REORGANIZATION.

The new railway workshops in the four main centres—Otahuhu, Hutt Valley, Addington, and Hillside—are now nearing completion, and it has been possible to transfer the staff from Petone to the Hutt Valley shops, and from Newmarket to Otahuhu. At Addington and Hillside approximately 80 per cent. of the new workshops has been completed, and the staff have been enabled to work with the new machinery which has been installed.

The layout and design of the workshops and machinery have been carried out in accordance with the most modern practice, and have been found on completion to be satisfactory and adequately meet the Department's requirements in every way.

The general arrangement of the workshops is such that the handling of material is reduced to a minimum by the use of modern cranes and industrial trucks.

Detailed considerations of the layout during the progress of the work have resulted in additions to the original scheme and extra expenditure which was considered to be fully warranted. Similarly, the extension of electrification to every form of activity in the workshops consequent upon hydro-electric power being available has also materially increased the efficiency of the undertaking, and in addition to this has ensured that the operation of the workshops in close proximity to suburban areas will cause no inconvenience to the residents, particularly in regard to the smoke nuisance.

Opportunity was afforded me to compare the latest workshops which have been erected in Australia with the workshops erected in New Zealand, and there is no doubt that the New Zealand workshops compare favourably in their layout and equipment with any similar establishments existing in Australia. I am also assured by officers who have been abroad that the standard of our workshops equals that of the most modern workshops on other railway systems.

The Department will welcome visits to the workshops from industrialists throughout the Dominion, in order that they may appreciate the completeness and the efficiency of the undertakings. Some parties have already inspected the installations, and have been impressed with the efficient handling of the Department's repair and construction activities.

On final completion of the workshops the Department will be in a position to manufacture the bulk of its requirements. In the past the Department has been compelled to import considerably more rolling-stock and other manufactured materials than it has been capable of producing in its own workshops. The advantage to the Dominion as a whole of importing raw materials rather than finished products need not be emphasized.

As a result of the reconstruction of the workshops it is confidently believed that there will be considerable savings in the manufacture and repair of practically the whole of the appliances necessary for the running of the railways.

The old workshops had arrived at the stage that they were obsolete and inadequate to the demands of the Department's business, and they were also in a condition that did not enable the staff to do themselves justice. A fair proportion of the men were working without cover, and those who were in the workshops were not in surroundings that enabled them to have that degree of comfort and convenience in connection with their work to which they were entitled, and which would enable them to give the best measure of service to the Department. The improvement that has been made in this respect in the workshop is, I believe, not the least important of the factors tending to justify the reorganization.

It must not be overlooked that the old workshops had been a matter of growth over a long period of years, and inevitably a point arrives in the process of such growth at which the more or less patch-work method breaks down and a clean sweep has to be made. It is plainly indicated in the report of the Fay-Raven Commission that this point had definitely been reached in connection with our old workshops.

The final estimated cost is £2,279,459. The scheme as originally planned was estimated at £1,880,000, including £60,000 which had previously been allocated for electrification of the old shops.

All additions to and variations of the original scheme were subjected to the closest scrutiny and examination by special technical committees set up for the purpose, and no alterations or additions were made unless the expenditure was considered to be justified.

The variations and additions are as follows:—

	Original Estimate. £	Final Estimate. £	Increase. £
Land	42,900	83,226	40,326
Buildings and layout	1,193,300	1,175,967	17,333 Dec.
Machinery and equipment	583,800	849,225	265,425
Electrification	60,000	171,041	111,041
Totals	£1,880,000	£2,279,459	£399,459

The additions and variations are fully discussed in the following paragraphs under the respective headings

LAND.		
Original Estimate. £	Final Estimate. £	Increase. £
42,900	83,226	40,326

In acquiring land it was assumed that the development of the country would continue, and provision has been made for the future extension of the workshops when necessary.

The additional expenditure on land was incurred at—Otahuhu, £30,000; Hutt, £3,500; Addington, £5,000; and Hillside, £2,000.

At Otahuhu the land cost £12,000 in excess of the amount allowed (£21,500) and £18,000 was spent on levelling. The area acquired is greater than is necessary for present requirements of locomotive and rolling-stock activities only, and allowance has been made for concentrating at Otahuhu the Maintenance Branch shops (now at Penrose) and the Railway stores (now at Newmarket).

The area of land purchased at Hutt is sufficient to accommodate the Locomotive, Maintenance, and Signal and Electrical workshops, Railway stores, and garage for the Hutt Valley road-motor service, also for future extensions of all these facilities, some of which developed after the initial schemes were prepared.

At Addington it was found necessary to purchase a small area of land to compensate for a portion of the workshops yard required to give access to the Middleton yard for traffic purposes.

Land was purchased at Hillside, outside the workshops yard, Cargill Road, for a site for a dining-room and social hall not provided for in the original estimates.

The following sites occupied by the old workshops and stores, all of which are in valuable city or suburban areas, will be vacated and made available for leasing or for other railway purposes:—

Location.	Total Area.			Approximate Area available for Leasing.	Approximate Value of Area available for Leasing.	
					Capital.	Annual.
	A.	R.	P.	A. R. P.	£	£
Newmarket (shops)	18	2	37	15 0 0	100,000	6,000
Newmarket (stores)	1	2	0	1 2 0	3,000	150
Penrose	5	0	30	4 0 0	5,000	250
Wellington (Waterloo Quay)—						
Stores shipping shed and yard	1	1	24	1 1 24	60,000	3,000
Signal workshop	0	1	20	..	..	..
Stationery store	0	1	20	..	..	..
Kaiwarra	1	3	32	1 3 32	7,000	500
Petone	17	3	35	10 0 0	25,000	1,500
	47	1	38	33 3 16	200,000	11,400

In addition to these areas, 4·8 acres on the new Wellington reclamation, costing approximately £9,000 per acre, or £43,000, previously set aside for Railway stores and Signal and Electrical workshops, will now be available for leasing at an annual rental of, say, £2,000.

The land now occupied by the Signal and Electrical workshops and stationery store at Wellington will form part of the new Wellington yard. Portions of the land at Newmarket, Penrose, and Petone have been reserved for railway or roading purposes.

It is proposed to apply the rentals derived from these properties to writing off that portion of the capital cost of demolished or scrapped buildings and plant not covered by depreciation funds.

BUILDINGS AND LAYOUT.

Original Estimate.	Final Estimate.	Under-expenditure.
£	£	£
1,193,300	1,175,967	17,333

As a result of the low tenders received for the erection of the buildings the final estimated cost is within the original estimate, notwithstanding a number of additions made to the original layout to accommodate extensions of the original plan.

MACHINERY AND EQUIPMENT.

Original Estimate.	Final Estimate.	Increase.
£	£	£
583,800	849,225	265,425

ELECTRIFICATION.

Original Estimate.	Final Estimate.	Increase.
£	£	£
60,000	171,041	111,041

The original proposals provided for a partial electrification of the new shops, and the sum of £60,000 previously allocated for electrification of the old shops was considered to be sufficient for the purpose.

With the twofold object of taking full advantage of the greater economy of electrical energy and of eliminating the smoke nuisance in residential areas, it was finally decided to purchase hydro-electric power in bulk at all centres, and to make the installation completely electrical.

This decision made it possible to install a number of additional appliances designed to make use of the night load. As the scheme progressed it was also considered advisable to include new and improved machines and processes which will make it possible to undertake in the Dominion not only the whole of the rolling-stock construction, but also the fabrication of all classes of metal-work, much of which has hitherto been imported from abroad.

While the initial capital costs were materially increased, the great savings to be effected in the cost of the output will, it is expected, more than compensate for the annual charges for interest, maintenance, and depreciation.

The principal factors contributing to the increased machinery costs are—	£
Additional machinery and appliances, including cost of raising loans ..	204,813
Pipe-line reticulation within buildings charged against machinery and equipment but included in building estimates	20,000
Unforeseen expenditure	40,612
Total	<u>£265,425</u>

The unforeseen expenditure was due to the following: (1) An increase of 1½d. per hour in the average rate of wages of workshops staff, £4,855; (2) the reassessment under the new accounting system of overhead charges on capital works and on workshops and Stores Branch operations, £32,000. The altered overhead rates had not been determined when the estimates were framed.

The increase of £111,041 in the electrical costs is due partly to the decision to completely electrify the shops (approximately £81,000) and partly to the additional appliances added to the original scheme (£30,000). The reassessment of overhead charges is also a factor that is difficult to estimate, but it would probably account for £10,000 of the total.

In determining the size and capacity of the shops the following factors have been taken into consideration. During the last ten years a considerable proportion of the new rolling-stock has been imported or purchased, as shown in the following table:—

	Built by Depart-ment.	Purchased.	Total.	Average per Year.
Locomotives (steam)	45	111	156	15·6
Locomotives (electric)	..	6	6	0·6
Cars and vans	227	..	227	22·7
Rail-cars	..	3	3	0·3
Wagons	2,378	2,500	4,878	487·8

With regard to the future, a survey has been made of the whole of the locomotives and rolling-stock. As a result of this survey it was found that a large number of worn-out or obsolete types of engines had reached the stage when scrapping was necessary in the interests of economy and efficiency, and the position in regard to cars and wagons is similar to the locomotives.

This could not be done with the limited facilities available in the old shops, and as a result a great number of uneconomical partial repairs had to be carried out. The survey disclosed that during the next five years an annual building programme of twenty engines, eighty-four cars and vans, and seven hundred wagons would be required to bring the rolling-stock up to the standard necessary for efficient traffic operation.

The foregoing outlines the position so far as replacements are concerned, but does not make any allowance for the necessary additional stock.

The new workshops, in addition to being able to cope with the rolling-stock requirements, have been equipped with reclaim depots to enable apparatus and material, which in the past has been practically valueless, to be salvaged and reconditioned for further use.

The electric steel furnaces in particular will enable scrap materials such as axles, tyres, and rails to be utilized in making steel castings at low cost.

As indicated above, the programme of work which we have in view will, if it can be maintained, keep the shops fairly fully employed for some years to come. It has been our experience, however, that the amount of our programme which is actually carried out year by year is determined not by the extent of the proposals contained in the programme, but by the amount of money that can be made available. I have already stressed the great desirability of improving the quantity and standard of our rolling-stock, and the necessity for adequate financial provision in this connection will, as the foregoing particulars show, find a second reason in the economics of the workshops reorganization. Inasmuch also as one of the essential features of the reorganization has been the provision of a large amount of new and costly machinery of modern type, which will reduce labour to a minimum, it will be very necessary for the best results that the maximum output should be obtained from these machines.

I think that the introduction of some schemes which will give the staff an incentive to get the greatest possible output from the machines might be adopted with advantage both to the staff and to the Department. This is a matter to which we propose to give attention during the coming year.

A method which is already in course of adoption for concentrating the greatest measure of work available into the new shops is the amalgamation of the Locomotive and Maintenance workshops. Hitherto the work requiring to be done for these two branches has been carried out in separate workshops under the control of each branch. This led to duplication of machinery and organization. To overcome this, and to direct the greatest volume of work available in the Department into the reorganized Locomotive shops, the Maintenance workshops are being merged into the Locomotive shops, and the former, as a separate organization, will cease to exist.

LYTTELTON TUNNEL ELECTRIFICATION.

The electrification of the section of the line between Christchurch and Lyttelton has been completed, and all trains on that section are now being run with the electric locomotives. The work was well carried out by the Departmental staff and the equipment was supplied by the English Electric Co. to the Department's specifications, and there has been no serious difficulty since the working commenced. The new conditions, so far as the tunnel is concerned, constitute a substantial advance on those previously existing. Some unpleasantness arose during the early stages through the existence in the tunnel of the soot deposits that had accumulated over many years of steam working. Steps were taken, however, to remove these deposits, and with the completion of the work the trouble that was experienced in this connection has been eliminated.

The time-table schedules were completely revised to suit electric working, and the benefits that have accrued from the altered conditions have been appreciated both by the staff and the public.

DIESEL ELECTRIC LOCOMOTIVES.

Mention of the electrification of the Christchurch-Lyttelton Section prompts me to remark that we have been interesting ourselves in the matter of Diesel electric locomotives for the purpose of determining whether they can be used to advantage on our system. Locomotives of this type are being operated in Canada, England, and elsewhere, and we are placing ourselves in touch with the Railway authorities in both countries with a view to obtaining such information as they can afford us regarding the performance and characteristics of this form of traction. We are also in touch with the local representatives of one of the large engineering concerns in Great Britain which has given particular attention to locomotives of this type, so that we may obtain all the information that might assist us towards determining the question of the suitability of these locomotives to our conditions. We are at present awaiting this information before proceeding to determination of this question.

BRIDGES.

The matter of strengthening or renewing our bridges is one that has been pressing on the attention of the Department, and the matter has been made the subject of a comprehensive review. This was necessitated both by reason of the age of many of our bridges as well as by considerations of their strength and consequent ability to stand the increased axle-load weight of the modern type of engines passing over the bridges.

The position resolves itself into one of adequate financial arrangement for the work of renewal and strengthening to be undertaken, and an investigation has been made with the object of ascertaining what financial provision would require to be made.

The original cost and probable remaining life has been estimated for each of the larger bridges, and from this has been determined the annual amount that should be contributed to a bridge renewals fund which will make provision for writing off the original capital cost of the bridge when its

reconstruction becomes necessary. Owing to the fact that no adequate provision has been made in the past for the renewal of bridges, the annual contribution now required in respect of many bridges with short remaining lives is very high. Rough estimates of the cost of reconstruction have been made for most of the bridges.

The smaller bridges, for which the cost of reconstruction is below about £6,000, have been eliminated from the present investigation. The original costs of these bridges, being comparatively small amounts, will be written off as a direct charge to working-expenses when the bridges are replaced.

Most steel and iron bridges are not appreciably deteriorated, and can be strengthened and retained in service for further long periods. For this type it is proposed in the meantime to apply a flat rate for depreciation of $1\frac{1}{2}$ per cent. per annum on the original cost—that is, an average life of sixty-six years is assumed for all steel and iron bridges. Eventually it may be found advisable to deal separately with some bridges subjected to unusually severe conditions, and for which the proposed flat rate would be inadequate. It is not anticipated, however, that any such special provisions would materially affect the aggregate requirements as now estimated.

Many large timber bridges, however, will require extensive reconstruction within a comparatively short time, according to the age and condition of their timbers and their standard of strength, and it is chiefly on account of these bridges that the larger contributions to the renewals fund are required. The only sound method of dealing with these bridges will in general be to renew the superstructure in steel, and in most cases also the sub-structures in concrete.

The schedules appended to this report show the details of the investigations. These are subject to revision from time to time as more definite information can be obtained with respect to each bridge dealt with. They serve, however, to indicate the true position as nearly as is possible to ascertain it with the information available at present.

Programmes of bridge strengthening and reconstruction have also been prepared indicating what works it is proposed to put in hand within the next few years.

The position with regard to the reconstruction of some long combined road and railway bridges will require special investigation. For instance, the proposals for the Rakaia and Waitaki Bridges provide for constructing railway-bridges alongside the existing combined road and railway bridges, and abandoning the existing bridges for roadway use only, for which purpose they should serve satisfactorily for a further long term. This will require negotiation with the Main Highways Board, and the matter is now in hand.

A programme of bridge strengthening and reconstruction extending over the next five years has been drawn up, and is also shown in a schedule attached to this report. The programme was arrived at after careful consideration by members of the executive staff immediately concerned with the operating conditions as affected by the carrying-capacity of the bridges.

The work is planned so that improved operating conditions will be obtained on important sections as soon as possible after the programme is put in hand. It is proposed, therefore, to concentrate most of the expenditure for the first two years on the Auckland-Wellington Section, and complete the strengthening or reconstruction of all weak bridges on that section as soon as possible.

The total annual contribution required for the bridge renewals fund as determined on the above lines is about £105,000. This amount is very large, and represents in a great part the burden of depreciation that has accumulated over the past years, and for which little or no provision was made. This illustrates very clearly a difficulty of changing from a non-commercial policy to a commercial one in an institution such as the railways. Money which should have been set aside as a reserve for depreciation in past years has gone, and the public have had the benefit of it, and this applies not only to bridges but also to the whole of our depreciating assets. Notwithstanding the fact that no financial provision was made, the depreciation has gone on, and all the money that should have been put aside to meet that depreciation must be recovered in some way. If it is to be a charge against the future revenues of the Department, then not only will the Department be hampered by having to earn more money than it would now be required to do if a proper provision had been made in the past, but it also involves inequity by making the future users of the railways pay for benefits that have accrued to past users and owners of the railway. It is equally unfair to regard the provision which now requires to be made for the accumulated depreciation as a "loss" on future railway-working. The country has had the benefit of the higher financial return from the railways in the past through the non-provision of the sums necessary for depreciation, and on any plan for bringing the railways on to a commercial basis allowance should be made for that amount, and the railway accounts should be written down by a sum that will bring them down to their present-day value—in other words, that will make that provision for depreciation that should have been made in past years.

STORES BRANCH.

The amount expended in connection with the purchase of stores and material during the year was £2,487,365 3s. 11d. This expenditure was divided as follows:—

	£	s.	d.
To merchants, manufacturers, and others in New Zealand ..	756,732	10	8
Through High Commissioner, London	602,741	13	4
Material manufactured in railway workshops	290,376	14	2
Coal and coke	713,589	4	11
Stationery	33,233	1	8
For manufactured and used material recovered from other railway branches	90,691	19	2
Total	£2,487,365	3	11

The following decreases and increases are shown when compared with the figures for year ended 31st March, 1928 :—

	Increase.			Decrease.		
	£	s.	d.	£	s.	d.
To merchants, manufacturers, and others in New Zealand ..	45,610	14	3	..		
Through High Commissioner	287,601	2	3	..		
Material manufactured in railway workshops ..	1,620	2	1	..		
Coal and coke	..			100,042	1	6
Stationery	..			7,271	15	3
For manufactured and used material recovered from other railway branches	36,280	1	7	..		
	<u>£371,112</u>	<u>0</u>	<u>2</u>	<u>£107,313</u>	<u>16</u>	<u>9</u>

The increased expenditure under the heading of "High Commissioner" payments is accounted for by the extra payments made for—

	£
New workshops plant and electrical material	198,119
Electric locomotives for workshops	49,600
Garrett locomotives	39,882
	<u>£287,601</u>

Purchases within the Empire amounted to £2,434,077, and from other countries (principally United States of America) £53,288.

During the year contracts were made for workshops machinery and electrical equipment totalling £103,736, of which £87,875 were placed within the Empire and £15,861 in other countries (mostly United States of America).

The decreased expenditure in connection with coal payments is accounted for by the smaller stocks held at the 31st March, 1929, as compared with the previous year, and also by the greater use made of New Zealand coals.

The policy of using New Zealand timbers wherever possible has been systematically carried out. Large orders were placed during the year for totara, silver-pine, and puriri sleepers. These orders had the effect of helping unemployed bush-workers during a rather difficult season.

A contract for the supply to all Government Departments of iron and steel manufactured in New Zealand was made with the Otago Iron-rolling Mills, Green Island, Otago, through the Stores Control Board for the period 1st June, 1928, to 31st May, 1930.

Condemned tarpaulins, unfit for repair, are now being sold to private parties. The orders for these tarpaulins largely exceed the supply available.

A Tenders Control Committee, the personnel of which is the Chief Engineer, Chief Mechanical Engineer, Chief Accountant, Signal and Electrical Engineer, and Comptroller of Stores, has been set up to consider all tenders and quotations for the supply of stores and material required for the Railway Department's use.

COAL-SUPPLIES.

A comparison of the purchases of New Zealand and imported fuel for five years ended 31st March, 1929, is as follows :—

Year.	New Zealand. Tons.	Per Cent. of Total.	Imported. Tons.	Per Cent. of Total.	Total. Tons.
1924-25	94,351	23·16	313,107	76·84	407,458
1925-26	85,393	23·49	278,076	76·51	363,469
1926-27	187,793	49·30	193,163	50·70	380,956
1927-28	288,646	65·50	152,025	34·50	440,671
1928-29	356,724	84·25	66,675	15·75	423,399

The total consumption by the Department for the year was 428,522 tons, involving an expenditure of £735,215, or an average of £1 14s. 3d. per ton.

The sums expended in the purchase of fuel were as follow: Imported fuel, £132,136; New Zealand fuel, £576,136.

The labour troubles in Australia have caused the Department's reserve stocks of hard coal to be seriously depleted; and, though the supplies of New Zealand coal continued during the year to be satisfactory, the unsuitability of the local coal for storage purposes makes it essential that reserve stocks must be built up immediately, and every effort has been made to deal adequately with the situation. It is satisfactory to note the increased use which has been made of New Zealand coals.

FURTHER UTILIZATION OF NEW ZEALAND TIMBERS.

During the past year investigations have been made by the Departmental officers, in conjunction with the officers of the Forestry Branch, with a view to a further utilization of New Zealand timbers for rolling-stock purposes.

These investigations have shown that it is necessary to adopt a process of kiln-drying, in order to make it possible to make the fullest use of New Zealand timbers for these purposes. The reports also show that by treating such New Zealand timbers savings can be effected, apart from the benefit to the industry in the country.

In the North Island the kiln-drying capacity required amounts to 1,000,000 sup. ft. per year, and in the South Island 750,000 sup. ft. per year. This amount would be purchased in New Zealand in place of timber now imported from Australia.

One of the principal difficulties the Department has had to face in the past has been the procuring of properly seasoned timbers of suitable kind in required quantities. If the Department were to undertake to air-dry its own timber it would necessitate large stocks being held. Unfortunately, New Zealand timbers have a high rate of deterioration, and this would render the process of air-drying uneconomical.

Added to this is the fact that some New Zealand timbers when air-seasoned are not suitable for our purpose, but become so when kiln-dried.

By the expenditure of approximately £20,000 adequate facilities to kiln-dry the Department's requirements can be obtained, resulting in relatively small stocks being required to be kept on hand, better service in the finished product, decreased maintenance costs, and materially assisting a local industry that does not appear to be in a thriving condition.

STAFF.

The total number of staff employed on the 31st March, 1929, including those engaged on works charged to capital, was 19,086, as compared with 18,584 the previous year, and the average number actually at work throughout the year was 18,536, as compared with 18,541 the previous year. Of the average number of staff at work during the year 13,598 were permanent employees, while 4,938 were casuals. The average number of men engaged on works charged to capital was 1,301, as against 1,087 last year.

Fifty-two members of the Second Division were promoted to the First Division, 156 members resigned, 92 retired on superannuation, 49 died, 45 were dismissed, and 573 engaged.

The sum of £44,344 was paid under the Workers' Compensation Act during the year to members of the Second Division who suffered injury in the course of their employment.

The new workshops at Otahuhu, Hutt, and Hillside were occupied by the staff during the year, and the work in connection with the change from the old to the new shops accounts for the increase in the average number of men engaged on works charged to capital.

I have under another heading in this report referred to the sick-benefit fund that has been established. Staff welfare work has also been carried on in other directions, notably in the provision of very well-equipped social halls at the workshops. We are also providing dining-rooms at the shops, and an organization which will enable the employees to obtain hot meals of high quality at the lowest possible price. In connection with the provision of recreational facilities for the staff we have pursued a policy of providing the materials at the cost of the Department where the staff themselves were willing to provide the necessary labour. I am glad to say that this arrangement has been availed of by sections of the staff at various places during the year.

Staff welfare work is an aspect of our business in which I am particularly interested as making not only for physical welfare and contentment among the staff, but as also tending to bring the staff and their families into more intimate social contact, and so leading the way to better understanding and a development of that *esprit de corps* which is so essential to the best results in an industry such as the railways, depending—as it does—so much on organization and the smooth working of its various sections.

I desire also to express my appreciation of the loyal co-operation which I have had from the staff generally in connection with the Department's business. Soon after I took office I emphasized that it was the man on the spot who could do the best service for the Department in the matter of obtaining business as against competitors. The essential relationship of the Commercial Branch in business-getting, so far as the internal organization of the Department was concerned, was to serve as a connecting-link between the management and the staff who are spread throughout the length and breadth of the railway system. Essentially the actual work of business-getting must principally rest with the staff who are giving the service and coming into daily contact with those requiring transport. I am very gratified to be able to record that during the year my appeal for the active co-operation of the staff has been responded to in a measure that has given me the greatest satisfaction. I have found many cases of members going out of their way to protect the Department's interests, and I desire to place on record my tribute to the staff for their loyalty and valuable assistance in this connection.

I wish also to place on record the good conduct of the staff during the past year, and the cordial relations that have existed between the various sections right throughout the organization.

SICK-BENEFIT FUND.

During the year the arrangements for the establishment of a sick-benefit fund for the purpose of assisting members of the wages staff of the Department during periods of incapacity through sickness were brought to completion. Previously to the establishment of this fund members of the wages staff who were off duty through sickness received no pay during these periods, and were dependent for their income on the various benefit societies that have been established by the staff themselves generally through their staff associations.

It has been a request that has been made on behalf of the wages staff for a good many years that they should receive some assistance during periods of sickness. The solution of this problem was eventually found in the formation of the Government Railway Employees' Sick Benefit Society. Under the arrangement now arrived at the members of the staff will make contributions to the sick-benefit fund, such as they have been accustomed to do in connection with the funds previously established, and in addition the Department will subsidize these contributions to the extent of 10s. in the pound with a maximum annual subsidy of £8,000. The accounts of the fund will be kept by the Department, and the fund will be administered by a central committee, on which the staff organizations and the Department will be represented, and by various district committees somewhat similarly constituted.

The arrangement is now in operation, and has worked with practically an entire absence of difficulty right from its inception. I feel that the establishment of the fund marks a very substantial advance in the industrial welfare of the railway employees.

REVISION OF INSTRUCTION-BOOKS.

With the growth in the extent and complexity of the Department's operations the various instruction-books have both increased in number by the inevitable addition of fresh books dealing with new phases of the Department's working, and have also been the subject of numerous amendments to the books already existing. Some of the older books have not been revised for a number of years, and the position was reached where a revision and consolidation of the various departmental instructions could not be longer postponed with due regard to the convenience of the staff and efficient and safe working. This work has accordingly been put in hand, and a definite staff has been allocated for the purpose, with the intention that the work shall now be pursued continuously until finality is reached and the various instruction-books are brought up to date and arranged in the best possible order. This is a work that I feel sure will be much appreciated by the staff, and will be of material assistance to them in the proper discharge of their various duties.

CORRESPONDENCE COURSE AND TRAINING-SCHOOL.

The total number of students receiving tuition in the various phases of railway work numbered 615 at the end of March. Four hundred and sixteen members passed the various departmental examinations during the year. A great measure of success was secured at the examinations by those members who availed themselves of the facilities provided by the Correspondence School.

Ninety-seven cadets have undergone the course of training in the school during the year, and the results have been very satisfactory. Fifty per cent. of these cadets matriculated prior to appointment to the service, and a number are continuing their studies at the University and Technical College.

The Cadets' Hostel is still fulfilling its useful purpose, and parents have expressed appreciation at the manner in which the Department is attending to the welfare of cadets away from home. A tennis-court has been provided, and cricket and football clubs have been formed in order to provide recreation for the cadets.

SUGGESTIONS AND INVENTIONS.

The Department's Suggestions and Inventions Committee dealt with 1,491 suggestions during the year, as against 1,739 during the previous year. Of these, 122 were recommended for adoption either wholly or partially; 447 were referred to heads of branches for their consideration, or were already in operation, or related to matters of policy; 812 were rejected; and 110 were under trial or investigation at the 31st March.

Monetary awards totalling £168 were made in respect of thirty-five suggestions, and commendations were noted on the official records of eighty-one suggesters.

During the year wider publicity has been given to the existence of the Suggestions and Inventions Committee, a recent innovation being the erection at the principal stations of "Suggestions" boxes with appropriate cards provided for making suggestions. It is anticipated that this will further induce train travellers, as well as members of the service, to submit any ideas they may have for improvements to our railway system.

Many of the suggestions submitted during the year were not original, a large number having been previously brought under notice, or related to matters which were already engaging the attention of the Department. Nevertheless, suggestions of considerable value are frequently received, and it is felt that the benefit obtained from these fully compensates for the time spent in sifting out the useful ones.

SUPERANNUATION FUND.

The report of the Government Railways Superannuation Fund Board for the year ended 31st March, 1929, shows the position to be as follows:—

Annual liability, £258,632.							£
Members' contributions	..	..	..	..	..	..	166,439
Interest	..	..	..	..	..	..	65,537
Deficit to be drawn from subsidy	..	..	..	..	..	..	26,656
							<u>£258,632</u>
At the same date the liability to contributors in respect of amounts paid							£
in was	..	..	..	..	..	..	1,505,554
The total accumulated fund was	..	..	..	..	..	..	<u>1,238,674</u>
Leaving deficit of							<u>£266,880</u>

The annual liability, £258,632, is in respect of 1,478 members, 485 widows, and 452 children, making a total of 2,415 persons actually on the fund on the 31st March, 1929.

The amount standing in the Investment Account in the balance-sheet is represented by the following securities:—

							£
Mortgages	..	..	..	..	..	..	843,122
Local bodies' debentures	..	..	..	..	..	..	193,615
Government securities	..	..	..	..	..	..	135,000
In hand awaiting investment	..	..	..	..	..	..	4,824
							<u>£1,176,561</u>

The average rate of interest on securities held on the 31st March, 1929, was 5·823 per cent.
The average rate of interest earned on the mean funds was 5·761 per cent.

The last actuarial examination of the Government Railways Superannuation Fund was made in 1919–20. In the report that was then made it was recommended that the subsidy to be paid by the Government into the fund should be at the rate of £170,000. The subsidy was accordingly increased from that time year by year until it reached the sum named in 1926, since which time it has remained at that figure. A further actuarial investigation is now being made, and it is expected that it will be concluded at an early date.

CONCLUSION.

I have elsewhere in this report mentioned that we are by improved facilities and the adoption of commercial methods in seeking and attracting business endeavouring to develop rail-borne traffic. I wish, in conclusion, to express some thoughts in regard to what might be termed the commercialization of the railways. Since the advent of motor competition and the growth of the debit balance as between revenue and expenditure there has been a growing tendency to judge the railways on the results of their working from a commercial standpoint. To this no possible exception could be taken if the railways were in fact a commercial institution, and the fact is that at present they are not. As I have indicated, we have in the internal working of the Department adopted commercial methods, but there is a limit to which the management as such can carry this commercialization process. We find in most of the major and a good many of the minor questions that come up for settlement non-commercial aspects entering into the matter. Whether this should continue or not is not a matter that is within our province to discuss, our purpose here being merely to point out the fact in order that no injustice should be done or misunderstanding arise as regards the position of the railways from a working point of view. To judge the results of the working of the Department from a commercial standpoint when the Department is not a commercial institution is as unfair as it is positively harmful.

The growth of the idea of the commercialization of the railways is one of the most outstanding features of the railway problem to-day. The pressure on the State finances of deficits on account of the working of the railways has been a growing one, until it has assumed dimensions that compel serious consideration. It has been too often assumed that this growth has been due to some defect in the working of the system. An analysis of the position does not support any such assertion. The policy is determined from time to time by the Government of the day and has to be accepted by the management, which then is charged to do its best to apply that policy to the working of the system. In applying the policy commercial methods are being used to the utmost possible extent; but unless the policy is commercialized, then at the very source of our operations we have a non-commercial factor which operates throughout the whole and sets definite limitations on the capacity of the management to get commercial results.

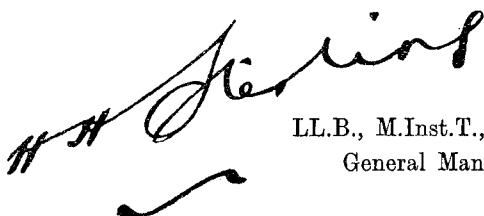
Commercialization means nothing else but the adoption of such a policy and such methods of working as will ensure the best financial results directly through the revenue and expenditure accounts. If this result is aimed at, then the only logical thing to do is not only to commercialize the methods of working, but also to commercialize the policy. The latter is unquestionably the governing factor and definitely circumscribes the operations of the former. Whether the Department should be thoroughly commercialized is a policy question which this is not the place to discuss. I feel, however, that in justice to the railwaymen—and, indeed, to the country itself—the issue should be laid bare.

Some steps have already been taken which seem to be consistent only with a policy of commercializing the Department. The action taken in that direction cannot, however, be fully effective until all non-commercial influences have been eliminated. The point is that to get the best results under either system—that is, under a non-commercial or commercial policy—one or the other should be definitely adopted both as a standard for the operations of the Department and as a standard by which to test its results. To adopt one for one purpose and the other for the other purpose is inconsistent, futile, and harmful.

The position that has arisen in South Africa is in many respects analogous to that which has arisen here and has been made the subject of a very able work, entitled “The Railway Policy of South Africa,” by Dr. S. H. Frankel, Professor of Economics and Economic History at Witwatersrand University, Johannesburg, and, while not necessarily agreeing with all the conclusions arrived at therein, I would commend this work to the study of all those who are interested in the railway problem in New Zealand.

I have endeavoured in this report not only to give an account of our stewardship for the past year, but also to state the major questions involved in the railway problem in New Zealand as I see it, and, as far as I might do, I have endeavoured to point the way to a solution.

I have the honour to be,
Sir,
Your obedient servant,



LL.B., M.Inst.T.,
General Manager.

REPORTS FROM HEADS OF BRANCHES.

MAINTENANCE.

MR. F. C. WIDDOP, M.Inst.C.E., Chief Engineer, reports as follows:—

The track, structures, buildings, and appliances have been maintained in good order and repair.

Permanent-way.—The relaying done during the year was as follows:—

Main line and branches, 53 lb., 55 lb., 56 lb., 65 lb., and 70 lb., relaid with 70 lb.	Miles.
material	36½
Main line and branches, 40 lb., 53 lb., 55 lb., and 56 lb. relaid with 55 lb.	
material	¼
Main line and branches relaid with second-hand 53 lb., 55 lb., 56 lb., and 70 lb.	
material removed from main line	5½
Total relaid for year	42¼

Sleepers.—The number of new sleepers placed in the track during the year was 152,161.

Ballasting.—143,121 cubic yards of ballast were placed on the track.

Slips, Floods, &c.—During the year the Kaihu Section between 11 m. and 15 m. was flooded on two occasions, causing slight delays to traffic.

On the 30th April, 1928, a heavy gale at Te Aroha caused considerable damage to dwellings and buildings.

On the 10th July, 1928, a heavy flood in the Waihou River caused several small washouts between Mangaiti and Tirohia, involving train-delays.

On the 24th, 25th, and 29th July, 1928, slips and washouts occurred on the main line, North Auckland, East Coast Main Trunk, Thames and Glen Afton Branches, causing interruptions to traffic.

On the 1st November, 1928, a slip of rock at 134 m., North Auckland line, between Onoke and Kauri, damaged the track and caused slight delay to traffic.

As the result of continuous heavy rain on the 30th and 31st October and 1st November, 1928, a slip came down in the Manawatu Gorge on the 2nd November, 1928, causing a stoppage of traffic. Line was cleared for traffic on the 3rd November, 1928.

Traffic was suspended on the Foxton Branch on the 2nd November, 1928, owing to a washout at Rangiotu, and resumed on the afternoon of the 3rd.

On the 19th June, 1928, a southerly gale caused damage to the sea-wall in several places between Kaiwarra and Ngahauranga. There was no delay to trains.

On the 16th August, 1928, a southerly gale caused heavy damage to the sea-wall between Kaiwarra and Petone. Traffic was suspended on the 16th August, but was resumed for single-line working on the afternoon of the 17th idem. Double-line working was resumed between Kaiwarra and Ngahauranga on the 20th August, and between Ngahauranga and Petone on the 14th September. The wall has been repaired and strengthened with a toe of heavy rubble and concrete blocks.

A slip of about 300 cubic yards came down at 82 m. 12 ch., Wairarapa line, between Mangamahoe and Eketahuna, on the 1st November, 1928. An engine of a train was derailed, and line was blocked until the following morning.

On the 9th April, 1928, and the 5th and 6th March, 1929, slips and washouts occurred on the Westport Section, causing delay to traffic.

Several washouts and slips occurred on the Otira line between Te Kinga and Inchbonnie, involving train delays.

On the 26th April, 1928, the approaches to Bridge No. 78A, Reefton line, between Cronadun and Rotokohu, were washed out, blocking the line until the 28th April, 1928.

On the 9th March, 1929, a severe earthquake at Arthur's Pass caused considerable damage to the formation and to the railway houses and station. It was necessary to employ a work-train to make up the formation. Practically all the chimneys of the houses were shaken down at the roof.

Owing to exceptionally heavy rain on the 18th and 19th March, 1929, several washouts occurred in the Dunedin district and caused blockage of traffic. On the Otago Central line, owing to the rapid rising of the Taioima Creek, a bank about 25 ft. high near Salisbury was scoured out at the toe, the embankment collapsing under the train, and the leading engine being precipitated into the creek. A deviation of the line was effected and traffic resumed on the 23rd March. On the Outram Branch, owing to washouts, traffic was blocked from the 20th to the 25th March, 1929.

On the 24th January, 1929, an exceptional downpour of rain caused a severe flood on the Kingston line, especially between Parawa and Athol, where the water was 18 in. over rail-level. No damage was caused to track or bridges.

Bridges.—These have been maintained in good order. A considerable number of bridges have been overhauled and repaired, also a number renewed in rolled-steel joists. Bridge-strengthening to enable heavier engines to run has continued on a number of lines.

Water-services.—These have received the necessary attention. Electric pumping-plant has been installed at a number of stations.

Wharves.—The wharves under the control of the Department have been efficiently maintained. During the year the Port Chalmers wharves were sold to the Otago Harbour Board, and portion of the Onerahi Wharf to the Whangarei Harbour Board.

Buildings.—Buildings have been maintained in good repair. The following buildings were destroyed by fire: Swanson, signal-cabin; Donnelly's Crossing, goods-shed; Otahuhu, washhouse of dwelling; Woodville, engine-drivers' room; Cross Creek, cottage; Romahapa, cottage; Glenhope, hut; and Kurow Station building and Post-office.

Station-yards.—Increased siding and station accommodation has been provided at a number of stations.

Railway Improvements.—The expenditure under the Railways Improvement Authorization Account for the last year was £857,164, as against £920,009 for the previous year. This amount does not include the expenditure under this account on the Auckland–Westfield, Palmerston North, and Tawa Flat Deviations and Hutt Valley Railway, carried out by the Public Works Department, which amounted to £487,714; Signal Branch charges, £222,560; and Locomotive Branch charges, £456,054.

Auckland New Yard.—Good progress has been made during the year with the rearrangement of Auckland yard. The new Outwards Goods-shed was completed and opened for use. A new motor weighbridge was erected, also two underslung jib traversing cranes and new platform scales. New shunters' quarters were completed and brought into use. A new office was built for the Locomotive Foreman. The new outward marshalling-sidings were completed, and the new intermediate car-sidings west of the new platform brought into use. The lease of a block of Harbour Board land on the eastern side of Quay Street was acquired, and was laid out and used for temporary Inward Goods-shed and Goods-yard. The old B Goods-shed was dismantled, and re-erected on the Harbour Board land for temporary use. The old wharf exchange group of sidings was lifted, and wharf approach sidings rearranged, including alterations to the lay-out of private sidings crossing Quay Street.

Auckland New Station Building.—Good progress has been made with the contract, and it is anticipated that the work will be completed close to the allotted time. Foundation piles to the number of 1,260 have been driven under the main building, and the steel structure is practically finished. Some delay has been occasioned by the stonemasons employed on the preparation of building-stone refusing to operate certain machinery and consequently being paid off. Subsidiary work, such as subways, station verandas, and retaining-walls are well in hand.

Wellington New Yard.—In connection with Wellington new station-yard considerable progress has been made in the filling for the new yard. Dredging had to be suspended to permit of the construction of large storm-water sewers. The interruption of dredging will have no effect on the general progress. One storm-water sewer has been completed and the other is well forward.

A permanent site with sidings has been prepared for the new goods-shed, and the plans of the shed are completed. A number of permanent local loading-sidings and adjoining cartways have been laid down.

Considerable improvement in the handling of goods-trains has been effected by the provision of a temporary junction at Thorndon and a large holding-grid on the site of the old Esplanade.

The plans of the new station building are well advanced, and will be ready for the commencement of building operations when the site is available. The clearing of the site is contingent upon the completion of the new goods-shed.

Hutt Valley Railway.—An extension of the industrial line to serve the industrial area is in hand, and private sidings have been provided to suit industries established in this area.

General.—The duplication of the track between Frankton and Horotiu is in hand. Platelaying has been completed and earthwork is nearly completed. Ballasting is in progress.

A crossing-loop has been laid at Kimihia, and the laying of one between Mercer and Whangamarino is in hand.

Temporary work in connection with the new bridge at Ngaruawahia has been commenced.

The replacing of level crossings at Piripiri and Tumai by overbridges, and at Hawera by subway, was completed.

Bridge-strengthening has been carried out in various districts. A programme has been drawn up for extensive strengthening and reconstruction of bridges to enable more powerful engines to be operated on heavy-traffic lines.

The Ravensbourne–Burke's duplication is proceeding steadily. Considerable work has been done in connection with the reclamation and sea-wall.

New Workshops.—North Island shops: The Car and Wagon Shops at Otahuhu and the Locomotive Shops at Hutt Valley are completely erected and equipped and are now in operation. Water and drainage reticulations are complete, as well as roadways and siding layouts, with the exception of a small amount of ballasting at Hutt Valley.

At Hutt Valley a repair-shed and shelter for buses are being provided and will shortly be completed.

South Island shops: The reorganization of the South Island shops provides for Car and Wagon Shops at Addington and Locomotive Shops at Hillside. The rebuilding and reorganization of both shops has been carried on concurrently, and the work is now nearing completion. Most of the main buildings, including water and drainage reticulations, are practically completed.

At Addington all main buildings are completed with the exception of the Steel Wagon Shop and Stores. The Steel Wagon Shop is now under construction. The erection of the Stores building, painting-sheds, dining-room, &c., will be started at an early date, as well as the construction of roadways and rearrangement of sidings.

At Hillside all main buildings are practically completed except the Pattern Shop and Stores, and the erection of these buildings will be started at an early date.

The Power-house, Reclaim Depot, Locomotive Erecting and Boiler Shops, and Steel Wagon Shops are in operation, and machinery installations are in hand in the Machine Shops and Foundry.

The following R.I.A. works are being carried out by the Public Works Department:—

Auckland–Westfield Deviation.—The formation throughout the deviation is practically completed, and the platelaying and ballasting of the permanent double track is now in hand. The railway-bridges are nearing completion, and road traffic has been turned over all the road-crossings which are provided with overbridges or subways. Good progress has been made with the erection of the six station buildings and platforms, and work in connection with the station-yards is in hand. Expenditure for the year, £89,386.

Palmerston North Deviation.—During the year more labour and plant were engaged on this work, and considerable progress was made with earthworks and culverting. The formation for main line was completed to within 42 chains of the Main Trunk Railway. An overbridge was erected at Milson's Line, and improvements to the channel of the Mangaone Stream were carried out. Expenditure for the year, £99,905.

Tawa Flat Deviation.—Considerable progress has been made with the work during the year. Some 7 chains of sea-wall on the harbour reclamation and a total of 23 chains of heavy earthwork have been completed. Both portals of No. 1 tunnel and 12 chains of full-section tunnel were completed; 55 chains out of a total of 63 chains of bottom-heading work, 10 ft. by 8 ft., were completed. To enable tunnel-spoil to be easily disposed of an adit 12 chains in length was driven at Ngahauranga. In No. 2 tunnel both portals and 5 chains of full section of tunnel have been completed; 38 chains of bottom heading, 10 ft. by 8 ft., have been driven. At 5½-mile peg a 20 ft. by 8 ft. shaft was sunk to a depth of 130 ft., and from this point headings are being driven in both directions.

The double-track bridge over the Hutt Road has been practically completed with the exception of track-laying and painting.

The bridge over the Ngahauranga Gorge Road has been completed, also the piers of bridges at 6 m. 38 ch., 7 m. 28 ch., and 7 m. 51 ch.

Huts for the accommodation of workmen have been provided, and tunnelling equipment, consisting of air-compressors, &c., and electric locomotives, is now in use. Expenditure for year, £286,442.

Additions to Open Lines.—The expenditure under this account was £52,899, the principal works being: Additional siding accommodation at Motatau, Rotorua, Wanganui (part), Thorndon, Mangatainoka, Woburn, Riccarton (part), Glasnevin, Christchurch, Ranfurly, Wyndham (part), Otautau; provision of crossing-loop between Mangaiti and Tirohia; alterations to District Offices, Whangarei; turntables, Opuā and Otira; 12,000-gallon vat, Paekakariki; crushing plant, Mount Smart; new houses at Clinton, Middleton, and Romahapa (part); purchase of houses at Paekakariki and Woolston; loading-banks, Ngapara and Gore; overbridge at Tuakau; stock-yards, Tātuanui, Kopu (part), Mangaiti, and Greenhills; sewerage, Frankton; new station-buildings at Mataroa and Elmer Lane; additions, Tauranga Station building; additions to locomotive depot, Tauranga (part) and Taneatua (part); refreshment-rooms, Tauranga; veranda at Milton; flood-control, Taieri Plains (part); tarring Station Street, Timaru; sandhouse, Frankton Junction; land for locomotive depot, Frankton Junction; artesian well, Invercargill (part); extension of centre rail, Rewanui; land for rearrangement of yard, Milton; motor-garage, Hutt Shops (part); portable rock-drilling plant; bridge at 130 m., Puketutu (part); mechanical appliances for goods-sheds, Christchurch.

Betterments.—Expenditure charged to "Betterments" during the year was £23,991 8s. 4d., the principal works being: Provisions of additional siding-accommodation at Paeroa, Morrinsville, and Ngatira; alterations to sidings on No. 3 jetty, Lyttelton; improvements to bridges Nos. 148 and 150, North Auckland line (part); provision of additional stockyards; improvements to stockyards and improved stock-handling facilities at several stations; improvements to clearances in Round Hill Tunnel, Dunedin district; provision of office for Bridge Inspector at Te Aroha; additions to District Engineer's Office, Wellington; fitting up Central Booking-office at Auckland; conversion of general waiting-room into bookstall at Christchurch; paving Wharf Street, Dunedin; improved water-services at several stations; installation of coin-in-slot locks at a large number of stations; and equipment of frame levers in lieu of "goose-neck" levers at crossing-loops (part).

Expenditure.—The expenditure for the year was as follows: Maintenance (charged to working expenses), £1,111,229; new works (charged to capital), £910,063. The maintenance expenditure charged to working-expenses amounted to £340 per mile, as compared with £359 in 1927–28, £338 in 1926–27, £369 in 1925–26.

Mileage.—The mileage open for traffic on the 31st March, 1929, was 3,299 miles 76 chains. During the year 106 miles 39 chains additional lines were opened for traffic.

Staff, Maintenance Branch.—Working staff, 4,067; office staff, 179: total, 4,246.

LOCOMOTIVE.

Mr. G. S. LYNDE, M.I.Mech.E., M.I.Loco.E., Chief Mechanical Engineer, reports as follows:—

The rolling-stock, machinery, and tools have been maintained in good working-order during the year.

Locomotives.—On the 31st March, 1929, there were 667 engines in service. During the year one Class G Garratt articulated locomotive, imported from Messrs. Beyer, Peacock, and Co., Manchester, was assembled in the Government railway workshops, three Wf Class were built by Messrs. A. and G. Price, Ltd., Thames, and six electric locomotives were imported from United Kingdom for the Lyttelton-Christchurch service. Twenty-one engines were written off during the year.

There was a decrease of 65,804 lb. (equal to 0.586 per cent.) in the tractive power available.

There were, at the close of the year, two Class G articulated Garratt locomotives under erection in the Hutt Workshops. These two locomotives will be completed and put into service during May of the present year. There were twenty-four Class C shunting-engines on order to be built in the Government railway workshops.

During the year 662 engines were passed through the workshops, of which 153 received a thorough overhaul.

Boilers.—Six locomotive boilers were built during the year, and fourteen boilers were in hand at the close of the year.

Carriages.—On the 31st March, 1929, there were 1,598 cars. Ten suburban cars built in the Government railway workshops were added to the stock, and eighteen old cars were written off, and one postal car converted to brake-van. Twenty-seven cars were on order at the end of the year.

During the year 1,989 cars were passed through the workshops, of which number 1,163 received heavy repairs.

Six day cars were converted to sleepers on the South Island main line and branches.

Rail-cars.—There were five rail-cars on the line on the 31st March, 1929.

Brake-vans.—On the 31st March, 1929, there were 480 brake-vans. Six bogie vans built in the Government railway workshops were added to the stock, and one postal car converted to brake-van during the year. Eighteen old vans were written off and one converted to a sleeping-van.

Altogether 615 vans were passed through the workshops, of which 299 received heavy repairs.

Wagons.—On the 31st March, 1929, there were 26,823 wagons in stock. The additions during the year were six bogie and 491 four-wheel wagons built in the Government railway workshops. Thirty-five wagons purchased from the Public Works Department, East Coast Railway, were also added to the stock, and three old vans were converted to wagons. Five wagons were sold and 443 were written off during the year. The carrying-capacity was increased by 2,066 tons.

During the year 23,437 wagons were passed through the workshops, of which 11,675 received heavy repairs.

There were on order at the end of the year sixty-five bogie and ninety four-wheel wagons.

Tank-wagons.—During the year twelve rail tank-wagons were built for oil companies for the carriage of motor-spirit in bulk.

Tarpaulins.—The tarpaulin stock on the 31st March, 1929, was 22,875. Five hundred new tarpaulins were manufactured in the railway workshops during the year, and 5,539 tarpaulins were replaced with a similar number of new sheets; 22,253 sheets were repaired in the workshops.

Axles.—During the year 487 car, van, and wagon axles were replaced with modern steel axles; 549 axles were prepared for new rolling-stock.

Train-lighting.—On the 31st March, 1929, there were 389 cars fitted with electric light.

Engine Headlights.—The total number of locomotives fitted with electric headlights on the 31st March, 1929, was 209.

SIGNAL AND ELECTRICAL.

Mr. H. J. WYNNE, A.M.I.C.E., Signal and Electrical Engineer, reports as follows:—

Fixed Signals at Officered Stations.—Home signals have been provided at Birchfield and Fairdown.

The total number of officered stations (including tablet stations) is 489, of which 321 are equipped with fixed signals, 9 are equipped with light signals as unattended crossing-loops, 121 are interlocked, and 38 are unequipped.

Interlocking of Points and Signals.—Interlocking with the tablet system has been installed at the following: Atlantic Union Oil Co.'s private siding (between Terrace End and Bunnythorpe); temporary service siding, Otokia; Quarry siding, Hoteo; Wayby Station; Huarau Station; Mareretu Station; Te Hana Station; Renown Colliery siding, near Rotowaro; W. Cook and Son's siding, near Himatangi; Bickerstaffe Station; Ranganui Station; Service siding, between Willowbridge and Morven; Ruatanga Springs Station; Mair Station; Otonga Station; Patea Co-operative Freezing Co.'s private siding, Moturoa; Southern Cross Glass Co.'s siding, Ashburton; Vacuum Oil Co.'s siding, Waipukurau; Public Works Department's siding, Kartigi Beach; Atlantic Oil Co.'s siding, Masterton; Oakley Station; Waikiekie Station.

The total number of interlockings is now 121, of which 19 are power interlocked; tramway crossings, 7; sidings and flag stations interlocked with tablet, 266; stations fitted with Woods locks, 328. Woods locks have been provided at Birchfield (4), Fairdown (2). One Woods lock has been removed at Ranfurly.

Automatic and Power Signalling.—Single-line automatic signalling has been brought into use between Greymouth and Elmer Lane engine-depot (51 chains). In connection with the above installation, an additional switch-locked siding has been installed at Greymouth.

The total mileage now equipped with automatic signalling is—Double line, 37 miles 57 chains; single line, 159 miles 62 chains.

Automatic signalling between Mercer and Frankton is nearing completion and will be brought into operation shortly, and the automatic signalling on the Westfield Deviation between Auckland and Westfield is in hand.

The total number of unattended crossing-loops equipped with automatic signalling is now thirty, and switch-locked sidings twenty-six.

Paefoa Station has been converted from mechanical interlocking to power interlocking.

Alterations to signalling and interlocking have been carried out at Thorndon, Mount Eden, Middleton, Greymouth, Otahuhu, and Swanson.

Materials have been ordered for power signalling and interlocking for Auckland new station.

Electric Tablet and Block Working.—The following work in connection with electric tablet has been carried out: Swanson, new tablet instruments installed to replace instruments destroyed by fire.

The number of tablet instruments now in use is 883, at 371 stations.

The total number of automatic exchangers in use is 333.

The total mileage equipped with electric tablet is 1,709 miles of single line out of a total of 3,292.

The total mileage equipped with lock-and-block is 16½ miles of double line. The number of lock-and-block instruments in use is twenty-six, at twelve stations.

The following tablet-locked sidings have been removed: W. Cook and Son's, near Foxton; Te Kuha Junction; Orari ballast-pit.

Telegraph and Telephone Facilities.—107 miles of poles have been erected and 402 miles of wire have been run during the year; fifty-nine connections to railway telephone circuits have been provided; thirty-five new connections to public exchanges have been provided; fifteen electric bells have been installed.

Metallic circuiting of telephone-lines has been completed on the following sections: Whangarei-Opua; Otiria-Kaikohe; Wanganui-East Town; Wingatui-Middlemarch; Timaru-Normanby; Woburn-Hutt Park; Lepperton Junction-Waitara; Riverton-Tuatapere; Millers Flat-Roxburgh; Waitotira Junction-Kirikopuni; Tahawai-Matata.

Telephones have been superimposed over the existing Morse lines between Lambton and Masterton.

An exchange connected to the public automatic has been installed in the Auckland Goods Office, comprising three trunk lines and twelve intercommunication lines.

Automatic intercommunication exchanges (PBX system) are now being installed in the following workshops: Otahuhu, Hutt Valley, Addington, Hillside.

The totals now in use are—Morse instruments, 286; telephones, 2,156; electric bells, 403; miles of wire, 11,641; miles of poles, 3,044; separate connections to public exchanges, 590.

Electric-lighting Installations.—During the year flood lighting has been installed in the following station-yards: Mercer, Napier, Westport, Auckland (additional). At Newmarket a special hoarding in workshops yard has been flood-lighted.

The following stations have been equipped with electric lighting: Woburn Station; Waterloo Station; Onehunga Wharf, Station, yard, and signals; Oratia Station; Onehunga Station and locomotive-shed; Napier Station, yard, goods-shed, locomotive shed, and signals; Waimauku Station and yard; Helensville South Station; Riversdale Station and yard; Lumsden Station and yard; Utiku Station and yard; Ohingaiti Station and yard; Riverton Station and yard; Plimmerton Station and yard; Otaki Station and yard; Carterton Station and yard; Waipahi Station and yard; Westport Station and yard, locomotive shed, workshops, and signals; Turakina Station and yard; Tauranga Station and Yard, and refreshment-room; Paengaroa Station; Dunsandel Station and yard; Greatford Station and yard; Te Kauwhata Station and yard; Ward Station and yard; Porirua Station and yard; Fordell Station and yard; Beach Street Station; Horopito Station and yard; Halcombe Station and yard; Avondale Station and yard, and signals; Glen Eden Station and yard, and signals; St. Andrews Station and yard; Washdyke Station and yard, and signals; Mercer Station and yard, signals, refreshment-rooms, and locomotive shed; Ngahere Station and yard; Bay View Station and yard.

At Auckland the electric lighting and heating of the new Outwards Goods-shed and offices, combined Tourist and Railway booking-offices, Queen Street, and Parcels and Booking Office, Symonds Street, have been completed, and at Greymouth the electric lighting of the Elmer Lane new locomotive-depot has been completed.

The following shops, halls, &c., have been equipped with electric lighting: Oamaru, social hall; Gore, engine-shed; Invercargill, main store, and foreman of works' trust store; Kumeu, stock-yard; Addington, foreman of works' trust store; Blenheim, goods-office; Moumahaki, stock-yard; Auckland, yard foreman's office; Ashhurst, cattle-yard; Tokomaru, stock-yard; Wanganui, miniature rifle range; Arthur's Pass, reticulation of public street and connecting of twenty-six private houses to railway supply completed during year.

The electric lighting of the existing workshops at East Town is completed.

The electric lighting of the new workshops and flood-lighting of the workshop yards at Otahuhu, Hutt Valley, Addington, and Hillside is in hand and nearing completion.

A contract has been let for the electric lighting and heating of the new station and platforms at Auckland.

Alterations involving 160 new lighting-points have been made to existing installations of all kinds, and fourteen heating and power points.

During the year 343 railway houses have been equipped with electric light.

The total number of stations lit with electricity is now 219. The total number of station-yards equipped with flood lighting is twelve. The total number of railway houses electrically lit is now 2,062.

Electric-power Installations.—Through the year the electrification of Elmer Lane locomotive depot has been completed.

The electrification of the new workshops at Otahuhu, Hutt Valley, Addington, and Hillside, also existing workshops at Napier, is in hand and nearing completion.

At the Otahuhu, Hutt Valley, Addington, and Hillside workshops, substation equipment has been provided for the following maximum demand: Otahuhu, 1,500 kv.a.; Hutt Valley, 2,100 kv.a.; Addington, 1,500 kv.a.; Hillside, 1,500 kv.a. There is now approximately 10,000 h.p. installed.

Railway Electrification.—The Lyttelton to Christchurch electrification has been completed and opened for traffic.

Complete schemes and detailed estimates have been prepared for the electrification of existing lines, including Upper Hutt-Summit, Wellington-Paekakariki.

Level-crossing Warning-devices.—Warning signals have been installed at the following level crossings: Morningside—Argyle Street (flashlight signal); Taumarunui—173 m. 61 ch. (Pearson's wigwag); Mount Albert—Woodward Road (flashlight signal); Dannevirke—33 m. 79 ch. (Pearson's wigwag); Wanganui—Grey Street (Pearson's wigwag); Hamilton—Lake Road (Pearson's wigwag—previously bells only).

Warning signal has been taken out at the following level crossing: Ongarue—160 m. 57 ch. (bells).

The total number of level crossings fitted with warning devices is 100.

Expenditure on Signals, &c.—Capital expenditure for the year for signals, &c., amounted to £224,345, of which £31,998 was on signals and interlocking, £13,083 on electric lighting, £75,406 on electrification of locomotive workshops, and £99,571 on the electrification of the Lyttelton—Christchurch line. The maintenance expenditure chargeable against revenue was £112,206.

STORES.

Mr. E. J. GUINNESS, Comptroller of Stores, reports as follows:—

The value of stores material and plant (purchased under Railway vote) on hand at the 31st March, 1929, at the various stores, depots, and sawmills amounted to £1,065,114 17s. 3d., as against £1,114,989 5s. on the 31st March, 1928.

The whole of the stock is in good order, has been systematically inspected, and is value for the amount stated.

APPENDIX A.

SUMMARY.—ORIGINAL COSTS OF BRIDGES AND CONTRIBUTIONS REQUIRED FOR BRIDGE RENEWALS FUND.

(NOTE.—Overbridges and culverts are not included.)

Section.	Approximate Total Original Cost of Bridges.	Annual Contributions to Renewals Fund.
	£	£
Kaihu	20,000	..
Auckland	704,000	15,690
Ohakune	335,000	4,550
Wanganui	274,000	27,330
Wellington	277,000	9,080
Gisborne	78,000	1,290
Picton	61,000	1,220
Nelson	46,000	1,010
Westport	19,000	550
Christchurch	722,000	18,230
Dunedin	462,000	22,805
Invercargill	192,000	3,365
Grand totals	£3,190,000	£105,120

BRIDGE RENEWALS FUND.

Line.	Bridge No.	Original Cost.	Estimated Remaining Life.	Annual Contribution to Renewals Fund.	Estimated Cost of Re- construction.
		£	Years.	£	£
<i>Auckland Section.</i>					
Auckland-Frankton ..	62, Ngaruawahia ..	15,000	2	7,500	30,000
Frankton-Thames ..	12, Te Aroha ..	5,400	10	540	10,000
	Iron and steel bridges ..	505,000	66	7,650	
Total for section ..	..	..	..	15,690	
<i>Ohakune Section.</i>					
Frankton-Marton ..	Steel and iron bridges ..	300,000	66	4,550	
Total for section ..	..	..	..	4,550	
<i>Wanganui Section.</i>					
Marton-Paekakariki ..	98, Rangitikei ..	19,000	7	2,700	43,000
	92, Oroua ..	8,000	2	4,000	16,000
	67, Manawatu ..	18,000	7	2,570	42,000
	41, Ohau ..	5,000	10	500	10,000
	33, Otaki ..	15,000	2	7,500	33,000
	30, Waikanae ..	3,000	2	1,500	6,000
Marton-New Plymouth	138, Whenuakura ..	3,000	2	1,500	20,000
	109, Turakina ..	4,000	5	800	8,000
	111, Wangaehu ..	6,000	5	1,200	13,000
	123, Aramoho ..	17,000	10	1,700	43,000
	Timber truss bridges be- tween Aramoho and New Plymouth	20,000	10	2,000	40,000
	Steel and iron bridges ..	90,000	66	1,360	
Total for section ..	..	..	..	27,330	
<i>Wellington Section.</i>					
Wellington-Paekakariki	20, Paremata ..	8,000	10	800	13,000
Wellington-Woodville ..	15, Silverstream ..	7,000	10	700	16,000
	49 ..	8,000	10	800	15,000
	52, Waiohine ..	13,000	10	1,300	24,000
	Timber truss bridges, 77, 80, 85, 89, 93, 96, 97	15,000	10	1,500	30,000
	114, Ngawapurua ..	23,000	10	2,300	45,000
	Steel and iron bridges ..	111,000	66	1,680	
Total for section ..	..	..	..	9,080	

BRIDGE RENEWALS FUND—continued.

Line.	Bridge No.	Original Cost.	Estimated Remaining Life.	Annual Contribution to Renewals Fund.	Estimated Cost of Reconstruction.
<i>Nelson Section.</i>					
Nelson-Glenhope ..	13	£ 3,000	Years. 20	£ 150	£ 9,000
	38. Motueka ..	10,000	20	500	26,000
	Steel and iron bridges ..	24,000	66	360	
Total for section ..	..	..	..	1,010	
<i>Picton Section.</i>					
Picton-Blenheim ..	20	10,000	20	500	20,000
	30	6,000	20	300	12,000
	Steel and iron bridges ..	28,000	66	420	
Total for section ..	..	..	..	1,220	
<i>Gisborne Section.</i>					
Gisborne ..	9, Waipaoa ..	8,000	20	400	16,000
	19, Waikohu ..	9,000	20	450	15,000
	Steel and iron bridges ..	29,000	66	440	
Total for section ..	..	..	..	1,290	
<i>Westport Section.</i>					
	30, Ngakawan ..	4,000	20	200	10,000
	Steel and iron bridges ..	23,000	66	350	
Total for section ..	..	..	..	550	
<i>Christchurch Section.</i>					
Main South line ..	10, Rakaia ..	25,000*	5	5,000	124,000
	18, Ashburton ..	12,000†	5	2,400	20,000
Stillwater-Reefton ..	71, Inangahua ..	7,000	20	350	20,000
	74, Waitahu ..	6,000	20	300	16,000
	79, Larry's Creek ..	3,500	20	175	9,000
	86, Inangahua River ..	7,500	20	375	15,000
Greymouth-Ross ..	27, Arahura ..	8,000	20	400	20,000
	32, Hokitika ..	29,000	20	1,450	70,000
	46, Totara ..	9,000	20	450	18,000
Addington-Waiau ..	40, North Kowai ..	7,000	20	350	16,000
	41, Waipara ..	9,000	20	450	18,000
	52, Hurunui ..	15,000	20	750	30,000
Waipara-Parnassus ..	26, Waiau-au ..	23,000	20	1,150	49,000
	Steel and iron bridges ..	306,000	66	4,630	
Total for section ..	..	..	..	18,230	
<i>Dunedin Section.</i>					
Main South Line ..	35, Rangitata North ..	35,000	5	7,000	66,000
	36, Rangitata South ..				
	50, Temuka ..	20,000	7	2,860	58,000
	51, Opihi ..				
	72, Otaio ..	4,000	7	770	9,000
	114, Waitaki ..	30,000*	5	6,000	80,000
	210, Otokia ..	6,000	10	600	16,000
	217, Waihola ..	7,000	10	700	2,000
Duntroon Branch ..	21, 24, 26, 30, 35, 36 ..	24,000	20	1,200	60,000
Fairlie Branch ..	23, Tangawai ..	4,500	20	225	8,000
Lawrence Branch ..	3, Glenore ..	3,000	20	150	6,000
	Steel and iron bridges (except Waitaki)	217,000	66	3,300	
Total for section ..	..	..	..	22,805	
<i>Invercargill Section.</i>					
Main South Line ..	236, Clutha ..	15,000‡	10	1,500	40,000
	278, Gore ..	3,000§	10	300	7,000
Riversdale-Switzers ..	3, Mataura ..	5,200	20	265	12,000
Glenham Branch ..	1 ..	10,000	20	500	20,000
Orepuki ..	29 ..	5,000	20	250	12,000
Mossburn ..	1 ..	5,000	20	250	12,000
	Steel and iron bridges ..	20,000	66	300	
Total for section ..	..	..	..	3,365	

* After making allowance for probable residual value. † Partial reconstruction only proposed. £12,000 = original cost of portion reconstructed. ‡ Partial reconstruction only; £15,000 cost of portion to be reconstructed. § Partial reconstruction only; £3,000 cost of portion to be reconstructed.

BRIDGE STRENGTHENING AND RECONSTRUCTION.—ESTIMATED EXPENDITURE.

Line.	Bridge Number.	Total Estimated Cost of Strengthening or Reconstruction.	Estimated Annual Expenditure.					Remarks.
			1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	
<i>Auckland Section.</i>								
Auckland-Frankton ..	62, Ngauwahia ..	£ 35,000	£ 20,000	£ 15,000	£ ..	£ ..	£ ..	Old timber bridge; weak for present engines. Reconstruction. <i>Work authorized and in hand.</i>
Frankton-Thames ..	1, Hamilton ..	5,000	..	..	..	..	5,000	Steel and iron; weak for present engines in floor system and pin-joints. To be strengthened. Speed-restriction meantime.
<i>Ohakune Section.</i>								
Frankton-Marton ..	157, Makohine ..	12,000	6,000	6,000	..	..	..	Steel and iron; weak for present engines in floor system. Speed-restriction. Floor system to be renewed. This will enable all classes of engines to run.
<i>Wanganui Section.</i>								
Marton-Paekakariki ..	98, Rangitikei ..	5,000	3,000	2,000	..	..	..	Timber trusses in fair order. Rods and floor-beams to be strengthened.
	92, Oroua ..	16,000	10,000	6,000	..	..	..	Old timber trusses; weak for present engines. Reconstruction.
	67, Manawatu ..	3,000	3,000	..	..	..	..	Timber trusses in fair order. Rods and floor-beams to be strengthened.
Marton - New Plymouth	33, Otaki ..	27,000	10,000	}	}	}	{	Old timber trusses; weak for present engines. Reconstruction.
	30, Waikanae ..	8,000	3,000					
	109, Turakina ..	8,000	..	..	8,000	13,000	..	Weak timber trusses. Reconstruction.
	111, Wangaehu ..	13,000	..	..	..	..	..	Weak timber; temporary structure. Reconstruction.
	138, Whenuakura ..	20,000	12,000	8,000	..	..	..	Weak timber trusses. Reconstruction. <i>Work authorized and in hand.</i>
	Timber trusses between Aramoho and New Plymouth	40,000	..	10,000	11,000	19,000	..	Weak timber trusses and steel girders. Strengthening.
<i>Wellington Section.</i>								
Wellington-Napier ..	15, 35, 171, 175 ..	10,000	5,000	5,000	..	..	..	Weak timber trusses and steel girders. Strengthening.
<i>Christchurch Section.</i>								
Main south line ..	10, Rakaia ..	124,000	..	9,000	30,000	40,000	45,000	Weak timber bridge. Combined road and railway Reconstruction.
Greymouth - Arthur's Pass	18, Ashburton ..	20,000	5,000	5,000	5,000	5,000	..	Old weak timber trusses. Partial reconstruction.
	30, Crooked River ..	9,000	9,000	..	..	..	..	Weak iron girders. Strengthening. <i>Work authorized and in hand.</i>
	45, Teremakau River ..							
<i>Dunedin Section.</i>								
Main South Line ..	35, Rangitata North ..	66,000	10,000	10,000	10,000	20,000	16,000	Old weak timber trusses. Reconstruction.
	36, Rangitata South ..	80,000	..	8,000	20,000	20,000	32,000	Weak iron girders. Combined road and railway bridge. Reconstruction alongside.
	114, Waitaki ..	20,000	4,000	4,000	4,000	4,000	4,000	Weak iron girders. Strengthening.
Otago Central Branch	Taieri Gorge bridges	521,000	100,000	100,000	100,000	100,000	121,000	

**BALANCE-SHEETS,
STATEMENTS OF ACCOUNTS,
AND
STATISTICAL RETURNS,
1929.**

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STATEMENT No. 1.
CAPITAL ACCOUNT AS AT 31ST MARCH, 1929.

—	Total to 31st March, 1928.	Year ended 31st March, 1929.	Total to 31st March, 1929.	—	Total to 31st March, 1928.	Year ended 31st March, 1929.	Total to 31st March, 1929.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
<i>Expenditure.</i>				<i>Receipts.</i>			
Permanent way, and works, buildings, machinery, and plant (lines open for traffic)	40,484,741 11 8	5,110,497 0 8	45,595,238 12 4	From General Government Funds—			
Rolling-stock	10,448,240 9 2	256,017 15 5	10,704,258 4 7	Public Works Fund ..	44,179,318 4 4	3,776,992 11 3	47,956,310 15 7
New lines in course of construction by Public Works Department charged against Railways Improvement Au- thorization Act 1914 Account ..	563,006 8 5	475,733 3 4	1,038,739 11 9	Wellington-Hutt Railway Improve- ment Account ..	228,373 5 5	..	228,373 5 5
Lake Wakatipu steamer service ..	44,387 3 3	..	44,387 3 3	Railways Improvement Account, 1904	641,275 7 8	..	641,275 7 8
Road motor services ..	53,193 2 0	14,706 17 11	67,899 19 11	Railways Improvement Authoriza- tion Act 1914 Account ..	4,362,079 16 5	1,997,316 8 7	6,359,396 5 0
House-factory and sawmill at Frankton Junction ..	156,813 17 1	..	156,813 17 1	Consolidated Fund ..	4,296 7 10	..	4,296 7 10
				Westport Harbour Loans ..	350,000 0 0	..	350,000 0 0
				Works constructed from Harbour Board funds—			
				Westport ..	71,640 0 0	..	71,640 0 0
				Greymouth ..	47,508 0 0	..	47,508 0 0
				Works constructed by provinces and Midland Railway Company at valuation ..	1,787,741 0 0	..	1,787,741 0 0
				Advances to Capital Account from Working Railways Account ..	51,672,232 1 8	5,774,308 19 10	57,446,541 1 6
				Outstanding liabilities ..	..	145,696 0 9	145,696 0 9
					..	15,100 6 8	15,100 6 8
	51,750,382 11 7	5,856,954 17 4	57,607,337 8 11		51,672,232 1 8	5,935,105 7 3	57,607,337 8 11

NOTE.—Unopened lines are under the control of the Public Works Department, and all expenditure out of the Public Works Fund in connection therewith is included in the accounts of that Department.

STATEMENT NO. 3.
INCOME AND EXPENDITURE IN RESPECT OF RAILWAY OPERATION, YEAR ENDED 31st MARCH, 1929.

EXPENDITURE.	See Abstract.	1928-29.		1927-28.		Per Cent. of Operating Revenue.		REVENUE.	See Statement No.	1928-29.		1927-28.		Per Cent. of Operating Revenue.		
		£		£		1928-29.	1927-28.			£		£				
		s. d.	£	s. d.	£					s. d.	£	s. d.	£			
Maintenance of way and works	A	1,111,228	14 11	1,147,067	1 2	14.77	15.62	Passengers, ordinary	..	15	1,868,047	12 0	1,886,833	8 11	24.82	25.69
Maintenance of signals and electrical appliances	B	112,206	0 2	102,870	12 0	1.49	1.40	Passengers, season tickets	..	15	256,698	16 10	258,462	17 3	3.41	3.52
Maintenance of rolling-stock	C	1,424,165	10 3	1,380,726	9 3	18.93	18.80	Parcels, luggage, and mails	..	15	378,140	17 0	379,932	13 11	5.03	5.17
Examination, lubrication, and lighting of vehicles	D	67,022	19 6	62,511	18 3	0.89	0.85	Goods	..	15	4,846,125	2 4	4,680,135	2 1	64.40	63.73
Locomotive transportation	E	1,583,769	16 9	1,599,552	3 3	21.05	21.78	Labour, demurrage, &c.	..	15	175,851	13 1	138,480	12 11	2.34	1.39
Traffic transportation	F	1,825,965	3 11	1,760,459	8 4	24.26	23.97									
Head Office and general charges	G	80,942	10 3	75,047	11 2	1.07	1.02									
Superannuation subsidy																
Less amount allocated to subsidiary services, &c.																
		17,539	2 4													
	G	169,278	6 0	173,873	11 9	2.25	2.37									
Total operating expenses	..	6,374,579	1 9	6,302,118	15 2	84.71	85.81									
Net operating revenue	..	1,150,284	19 6	1,041,725	19 11	15.29	14.19									
	..	7,524,864	1 3	7,343,844	15 1	100.00	100.00		..		7,524,864	1 3	7,343,844	15 1	100.00	100.00

ABSTRACT A.—MAINTENANCE OF WAY AND WORKS.

[illegible]

ABSTRACT B.—MAINTENANCE OF SIGNALS AND ELECTRICAL APPLIANCES.

[illegible]

ABSTRACT C.—MAINTENANCE OF ROLLING-STOCK.

Item.	Expenditure.						Kathu.			Gisborne.			North Island Main Line and Branches.			South Island Main Line and Branches.			Westport.			Nelson.			Picton.			Total.		
	Kathu.	Gisborne.	North Island Main Line and Branches.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	
General superintendence ..	21	108	13,151	8,562	403	74	111	22,430	0.3	0.9	0.3	0.3	1.8	0.3	0.5	0.5	0.3	0.3	0.5	0.3	0.3	0.3	2.0	0.4	0.3	6.9	0.5			
Locomotives (including rail and electric)	597	2,725	337,664	229,373	8,124	3,473	4,149	586,105	8.3	24.9	8.2	7.4	45.4	8.5	12.1	13.4	8.0	6.0	188.9	21.2	14.1	11.0	74.2	15.0	7.8	180.1	12.7			
Car and wagon supervision ..	..	..	3,904	3,010	..	..	..	6,914	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cars ..	103	1,628	130,050	79,287	1,440	556	658	213,722	1.4	4.3	1.4	4.4	27.1	5.1	2.9	4.6	0.1	1.1	33.5	3.7	2.2	1.8	11.7	2.4	0.8	65.7	4.6			
Vans and postal vans ..	13	183	20,414	13,364	767	196	136	35,073	0.2	0.5	0.2	0.5	3.1	0.6	0.5	0.8	0.3	0.6	17.8	2.0	0.8	0.4	2.4	0.5	0.5	10.8	0.8			
Wagons ..	428	4,250	259,385	225,626	11,607	1,274	1,812	504,382	6.0	17.8	5.9	11.7	70.9	13.4	5.9	187.8	9.3	8.6	269.9	30.3	5.1	4.8	32.3	6.5	6.7	155.1	10.9			
Service vehicles ..	..	38	5,786	5,154	127	45	35	11,191	0.1	0.3	0.1	0.6	0.1	0.1	4.2	0.2	0.2	3.2	0.3	0.1	3.0	0.3	0.6	0.1	0.1	3.4	0.2			
Tarpaulins, ropes, and nets ..	5	133	19,830	22,778	246	476	880	44,348	0.1	0.2	0.1	0.4	2.2	0.4	0.4	14.4	0.7	0.8	14.0	1.3	0.2	1.9	3.2	0.6	13.6	1.0				
Totals ..	1,173	9,065	790,184	587,154	22,714	6,094	7,781	1,424,165	16.4	48.9	16.2	24.8	151.1	28.4	17.9	572.2	28.3	20.5	361.1	34.4	16.9	24.5	138.9	28.1	18.9	437.7	30.8			

ABSTRACT D.—EXAMINATION, LUBRICATION, AND LIGHTING OF VEHICLES.

Item.	Expenditure.						Kahlu.			Glaborne.			North Island Main Line and Branches.			South Island Main Line and Branches.			Westport.			Nelson.			Picton.			Total.				
	Kahlu.		Glaborne.		North Island and Branches.		South Island and Branches.		Per Cent. of Revenue.		Per Mile of Railway.		Per Train-mile.		Per Cent. of Revenue.		Per Mile of Railway.		Per Train-mile.		Per Cent. of Revenue.		Per Mile of Railway.		Per Train-mile.		Per Cent. of Revenue.		Per Mile of Railway.		Per Train-mile.	
	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s	£	s
Examination and lubrication of cars, vans, and wagons	36	145	17,890	15,377	£	203	£	34,709	0-5	1-5	0-5	0-4	2-4	0-5	0-4	13-0	0-6	0-6	9-5	0-9	0-9	0-7	2-3	0-7	2-6	0-7	0-5	3-6	0-7	0-4	10-7	0-7
Lighting, rolling-stock, Pintsch, and acetylene gas	19	87	14,162	6,655	£	95	£	21,255	0-3	0-8	0-3	0-2	1-5	0-2	0-3	10-2	0-5	0-2	4-1	0-4	0-1	4-2	0-5	1-5	0-4	0-2	1-0	0-2	0-3	6-5	0-5	
Electric lighting of vehicles	..	..	5,084	1,623	£	..	£	6,707	..	..	..	..	..	..	0-1	3-7	0-2	0-1	1-0	0-1	..	..	..	..	..	..	..	..	0-1	2-1	0-1	
Depot expenses	..	..	2,986	1,366	£	..	£	4,352	..	..	..	..	..	..	0-1	2-2	0-1	..	0-8	..	..	..	..	..	..	..	..	0-1	1-3	0-1		
Totals	55	232	40,122	25,021	£	261	£	67,023	0-8	2-3	0-8	0-6	3-9	0-7	0-9	29-1	1-4	0-9	15-4	1-4	0-8	25-0	2-8	1-1	4-1	1-1	0-7	4-6	0-9	20-6	1-4	

ABSTRACT E.—LOCOMOTIVE TRANSPORTATION.

Item.	Expenditure.						Kahlu.			Glaborne.			North Island Main Line and Branches.			South Island Main Line and Branches.			Westport.			Nelson.			Picton.			Total.			
	Kahlu.	Glaborne.	North Island and Branches.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Per Cent. of Revenue.				
District superintendence ..	5,825	5,577	..	..	..	..	..	11,402	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Depot supervision ..	346	27,604	17,459	902	7,570	173	149	46,634	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Wages, allowances, and expenses ..	731	2,742	324,712	215,262	7,502	3,000	3,257	557,274	10.3	30.5	10.2	7.5	45.7	8.6	23.5	11.6	7.5	132.4	12.6	5.6	176.1	19.7	12.1	46.9	12.0	8.7	58.2	11.8	7.4	171.3	
Fuel ..	539	6,467	466,768	267,134	6,058	3,546	4,201	754,713	7.5	22.5	7.4	17.7	107.7	20.4	10.6	338.1	16.7	9.4	164.3	15.7	4.5	140.9	15.8	14.4	55.4	14.3	11.2	75.0	15.2	10.0	
Water ..	17	168	14,519	8,988	281	123	85	24,181	0.2	0.7	0.2	0.5	2.8	0.5	0.3	10.5	0.5	5.5	0.5	0.2	6.5	0.7	0.5	1.9	0.5	0.2	1.5	0.3	0.3	0.4	
Stores ..	366	142	13,444	8,540	302	109	116	22,689	0.5	1.5	0.5	0.4	2.4	0.4	0.3	9.7	0.5	5.3	0.5	0.2	7.0	0.8	0.4	1.7	0.4	0.3	2.1	0.4	0.3	0.5	
Shed expenses ..	217	1,099	99,896	61,443	2,811	693	718	166,877	3.0	9.0	3.0	18.3	3.4	2.3	72.3	6.5	2.1	37.8	3.6	2.1	65.3	7.3	2.8	10.8	2.8	1.9	12.8	2.6	2.2	3.6	
Totals ..	1,541	10,964	952,768	584,403	17,924	7,644	8,526	1,583,770	21.5	64.2	21.3	30.0	182.7	34.4	21.5	689.9	34.1	20.4	359.4	34.2	13.3	416.8	46.6	30.9	119.4	30.7	22.7	152.3	30.8	21.0	486.7

ABSTRACT F--TRAFFIC TRANSPORTATION.

Item.	Expenditure.										Revenue.												Total.									
	Kaihu.				Gisborne.				North Island Main Line and Branches.				South Island Main Line and Branches.				Westport.				Nelson.				Picton.							
	Kaihu.	Gisborne.	North Island Main Line and Branches.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.	Per Cent. of Revenue.	Per Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Railway.	Per Train-mile.	Per Cent. of Revenue.	Per Railway.		Per Train-mile.	Per Cent. of Revenue.	Per Railway.	Per Train-mile.					
Superintendence—	43	225	27,486	17,817	852	153	232	46,808	0.6	1.8	0.6	6.1	36.4	6.9	57.7	179.5	8.9	7.2	124.7	11.9	2.7	84.3	9.4	10.0	38.9	10.0	6.6	43.8	8.9	6.1	142.0	10.0
General ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
District ..	17	1,176	63,532	50,027	1,494	1,573	1,378	119,197	0.2	0.7	0.2	3.2	19.6	3.8	1.4	46.0	2.3	1.7	30.8	2.9	1.1	34.7	3.9	6.4	24.6	6.2	3.7	24.6	5.1	1.6	36.6	2.6
Station expenses—	1,024	2,191	247,824	202,812	3,623	2,488	2,455	462,417	14.3	42.8	14.1	6.1	36.4	6.9	57.7	179.5	8.9	7.2	124.7	11.9	2.7	84.3	9.4	10.0	38.9	10.0	6.6	43.8	8.9	6.1	142.0	10.0
Supervision and office ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Platform ..	142	71	86,926	48,113	1,702	112	311	137,377	2.0	5.9	2.0	0.2	1.5	0.2	2.0	62.9	3.1	1.7	29.6	2.8	1.3	39.6	4.4	0.5	1.8	0.5	0.8	5.6	1.1	1.8	42.2	3.0
Signalling ..	13	552	106,585	60,837	2,158	218	6	170,369	0.2	0.5	0.2	1.5	9.2	1.7	2.4	72.7	3.8	2.1	37.4	3.6	1.6	50.2	5.6	0.9	3.4	0.9	..	..	..	2.3	52.4	3.7
Shunting and marshalling yards ..	101	498	114,358	98,122	4,921	541	607	219,148	1.4	4.2	1.4	1.4	8.3	1.6	2.6	82.8	4.1	3.4	60.3	5.7	3.7	114.4	12.9	2.2	8.5	2.2	1.6	10.8	2.2	2.9	67.3	4.7
Goods-sheds and goods-yards ..	130	299	100,416	118,654	440	593	1,588	222,120	1.8	5.4	1.8	0.8	5.0	0.9	0.5	72.7	3.6	4.2	73.0	7.1	0.3	10.2	1.1	2.4	9.3	2.4	4.3	28.4	5.7	3.0	68.3	4.8
Wharves ..	49	..	23,295	83,562	16,364	..	2,965	126,235	0.7	2.0	0.7	..	..	..	0.5	16.9	0.8	2.9	51.4	4.9	12.2	380.7	42.5	..	..	..	7.9	53.1	10.7	1.7	38.8	2.7
Fuel, water, stationery, and other station expenses	102	456	21,163	17,277	285	345	314	39,942	1.4	4.2	1.4	1.2	7.6	1.4	0.5	15.3	0.8	0.6	10.6	1.0	0.2	6.6	0.7	1.4	5.4	1.4	0.8	5.6	1.1	0.5	12.3	0.9
Train expenses—	378	1,128	115,468	77,476	2,064	1,133	1,201	198,848	5.3	15.8	5.2	3.1	18.8	3.5	2.6	83.7	4.1	2.7	47.6	4.5	1.5	48.0	5.4	4.6	17.7	4.5	3.2	21.4	4.3	2.6	61.1	4.3
Running ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cleaning and heating vehicles ..	20	419	36,046	20,298	139	315	282	57,519	0.3	0.8	0.3	1.1	7.0	1.3	0.8	26.1	1.3	0.7	12.5	1.2	0.1	3.2	0.4	1.3	4.9	1.3	0.8	5.0	1.0	0.8	17.7	1.2
Sleeping-cars ..	..	..	9,598	1,799	..	..	..	11,397	..	..	..	..	..	..	0.2	6.9	0.3	0.1	1.1	0.1	..	..	..	..	..	..	..	..	..	0.2	3.5	0.2
Miscellaneous ..	..	292	4,870	3,427	9	5,973	17	14,588	..	..	..	0.8	4.9	0.9	0.1	3.5	0.2	0.1	2.1	0.2	..	0.2	..	24.0	93.2	24.0	..	..	0.3	0.1	4.5	0.3
Totals	2,019	7,307	957,567	800,221	34,051	13,444	11,356	1,825,965	28.2	84.1	27.9	20.0	121.8	22.9	21.7	693.4	34.3	28.0	492.1	46.9	25.3	791.9	88.5	54.3	210.1	54.0	30.3	202.8	41.0	24.3	561.1	39.4

STATEMENT No. 4.
INCOME AND EXPENDITURE IN RESPECT OF LAKE WAKATIPU STEAMERS.

EXPENDITURE.	1928-29.	1927-28.	Per Cent. of Revenue.		REVENUE.	1928-29.	1927-28.	Per Cent. of Revenue.	
			1928-29.	1927-28.				1928-29.	1927-28.
Salaries and wages, shore staff ..	£ 1,520 7 2	£ s. d. 1,547 0 0	13-90	15-65	Ordinary passengers ..	£ 4,425 16 8	£ s. d. 4,177 11 1	40-45	42-26
Salaries and wages, steamer staff ..	5,402 5 10	5,250 2 8	49-38	53-12	Season tickets ..	154 0 8	168 9 10	1-41	1-70
Coal and stores ..	2,919 2 8	2,698 4 4	26-67	27-30	Parcels, luggage, and mails ..	994 10 2	973 11 8	9-09	9-85
Repairs, steamers ..	3,850 0 8	2,197 4 5	35-19	22-23	Goods ..	5,288 10 0	4,524 13 10	48-34	45-78
Repairs, wharves, &c. ..	149 11 4	460 1 11	1-37	4-65	Miscellaneous ..	77 12 2	40 15 6	0-71	0-41
Insurance, renewals, interest, &c. ..	3,583 8 7	3,474 0 0	32-76	35-13	Total revenue ..	10,940 29 8	9,885 1 11	100-00	100-00
					Loss on operation ..	6,484 6 7	5,741 11 5	59-27	58-08
	17,424 16 3	15,626 13 4	159-27	158-08		17,424 16 3	15,626 13 4	159-27	158-08

STATEMENT No. 5
INCOME AND EXPENDITURE IN RESPECT OF REFRESHMENT SERVICE.

EXPENDITURE.	1928-29.	1927-28.	Per Cent. of Revenue.		REVENUE.	1928-29.	1927-28.
			1928-29.	1927-28.			
Salaries and wages ..	£ 38,620 8 8	£ s. d. 38,555 6 8	31-38	31-55	Receipts from refreshment-room ..	£ 123,058 19 8	£ s. d. 122,220 7 5
Provisions consumed ..	48,879 9 1	48,138 4 5	39-73	39-38			
Light, fuel, and water ..	2,768 19 11	2,688 18 5	2-25	2-20			
Freights ..	2,971 0 1	3,032 8 0	2-41	2-48			
Rents ..	10,725 0 0	11,132 0 0	8-72	9-11			
Renewals ..	2,949 8 11	3,527 0 7	2-39	2-89			
Betterments ..	2,000 0 0	1,433 14 5	1-63	1-17			
Interest, insurance, and miscellaneous ..	7,175 19 9	6,136 2 3	5-83	5-02			
Total expenditure ..	116,090 6 5	114,643 14 9	94-34	93-80			
Net profit ..	6,968 13 3	7,576 12 8	5-66	6-20			
	123,058 19 8	122,220 7 5	100-00	100-00			

STATEMENT NO. 5A.

INCOME AND EXPENDITURE IN RESPECT OF BOOK-STALL SERVICE.

EXPENDITURE.			1928-29.		Per Cent. of Revenue.		REVENUE.		1928-29.	
			£	s. d.					£	s. d.
Wages	..	..	37	4 9	11.55	Receipts	..	..	322	8 5
Stores	..	..	215	12 8	66.88		..	..		
Rent ..	..	..	29	8 4	9.12		..	..		
Miscellaneous ..	..	..	18	8 11	5.72		..	..		
Total expenditure	..	..	300	14 8	93.27					
Net profit ..	..	..	21	13 9	6.73				322	8 5
			322	8 5	100.00					

STATEMENT NO. 6.

INCOME AND EXPENDITURE IN RESPECT OF ADVERTISING SERVICE.

EXPENDITURE.	1928-29.		1927-28.		REVENUE.	1928-29.		1927-28.		Per Cent. of Revenue.	
	£	s. d.	£	s. d.		£	s. d.	£	s. d.	1928-29.	1927-28.
Salaries, wages, and allowances ..	13,675	19 4	12,540	12 5	Advertising-signs, printing, &c. ...	52,449	15 4	51,537	1 3	97.16	97.98
Stores and materials ..	2,865	16 11	2,875	18 0	Miscellaneous receipts ..	1,533	19 11	1,063	0 11	2.84	2.02
Rent of premises, sites, and commission ..	13,422	9 0	13,367	10 11							
Office and general expenses ..	3,670	16 0	3,678	3 9							
Interest, insurance, and depreciation ..	16,884	12 10	14,459	1 10							
Betterments ..	199	15 6	..	0 37							
Total expenditure ..	50,719	9 7	48,921	6 11							
Net profit ..	3,264	5 8	3,678	15 3							
	53,983	15 3	52,600	2 2						100.00	100.00

STATEMENT NO. 7.

INCOME AND EXPENDITURE IN RESPECT OF DEPARTMENTAL DWELLINGS.

EXPENDITURE.	1928-29.		1927-28.		REVENUE.	1928-29.		1927-28.		Per Cent. of Revenue.	
	£	s. d.	£	s. d.		£	s. d.	£	s. d.	1928-29.	1927-28.
Wages and charges ..	41,705	19 0	42,773	18 2	Rentals ..	105,897	7 5	93,643	0 1	100.00	100.00
Materials ..	12,964	9 9	12,770	12 5	Net loss ..	64,176	1 4	68,620	10 6	60.60	73.28
Insurance ..	4,411	0 0	4,059	0 0							
Interest ..	77,380	0 0	70,742	0 0							
Renewals ..	33,612	0 0	30,918	0 0							
	170,073	8 9	162,263	10 7						160.60	173.28

STATEMENT No. 8.

INCOME AND EXPENDITURE IN RESPECT OF BUILDINGS OCCUPIED BY REFRESHMENT SERVICE, BOOK-STALL PROPRIETORS, ETC.

EXPENDITURE.	1928-29.	1927-28.	Per Cent. of Revenue.		REVENUE.	1928-29.	1927-28.
			1928-29.	1927-28.			
Wages and charges	£ 1,537 5 11	£ 1,689 11 4	7-90	8-22		£ 19,455 1 0	£ 20,542 2 0
Materials	369 14 8	562 1 1	1-90	2-74			
Insurance, interest, and renewals ..	6,576 0 0	6,576 0 0	33-80	32-01			
Total expenditure	8,483 0 7	8,827 12 5	43-60	42-97			
Net profit	10,972 0 5	11,714 9 7	56-40	57-03			
	19,455 1 0	20,542 2 0	100-00	100-00		19,455 1 0	20,542 2 0

STATEMENT No 8A.

INCOME AND EXPENDITURE IN RESPECT OF ROAD MOTOR SERVICES.

EXPENDITURE.	1928-29.	1927-28.	Per Cent. of Revenue.		REVENUE.	1928-29.	1927-28.	Per Cent. of Revenue.	
			1928-29.	1927-28.				1928-29.	1927-28.
Superintendence — Salaries and office expenses	£ 10,844 13 1	£ 3,407 0 2	10-59	10-49	Passengers	£ 100,597 0 10	£ 31,381 13 10	98-25	96-60
Maintenance charges	25,229 7 8	4,953 15 3	24-64	15-25	Parcels	1,654 4 2	1,045 12 11	1-62	3-22
Running expenses	46,767 0 10	15,875 2 5	45-68	48-86	Advertising	134 2 7	59 4 1	0-13	0-18
License fees	2,555 13 6	837 15 0	2-50	2-58	Total revenue	102,385 7 7	32,486 10 10	100-00	100-00
Interest, insurance, and depreciation ..	22,867 18 5	7,435 15 7	22-33	22-89	Net operating loss	5,879 5 11	22 17 7	5-74	0-07
	108,264 13 6	32,509 8 5	105-74	100-07		108,264 13 6	32,509 8 5	105-74	100-07
Net operating loss	5,879 5 11	22 17 7			Net loss	9,327 0 10	234 17 5		
Preliminary expenses	3,447 14 11	211 19 10							
	9,327 0 10	234 17 5				9,327 0 10	234 17 5		

STATEMENT NO. 9.

RAILWAY SAWMILLS AND BUSH ACCOUNTS.—COMBINED TRADING AND PROFIT AND LOSS ACCOUNTS.

Dr.	1928-29.	1927-28.	Cr.	1928-29.	1927-28.
To Stock of timber, firewood, and logs on hand at 1st April, 1928	£ s. d. 99,883 13 2	£ s. d. 129,728 12 1			
Purchases and transfers—			By Sales, issues, and transfers—	£ s. d.	
Timber	£ s. d. 10,337 3 10		Timber	100,438 5 1	
Firewood	2,866 13 0		Firewood	3,902 3 6	
Logs	16,840 18 4		Logs	11,001 7 6	
			Stocks on hand at 31st March, 1929—		
Royalty payments			Timber	42,202 12 8	
Wages			Logs	639 4 10	
Salaries and miscellaneous payments, including interest on capital			Rents		
			Written off to Reserve Account		
			Net loss carried forward		
	£180,239 1 0	£289,132 12 0			
				£ s. d.	£ s. d.
					173,424 0 9
					99,883 13 2
					538 14 3
					11,378 17 6
					3,907 6 4
					£289,132 12 0

STATEMENT NO. 9A.

RAILWAY EMPLOYEES' SICK BENEFIT SOCIETY.

Income and Expenditure.

Expenditure.	£ s. d.	Income.	£ s. d.
To Balance to Accumulated Fund	£6,334 14 11	By Contributions	2,786 6 2
		Entrance fees	1,447 2 6
		Subsidy as per Section 5, Subsection (1), of Government Railways Amendment Act, 1928, charged to Working Railways Account	2,101 6 3
	£6,334 14 11		£6,334 14 11

Balance-sheet.

Liabilities.	£ s. d.	Assets.	£ s. d.
Accumulated Fund Account	£6,334 14 11	Cash in Working Railways Account	6,303 18 9
		Contributions outstanding on 31st March, 1929	20 13 8
		Entrance fees outstanding on 31st March, 1929	10 2 6
	£6,334 14 11		£6,334 14 11

STATEMENT NO. 10.
STATEMENT OF SUBSIDY FROM CONSOLIDATED FUND IN RESPECT OF SERVICES RENDERED BY NON-PAYING DEVELOPMENTAL BRANCH LINES AND ISOLATED SECTIONS :
1ST APRIL, 1928, TO 31ST MARCH, 1929.

Branches showing Loss.	Mileage.	Loss on Working.		Feeder Value.		Total Net Loss.		Loss including Interest.		Average per Mile of Line.				
		£	s. d.	£	s. d.	£	s. d.	£	s. d.	Branch Revenue.	Feeder Value.	Total Revenue.	Working-expenses.	Interest.
Kaikōhe	25	7,389	2 10	6,029	8 3	1,359	14 7	16,184	17 2	317	241	568	613	593
Waikū	13	3,947	1 1	3,150	8 5	796	12 7	9,735	15 10	423	242	665	727	688
Tōkō	48	12,157	4 5	2,596	2 8	9,561	1 9	41,791	13 10	329	54	383	582	870
Opunake	23	4,539	8 3	3,298	17 11	1,040	10 4	20,116	4 2	184	143	329	387	875
Greytown	3	2,687	17 4	1,627	15 9	1,060	1 7	1,598	13 10	184	543	727	1,080	533
Eskdale	12	3,116	9 5	1,350	16 4	1,765	13 1	9,240	0 1	336	113	449	595	769
North Island totals	124	33,637	3 4	18,053	9 4	15,583	14 0	98,667	4 11	309	146	455	581	976
Eyreton-Oxford	54	8,848	0 8	1,858	17 0	6,989	3 8	13,840	17 2	176	34	210	340	127
Cheviot	44	11,927	7 0	1,866	1 10	10,061	5 2	26,277	8 0	407	42	449	678	369
Little River	23	6,807	2 2	420	18 10	6,386	3 4	11,431	0 3	413	18	431	709	219
Southbridge	26	593	0 5*	2,021	4 3	2,614	4 8*	2,288	10 10	917	78	995	894	189
Methven	23	509	16 2*	3,737	0 7	4,246	16 9*	524	7 9*	597	162	759	574	162
Springburn	28	5,188	9 0	1,061	5 9	4,127	3 3	7,119	14 7	206	38	244	391	107
Fairlie	37	5,897	12 8	2,155	13 2	3,741	19 6	10,712	16 5	455	58	513	614	188
Waimate	13	6,120	11 7	3,749	12 11	2,370	18 8	4,722	13 11	338	288	626	809	181
Kurow	38	4,033	19 4	2,719	2 2	1,314	17 2	7,489	1 4	356	72	428	462	196
Ngapara-Livingstone	27	3,379	5 9	1,028	4 4	2,351	1 5	9,571	17 2	161	38	199	286	267
Waiheimo	9	1,600	17 9	1,289	8 8	311	9 1	1,886	3 9	185	143	328	363	175
Otago Central	147	14,228	13 5	3,942	13 8	10,285	19 9	74,662	2 10	685	27	712	782	438
Roxburgh	61	16,307	14 5	2,949	5 3	13,358	9 2	43,802	14 0	308	48	356	576	499
Tapanui	27	7,034	10 10	2,814	16 2	4,219	14 8	9,753	19 6	249	104	353	510	205
Waikaka	13	2,129	0 8	1,129	17 11	999	2 9	4,060	11 8	203	87	290	367	312
Switzers	14	3,365	9 5	844	7 7	2,521	1 10	6,074	3 4	116	60	176	356	254
Glenham	10	6,312	10 4	1,529	12 1	4,782	18 3	7,187	5 4	151	153	304	783	240
Seaward Bush	34	4,089	5 8	1,616	2 6	2,473	3 2	10,732	10 1	415	48	463	535	243
Orarua	9	2,059	6 5	683	14 5	1,375	12 0	6,083	3 5	81	76	157	310	523
Forest Hill	13	2,378	5 4	1,463	10 7	914	14 9	2,113	7 9	210	113	323	393	92
Mararoa	12	1,538	14 4	593	10 4	945	4 0	2,130	4 5	94	49	143	222	99
South Island totals	662	112,144	0 2	39,475	0 0	72,669	0 2	261,940	5 9	410	60	470	580	285
Cape Foulwind	8	1,289	11 1	63	12 8	1,225	18 5	4,860	13 2	141	8	149	302	454
Losses from 4th March, 1928, to 2nd March, 1929	794	147,070	14 7	57,592	2 0	89,478	12 7	365,468	3 10	392	73	465	577	347
Estimated loss from 3rd to 31st March, 1929	..	..	..	..	..	..	..	28,112	18 9	..	..	..	..	..
Less estimated loss from 4th to 31st March, 1928	..	..	..	..	..	..	..	27,417	12 8	..	..	..	..	..
								695	6 1	..	..	..	..	..
								366,163	9 11	..	..	..	..	..
Isolated Sections.														
Kaihu	24	4,533	13 10	..	..	4,533	13 10	12,120	10 7	..	..	281	456	330
Gisborne	60	9,538	1 9	..	..	9,538	1 9	44,771	17 8	..	..	591	743	594
Nelson	64	17,405	1 8	..	..	17,405	1 8	41,196	0 7	..	..	385	651	378
Pictou	56	7,144	6 0	..	..	7,144	6 0	34,684	15 2	..	..	663	773	644
Totals	204	38,621	3 3	..	..	38,621	3 3	132,773	4 0	..	..	510	689	472
Grand totals	998	185,691	17 10	57,592	2 0	128,099	15 10	498,936	13 11	..	..	..	..	..

* Indicates profit.

STATEMENT No. 11.

STATEMENT OF CASH RECEIPTS AND PAYMENTS—WORKING RAILWAYS ACCOUNT.

<i>Receipts.</i>			<i>Payments.</i>		
	£	s. d.		£	s. d.
To Balance brought forward ..	247,657	12 7	By Wages and vouchers ..	7,639,245	8 8
Investments realized ..	250,000	0 0	Refunds to Harbour Boards, shipping companies, and other carriers ..	268,699	8 0
Revenue receipts ..	8,211,727	15 7	Interest on capital ..	2,331,334	14 5
“Credits in aid” (Working Railways expenditure) ..	1,558,349	13 0	Investments ..	200,000	0 0
Receipts from Consolidated Fund under subsection 1 (b) of section 37 of Government Railways Act, 1926 (Subsidy—Branch lines and isolated sections) ..	496,578	8 11	Balance as per general balance-sheet ..	340,236	1 6
Interest on investments ..	15,202	2 6			
	<u>£10,779,515</u>	<u>12 7</u>		<u>£10,779,515</u>	<u>12 7</u>

Reconciliation Statement.

	£	s. d.
Credit balance in Working Railways Account as per Treasury figures ..	288,586	17 0
Add Imprests outstanding ..	51,649	4 6
Credit balance as per above statement ..	<u>£340,236</u>	<u>1 6</u>

STATEMENT No. 12.
GENERAL RESERVE ACCOUNT.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Betterments Fund ..	55,916	10 6	By Balance ..	1,375,662	6 1
Balance ..	1,378,316	10 11	Stores suspense (surplus stock) ..	58,570	15 4
	<u>£1,434,233</u>	<u>1 5</u>		<u>£1,434,233</u>	<u>1 5</u>
			By Balance ..	£1,378,316	10 11

RENEWALS, DEPRECIATION, AND EQUALIZATION FUNDS.

SLIPS, FLOODS, AND ACCIDENTS EQUALIZATION FUND.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Repairs to bridges, slips, and washouts ..	21,201	18 5	By Balance from previous year ..	26,600	0 10
Balance ..	26,902	2 5	Contributions debited to working-expenses ..	21,504	0 0
	<u>£48,104</u>	<u>0 10</u>		<u>£48,104</u>	<u>0 10</u>
			By Balance ..	£26,902	2 5

WORKERS' COMPENSATION FUND.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Accident payments ..	44,344	7 11	By Balance from previous year ..	18,259	17 6
Balance ..	18,497	3 11	Premiums debited to working-expenses ..	44,581	14 4
	<u>£62,841</u>	<u>11 10</u>		<u>£62,841</u>	<u>11 10</u>
			By Balance ..	£18,497	3 11

INSURANCE FUND.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Losses ..	5,815	5 11	By Balance from previous year ..	18,128	8 6
Upkeep Railway fire brigades and fire appliances ..	3,136	17 10	Premiums debited to working-expenses ..	15,642	18 0
Balance ..	24,819	2 9		<u>£33,771</u>	<u>6 6</u>
	<u>£33,771</u>	<u>6 6</u>	By Balance ..	£24,819	2 9

GENERAL RENEWALS AND DEPRECIATION FUND.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Relaying of track ..	115,641	16 6	By Balance from previous year ..	930,870	1 11
Bridges, buildings, &c. ..	11,982	1 2	Contributions debited to working-expenses ..	655,986	0 0
Rolling-stock ..	119,155	9 10		<u>£1,586,856</u>	<u>1 11</u>
Locomotive workshops and plant ..	4,884	17 10	By Balance ..	£1,328,019	9 8
Dwellings ..	1,621	17 1			
Signal appliances ..	2,053	9 10			
Road motors ..	3,497	0 0			
Balance ..	1,328,019	9 8			
	<u>£1,586,856</u>	<u>1 11</u>			

BETTERMENTS FUND.

<i>Expenditure.</i>			<i>Income.</i>		
	£	s. d.		£	s. d.
To Balance ..	24,074	15 9	By General Reserve ..	55,916	10 6
Way, works, buildings, and structures ..	23,991	8 4	Contributions debited to working-expenses (refreshment service) ..	2,000	0 0
Signals, &c. ..	1,592	0 7		<u>£57,916</u>	<u>10 6</u>
Rolling-stock ..	4,258	5 10	By Balance ..	£4,000	0 0
Balance ..	4,000	0 0			
	<u>£57,916</u>	<u>10 6</u>			

STATEMENT No. 13.

EXPENDITURE ON CONSTRUCTION OF RAILWAYS, ROLLING-STOCK, ETC., TO 31ST MARCH, 1929; NET REVENUE AND RATE OF INTEREST EARNED ON CAPITAL EXPENDED ON OPENED LINES FOR YEAR ENDED SAME DATE.

Section of Railway.	Opened Lines.			Unopened Lines.	Net Revenue.	Rate of Interest earned.
	Lines and Works.	Rolling-stock.	Total.			
	£	£	£	£	£	£ s. d.
Kaihu	176,136	13,043	189,179	..	—3,787	..
"	..	..	..	..	..	..
Gisborne	774,438	73,628	848,066	..	—7,981	..
"	..	..	..	733,801	..	..
North Island Main Lines and Branches	23,492,057	5,809,991	29,302,048	..	910,070	3 5 5
"	..	..	..	4,482,076	..	..
South Island " Main Lines and Branches	17,349,249	4,565,502	21,914,751	..	237,099	1 1 11
"	..	..	..	72,164	..	..
Westport	550,749	148,524	699,273	..	37,587	5 7 8
"	..	..	..	248,640	..	..
Nelson	532,014	42,632	574,646	..	—16,920	..
"	..	..	..	101,546	..	..
Picton	631,238	50,939	682,177	..	—5,783	..
"	..	..	..	17,514	..	..
	43,505,881	10,704,259	54,210,140	5,655,741	1,150,285	2 3 8
Lake Wakatipu steamer service	44,387	..	44,387	..	—6,484	..
Subsidiary Services, &c.	2,284,532	..	2,284,532	..	255,854	11 4 0
Subsidy, Branch Lines and Isolated Sections	..	..	..	..	498,937	..
<i>In suspense—</i>						
Surveys, North Island	..	..	..	29,862	..	..
Miscellaneous, North Island	..	..	..	5,169	..	..
Surveys, South Island	..	..	..	5,763	..	..
Miscellaneous, South Island	..	..	..	5,168	..	..
General	29,539	..	29,539	..	..	..
P.W.D. stock of permanent way	..	..	..	5,913	..	..
	45,864,339	10,704,259	56,568,598	..	1,898,592	3 9 0
	..	..	..	5,707,616	..	..
Total cost of opened and unopened lines at 31st March, 1929	..	..	62,276,214	..	..	3 1 7

NOTE.—The amount stated in this return as the cost of construction of opened lines includes the Provincial and General Government expenditure on railways. It also includes the Midland Railway and expenditure by the Greymouth and Westport Harbour Boards on railways and wharves under the provisions of section 7 of the Railways Authorization Act, 1885, the information regarding the last-mentioned being furnished by the respective Boards. The rate of interest earned has been computed on cost proportionately to the time during which the lines, taken over by the Working Railways Department, within the financial year were earning revenue, thus:—

North Island Main Lines and Branches: Waiotira-Kirikopuni, opened for traffic 15th May, 1928; Tahawai-Tauranga, opened for traffic 18th June, 1928; Tauranga-Taneatua, opened for traffic 2nd September, 1928.

South Island Main Lines and Branches: Miller's Flat - Roxburgh, opened for traffic 18th April, 1928.

STATEMENT NO. 14.

EXPENDITURE UNDER VOTE FOR ADDITIONS TO OPEN LINES, CHARGED TO CAPITAL ACCOUNT, FOR THE YEAR ENDED 31ST MARCH, 1929.
Way and Works Branch: Particulars of Works, &c.

Work, &c.	Gisborne.		North Island Main Lines and Branches.		South Island Main Lines and Branches.		Westport.		Picton.		General.		Totals.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Land	..	..	..	..	..	..	..	..	..	..	..	..	8,004	3 3
Grading and formation, including formation station-yards	..	..	..	..	..	..	..	..	..	..	..	..	3,144	11 7
Tunnels	..	..	..	..	..	..	..	..	..	..	..	..	Cr.	28 10 1
Bridges, culverts, and subways	..	..	..	..	..	..	..	..	..	..	..	..	8,550	1 3
Fences, gates, and cattle-stops	..	..	..	..	..	..	..	..	..	..	..	..	235	18 5
Permanent-way	..	..	..	..	..	..	..	..	..	..	..	..	4,752	3 10
Station buildings, platforms, catteries, loading-banks	..	..	..	..	..	..	..	..	..	..	..	..	6,616	1 2
Engine-sheds, car and wagon depots, and other operating buildings	..	..	..	..	..	..	..	..	..	..	..	..	4,416	11 6
Dwellings	5	11 5	..	..	..	..	..	..	..	..	..	..	103,943	8 3
Wharves	..	..	..	..	..	..	..	..	..	..	..	..	Cr.	6,559 1 6
Water services	..	..	..	..	..	..	..	..	..	..	..	..	3,553	1 10
Non-operating buildings	..	..	..	..	..	..	..	..	..	..	..	..	1,321	8 4
Maintenance Workshop buildings	..	..	..	..	..	..	..	..	..	..	..	..	32	4 1
Maintenance Workshop plant	..	..	..	..	..	..	..	..	..	..	..	..	Cr.	324 15 2
Locomotive Workshop buildings	..	..	..	..	..	..	..	..	..	..	..	..	4	10 2
Locomotive Workshop plant	..	..	..	..	..	..	..	..	..	..	..	..	14	16 11
Locomotive Depot plant (R.S. and C. and W.)	..	..	..	..	..	..	..	..	..	..	..	..	1,473	6 8
Refreshment-rooms	..	..	..	..	..	..	..	..	..	..	..	..	3,994	14 11
Road-motor buildings	..	..	..	..	..	..	..	..	..	..	..	..	2,589	2 0
Cranes, weighbridges, capstans, turntables	..	..	..	..	..	..	..	..	..	..	..	..	3,942	11 3
Maintenance movable plant	..	..	..	..	..	..	..	..	..	..	..	..	2,295	7 9
Miscellaneous (roads, sewerage, drainage, fire-fighting appliances)	..	..	..	..	..	..	..	..	..	..	..	..	2,280	14 0
Signal and interlocking	..	..	..	..	..	..	..	..	..	..	..	..	160	18 1
Tablet installations	..	..	..	..	..	..	..	..	..	..	..	..	225	6 9
Electric lighting	..	..	..	..	..	..	..	..	..	..	..	..	22	6 0
Telegraph and telephone lines	..	..	..	..	..	..	..	..	..	..	..	..	53	19 3
Train-control (lines and instruments)	..	..	..	..	..	..	..	..	..	..	..	..	1,332	12 0
Electrification of track	..	..	..	..	..	..	..	..	..	..	..	..	246	2 1
	£5	11 5	£122,330	14 11	£33,509	4 10	£101	19 11	£15	8 4	£330	15 2	£156,293	14 7

ROAD MOTORS.

Purchase of motor-buses	..	..	..	..	..	..	..	..	..	..	..	..	£	s. d.
	..	..	..	..	..	..	..	..	..	..	..	..	£14,136	6 9

STATEMENT NO. 14—continued.

EXPENDITURE UNDER VOTE FOR ADDITIONS TO OPEN LINES, CHARGED TO CAPITAL ACCOUNT, FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

LOCOMOTIVE BRANCH: PARTICULARS OF ROLLING-STOCK, ETC.

Description of Stock ordered.	Number Incomplete on 31st March, 1928.	Number Complete on 31st March, 1929.	Number Incomplete on 31st March, 1929.	Expenditure, Year ended 31st March, 1929.
				£ s. d.
Locomotives, Class C (new design)	..	..	24	2,181 9 5
Locomotives, Class G (Garrett)	..	1	2	49,730 13 3
Locomotives, Class Wf (A. and G. Price, Ltd.) ..	3	3	..	8,716 13 0
Spare boilers	..	..	..	769 16 4
Boiler-mountings for new boilers	..	..	..	113 12 3
Fitting superheaters to locomotives	..	..	..	3,114 7 10
Electric headlights for locomotives	..	..	..	3,330 19 2
Spare sets engine-wheels	..	..	1	146 0 4
Spare tender bogies	..	..	2	126 16 10
Carriages, Class A	11	..	26	..
Carriages, Class Aa (suburban)	..	10	..	22,073 15 9
Carriages, Class Aa (sleeping)	..	..	..	13 9 7
Carriages, Class Aa (day)	..	..	7	3,818 8 1
Spare bogies for carriages	..	..	22	1,743 14 4
Gibbons spring frame bogies for carriages ..	..	2	..	580 14 9
Bogies for Royal train	..	..	..	Cr. 987 8 4
General Manager's carriage	..	..	1	25 15 8
Electric lighting for cars	..	..	..	12,058 19 0
Brake-vans, Class F	6	6	3	16,665 5 9
Wagons, Class J	40	131	30	56,623 18 4
Wagons, Class La	240	262	40	74,247 10 11
Wagons, Class Ug	5	5	5	7,479 5 10
Wagons, Class W	..	..	20	94 15 1
Wagons, Class Xa	54	54	..	11,474 12 9
Wagons, Class Xb	6	6	..	2,029 1 4
Wagons, Class Yb	38	38	..	892 3 2
Wagons, Class Zp	10	..	40	5,597 18 1
Pneumatic coaling-cranes	..	4	..	1,107 17 5
Tarpaulins	..	500	..	2,822 3 7
Transfer of rolling-stock	..	..	..	147 5 10
Spare bogies for wagons	..	..	24	2,617 17 5
Fitting dynamo-meter to Zp wagon	..	1	..	106 19 8
Petrol tower wagon	..	1	..	1,723 1 2
Ford motor-car	..	1	..	204 16 6
New bus-bodies	..	..	..	570 11 2
Obsolete locomotives written off	..	..	..	Cr. 46,636 0 0
Sale of obsolete rolling-stock	..	..	..	Cr. 6,518 3 0
Obsolete rolling-stock written off	..	..	..	Cr. 88,061 10 0
Sale of obsolete machinery	..	..	..	Cr. 2,920 12 10
Obsolete machinery written off	..	..	..	..
Cost of raising loans, 1925-29	..	..	..	50,629 0 0
Total	..	..	..	198,455 15 5
Total locomotives	3	4	26	
„ carriages	11*	10	27	
„ brake-vans	6	6	3	
„ wagons, bogie	15	5	45	
„ wagons, four-wheeled	378†	491	90	

* Decreased by 5.

† Decreased by 7.

Reconciliation Statement.

Expenditure charged to Vote	£	s. d.	£	s. d.	Expenditure—	£	s. d.
No. 43 by Treasury ..	410,287	2 7			Way and Works Branch ..	156,293	14 7
Vouchers outstanding previous year ..	Cr. 18,562	8 10			Road Motor Services ..	14,136	6 9
	428,849	11 5			Locomotive Branch ..	198,455	15 5
Less recoveries on account of expenditure in previous years	196,882	0 4					
			231,967	11 1			
Cost of raising loans, 1925-29 ..			99,010	0 0			
Vouchers outstanding at 31st March, 1929			37,908	5 8			
			£368,885	16 9		£368,885	16 9

STATEMENT No. 14—continued.

EXPENDITURE UNDER THE RAILWAYS IMPROVEMENT AUTHORIZATION ACT, 1914, AND SECTION 7 OF FINANCE ACT, 1924, AND SECTION 10 OF FINANCE ACT, 1925, AND SECTION 3 OF FINANCE ACT, 1926, CHARGED TO CAPITAL ACCOUNT, FOR THE YEAR ENDED 31ST MARCH, 1929.

Work, &c.	Kathu.	Gisborne.	North Island Main Lines and Branches.	South Island Main Lines and Branches.	Westport.	Nelson.	Pictou.	General.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Land			36,712 1 2	6,064 2 10		161 3 5			42,937 7 5
Grading and formation, including formation station-yards			58,025 13 3	4,481 14 6					62,507 7 9
Bridges, culverts, and subways			11,062 2 7	10,057 7 8					21,119 10 3
Fences, gates, and cattle-stops			1,164 1 11						1,164 1 11
Permanent-way			92,755 10 3	6,949 14 3					99,405 4 6
Station buildings, platforms, loading-banks			124,222 8 4						124,222 8 4
Engine-sheds, car and wagon depots, and other operating buildings			16,987 15 8	4,173 10 3					21,161 5 11
Water-services			Cr. 115 17 11	1,962 18 1					1,847 0 2
Non-operating buildings				29 0 5					29 0 5
Locomotive Workshop buildings			328,374 18 9	180,921 16 10				1,584 16 5	510,881 12 0
Locomotive Workshop plant		44 2 9	296,124 10 10	154,063 5 0	147 14 8	94 0 7	253 18 3	1,750 13 11	452,478 6 0
Locomotive Depot plant (R.S. and C. and W.)	64 9 3		1,368 6 5	7,754 5 9					9,187 1 5
Refreshment-rooms			Cr. 44 13 3						Cr. 44 13 3
Road motor buildings			243 16 7						243 16 7
Cranes, weighbridges, capstans, turntables			3,413 0 4	2,953 1 5					6,366 1 9
Maintenance movable plant			85 16 11	48 13 1					134 10 0
Miscellaneous (roads, sewerage, drainage, fire-fighting appliances)		262 9 11	23,034 18 2	603 17 10					23,901 5 11
Signal and interlocking			8,416 14 8	715 17 5	326 19 9			Cr. 732 14 8	8,726 17 2
Automatic and power signalling			32,221 17 5	125 2 3					32,346 19 8
Electric lighting		96 17 10	7,499 1 5	4,611 3 4	1,869 18 1		362 10 11		14,433 11 7
Telegraph and telephone lines			1,681 15 3	2,477 13 4		294 13 8		Cr. 1,375 11 0	3,078 11 3
Safety appliances (warning bells, wig-wags, &c.)			1,143 6 7	747 15 7				188 6 2	2,079 8 4
Electrification of track				42,359 6 3					42,359 6 3
Electric locomotives				55,211 18 4					55,211 18 4
	64 9 3	397 10 6	1,044,377 5 4	486,012 4 5	2,344 12 6	549 17 8	616 9 2	1,415 10 10	1,535,777 19 8
Expenditure charged by Public Works Department—									
New line—Auckland—Westfield									
Hutt Valley Railway			89,386 9 5						89,386 9 5
Deviations: Tawa Flat and Palmerston North			11,980 8 7						11,980 8 7
			386,346 13 11						386,346 13 11
			487,713 11 11						487,713 11 11
Grand total	£64 9 3	£397 10 6	£1,532,090 17 3	£486,012 4 5	£2344 12 6	£549 17 8	£616 9 2	£1,415 10 10	£2,023,491 11 7

Reconciliation Statement.

	£	s. d.	£	s. d.	£	s. d.
Expenditure charged by Treasury	..	..	1,899,532 8 2			
Less outstanding previous year	..	..	96,712 18 9			
			1,802,819 9 5			
Balance of cost of raising loan, 31st March, 1928	..	..	15,874 13 3			
Cost of raising loan, 1928-29	..	..	81,909 7 2			
Vouchers outstanding at 31st March, 1929..	..	..	97,784 0 5			
			122,888 1 9			
			£2,023,491 11 7			

STATEMENT NO.

COMPARATIVE STATEMENT OF OPERATING TRAFFIC AND REVENUE FOR THE YEAR ENDED 31ST MARCH, 1929.

(1) OPERATING TRAFFIC.

Section.	Length Open for Traffic.	Passengers.				Live-stock.				Goods.			Gross Total Tonnage.		
		First Class.		Second Class.		Total.	Season Tickets.	Cattle.	Sheep and Pigs.	Total.	Equivalent Tonnage.	Timber.		Goods.	Total.
		Single.	Return.	Single.	Return.										
1928-29.	Miles.	Single.	Return.	Single.	Return.	Number.	Number.	Number.	Number.	Number.	Tons.	Tons.	Tons.	Tons.	Tons.
Kaihu	24	265	284	10,459	13,038	24,046	32	68	1,616	1,684	83	1,811	4,381	6,192	6,275
Gisborne	60	5,172	2,370	23,302	30,344	61,188	223	1,384	101,858	103,242	4,537	9,690	51,416	61,106	65,643
North Island Main Lines	1,413	237,414	354,332	1,491,470	2,743,628	4,826,844	480,421	526,478	4,816,592	5,343,070	305,800	288,736	2,867,016	3,155,752	3,461,552
and Branches															
South Island Main Lines	1,627	176,076	351,780	837,057	2,579,440	3,944,353	173,650	103,459	4,530,762	4,634,221	214,742	260,969	2,879,950	3,140,919	3,355,661
and Branches															
Westport	43	161	406	20,943	44,736	66,246	542	212	1,187	1,399	112	4,232	630,821	635,053	635,165
Nelson	64	744	1,114	16,494	44,990	63,342	801	1,286	27,368	28,654	1,487	2,065	28,895	30,960	32,447
Pictou	56	7,581	3,076	20,667	28,924	60,248	486	1,507	205,991	207,498	8,680	523	47,499	48,022	56,702
Lake Wakatipu steamers	3,287	427,413	713,362	2,420,392	5,485,100	9,046,267	656,155	634,394	9,685,374	10,319,768	535,441	568,026	6,509,978	7,078,004	7,613,445
	..	2,526	4,014	5,436	16,750	28,726	14	290	10,555	10,845	510	1,058	7,618	8,676	9,186
Totals ..	3,287	429,939	717,376	2,425,828	5,501,850	9,074,993	656,169	634,684	9,695,929	10,330,613	535,951	569,084	6,517,596	7,086,680	7,622,631
1927-28.	Miles.	Single.	Return.	Single.	Return.	Number.	Number.	Number.	Number.	Number.	Tons.	Tons.	Tons.	Tons.	Tons.
Kaihu	24	221	332	11,312	13,512	25,377	53	64	2,015	2,079	100	1,868	3,966	5,834	5,934
Gisborne	60	4,415	2,014	24,182	26,686	57,297	246	1,318	110,236	111,554	4,808	9,558	50,286	59,844	64,652
North Island Main Lines	1,315	279,970	351,698	1,621,302	2,765,510	5,018,480	463,938	352,978	4,760,735	5,113,713	297,393	316,357	2,707,667	3,024,024	3,321,417
and Branches															
South Island Main Lines	1,618	193,131	365,896	878,033	2,533,646	3,970,706	166,255	102,893	4,224,305	4,327,198	200,152	236,559	2,788,109	3,024,668	3,224,820
and Branches															
Westport	43	242	620	23,190	49,854	73,906	695	146	2,096	2,242	128	3,172	647,396	650,568	650,696
Nelson	64	680	1,306	18,014	47,134	67,134	777	718	18,539	19,257	960	2,055	27,973	30,028	30,988
Pictou	56	7,709	4,163	19,866	27,904	59,647	777	1,625	181,789	183,414	7,764	989	51,128	52,117	59,881
Lake Wakatipu steamers	3,180	486,368	726,034	2,595,899	5,464,246	9,272,547	632,741	459,742	9,299,715	9,759,457	511,305	570,558	6,276,525	6,847,083	7,358,388
	..	2,584	3,200	5,806	15,020	26,610	22	201	13,272	13,473	592	763	7,019	7,782	8,374
Totals	3,180	488,952	729,234	2,601,705	5,479,266	9,299,157	632,763	459,943	9,312,987	9,772,930	511,897	571,321	6,283,544	6,854,865	7,366,762

STATEMENT No. 16.

STATEMENT OF SEASON TICKETS ISSUED FOR THE YEAR ENDED 31ST MARCH, 1929.

Description of Tickets.	1928-29.		1927-28.	
	Number.	Amount.	Number.	Amount.
		£ s. d.		£ s. d.
Travellers' annual, all lines	32	3,128 18 4	35	3,379 19 5
Travellers' annual, North Island	90	5,977 10 11	96	6,565 0 5
Travellers' annual, South Island	19	1,241 17 6	19	1,183 17 6
Reporters' annual	20	664 6 0	28	996 16 2
Sectional annual, North Island	443	19,359 4 5	466	20,312 2 8
Sectional annual, South Island	224	9,383 0 10	247	9,964 8 11
Tourist, all lines	284	4,598 15 0	282	4,574 7 6
Tourist, North Island	819	8,685 0 0	894	9,497 10 0
Tourist, South Island	47	544 15 0	56	672 10 0
School	29,535	25,587 1 6	28,885	25,215 18 6
Bearer twelve-trip	49,049	15,567 8 7	48,596	16,059 7 10
Bearer fifty-trip	7,823	13,696 6 3	7,820	13,246 17 6
Weekly twelve-trip	116,609	22,183 13 10	116,967	22,731 14 11
Weekly workmen's	412,005	51,136 9 1	390,152	48,508 17 6
All other season	39,170	75,098 10 3	38,220	75,721 18 3
Totals	656,169	256,852 17 6	632,763	258,631 7 1

STATEMENT NO. 17.

STATEMENT OF PASSENGER TICKETS ISSUED AT CHEAP EXCURSION RATES FOR YEAR ENDED 31ST MARCH, 1929.

Sections.	SCHOOLS, FACTORIES, AND FRIENDLY SOCIETIES.					EXCURSIONS (OTHER THAN SCHOOLS, FACTORIES, AND FRIENDLY SOCIETIES).					GROSS TOTAL.		
	Schools, Factories, and Friendly Societies.	Schools only.		Schools, Factories, and Friendly Societies.	Total.	Revenue.	First Class.	Second Class.	Total.	Revenue.	Number of Tickets.	Revenue.	
	Children not exceeding 15 Years of Age.	Senior Scholars over 15 but not exceeding 19 Years of Age.	Number.	Number.									
Kaihu ..	541	..	..	362	903	£ 52 7 2	136	1,237	1,373	258 16 10	2,276	£ 311 4 0	d.
Gisborne ..	2,349	61	..	1,238	3,648	199 12 9	354	3,616	3,970	1,393 9 3	7,618	1,593 2 0	0
Auckland ..	15,302	2,843	..	10,988	29,133	3,413 19 10	18,705	119,453	138,158	106,782 18 2	167,291	110,196 18 0	0
Ohakune ..	3,226	402	..	1,512	5,140	439 15 8	3,500	25,933	29,433	21,055 15 0	34,573	21,495 10 8	8
Wanganui ..	7,839	2,124	..	5,533	15,496	1,720 19 3	5,244	42,503	47,747	28,983 10 1	63,243	30,704 9 4	4
Wellington ..	25,003	3,327	..	21,311	49,641	3,667 7 7	49,054	115,253	164,307	101,335 7 9	213,948	105,002 15 4	4
Pictou ..	1,025	32	..	585	1,642	129 13 5	951	3,988	4,939	916 15 6	6,581	1,046 8 11	11
Nelson ..	1,410	274	..	833	2,517	147 0 11	213	9,056	9,269	1,257 3 7	11,786	1,404 4 6	6
Westport ..	1,031	66	..	676	1,773	11,166 17 1	124	12,441	12,565	2,049 17 2	14,338	2,126 18 5	5
Christchurch ..	30,017	3,180	..	42,514	75,711	11,166 17 1	17,019	92,078	109,097	64,641 10 1	184,808	75,808 7 2	2
Dunedin ..	16,886	1,482	..	19,468	37,836	3,939 18 10	12,792	101,955	114,747	65,518 18 0	152,583	69,458 16 10	10
Invercargill ..	7,404	1,103	..	10,195	18,702	2,383 13 3	4,239	55,372	59,611	27,312 16 3	78,313	30,896 9 6	6
Head Office ..	..	..	..	..	..	..	4,992	7,876	12,868	27,381 18 6	12,868	27,381 18 6	6
Totals ..	112,033	14,894	..	115,215	242,142	27,338 7 0	117,323	590,761	708,084	450,088 16 2	950,226	477,427 3 2	2
Total, year ending—													
31st March, 1901	38,864	5,602	..	34,550	79,016	5,234 16 8	87,544	541,624	629,168	102,932 10 9	708,184	108,167 7 5	5
31st March, 1902	42,506	5,736	..	37,708	85,950	5,466 16 9	95,628	588,813	684,441	136,813 0 1	770,391	142,279 16 10	10
31st March, 1903	41,540	6,048	..	41,555	89,143	6,050 11 3	84,448	517,566	602,014	103,279 8 6	691,157	109,329 19 9	9
31st March, 1904	50,364	6,975	..	54,344	111,683	7,424 19 7	100,417	594,967	695,384	125,624 4 0	807,067	137,049 3 7	7
31st March, 1905	52,742	7,359	..	53,558	113,659	7,490 16 0	100,968	592,485	693,453	130,068 16 9	807,112	137,559 12 9	9
31st March, 1906	55,478	7,715	..	57,027	120,220	7,882 16 1	110,823	626,852	737,675	140,939 16 3	857,895	148,822 12 4	4
31st March, 1907	48,044	7,837	..	53,783	95,664	6,514 18 4	125,280	731,132	856,412	194,185 2 9	952,076	200,700 1 1	1
31st March, 1908	51,031	8,163	..	53,886	113,080	7,604 10 4	113,617	618,518	732,135	141,519 16 11	845,215	149,124 7 3	3
31st March, 1909	55,199	9,266	..	52,579	117,044	7,641 5 10	122,312	667,867	790,179	166,471 6 3	907,223	174,112 12 1	1
31st March, 1910	53,917	7,811	..	53,677	115,405	7,964 15 7	128,277	735,561	863,838	211,133 6 10	979,243	219,098 2 5	5
31st March, 1911	66,381	10,799	..	66,695	143,875	9,488 14 7	107,208	576,251	683,459	155,444 10 11	827,334	164,933 5 6	6
31st March, 1912	62,289	8,924	..	63,612	134,825	9,702 15 3	135,590	704,883	840,473	206,472 13 1	975,298	216,175 8 4	2
31st March, 1913	63,040	9,723	..	61,134	133,897	9,509 8 7	159,730	804,965	964,695	271,611 17 7	1,098,592	281,121 6 2	2
31st March, 1914	111,029	18,246	..	59,712	188,987	13,235 8 4	131,416	683,851	815,267	210,109 0 9	1,004,254	223,944 9 1	1
31st March, 1915	47,846	7,974	..	48,197	104,017	7,919 1 9	144,260	782,355	926,615	259,547 10 6	1,030,632	267,466 12 3	3
31st March, 1916	43,038	8,198	..	36,091	87,327	6,072 18 9	136,401	763,690	900,091	269,097 16 0	987,418	275,170 14 9	9
31st March, 1917	38,477	8,788	..	32,901	80,166	6,159 17 6	168,098	735,468	903,566	313,006 7 3	983,732	319,166 4 10	10
31st March, 1918*	591	124	..	743	1,458	131 6 7	2,148	110,482	130,630	62,968 15 11	132,088	63,100 2 6	6
31st March, 1919*	Nil	Nil	..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
31st March, 1920	38,357	3,968	..	42,461	84,786	7,173 12 2	76,713	260,159	336,872	161,401 18 3	421,658	168,575 10 5	5
31st March, 1921	94,175	12,346	..	70,794	177,315	14,966 19 8	146,404	524,246	670,650	371,525 9 4	847,965	386,492 9 0	0
31st March, 1922	76,537	13,855	..	71,852	162,224	14,955 1 5	109,414	338,791	448,205	242,464 18 6	610,429	257,419 19 11	11
31st March, 1923	83,716	15,700	..	73,855	173,271	16,228 5 3	119,261	393,682	512,943	323,015 18 8	686,214	339,244 3 11	11
31st March, 1924	96,338	18,363	..	86,047	200,748	19,699 5 2	111,124	322,061	433,185	267,717 7 0	633,933	287,416 12 2	2
31st March, 1925	42,540	13,589	..	19,928	76,057	7,702 14 4	123,341	362,724	486,065	289,999 8 8	562,122	297,702 3 0	0
31st March, 1926	88,461	19,197	..	86,061	193,719	24,699 0 7	146,417	565,326	711,743	445,694 15 10	905,462	470,393 16 5	5
31st March, 1927	134,802	21,368	..	111,365	267,535	32,702 4 0	120,663	522,598	643,261	351,481 6 10	910,796	384,183 10 10	10
31st March, 1928	96,308	17,173	..	98,381	211,862	23,864 17 4	105,372	485,428	590,800	329,246 3 8	802,662	353,111 1 0	0
31st March, 1929	112,033	14,894	..	115,215	242,142	27,338 7 0	117,323	590,761	708,084	450,088 16 2	950,226	477,427 3 2	2

* The issue of school, factory, friendly-society, and holiday excursion tickets was suspended in connection with staff-saving time-table on 23rd April, 1917.

NAME	AGE	SEX	REL	DATE	TIME	PLACE	REMARKS
JOHN DOE	35	M	H	1945	10:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	11:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	11:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	12:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	12:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	13:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	13:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	14:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	14:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	15:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	15:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	16:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	16:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	17:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	17:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	18:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	18:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	19:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	19:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	20:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	20:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	21:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	21:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	22:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	22:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	23:00	NEW YORK	ARRIVED
JOHN DOE	35	M	H	1945	23:30	NEW YORK	ARRIVED
JANE DOE	32	F	W	1945	24:00	NEW YORK	ARRIVED

1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494	1495	1496	1497	1498	1499	1500
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STATEMENT NO. 18.

STATEMENT OF TRAFFIC AND REVENUE FOR EACH STATION FOR THE YEAR ENDED 31ST MARCH, 1929.

Stations.	OUTWARD.																	INWARD.					Stations.			
	NUMBER OF TICKETS.					Number of Season Tickets.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.	Ordinary Passengers.	Season Tickets.	Parcels, &c.	Luggage, Mails, &c.	Goods.	Miscellaneous.	Total Value forwarded.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.					
	First-class Single.	First-class Return.	Second-class Single.	Second-class Return.	Total.																					
NORTH ISLAND MAIN LINES AND BRANCHES—																										
Auckland (Coaching) ..	37,555	15,124	165,624	130,362	348,665	19,448	333	4,154	24,985	378,821	233,576	6 11	22,600	6 9	38,338	14 11	12,542	17 6	Cr. 214 9 9	2,258 14 6	309,100 10 10	579	2,430	84,725	298,142	Auckland (Coaching). (Goods).
Central Booking-office ..	2,353	2,797	2,896	6,240	14,286	132	..	..	..	..	14,623	16 4	1,344	12 0	..	..	..	..	356,187 13 9	8,001 15 3	364,189 9 0	..	..	..	..	Central Booking-office.
Symonds St. Booking-office ..	6	63	38	176	283	..	..	..	..	..	360	7 6	3	7 6	2 13	2	..	..	Cr. 5 4 6	0 6 0	366 14 2	..	..	..	..	Symonds St. Book.-office.
Newmarket ..	3,336	2,198	28,697	32,623	66,854	11,415	58	14	2,770	5,367	9,341	10 1	2,404	19 4	958	18 4	153	11 10	14,964 3 1	178 14 11	28,001 17 7	66	10	51,530	19,051	Newmarket.
Mount Eden ..	921	750	18,266	26,202	46,139	5,322	91	..	1,101	20,893	5,185	7 6	1,105	7 11	497	17 8	41	17 4	6,193 6 7	275 1 7	13,298 18 7	894	210	48,838	53,238	Mount Eden.
Avondale ..	331	209	24,897	40,032	65,469	54,816	321	..	892	14,825	4,096	9 0	7,767	4 5	259	11 10	28	6 2	5,219 17 1	40 0 6	17,411 9 0	401	501	33,752	6,235	Avondale.
Henderson ..	388	438	16,510	33,013	50,349	23,137	3,348	14,207	807	6,544	4,660	4 4	4,823	19 2	1,321	4 3	11	11 3	5,801 15 4	44 11 5	16,663 5 9	2,202	6,114	8,148	18,073	Henderson.
Helensville ..	3,112	1,408	15,068	16,909	36,497	243	10,290	53,115	11,158	14,079	7,716	18 11	347	13 0	1,612	11 4	48	17 1	15,578 9 7	345 16 2	25,650 6 1	2,428	17,088	8,325	42,882	Helensville.
Wellsford ..	867	313	6,058	3,101	10,339	84	5,203	17,949	415	4,524	3,264	12 2	63	1 4	916	16 2	22	16 8	5,543 0 11	24 10 3	9,834 17 6	1,750	7,860	5,115	32,445	Wellsford.
Maungaturoto ..	1,076	574	7,240	6,244	15,134	8	5,977	21,521	84	2,175	4,238	7 1	11	11 6	222	19 5	40	8 11	5,311 0 2	15 6 4	9,839 13 5	306	3,688	1,127	7,698	Maungaturoto.
Paparoa ..	455	174	1,977	1,316	3,922	6	4,433	13,533	286	3,933	1,422	19 4	5	10 0	164	12 9	13	5 6	4,413 14 10	12 17 2	6,032 19 7	500	2,270	2,002	8,417	Paparoa.
Waioiti ..	565	331	8,147	5,500	14,543	70	13,573	62,069	8,369	46,662	3,330	8 5	52	10 0	392	14 7	27	17 9	30,346 13 2	2,873 0 0	37,023 3 11	1,239	11,257	2,390	109,108	Waioiti.
Whangarei ..	4,938	2,030	26,549	15,464	48,981	1,360	10,718	33,092	5,292	17,929	22,270	15 2	596	11 3	1,199	19 11	194	5 5	16,539 1 0	302 13 10	41,103 6 7	2,064	11,822	32,119	52,139	Whangarei.
Hikurangi ..	237	218	3,440	2,355	6,250	228	2,155	10,140	14,848	141,404	2,226	18 7	132	11 5	393	12 8	8	16 4	38,369 3 11	309 19 5	41,441 2 4	398	3,160	1,797	9,759	Hikurangi.
Otiria ..	887	278	3,388	1,883	6,436	16	1,197	7,230	13,713	4,388	3,190	6 7	15	18 2	919	18 0	16	17 10	5,515 6 7	14 13 10	9,673 1 0	491	2,443	1,491	12,335	Otiria.
Kawakawa ..	910	451	6,426	2,453	10,240	24	62	251	195	7,253	2,415	11 1	23	10 11	481	6 3	13	9 3	2,463 17 5	24 1 5	5,421 16 4	6,929	43,908	573	5,413	Kawakawa.
Opua ..	1,014	272	7,843	6,566	15,695	51	28	838	355	2,653	3,763	5 3	22	15 5	172	9 0	20	14 10	1,905 5 9	148 14 5	6,033 4 8	4	..	2,500	4,939	Opua.
Kaikohu ..	1,316	560	9,245	7,234	18,355	24	6,556	38,728	2,820	1,299	7,394	9 10	24	0 0	725	9 2	42	6 10	7,535 18 10	187 2 9	15,909 7 5	781	1,006	5,256	10,928	Kaikohu.
Remuera ..	810	201	1,523	1,183	3,717	3,971	897	2,773	378	124	136	3 5	1,028	15 2	17	3 1	2	9 3	538 1 5	6 2 4	1,728 14 8	608	475	23,753	2,023	Remuera.
Green Lane ..	644	336	4,480	7,159	12,619	6,473	48	..	38	14	540	11 11	1,592	19 11	47	9 9	7	16 4	72 16 11	4 17 3	2,266 12 1	4	..	2,203	2,564	Green Lane.
Ellerslie ..	514	467	10,055	10,517	21,553	12,593	831	6	102	130	1,127	8 11	2,645	16 11	103	3 1	4	12 5	3,010 3 11	14 17 11	6,906 3 2	852	1	3,622	1,207	Ellerslie.
Penrose ..	113	215	6,073	4,869	11,270	5,695	708	5,407	338	118,327	684	2 6	1,003	12 4	212	1 11	8	3 11	49,538 13 10	109 6 2	51,556 0 8	80,400	454,842	7,050	56,194	Penrose.
Onehunga (Town) ..	28	17	3,684	2,430	6,159	10,588	24	..	2,895	5,339	365	3 10	1,534	16 11	161	5 5	7	19 5	1,868 7 11	435 15 10	4,373 9 4	17	105	12,590	83,044	Onehunga (Town).
Otahuhu ..	306	1,113	10,130	18,497	30,046	18,004	2,785	26,330	89	116,339	2,109	5 6	3,457	15 4	193	10 1	31	14 8	55,818 14 3	792 6 0	62,403 5 10	33,989	134,511	14,613	95,807	Otahuhu.
Papatoetoe ..	230	683	6,885	19,860	27,658	14,694	329	4,137	2,642	1,392	994	10 5	3,652	2 0	576	8 10	18	18 0	1,370 11 10	12 15 6	6,625 6 7	1,859	20,345	10,010	5,495	Papatoetoe.
Papakura ..	1,108	1,570	21,880	43,104	67,662	17,275	2,346	22,659	415	15,320	4,871	5 8	4,451	11 0	705	7 5	39	15 0	4,480 2 1	22 10 7	14,570 11 9	2,843	30,118	5,694	13,102	Papakura.
Drury ..	99	165	3,150	4,109	7,523	362	3,310	17,540	921	6,793	1,187	11 4	287	6 11	507	10 1	9	6 9	5,076 8 10	14 12 11	7,082 16 10	411	3,352	2,006	8,422	Drury.
Waiuku ..	208	169	3,944	2,829	7,150	3	7,869	10,783	992	5,222	1,651	17 11	5	17 10	119	5 2	12	13 4	1,585 0 10	21 3 6	3,395 18 7	1,083	7,647	7,286	31,095	Waiuku.
Pukekohe ..	1,023	849	12,615	8,436	22,923	379	8,836	17,634	220	10,393	5,960	15 3	247	8 8	786	9 10	75	5 5	12,735 10 10	34 3						

STATEMENT No. 18—continued.

STATEMENT OF TRAFFIC AND REVENUE FOR EACH STATION FOR THE YEAR ENDED 31st MARCH, 1929—continued.

Stations.	OUTWARD.																			INWARD.					Stations.
	NUMBER OF TICKETS.					Number of Season Tickets.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.	Ordinary Passengers.	Season Tickets.	Parcels, &c.	Luggage, Mails, &c.	Goods.	Miscellaneous.	Total Value forwarded.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.				
	First-class Single.	First-class Return.	Second-class Single.	Second-class Return.	Total.																				
NORTH ISLAND MAIN LINES AND BRANCHES—contd.																									
Tariki	75	17	1,243	560	1,895	85	1,975	4,166	4,942	1,705	294 5 11	69 10 6	21 10 1	3 1 0	1,454 5 9	3 1 5	1,845 14 8	156	1,991	386	2,495	Tariki.			
Midhurst ..	43	25	2,252	1,262	3,582	125	2,893	2,995	78	1,825	383 10 5	90 3 0	50 4 4	3 6 5	1,650 0 6	4 4 5	2,181 9 1	90	305	1,044	4,264	Midhurst.			
Stratford ..	1,807	619	17,050	10,053	29,529	261	14,521	31,311	321	7,312	8,959 14 1	275 12 10	1,003 8 10	140 4 0	8,190 14 5	304 3 6	18,873 17 8	1,850	9,727	6,088	15,957	Stratford.			
Te Wera ..	38	90	553	346	1,027	4	900	5,756	14	8,602	260 3 3	6 0 0	314 15 3	1 13 6	2,872 14 4	804 9 1	4,259 15 5	683	9,735	876	5,407	Te Wera.			
Whangamomona ..	604	594	5,983	4,432	11,613	23	1,299	26,266	..	839	1,688 1 8	22 19 6	419 6 11	7 2 9	2,604 2 9	116 8 3	4,758 1 10	1,964	4,862	2,352	12,651	Whangamomona.			
Eltham	558	273	8,029	5,607	14,467	245	25,176	55,590	1,943	10,389	4,639 2 2	241 10 0	411 11 1	65 19 0	12,364 4 0	43 2 9	17,765 9 0	1,652	18,913	16,127	24,757	Eltham.			
Normanby ..	36	23	2,035	839	2,933	56	27,664	23,170	148	15,850	491 10 8	72 11 0	49 2 11	5 7 6	10,054 13 9	4 10 11	10,677 16 9	1,556	7,830	819	11,228	Normanby.			
Hawera	1,968	1,324	20,621	12,954	36,867	202	16,460	71,116	761	15,640	14,052 6 10	340 9 4	669 13 1	206 18 3	15,104 19 1	88 16 10	30,463 3 5	5,031	55,368	19,348	38,805	Hawera.			
Patea	435	241	4,664	3,358	8,698	180	1,981	14,394	317	18,425	2,324 9 5	144 12 0	220 12 6	42 9 3	21,695 10 11	354 0 10	24,781 14 11	58,093	103,103	2,954	39,502	Patea.			
Waverley ..	336	106	3,027	2,040	5,509	70	6,412	46,673	19	2,273	1,648 10 7	52 14 10	150 19 11	32 15 6	5,379 1 7	18 13 1	7,282 15 6	2,356	29,831	12,011	7,937	Waverley.			
Waitotara ..	64	89	907	860	1,920	14	2,382	63,029	17	771	347 16 5	6 6 0	154 15 6	5 1 5	3,771 18 5	1 5 6	4,287 3 3	1,109	27,122	1,563	3,885	Waitotara.			
Kai Iwi	65	82	2,122	1,490	3,750	3	2,033	54,707	..	432	484 15 8	2 5 0	132 16 5	3 5 1	2,815 16 0	7 1 11	3,446 0 1	1,105	16,911	360	3,862	Kai Iwi.			
Aramoho ..	1,196	688	7,493	4,125	13,502	21	780	27,980	150	45,918	2,919 4 4	11 1 4	286 19 8	129 16 2	18,972 13 6	65 7 11	22,385 2 11	997	22,092	6,156	37,464	Aramoho.			
Wanganui ..	4,330	2,269	26,773	14,512	47,884	143	2,423	23,948	3,096	16,478	21,753 13 7	816 19 9	2,552 2 10	659 15 6	20,140 16 3	2,221 2 10	48,144 10 9	7,589	411,806	32,586	49,746	Wanganui.			
„ (Wharf) ..	..	..	..	..	..	..	12	18	1,001	58,794	..	..	..	..	24,412 6 8	10,101 15 6	34,514 2 2	38	60	6,115	14,107	„ (Wharf).			
Fordell	149	128	1,838	954	3,069	55	1,854	69,952	91	935	568 19 8	47 19 0	100 10 1	9 1 11	3,134 11 4	8 17 2	3,869 19 2	937	22,711	700	3,779	Fordell.			
Turakina ..	128	142	3,629	1,691	5,590	41	584	48,610	2,598	1,171	1,056 11 0	29 6 6	157 4 7	14 4 8	3,117 3 4	18 3 5	4,392 13 6	469	28,035	613	6,638	Turakina.			
Greatford ..	150	147	1,560	1,079	2,936	8	918	34,383	..	21,441	673 1 2	6 17 4	66 1 0	10 0 9	7,326 4 2	2 18 4	8,085 2 9	628	32,931	1,421	3,365	Greatford.			
Halcombe ..	81	55	2,316	2,339	4,791	76	365	34,032	2	3,216	741 18 0	63 10 0	55 5 5	9 13 0	3,984 5 11	6 11 6	4,861 3 10	283	22,448	849	3,593	Halcombe.			
Feilding ..	1,948	890	11,354	6,008	20,200	172	6,682	161,382	143	10,800	8,849 15 6	263 5 8	696 19 6	199 12 0	21,692 10 3	55 16 8	31,757 19 7	15,107	116,397	18,931	29,278	Feilding.			
Palmerston North ..	13,427	6,557	62,178	39,977	122,139	663	4,573	31,019	1,485	40,608	57,343 18 0	1,684 4 10	3,426 8 9	1,641 18 2	45,073 8 1	936 7 6	110,106 5 4	9,172	127,754	105,633	71,242	Palmerston North.			
Ashhurst ..	314	173	4,004	1,091	5,582	40	492	38,855	119	978	1,204 4 0	34 10 0	49 17 5	19 6 6	2,506 3 10	6 1 0	3,820 2 9	2,020	32,444	2,169	4,094	Ashhurst.			
Longburn ..	137	169	4,204	4,704	9,214	40	9,546	71,206	20,246	11,668	983 1 2	44 18 4	354 11 10	12 3 0	22,989 1 8	Cr. 105 16 2	24,277 19 10	1,756	144,376	892	9,019	Longburn.			
Foxton	134	80	4,137	2,778	7,129	23	1,647	8,536	3,732	7,341	1,188 12 9	46 1 5	154 17 8	12 18 11	6,399 13 7	506 9 8	8,298 14 0	1,055	13,391	5,412	23,348	Foxton.			
Shannon ..	379	364	8,083	9,640	18,466	194	3,039	33,313	252	5,419	3,492 5 11	280 0 2	202 13 11	37 7 4	7,955 17 3	13 17 5	11,982 2 0	1,046	24,041	2,239	6,584	Shannon.			
Levin	1,567	782	14,583	10,638	27,570	279	6,456	28,658	602	6,358	7,727 19 0	229 5 2	504 13 4	126 16 5	6,820 17 11	53 10 7	15,463 2 5	1,505	23,150	7,328	10,477	Levin.			
Otaki	1,031	474	8,902	6,054	16,461	196	2,083	29,033	2,803	5,685	4,408 5 9	209 18 10	2,411 15 0	62 10 2	7,341 8 4	23 18 10	14,457 16 11	1,512	11,564	1,942	16,228	Otaki.			
Paekakariki ..	1,783	2,518	12,682	19,866	36,849	1,230	822	30,480	11,110	24,213	5,248 5 9	582 12 0	1,802 16 4	54 0 9	7,049 11 6	25 10 1	14,762 16 5	582	4,950	3,893	7,709	Paekakariki.			
Johnsonville ..	604	1,320	10,478	23,458	35,860	15,465	1,010	16,939	95	396	3,073 3 7	2,753 0 10	104 11 2	20 10 9	1,276 0 0	13 6 2	7,240 12 6	7,623	54,508	9,124	18,995	Johnsonville.			
Thorndon (Coaching) ..	17,700	17,008	61,677	95,316	191,701	16,772	..	..	..	..	90,409 6 6	5,403 4 5	19,196 0 1	4,160 18 1	Cr. 161 2 0	286 1 9	119,294 8 10	..	..	..	..	Thorndon (Coaching).			
Lambton ..	14,065	37,184	65,163	96,491	212,903	42,288	..	..	..	..	30,928 0 7	14,705 0 11	3,112 16 7	2,174 19 0	Cr. 40 18 5	456 1 8	51,336 0 4	..	..	..	..	Lambton.			
Wellington (Goods) ..	..	..	..	..	..	..	1,131	3,921	30,328	203,606	..	..	..	..	259,511 1 0	2,941 16 11	262,452 17 11	1,273	2,510	99,583	181,638	Wellington (Goods).			

STATEMENT No. 18—continued.

STATEMENT OF TRAFFIC AND REVENUE FOR EACH STATION FOR THE YEAR ENDED 31st MARCH, 1929—continued.

Stations.	OUTWARD.																			INWARD.										Stations.
	NUMBER OF TICKETS.					Number of Season Tickets.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.	Ordinary Passengers.	Season Tickets.	Parcels, &c.	Luggage, Mails, &c.	Goods.	Miscellaneous.	Total Value forwarded.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.									
	First-class Single.	First-class Return.	Second-class Single.	Second-class Return.	Total.																									
SOUTH ISLAND MAIN LINES AND BRANCHES—																														
Lyttelton	29,543	25,754	32,943	79,809	168,049	13,219	1,523	40,198	51,717	351,872	13,332	9 11	3,904	17 2	2,149	12 10	118 19 10	137,370	18 9	15,677	6 8	172,554	5 2	1,825	273,370	Lyttelton				
Heathcote (Wharf)	478	2,697	3,384	19,531	26,090	4,052	..	..	..	14,272	..	..	..	..	..	..	..	2,379	5 11	..	..	..	..	..	..	45,449				
Woolston	202	294	2,279	6,306	9,081	2,359	7	..	121	2,911	1,170	8 3	1,053	9 6	45 7 5	11 19 10	2,069	5 7	0 16 2	4,351	6 9	..	..	..	..	5,900				
Opawa	685	657	2,717	4,845	8,904	4,506	..	..	..	4,207	349	1 8	422	0 5	117 3 11	4 14 8	1,961	10 10	15 11 4	2,870	2 10	28	..	..	..	13,271				
Christchurch (Coaching)	41,689	41,525	112,705	221,687	417,606	30,578	..	..	..	..	90,677	7 1	7,178	15 7	11,520	11 3	6,065	3 3	Cr. 91 11 8	499 1 4	115,849	6 10	..	..	..					
Central Booking-office (Goods)	10,085	6,348	6,241	12,788	35,462	418	..	19	10,740	102,291	43,775	18 5	3,288	5 4	3,493	8 8	11 10 6	98,310	5 3	3,033	10 3	101,343	15 6	1,068	334,563					
Addington	188	439	3,757	4,634	9,018	1,726	5,625	313,550	9,582	31,111	1,371	18 6	215	13 2	179 18 1	42 1 11	25,112	12 9	368 16 5	27,291	0 10	22,014	525,855	88,281	76,011					
Riccarton	238	94	1,051	737	2,120	275	..	..	2,115	..	5,562	2 5	52	2 3	25 6 7	9 17 9	2,082	11 9	12 1 6	2,540	2 3	10	..	..	..					
Papanui	564	180	3,344	4,298	8,386	1,763	80	..	403	4,793	1,084	8 5	372	5 8	135 8 10	25 19 2	3,166	10 10	13 17 0	4,798	9 11	210	100	13,664	10,016					
Belfast	98	381	2,646	4,908	8,033	332	456	..	120	21,711	607	15 11	212	3 3	112 5 1	13 3 3	11,174	5 10	8 10 3	12,128	3 7	892	529,794	6,879	12,837					
Kaipoi	284	293	5,867	9,755	16,109	635	651	9,149	576	25,899	2,292	19 2	607	4 4	301 15 10	45 5 8	11,019	8 4	30 12 7	14,297	5 11	493	188,604	4,070	9,381					
Rangiora	903	1,109	10,315	18,315	30,642	683	1,474	46,094	1,346	26,137	4,837	4 8	869	19 0	413 8 4	83 2 4	11,890	18 3	62 2 1	18,156	14 8	1,178	15,965	11,387	11,571					
Cust	1	..	400	533	934	79	375	23,693	492	6,252	129	3 6	62	1 3	22 11 11	5 5 4	3,435	7 0	0 11 11	3,655	0 11	184	8,106	532	2,269					
East Oxford	9	14	344	1,423	1,790	12	727	58,288	21	3,825	654	0 1	14	10 0	352 0 2	6 8 3	3,555	6 6	2 2 11	4,584	7 11	161	11,680	4,407	5,916					
Sefton	49	70	1,137	1,038	2,294	86	360	10,307	25	7,062	381	1 5	67	17 6	39 2 1	5 1 4	3,042	13 2	8 17 0	3,544	12 6	123	8,683	353	1,496					
Amberley	346	118	1,644	1,110	3,218	73	448	54,733	26	4,558	849	13 0	64	7 11	127 19 10	21 6 6	3,954	15 2	9 14 4	5,027	16 9	275	25,912	1,751	2,715					
Waipara	234	342	1,489	1,284	3,349	32	1,225	136,322	..	5,986	930	13 0	32	6 4	278 6 4	7 7 8	8,956	14 5	5 8 10	10,210	17 1	280	12,861	366	846					
Mina	133	58	829	524	1,644	1,215	62,894	3	2,780	745	12 4	..	..	..	268 8 8	10 11 6	5,363	3 7	15 0 4	6,402	16 5	481	13,987	3,028	5,304					
Parnassus	1,347	140	1,164	486	3,137	5	1,238	83,442	602	1,400	2,230	3 7	3	15 0	323 1 0	23 9 10	6,608	8 4	23 2 2	9,211	19 11	345	10,171	2,296	2,675					
Waikari	212	102	1,627	869	2,810	42	168	28,187	30	4,736	814	19 1	54	7 10	103 7 2	13 5 10	3,645	8 3	9 4 8	4,640	12 10	134	3,130	830	2,971					
Hawarden	276	66	1,499	1,243	3,084	50	873	75,036	..	7,547	907	15 6	47	14 9	195 2 4	14 3 3	7,901	10 4	4 8 1	9,070	14 3	196	12,865	1,973	2,449					
Culverden	485	324	2,605	1,757	5,171	12	2,020	69,222	74	5,207	2,024	13 8	10	0 0	236 9 2	34 3 7	8,096	0 4	27 6 7	10,428	13 4	412	12,219	3,464	5,706					
Waiau	163	52	1,072	630	1,917	..	573	59,263	23	1,611	922	10 0	..	..	113 1 6	13 2 8	4,681	16 10	32 5 9	5,762	16 9	302	3,175	1,721	3,207					
Hornby	59	174	1,279	2,196	3,708	111	1,745	4,128	88	69,219	790	0 7	67	6 11	20 15 9	4 10 10	30,393	17 3	26 12 10	31,303	4 2	2,613	25,795	2,780	62,603					
Prebbleton	10	8	558	1,465	2,041	103	25	12	..	7,316	212	4 10	85	15 10	11 3 11	1 10 0	2,267	3 1	0 15 10	2,678	13 6	43	995	224	1,127					
Lincoln	30	50	692	1,107	1,879	57	995	43,707	8	16,420	371	1 8	56	2 10	128 16 5	5 13 11	5,672	2 6	14 13 6	6,248	10 10	368	8,439	506	4,612					
Springston	8	23	221	299	551	39	540	30,755	3	12,175	75	16 8	31	0 0	37 0 7	1 17 4	5,058	17 1	3 7 6	5,207	19 2	54	2,895	90	1,549					
Leeston	78	101	492	1,446	2,117	99	672	18,696	1,271	8,577	512	12 1	92	3 0	484 8 8	5 9 8	4,407	16 3	8 6 2	5,610	15 10	608	36,012	2,171	6,345					
Southbridge	80	171	1,448	2,420	4,119	19	787	25,272	18	12,708	747	0 10	15	0 0	429 18 3	5 9 9	6,546	6 5	10 0 10	7,753	16 1	121	14,557	944	2,675					
Little River	2	9	2,381	3,156	5,548	78	3,807	125,300	15	2,850	1,800	15 8	87	9 9	361 14 9	9 15 1	4,930	9 7	31 17 9	7,222	2 7	1,264	32,154	2,067	2,813					
Islington	93	86	2,335	3,903	6,417	75	96	6,161	581	21,733	621	10 1	61	15 6	81 19 4	5 15 0	9,801	9 6	14 16 4	10,687	5 9	1,312	392,606	2,258	10,600					
Rolleston	81	214	1,723	2,086	4,104	5	536	30,297	31	8,553	954	3 4	7	3 4	65 15 4	7 13 1	4,154	1 4	31 12 9	5,220	9 2	671	10,575	316	5,099					
Kirwee	24	21	581	798	1,424	27	108	22,023	..																					

STATEMENT NO. 18—continued.

STATEMENT OF TRAFFIC AND REVENUE FOR EACH STATION FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

Stations.	OUTWARD.																	INWARD.					Stations.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	NUMBER OF TICKETS.					Number of Season Tickets.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.	Ordinary Passengers.	Season Tickets.	Parcels, &c.	Luggage, Mails, &c.	Goods.	Miscellaneous.	Total Value forwarded.	Cattle and Calves.	Sheep and Pigs.	Timber, Hundreds of Superficial Feet.	Other Goods.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	First-class Single.	First-class Return.	Second-class Single.	Second-class Return.	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
SOUTH ISLAND MAIN LINES AND BRANCHES—contd.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Burke's	188	1,072	1,336	5,443	8,039	2,079	Number.	Number.		Tons.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d

CLASSIFICATION OF GOODS AND LIVE-STOCK TRAFFIC AND EARNINGS BY COMMODITIES.

Commodity.	Year ended 31st March, 1929.										Year ended 31st March, 1928.									
	Tonnage carried.	Per Cent. of Gross.	Tons one Mile.	Average Haul.	Revenue.				Total.	Per Cent. of Gross.	Tons one Mile.	Average Haul.	Total.	Per Cent. of Gross.	Per Ton.	Per Ton Mile.	£	£ s. d.	£ s. d.	d.
					£	Per Cent. of Gross.	Per Ton.	Per Ton Mile.												
<i>Products of Agriculture.</i>				Miles.																
Grain	355,522	4.67	15,948,026	45	151,354	3.09	0 8 6	2.28	300,047	4.08	13,498,145	45	127,361	2.70	0 8 6	2.26	127,361	0 8 6	2.26	2.26
Meals	121,283	1.59	7,401,395	61	62,947	1.29	0 10 5	2.04	126,580	1.72	7,269,043	57	63,323	1.34	0 10 10	2.09	63,323	1.34	2.09	2.09
Fruit, N.Z. and Cook Islands ..	41,239	0.54	7,316,438	177	49,715	1.01	1 4 1	1.63	37,792	0.51	6,792,803	180	46,393	0.98	1 4 7	1.63	46,393	0.98	1 4 7	1.63
Root crops, fodder	162,033	2.13	10,314,750	64	79,425	1.62	0 9 10	1.84	163,897	2.23	9,929,457	61	78,206	1.66	0 9 7	1.88	78,206	1.66	0 9 7	1.88
Flax, green and dressed	27,025	0.36	1,361,771	50	16,138	0.33	0 12 0	2.84	36,662	0.50	1,912,435	52	21,526	0.46	0 11 9	2.70	21,526	0.46	0 11 9	2.70
Seeds	24,276	0.32	1,380,037	57	17,251	0.35	0 14 3	3.00	27,232	0.37	1,525,012	56	19,045	0.40	0 14 0	2.99	19,045	0.40	0 14 0	2.99
<i>Animals and their Products.</i>																				
Cattle and horses	731,378	9.61	43,722,417	60	376,830	7.69	0 10 4	2.06	692,210	9.41	40,918,895	59	355,864	7.54	0 10 3	2.08	355,864	7.54	0 10 3	2.08
Sheep and pigs	144,257	1.89	11,662,716	81	196,464	4.01	1 7 3	4.04	139,317	1.89	10,622,857	76	185,704	3.94	1 6 8	4.19	185,704	3.94	1 6 8	4.19
Meat	391,194	5.14	28,260,602	72	391,486	7.99	1 0 0	3.32	371,439	5.04	27,339,334	74	381,811	8.09	1 0 7	3.35	381,811	8.09	1 0 7	3.35
Butter	171,964	2.26	4,459,369	26	110,650	2.26	0 12 11	5.95	178,590	2.43	4,343,930	24	110,557	2.34	0 12 5	6.10	110,557	2.34	0 12 5	6.10
Cheese	101,846	1.34	6,684,889	66	111,594	2.28	1 1 11	4.00	94,982	1.29	5,930,099	62	106,587	2.26	1 2 5	4.31	106,587	2.26	1 2 5	4.31
Wool	99,691	1.31	4,240,398	43	89,138	1.82	0 17 11	5.04	75,275	1.02	3,378,544	45	74,912	1.59	0 19 11	5.32	74,912	1.59	0 19 11	5.32
Dairy by-products	141,235	1.86	7,554,649	53	144,388	2.95	1 0 6	4.59	135,184	1.84	7,181,122	53	137,407	2.91	1 0 4	4.59	137,407	2.91	1 0 4	4.59
Fat, hides, skins	16,989	0.22	1,318,072	78	16,641	0.34	0 19 7	3.03	16,007	0.22	1,359,199	85	17,132	0.36	1 1 5	3.02	17,132	0.36	1 1 5	3.02
Fish	33,354	0.44	1,463,499	44	34,139	0.70	1 0 6	5.60	36,467	0.50	1,567,661	43	38,484	0.82	1 1 1	5.88	38,484	0.82	1 1 1	5.88
	7,743	0.10	1,232,316	159	11,838	0.24	1 10 7	2.30	6,794	0.09	1,124,926	166	10,125	0.21	1 9 10	2.16	10,125	0.21	1 9 10	2.16
<i>Products of Mines.</i>																				
Agricultural lime	1,108,273	14.56	66,876,510	60	1,106,338	22.59	1 0 0	3.96	1,054,055	14.32	62,847,672	60	1,062,719	22.52	1 0 2	4.05	1,062,719	22.52	1 0 2	4.05
Coal, imported	142,213	1.87	8,839,383	62	45,668	0.93	0 6 5	1.24	116,428	1.58	7,090,310	61	36,981	0.78	0 6 4	1.25	36,981	0.78	0 6 4	1.25
Coal, N.Z. hard	59,661	0.78	1,652,598	28	25,432	0.52	0 8 7	3.69	75,542	1.03	1,940,354	26	31,430	0.67	0 8 4	3.88	31,430	0.67	0 8 4	3.88
Coal, N.Z. brown	1,105,509	14.52	34,161,724	31	287,411	5.87	0 5 2	2.02	1,102,183	14.98	36,883,446	33	286,537	6.07	0 5 2	1.86	286,537	6.07	0 5 2	1.86
Road-metal	999,017	13.12	120,913,304	121	572,268	11.68	0 11 6	1.14	1,012,946	13.77	121,434,819	120	576,343	12.21	0 11 5	1.13	576,343	12.21	0 11 5	1.13
Lime and coke	354,159	4.65	7,610,165	21	59,943	1.21	0 3 4	1.86	277,217	3.77	6,833,613	25	49,811	1.06	0 5 7	1.74	49,811	1.06	0 5 7	1.74
	60,734	0.80	3,382,939	56	25,110	0.51	0 8 3	1.78	54,596	0.74	3,370,865	62	24,589	0.52	0 9 0	1.74	24,589	0.52	0 9 0	1.74
<i>Products of Forests.</i>																				
Timber, imported	2,721,293	35.74	176,560,113	65	1,014,932	20.72	0 7 6	1.37	2,638,912	35.87	177,553,407	67	1,005,691	21.31	0 7 8	1.35	1,005,691	21.31	0 7 8	1.35
Timber, N.Z.	29,769	0.39	1,437,803	49	29,259	0.60	0 19 8	4.88	32,707	0.44	1,628,804	50	33,675	0.71	1 0 7	4.96	33,675	0.71	1 0 7	4.96
Firewood, posts, &c.	538,252	7.07	60,980,958	113	495,929	10.12	0 18 5	1.95	537,876	7.31	60,709,948	113	501,530	10.64	0 18 8	1.98	501,530	10.64	0 18 8	1.98
	126,693	1.66	10,002,510	79	50,936	1.04	0 8 1	1.22	127,997	1.74	9,690,938	76	49,277	1.04	0 7 9	1.21	49,277	1.04	0 7 9	1.21
<i>Manufactures, &c.</i>																				
Benzine, gasoline, kerosene ..	694,714	9.12	72,421,271	104	576,124	11.76	0 16 7	1.90	698,560	9.49	72,029,690	103	584,482	12.39	0 16 9	1.94	584,482	12.39	0 16 9	1.94
Cement, N.Z.	123,937	1.63	9,030,982	73	200,239	4.09	1 12 4	5.32	89,977	1.22	7,635,276	85	172,747	3.66	1 18 10	5.42	172,747	3.66	1 18 10	5.42
Manures	70,679	0.93	5,484,478	78	55,130	1.13	0 15 8	2.41	78,481	1.07	9,519,346	121	75,842	1.61	0 19 4	1.91	75,842	1.61	0 19 4	1.91
	712,741	9.36	47,242,949	66	326,939	6.67	0 9 2	1.66	586,007	7.96	36,371,287	62	261,313	5.54	0 8 11	1.72	261,313	5.54	0 8 11	1.72
Miscellaneous	907,357	11.92	61,758,409	68	582,308	11.89	0 12 10	2.26	754,465	10.25	53,525,909	71	509,902	10.81	0 13 6	2.28	509,902	10.81	0 13 6	2.28
	1,450,430	19.05	66,414,678	46	1,241,859	25.35	0 17 1	4.48	1,520,195	20.66	62,035,702	41	1,199,940	25.43	0 15 10	4.64	1,199,940	25.43	0 15 10	4.64
Totals	7,613,445	100.00	487,753,398	64	4,898,391	100.00	0 12 11	2.41	7,358,397	100.00	468,911,275	64	4,718,598	100.00	0 12 10	2.41	4,718,598	100.00	0 12 10	2.41

STATEMENT No. 19.

STATEMENT SHOWING MILEAGE, CAPITAL COST, TRAFFIC, REVENUE, AND EXPENDITURE OF NEW ZEALAND GOVERNMENT RAILWAYS FROM 1ST APRIL, 1921, TO 31ST MARCH, 1929.

MILEAGE, CAPITAL COST, TRAFFIC, AND REVENUE.*

Year.	Miles.	Capital Cost.	Train-mileage.	Passengers.		Season Tickets.		Coaching.	Cattle. (Number.)	Sheep and Pigs. (Number.)	Timber. (Tons.)
				Number.	Revenue	Number.	Revenue	Revenue.			
		£			£		£	£			
1921-1922	.. 3,030	39,309,097	8,717,265	14,262,440	2,212,633	472,865	205,594	339,482	279,904	7,635,515	708,212
1922-1923	.. 3,037	40,275,161	8,346,731	11,256,610	2,216,514	485,681	204,106	393,322	293,930	7,367,763	663,213
1923-1924	.. 3,053	41,399,427	9,024,503	13,836,311	2,136,999	525,744	212,601	406,832	320,434	7,723,971	724,116
1924-1925	.. 3,085	44,570,746	9,083,623	12,424,012	2,077,625	537,554	210,946	417,550	351,873	8,105,597	754,634
1925-1926	.. 3,138	45,794,199	10,319,407	11,787,273	2,271,498	600,272	265,549	409,207	391,649	8,209,965	770,654
1926-1927	.. 3,164	47,195,948	10,723,864	10,274,878	2,045,348	585,078	258,832	377,367	391,062	8,902,511	663,442
1927-1928	.. 3,180	49,014,832	10,838,594	9,272,547	1,886,833	632,741	258,463	379,933	459,742	9,299,715	570,558
1928-1929	.. 3,287	54,210,139	11,113,482	9,046,267	1,868,047	656,155	256,699	378,141	634,394	9,685,374	568,026

Year.	Goods.	Total.	Goods Revenue.	Miscellaneous Revenue, Labour, Demurrage, &c.	Rents and Commission.	Total Revenue.	Revenue per Train-mile.
	Tons.	Tons.	£	£	£	£	d.
1921-1922	.. 5,222,900	5,931,112	3,646,594	124,106	115,182	6,643,591	182.69
1922-1923	.. 5,571,594	6,234,807	3,671,008	119,933	122,919	6,727,802	193.18
1923-1924	.. 5,795,341	6,519,457	3,953,213	141,968	132,598	6,984,211	185.50
1924-1925	.. 5,847,973	6,602,607	4,122,017	137,149	147,237	7,112,524	187.65
1925-1926	.. 6,028,959	6,793,613	4,499,160	143,961	..	7,589,274	176.51
1926-1927	.. 6,161,706	6,825,148	4,596,166	145,759	..	7,423,472	166.14
1927-1928	.. 6,276,525	6,847,083	4,680,135	138,481	..	7,343,845	162.62
1928-1929	.. 6,509,978	7,078,004	4,846,125	175,852	..	7,524,864	162.50

EXPENDITURE.*

Year.	Expenditure per Train-mile.	Expenditure per Cent. of Revenue.	Maintenance of Way and Works.				Maintenance of Signals.				Maintenance of Locomotives, Carriages, and Wagons.		
			Amount.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Amount.	Per Cent. of Revenue.	Per Mile of Railway.	Per Train-mile.	Amount.	Per Cent. of Revenue.	Per Train-mile.
	d.		£		£	d.	£		£	d.	£		d.
1921-1922	.. 171.37	93.89	1,111,883	16.76	368.45	30.61	72,343	1.09	23.97	1.99	1,113,170	16.76	30.65
1922-1923	.. 157.81	81.79	1,040,892	15.49	343.76	29.93	67,425	1.01	22.27	1.94	1,043,590	15.51	30.00
1923-1924	.. 143.43	77.37	1,143,281	16.39	375.57	30.40	70,912	1.02	23.29	1.88	1,048,567	15.01	27.89
1924-1925	.. 146.19	77.97	1,113,048	15.67	362.95	29.40	81,201	1.14	26.48	2.14	1,083,788	15.24	28.63
1925-1926	.. 143.37	81.23	1,144,385	15.08	368.80	26.62	105,064	1.38	33.86	2.43	1,311,317	17.28	30.50
1926-1927	.. 137.82	82.96	1,074,334	14.47	340.30	24.04	100,861	1.36	31.95	2.26	1,303,444	17.56	29.17
1927-1928	.. 139.55	85.81	1,147,067	15.62	360.94	25.40	102,871	1.40	32.37	2.28	1,380,727	18.80	30.57
1928-1929	.. 137.66	84.71	1,111,229	14.77	341.50	24.00	112,206	1.49	34.48	2.42	1,424,165	18.93	30.76

Year.	Locomotive Transportation.			Traffic Transportation.			Head Office and General Charges.			Lake Wakatipu Steamers.		Total Expenditure.
	Amount.	Per Cent. of Revenue.	Per Train-mile.	Amount.	Per Cent. of Revenue.	Per Train-mile.	Amount.	Per Cent. of Revenue.	Per Train-mile.	Amount.	Per Cent. of Revenue.	
	£		d.	£		d.	£		d.	£		£
1921-1922	.. 2,020,994	30.42	55.64	1,703,049	25.66	46.89	202,948	3.06	5.59	13,339	166.34	6,237,727
1922-1923	.. 1,613,564	23.98	46.40	1,527,033	22.73	43.91	195,894	2.91	5.63	14,100	150.79	5,502,497
1923-1924	.. 1,395,491	19.98	37.11	1,530,652	21.94	40.71	204,407	2.93	5.44	10,456	117.85	5,403,766
1924-1925	.. 1,408,927	19.81	37.23	1,599,668	22.52	42.27	246,504	3.47	6.51	12,279	121.62	5,545,415
1925-1926	.. 1,636,620	21.56	38.06	1,743,641	22.98	40.55	223,543	2.94	5.20	..	..	6,164,570
1926-1927	.. 1,669,352	22.49	37.36	1,752,998	23.61	39.23	257,294	3.47	5.76	..	..	6,158,283
1927-1928	.. 1,662,074	22.63	36.80	1,760,459	23.97	38.98	248,921	3.39	5.51	..	..	6,302,119
1928-1929	.. 1,650,793	21.94	35.65	1,825,965	24.26	39.43	250,221	3.32	5.40	..	..	6,374,579

* Figures from 1925-26 are for train operation only, and do not include subsidiary services as in previous years.

STATEMENT No. 20.
COMPARATIVE STATEMENT OF THE MILEAGE OPENED, CAPITAL EXPENDED, EARNINGS, EXPENSES, ETC., OF RAILWAYS IN THE FOLLOWING STATES (TAKEN FROM LATEST OFFICIAL RECORDS).

		Area in Square Miles.	Population.	Miles open.	Gauge.	Total Cost.	Cost per Mile.	Population per Mile of Railway.	Cost per Head of Population.	Train-miles run.*	Gross Earnings.	Earnings per Train-mile.	Working-expenses.	Working-expenses per Train-mile.	Profit on Working.	Net Earnings per Train-mile	Percentage of Net Earnings to Capital.	Percentage of Working-expenses to Earnings.	Earnings per Head of Population.	Passengers carried.†	Tonnage of Goods.	Earnings per Average Mile open.	Working-expenses per Average Mile open.	Net Earnings per Average Mile.	Expenses.					Number of Locomotives.	Number of Passenger-carriages.	Number of Wagons and Brake-vans.	Year ending
																									Maintenance per Mile of Railway.	Locomotive Car, and Wagon per Train-mile.	Traffic per Cent. of Revenue.	General Charges (including Compensation, &c.) per Cent. of Revenue					
					Ft. in.	£	£		£ s. d.		£	d.	£	d.	£	d.			£ s. d.			£	£	£	£	d.							
Victoria ..	..	87,884	1,754,000	4,697	{ 5 3 / 2 6 }	72,606,590	15,458	390	41 10 0	17,694,928	12,821,059	173-89	10,025,829	135-98	2,795,230	37-91	3-84	78-20	7 6 3	164,574,870	8,117,961	2,751	2,151	600	453	54-46	24-70	5-73	663	1,983	20,958	30 June, 1928.	
New South Wales ..	..	309,432	2,429,138	5,867	4 8 1/2	117,984,374	20,110	414	48 11 5	26,896,580	19,029,512	169-80	14,756,327	131-67	4,273,185	38-13	3-70	77-54	7 16 8	148,046,881	15,433,083	3,266	2,533	733	442	63-87	20-38	6-02	1,434	2,101	24,185	„ „	
Queensland ..	..	670,500	911,737	6,345	{ 3 6 / 2 0 }	58,998,267	9,299	144	64 14 2	11,655,122	7,381,532	152-00	6,106,140	125-74	1,275,392	26-26	2-16	82-72	8 1 11	24,800,934	4,670,447	1,164	963	201	251	54-73	23-16	2-03	775	1,186	19,065	„ „	
South Australia ..	..	380,070	578,000	2,527	{ 3 6 / 5 3 }	26,582,516	10,516	228	45 19 10	6,503,474	3,999,583	147-60	3,727,759	137-57	271,824	10-03	1-08	93-20	6 18 5	20,880,751	3,418,092	1,583	1,475	108	231	73-89	24-38	4-15	464	755	9,378	„ „	
Western Australia..	..	975,920	392,184	3,977	3 6	22,130,077	5,565	99	56 8 7	5,900,883	3,858,051	156-91	2,910,811	118-39	947,240	38-52	4-28	75-45	9 16 9	16,032,536	3,697,648	972	733	239	184	53-14	20-06	2-56	399	396	10,925	„ „	
Tasmania ..	..	26,215	210,456	658	{ 3 6 / 2 0 }	6,483,281	9,853	320	30 16 1	1,429,416	554,743	93-14	573,885	96-35	19,142 (loss)	3-21 (loss)	..	103-45	2 12 9	2,322,410	715,387	843	872	29 (loss)	214	39-23	22-50	13-40	95	162	2,045	„ „	
New Zealand ..	..	103,861	933,111	2,391	3 6	22,498,972	9,410	391	24 2 3	6,413,573	2,349,704	87-75	1,621,239	60-47	728,465	27-28	3-24	69-00	2 10 4	8,826,382	4,241,422	980	676	304	229	21-99	18-86	3-01	395	906	14,127	31 Mar., 1906.	
„	..	103,861	961,604	2,427	3 6	23,504,272	9,570	396	24 8 10	6,755,454	2,624,600	93-00	1,812,482	64-21	812,118	28-79	3-45	69-06	2 14 7	9,600,786	4,592,099	1,078	744	334	253	23-37	18-90	2-80	398	966	14,605	„ 1907.	
„	..	103,861	985,318	2,469	3 6	24,365,647	9,861	399	24 14 7	7,051,274	2,761,938	93-75	1,949,759	66-18	812,179	27-57	3-33	70-59	2 16 1	9,756,716	4,834,534	1,114	786	328	258	24-96	19-40	2-76	410	1,002	15,475	„ 1908.	
„	..	103,861	1,016,044	2,556	3 6	27,762,592	10,351	398	27 6 6	7,458,236	2,929,526	94-00	2,114,815	67-89	814,711	26-11	3-13	72-19	2 17 8	10,457,144	4,871,874	1,148	828	320	258	25-56	20-73	3-16	452	1,116	16,476	„ 1909.	
„	..	103,861	1,035,211	2,704	3 6	28,513,476	10,494	383	27 10 10	7,889,166	3,249,790	98-75	2,169,474	65-84	1,080,316	32-91	3-80	66-76	3 2 9	11,141,142	5,223,414	1,203	803	400	230	25-35	18-96	2-96	465	1,140	17,220	„ 1910.	
„	..	103,861	1,055,640	2,742	3 6	29,606,546	10,723	385	28 1 0	8,141,075	3,494,182	102-75	2,303,272	67-75	1,190,910	35-00	4-06	65-92	3 6 2	11,200,613	5,555,292	1,275	840	435	254	25-81	18-10	2-81	478	1,166	18,036	„ 1911.	
„	..	103,861	1,081,344	2,801	3 6	30,506,089	10,864	386	28 4 2	8,371,687	3,676,509	105-25	2,465,896	70-52	1,210,613	34-73	3-98	67-07	3 8 0	20,336,577	5,599,756	1,314	881	433	263	27-30	18-27	2-76	493	1,212	18,521	„ 1912.	
„	..	103,861	1,111,592	2,840	3 6	31,611,220	11,053	391	28 8 9	9,016,224	3,971,002	105-50	2,705,609	71-84	1,265,393	33-66	4-04	68-13	3 11 5	22,310,867	5,957,005	1,400	954	446	271	28-20	19-40	2-64	513	1,282	19,515	„ 1913.	
„	..	103,861	1,139,669	2,861	3 6	32,355,087	11,309	398	28 7 9	9,319,268	4,043,328	104-00	2,880,323	74-00	1,163,005	30-00	3-61	71-24	3 10 11	23,173,472	5,661,340	1,416	1,008	408	268	29-72	20-73	2-91	534	1,363	20,251	„ 1914.	
„	..	103,861	1,150,430	2,917	3 6	34,133,825	11,702	394	29 13 5	9,383,420	4,105,457	104-75	2,920,455	74-54	1,185,002	30-21	3-53	71-14	3 11 4	23,542,903	6,075,282	1,410	1,002	408	254	30-26	21-20	2-98	557	1,397	21,226	„ 1915.	
„	..	103,861	1,152,048	2,959	3 6	34,857,882	11,780	389	30 5 2	9,356,522	4,548,356	116-50	2,910,883	74-50	1,637,473	42-00	4-72	64-00	3 19 0	24,600,693	5,960,562	1,540	985	555	251	29-77	19-60	2-50	585	1,452	21,994	„ 1916.	
„	..	103,861	1,150,605	2,970	3 6	35,378,664	11,912	387	30 15 0	9,146,331	4,800,810	125-75	2,926,864	76-63	1,873,946	49-12	5-30	60-97	4 3 5	24,782,602	5,826,265	1,619	987	632	244	30-88	18-87	2-47	607	1,480	22,380	„ 1917.	
„	..	103,861	1,154,559	2,977	3 6	36,001,432	12,029	389	32 0 11	7,468,646	4,687,700	150-50	3,042,907	97-54	1,644,793	52-96	4-60	64-91	4 1 3	21,438,325	5,373,136	1,578	1,023	555	240	40-02	20-38	2-67	624	1,488	22,517	„ 1918.	
„	..	103,861	1,175,325	2,993	3 6	36,167,681	12,084	393	30 15 6	7,477,583	4,988,632	160-00	3,308,575	105-97	1,680,057	54-03	4-65	66-32	4 4 11	22,030,327	5,611,738	1,670	1,107	563	252	44-35	20-73	2-70	620	1,489	22,658	„ 1919.	
„	..	103,861	1,223,915	3,006	3 6	36,390,115	12,106	407	29 14 8	7,408,608	5,752,487	186-00	4,105,067	132-72	1,647,420	53-28	4-53	71-36	4 14 0	24,582,186	6,000,279	1,923	1,372	551	281	57-84	22-66	2-99	616	1,492	22,937	„ 1920.	
„	..	103,861	1,268,046	3,018	3 6	37,235,254	12,338	420	29 7 3	9,303,392	6,908,531	178-00	5,636,601	145-14	1,271,930	32-86	3-42	81-59	5 9 0	28,821,783	6,487,279	2,293	1,870	423	350	68-54	24-82	2-95	608	1,492	23,119	„ 1921.	
„	..	103,861	1,300,967	3,030	3 6	39,309,097	12,973	429	30 4 4	8,717,265	6,643,591	182-69	6,237,727	171-37	405,864	11-32																	

* The figures for train-miles run in New Zealand prior to 1925 included mileage run by assisting engines. † The figures for passenger traffic in New Zealand prior to 1912 are exclusive of season tickets. ‡ New Zealand figures from 1926 are for operation only, subsidiary services not included as in previous years.

STATEMENT No. 21.

COMPARATIVE STATEMENT OF THE NUMBER OF EMPLOYEES FOR YEARS 1928-29 AND 1927-28.

Branch.				Kaihu.	Gisborne	North Island Main Line and Branches.	South Island Main Line and Branches.	Westport.	Nelson.	Pictou.	Stores.	Refreshment Branch.	Architectural Branch.	Total.
1928-29.														
General	..	..	..	1	3	702	164	4	4	3	395	339	95	1,710
Traffic..	..	..	..	5	20	3,003	2,540	88	21	38	..	..	..	5,715
Maintenance	..	..	..	14	40	2,684	1,646	39	35	38	..	..	..	4,496
Locomotive	..	..	..	5	25	3,783	2,683	74*	22	23	..	..	..	6,615
Totals	..	..	..	25	88	10,172	7,033	205	82	102	395	339	95	18,536
1927-28.														
General	..	..	..	1	3	682	154	4	4	3	454	329	147	1,781
Traffic..	..	..	..	5	21	2,925	2,511	90	21	36	..	..	..	5,609
Maintenance	..	..	..	13	42	2,634	1,713	47	40	41	..	..	..	4,530
Locomotive	..	..	..	5	23	3,684	2,791	73*	22	23	..	..	..	6,621
Totals ..	..	..	..	24	89	9,925	7,169	214	87	103	454	329	147	18,541

* Workshops staff only. Westport locomotive-running staff are included under South Island Main Line and Branches.

STATEMENT No. 23.

STATEMENT OF RAILS LAID DURING THE YEAR ENDED 31ST MARCH, 1929.

Weight.					Kaihu.	Gisborne.	North Island Main Line and Branches.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.
RAILS LAID :—												
55 lb. steel	..	..	..	..	..	10	11	23	..	5	..	49
70 "	..	..	..	..	..	..	5,810	3,356	99	..	..	9,265
100 "	..	..	..	..	..	..	..	1	..	..	..	1
Totals	..	..	..	..	..	10	5,821	3,380	99	5	..	9,315

STATEMENT No. 24.

STATEMENT OF SLEEPERS LAID AND REMOVED DURING THE YEAR ENDED 31ST MARCH, 1929.

Description.	Kaihu.	North Island Main Line and Branches.	Gisborne.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.
SLEEPERS LAID :—								
Mountain Pine	..	..	..	..	7	..	..	7
Maire	..	1,265	..	..	..	..	..	1,265
Black Butt	..	201	..	..	..	..	..	201
Jarra	10	77,119	60	23,465	..	8	182	100,844
Totara	163	5,379	..	4,840	353	60	..	10,795
Birch	..	..	..	..	28	..	..	28
Silver-pine	..	5,335	..	28,707	767	78	116	35,003
Puriri	91	111	..	..	..	..	..	202
Yellow Pine	..	..	..	34	12	..	..	46
Ironbark	..	2,186	..	1,581	..	..	..	3,767
Matai	..	..	..	3	..	..	..	3
Totals	264	91,596	60	58,630	1,167	146	298	152,161
SLEEPERS REMOVED :—								
Kauri	16	..	..	..	..	..	..	16
Maire	..	6	..	..	..	..	..	6
Ironbark	..	598	..	608	4	..	..	1,210
Jarra	2	34,253	32	17,873	..	30	1	52,191
Matai and Rimu	..	362	..	1,304	..	..	..	1,666
Totara	116	33,503	3	2,748	..	116	..	36,486
Birch	..	10,917	..	83	39	..	17	11,056
Silver-pine	..	5,136	5	31,919	1,116	..	280	38,456
Powellized	..	..	..	828	..	..	..	828
Puriri	130	2,808	..	273	..	..	..	3,211
Creosoted	..	3,696	..	1,280	..	..	..	4,976
Blue-gum	..	51	..	128	..	..	..	179
Yellow Pine	..	..	20	..	8	..	..	28
Totals	264	91,330	60	57,044	1,167	146	298	150,309

STATEMENT No. 25.

STATEMENT OF NUMBER OF STATIONS AND PRIVATE SIDINGS ON EACH SECTION FOR THE YEAR ENDED 31ST MARCH, 1929.

Section.	Length.	Number of Stations and Stopping-places for Passengers in the Time-tables.	Number of Private Sidings.		
			At Stations.	Out of Stations.	Total.
Kaihu	M. ch.				
..	24 10	12	1	..	1
Gisborne	60 50	20	6	2	8
North Island Main Line and Branches	1,423 52	504	219	58	277
South Island Main Line and Branches	1,628 20	580	219	36	255
Westport	43 2	20	5	4	9
Nelson	64 10	23	4	1	5
Picton	56 12	19	8	..	8
Totals	3,299 76	1,178	462	101	563

STATEMENT NO. 26.
COMPARATIVE STATEMENT OF MILEAGE OF RAILWAYS OPEN FOR TRAFFIC AND UNDER MAINTENANCE ON 31ST MARCH, 1929.

Section.	Mileage open for Traffic on 31st March, 1928.	Additional Lengths opened during Year.		Reduced Mileage equivalent to Maintenance for whole Period.		Length closed during Year.		Net Addition to Mileage open for Traffic.	Net Addition to Mileage under Maintenance.	Total Mileage open for Traffic on 31st March, 1929.	Equivalent Total Mileage maintained during Finan- cial Year ended 31st March, 1929.
		Line opened.	Date of Opening.	Length opened.	M. ch.	M. ch.	Line.				
Kaihu	M. ch. 24 10	..	..	M. ch. ..	..	M. ch. ..	..	M. ch. ..	M. ch. ..	M. ch. 24 10	M. ch. 24 10
North Island Main Lines and Branches	1,326 26	{ Waioiti-Kirikopuni .. { Tabawai-Tauranga .. { Tauranga-Taneatua ..	15th May, 1928 .. 18th June, 1928 .. 2nd September, 1928 ..	13 71 23 64 59 56	12 17 18 57 34 41	..	Opunake Branch 22m. 72c.-22m. 77c.	97 26	65 30	1,423 52	1,391 56
Gisborne	60 50	..	..	..	..	..	..	..	..	60 50	60 50
South Island Main Lines and Branches	1,619 07	Miller's Flat-Roxburgh	18th April, 1928 ..	9 13	8 59	..	..	9 13	8 59	1,628 20	1,627 66
Westport	43 02	..	..	..	..	..	..	..	..	43 02	43 02
Nelson	64 10	..	..	..	..	..	..	..	..	64 10	64 10
Pictou	56 12	..	..	..	..	..	..	..	..	56 12	56 12
Totals	3,193 37	..	..	106 44	74 14	..	..	106 39	74 09	3,299 76	3,267 46

STATEMENT No. 27.
STATEMENT SHOWING WEIGHTS OF RAILS IN VARIOUS LINES ON 31ST MARCH, 1929.

Line.	40 lb. Iron.	40 lb. Steel.	52 lb. Iron.	52 lb. Steel.	53 lb. Steel.	55 lb. Steel.	56 lb. Steel.	65 lb. Steel.	70 lb. Steel.	100 lb. Steel.	Total.
Kaihu Section—											
Kaihu Branch ..	..	..	..	..	M. ch. 17 15	M. ch. 6 75	M. ch. ..	M. ch. ..	M. ch. ..	M. ch. ..	M. ch. 24 10
North Island Main Lines and Branches—											
Kaikohe Branch ..	..	..	..	..	..	24 59	..	..	..	..	24 59
Kirikopuni Branch ..	..	..	..	..	..	13 71	..	..	..	..	13 71
Onerahi Branch ..	..	..	..	..	0 20	2 57	..	..	1 23	..	4 20
Auckland-Wellington	..	..	..	..	0 5	..	0 5	10 5	415 50	..	425 65
North Auckland Line	..	..	..	..	0 18	102 37	20 37	58 07	..	..	181 19
Onehunga Branch	..	0 10	..	..	0 57	..	1 48	..	0 24	..	2 59
Waikato Branch ..	..	..	..	..	..	12 70	..	..	..	..	12 70
Huntly-Awaroa Railway ..	..	..	..	..	..	9 6	..	..	..	..	9 6
Thames Branch ..	..	..	..	..	0 33	..	17 75	..	44 47	..	62 75
East Coast Main Trunk Line	..	..	..	..	..	97 18	11 37	..	1 11	..	109 66
Cambridge Branch	..	..	..	..	6 75	2 36	2 42	..	0 8	..	12 1
Rotorua Branch ..	..	..	..	..	13 47	..	0 3	..	55 10	..	68 60
Raetihi Branch ..	..	..	..	..	6 35	2 3	..	..	..	..	8 38
Marton-New Plymouth	..	..	..	..	0 16	..	6 62	..	130 5	..	137 3
Waitara Branch ..	..	0 29	..	..	3 69	..	0 44	..	..	..	4 62
Toko Branch ..	..	..	..	..	15 45	31 34	0 31	..	..	..	47 30
Opunake Branch ..	..	..	..	..	..	22 72	..	..	..	..	22 72
Mount Egmont Branch	..	..	..	..	..	..	6 2	..	..	..	6 2
Wanganui Branch	..	..	..	..	..	0 9	1 69	..	1 22	..	3 20
Foxton Branch ..	..	..	0 2	..	10 70	..	8 41	..	..	..	19 33
Palmerston North-Eskdale	..	..	..	..	0 21	11 73	14 0	..	97 62	..	123 76
Port Ahuriri Branch	..	..	..	..	1 65	0 4	..	..	0 1	..	1 70
Wellington-Woodville	..	..	..	..	..	0 1	4 51	..	109 71	..	114 43
Hutt Valley Branch	..	..	..	..	..	..	..	..	2 65	..	2 65
Greytown Branch	..	..	3 7	..	..	..	..	..	..	..	3 7
Gisborne Section—											
Gisborne Line ..	0 20	..	..	..	..	31 8	17 62	..	..	..	49 10
Ngatapa Branch	..	..	..	..	..	11 40	..	..	..	..	11 40
South Island Main Lines and Branches—											
Lyttelton-Bluff ..	..	0 8	0 3	..	0 1	12 79	..	..	390 21	1 48	392 1
Main North Line ..	..	..	..	..	28 26	0 3	..	..	39 27	..	80 52
Oxford Branch ..	..	11 45	..	..	18 35	0 7	3 36	..	0 6	..	33 45
Eyreton Branch ..	..	..	..	..	20 14	0 7	..	..	..	..	20 21
Cheviot Branch ..	..	..	..	..	..	12 63	31 25	..	0 3	..	44 1
Southbridge Branch	..	..	..	..	23 12	1 0	1 20	..	0 7	..	25 39
Little River Branch	..	0 9	..	..	0 48	17 45	4 25	..	0 1	..	22 48
Midland Line ..	..	..	..	..	..	0 1	..	..	122 14	8 50	130 65
White Cliffs Branch	..	..	..	..	11 29	..	0 10	..	0 7	..	11 46
Methven Branch	..	..	..	22 16	..	0 1	..	..	0 3	..	22 20
Carried forward	0 20	12 21	3 12	22 16	180 36	427 62	155 5	10 5	1,470 15	10 18	2,291 50

STATEMENT NO. 27—continued.
STATEMENT SHOWING WEIGHTS OF RAILS IN VARIOUS LINES ON 31ST MARCH, 1929—continued.

Line.	40lb. Iron.	40lb. Steel.	52lb. Iron.	52lb. Steel.	53lb. Steel.	55lb. Steel.	56lb. Steel.	65lb. Steel.	70lb. Steel.	100lb. Steel.	Total.
Brought forward											
South Island Main Lines and Branches—continued.											
Springburn Branch	..	..	..	..	..	..	..	..	..	..	..
Albury Branch ..	0 20	12 21	3 12	22 16	180 36	427 62	155 5	10 5	1,470 15	M. ch. 10 18	M. ch. 2,291 50
Waimate Branch ..	2 19	0 30	..	..	1 2	4 53	18 70	..	0 22	..	27 36
Waimate Gorge Branch ..	0 65	..	..	2 2	22 40	4 78	7 66	..	0 4	..	36 13
Duntroon Branch ..	..	..	7 21	..	1 0	..	..	..	..	..	4 46
Oamaru Breakwater Branch ..	1 16	..	0 4	..	28 51	3 61	3 69	..	..	..	8 21
Ngapara Branch ..	0 23	..	..	..	0 40	..	3 45	..	..	..	37 41
Tokarahi Branch ..	..	..	..	..	11 44	..	1 39	..	..	..	0 63
Dunback Branch ..	..	..	..	..	..	10 36	1 0	..	..	..	15 9
Port Chalmers Branch ..	..	6 76	0 53	..	0 16	..	..	..	..	..	11 75
Walton Park Branch ..	0 2	..	..	..	0 16	..	..	..	..	..	8 65
Fernhill Branch ..	..	..	..	..	1 48	0 19	0 48	..	1 10	..	1 26
Otago Central Railway ..	..	..	..	..	1 57	..	..	..	0 1	..	2 38
Outram Branch ..	0 1	..	..	..	61 13	15 27	65 58	..	4 60	..	146 78
Lawrence Branch ..	..	..	..	..	6 26	0 73	1 53	..	0 7	..	9 0
Catlin's River Branch ..	..	..	..	..	1 40	42 20	15 8	..	..	..	58 68
Tapuanui Branch ..	..	..	..	..	15 26	20 5	3 46	..	4 1	..	42 78
Waikaka Branch ..	..	..	..	..	10 40	9 3	6 58	..	..	..	26 21
Glenham Branch ..	..	..	..	..	..	12 56	..	..	0 1	..	12 57
Seaward Bush Branch ..	..	..	..	..	6 64	..	2 17	..	0 34	..	9 35
Kingston Branch ..	..	..	..	..	1 52	25 9	7 4	..	..	..	33 65
Tuatapere Branch ..	..	..	..	..	42 47	..	25 64	..	18 47	..	86 78
Wairoa Branch ..	..	..	..	..	6 60	16 33	20 15	..	13 8	..	56 36
Hedgehope Branch ..	0 60	4 1	..	..	..	..	..	..	22 44	..	22 44
Mosburn Branch ..	..	10 16	..	..	4 66	3 18	0 1	..	..	..	12 66
Waimea Plains Branch ..	..	..	..	..	0 24	..	0 1	..	..	..	10 41
Switzers Branch ..	..	..	..	..	1 77	11 69	..	..	36 37	..	36 37
Graymouth-Ross ..	..	..	..	..	..	..	..	..	0 1	..	13 67
Stillwater-Inangahua ..	..	..	..	..	27 64	14 54	14 26	..	24 3	..	38 29
Blackball Branch ..	..	..	..	..	..	1 0	8 75	..	5 40	..	56 73
Point Elizabeth Branch ..	..	..	..	..	0 15	..	2 31	..	..	..	3 31
7-Mile Branch ..	..	..	..	..	..	..	4 46	..	3 24	..	8 5
Westport-Mokihinui ..	..	..	..	..	0 17	2 43	..	..	..	..	2 43
Westport—Te Kuha ..	..	..	..	..	..	0 1	8 67	..	21 12	..	30 17
Cape Foulwind Line ..	..	..	..	..	..	5 57	0 4	..	..	..	5 61
Nelson Line ..	..	..	..	..	..	..	7 4	..	..	..	7 4
Picton Line ..	..	..	..	..	25 38	21 50	16 73	..	0 9	..	64 10
Totals	5 46	33 64	11 10	24 18	482 34	677 1	419 57	10 5	1,625 63	10 18	3,299 76

STATEMENT No. 28.

STATEMENT SHOWING APPROXIMATELY SLEEPERS LAID AND REMOVED UP TO 31ST MARCH, 1929.

Year.	Approximate Length opened each Year.			Sleepers.	
	North Island.	Middle Island.	Total.	Laid during Construction.	Removed during Maintenance.*
	M. ch.	M. ch.	M. ch.		
1867	..	45 70	45 70	96,338	..
1870-71	..	18 58	18 58	39,323	..
1871-72	..	11 68	11 68	24,885	..
1872-73	..	27 62	27 62	58,327	..
1873-74	10 55	11 21	21 76	46,095	..
1874-75	61 19	126 78	188 17	395,246	..
1875-76	69 23	248 4	317 27	666,409	..
1876-77	64 24	152 39	216 63	455,254	..
1877-78	103 76	94 58	198 54	417,217	..
1878-79	27 19	56 46	83 65	176,006	..
1879-80†	26 33	40 73	67 26	141,382	..
1880-81	68 39	32 71	101 30	212,888	74,261
1881-82	22 67	40 16	63 3	132,379	73,947
1882-83	2 2	40 19	42 21	88,751	106,763
1883-84	22 19	22 50	44 69	94,211	125,632
1884-85	56 0	24 0	80 0	168,000	148,325
1885-86	43 26	47 52	90 78	191,048	137,993
1886-87	58 72	11 39	70 31	147,814	139,040
1887-88	11 47	17 32	28 79	60,874	122,027
1888-89	18 31	..	18 31	42,814	108,690
1889-90	11 57	20 68	32 45	68,381	129,634
1890-91	28 21	5 68	34 9	71,636	133,954
1891-92	..	27 27	27 27	57,408	139,912
1892-93	17 26	..	17 26	36,382	132,569
1893-94	28 38	33 58	62 16	130,620	155,827
1894-95	16 62	27 24	44 6	92,558	170,681
1895-96	14 73	3 48	18 41	38,876	188,291
1896-97	3 64	1 11	4 75	10,370	210,588
1897-98	27 46	10 2	37 48	78,960	243,479
1898-99	22 46	11 13	33 59	70,848	282,326
1899-1900	..	19 26	19 26	40,582	302,354
1900-1901	4 30	103 38	107 68	226,485	345,433
1901-1902	11 20	12 32	23 52	49,665	369,339
1902-1903	28 40	27 43	56 3	117,679	330,029
1903-1904	33 12	4 44	37 56	79,170	309,296
1904-1905	17 61	27 75	45 56	95,970	302,252
1905-1906	23 5	8 52	31 57	66,596	309,183
1906-1907	..	50 7	50 7	105,184	283,293
1907-1908	10 38	4 61	15 19	31,999	331,678
1908-1909	186 21	23 21	209 42	440,003	279,190
1909-1910	3 60	31 43	35 23	74,104	236,390
1910-1911	14 64	29 76	44 60	93,975	282,682
1911-1912	23 30	23 1	46 31	97,414	273,586
1912-1913	25 37	26 77	52 34	110,092	235,378
1913-1914	..	3 6	3 6	6,458	261,748
1914-1915	40 22	51 3	91 25	191,756	227,674
1915-1916	7 43	7 73	15 36	32,445	157,970
1916-1917	..	..	..	..	86,595
1917-1918	22 70	..	22 70	48,038	88,540
1918-1919	..	..	..	..	70,743
1919-1920	..	12 75	12 75	27,169	78,663
1920-1921	11 54	0 7	11 61	24,701	100,280
1921-1922	..	12 27	12 27	25,909	139,187
1922-1923	7 70	..	7 70	16,538	163,735
1923-1924	24 66	2 43	27 29	57,461	227,075
1924-1925	18 8	14 75	33 3	69,379	184,036
1925-1926	30 41	20 66	51 27	107,809	235,266
1926-1927	24 22	3 70	28 12	67,560	97,586
1927-1928	16 67	..	16 67	40,410	175,969
1928-1929	97 26	9 13	106 39	255,570	150,309
Totals	..	..	..	6,911,421	9,459,398

* Complete information not recorded until 1880-81.

† Nine months only.

STATEMENT No. 29.

STATEMENT OF CARRIAGE, RAIL-CAR, BRAKE-VAN, AND WAGON STOCK, AND TARPAULINS, FOR THE YEAR ENDED 31ST MARCH, 1929.

Description.	Class.	Kaihu.	North Island Main Line and Branches.	Gisborne.	South Island Main Line and Branches.	Westport.	Nelson.	Pictou.	Total.
CARRIAGES.									
Saloon, bogie, 56 ft.	AA	..	1	..	..	..	..	..	1
Sleepers, bogie, 56 ft.	AA	..	5	..	..	..	..	..	5
" " 50 ft.	AA	..	10	..	..	..	..	..	10
First-class, bogie, 50 ft.	AA	..	49	..	..	..	..	..	49
Ladies' (composite), bogie, 50 ft.	AA	..	6	..	..	..	..	..	6
Second-class bogie, 50 ft.	AA	..	64	..	..	..	..	..	64
Royal saloon, bogie, 50 ft.	AA	..	1	..	..	..	..	..	1
Saloon, bogie, 50 ft.	AA	..	2	..	..	..	..	..	2
Postal, bogie, 50 ft.	AA	..	1	..	..	..	..	..	1
Sleepers, bogie, 47½ ft.	A	..	..	..	6	..	..	..	6
Royal saloon, bogie, 44 ft.	A	..	..	..	1	..	..	..	1
Gallery-cars, bogie, 44 ft.	A	..	..	..	5	..	..	..	5
Saloon, bogie, 47½ ft.	A	..	1	..	1	..	..	..	2
" " 44 ft.	A	..	..	..	1	..	..	..	1
" " 41 ft.	A	..	5	..	4	..	..	..	9
" " 39½ ft.	A	..	6	..	7	..	..	..	13
" " 37½ ft.	A	..	2	..	..	..	..	..	2
" " 35 ft.	A	..	1	..	2	..	..	..	3
Ladies' (composite), bogie, 47½ ft.	A	..	..	..	4	..	..	..	4
" " " 50 ft.	A	..	9	..	..	..	..	..	9
Motor-train, bogie, 60 ft.	A	..	4	..	1	..	..	..	5
First-class, bogie, 50 ft.	A	..	46	..	..	..	..	..	46
" " 47½ ft.	A	..	40	..	82	..	..	2	124
" " 44 ft.	A	..	3	..	3	..	..	1	7
" " 43 ft.	A	..	11	..	..	..	..	..	11
" " 30 ft.	B	..	..	..	1	..	..	..	1
Composite, bogie, 60 ft.	A	..	8	..	..	..	..	..	8
" " 50 ft.	A	..	52	..	1	..	..	..	53
" " 47½ ft.	A	..	105	2	105	1	4	2	219
" " 46 ft.	A	..	..	..	5	..	..	..	5
" " 44 ft.	A	..	65	7	80	2	1	2	157
" " 43 ft.	A	..	7	..	..	..	..	..	7
" " 42½ ft.	A	..	15	..	30	..	..	..	45
" " 39½ ft.	A	..	2	..	4	1	2	1	10
" " 30 ft.	B	..	12	..	19	..	..	..	31
" " 6-wheel	C	2	..	..	1	..	..	..	3
Second-class, bogie, 52 ft.	A	..	1	..	..	..	..	..	1
" " 50 ft.	A	..	104	..	1	..	..	..	105
" " 47½ ft.	A	..	96	..	137	3	..	..	236
" " 46 ft.	A	..	..	..	6	..	..	..	6
" " 44 ft.	A	..	86	4	116	3	3	4	216
" " 43 ft.	A	..	18	..	..	..	..	..	18
" " 42½ ft.	A	..	3	..	14	..	..	..	17
" " 39½ ft.	A	..	9	..	3	..	..	..	12
" " 35 ft.	A	..	3	..	..	..	..	..	3
" " 30 ft.	B	..	6	..	16	..	..	..	22
" " 6-wheel	C	2	2	..	2	2	4	..	12
" " 4-wheel	D	..	..	..	..	4	..	..	4
Postal, bogie, 50 ft.	A	..	7	..	3	..	..	..	10
" " 44 ft.	A	..	4	..	4	..	..	..	8
" " 39½ ft.	A	..	2	..	..	..	..	..	2
Totals	..	4	874	13	665	16	14	12	1,598
RAIL-CARS.									
Rail-car, 58 ft. (Clayton)	..	..	..	..	1	..	..	..	1
" " 56½ ft. (Sentinel)	..	..	1	..	..	..	..	..	1
" " 55½ ft. (Edison)	..	..	..	..	1	..	..	..	1
" " 16 ft. (Ford)	..	..	..	..	2	..	..	..	2
Totals	..	..	1	..	4	..	..	..	5
BRAKE-VANS.									
Brake-vans, 4-wheel	F	2	11	..	33	4	3	..	53
" " bogie	F	..	238	4	162	5	3	4	416
" " Fell	F	..	7	..	4	..	..	..	11
Totals	..	2	256	4	199	9	6	4	480

STATEMENT NO. 29—continued.

STATEMENT OF CARRIAGE, BRAKE-VAN, AND WAGON STOCK, AND TARPAULINS, FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

Description.					Class.	Kaihu.	North Island Main Line and Branches.	Gisborne.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.
WAGONS.													
Horse-boxes	..	..	..	..	G	..	118	1	106	..	1	4	230
Cattle	..	..	..	..	H	..	379	4	259	4	5	8	659
Sheep	..	..	..	..	J	..	1,111	40	1,003	..	10	40	2,204
Covered goods	..	..	..	..	K	1	321	2	340	5	6	3	678
Sleeping-vans	..	..	..	..	K	..	25	..	51	1	1	..	78
High sides	..	..	..	..	L	4	5,291	47	4,895	17	103	174	10,531
..	..	..	..	..	La	..	2,479	..	2,535	..	..	..	5,014
Low sides	..	..	..	..	M	12	511	40	927	24	14	21	1,549
.. (steel)	..	..	..	..	Ma	..	148	12	..	..	..	..	160
Work-train	..	..	..	..	Mb	..	86	..	26	..	..	..	112
Timber	..	..	..	..	N	40	176	..	195	65	8	..	484
Iron hopper	..	..	..	..	O	..	21	..	..	..	..	..	21
.. for ballast	..	..	..	..	Ob	..	28	..	..	..	..	..	28
Platform coal	..	..	..	..	P	..	228	..	..	..	..	..	228
Moveable hopper	..	..	..	..	Q	..	..	..	495	673	..	..	1,168
Frozen meat	..	..	..	..	W	..	292	10	91	..	15	..	408
Cool, insulated	..	..	..	..	X	..	173	..	32	..	..	..	205
.. ventilated	..	..	..	..	Xa	1	214	..	212	..	..	7	434
..	..	..	..	..	Xb	..	98	..	55	..	..	..	153
Work-train hopper..	..	..	..	..	Y	..	..	..	10	..	..	..	10
..	..	..	..	..	Yb	..	272	..	137	..	..	..	409
High-side, bogie	..	..	..	..	R	2	223	..	84	..	..	..	309
..	..	..	..	..	Rb	..	70	..	21	..	..	..	91
..	..	..	..	..	Rd	..	54	..	..	..	..	..	54
..	..	..	..	..	Rn	..	34	..	..	..	..	..	34
Sheep, bogie	..	..	..	..	S	..	64	..	43	..	..	..	107
Cattle, bogie	..	..	..	..	T	..	46	..	24	..	..	..	70
Platform, bogie	..	..	..	..	U	..	237	40	135	4	4	6	426
Gas-storeholders, bogie	..	..	..	..	Ua	..	11	..	7	..	..	..	18
Platform, ..	..	..	..	..	Ub	..	134	..	219	..	..	..	353
Oil fuel, ..	..	..	..	..	Ud	..	..	..	1	..	..	..	1
Horse-boxes, ..	..	..	..	..	Ug	..	37	..	29	..	..	..	66
Frozen meat, ..	..	..	..	..	V	..	47	12	73	..	..	..	132
..	..	..	..	..	Vb	..	124	..	60	..	..	..	184
Covered goods, ..	..	..	..	..	Z	..	61	..	40	..	..	..	101
..	..	..	..	..	Zp	..	46	..	68	..	..	..	114
Totals	..	..	..	..	..	60	13,159	208	12,173	793	167	263	26,823
Tarpaulins	..	..	..	..	..	30	10,868	115	11,345	52	175	290	22,875

STATEMENT No. 30.

STATEMENT OF LOCOMOTIVE STOCK FOR THE YEAR ENDED 31st MARCH, 1929.

Class.	Type.	Cylinder.		Coupled Wheels.		Truck Wheels.		Kaihu.	North Island Main Line and Branches.	Gisborne.	South Island Main Line and Branches.	Westport.	Nelson.	Picton.	Total.
		Dia-meter.	Stroke.	No.	Dia-meter.	No.	Dia-meter.								
A	Tender (4-cyl. balanced compound), (17 superheated) ..	In. 12 & 19	In. 22	6	Ft. in. 4 6	6	In. 30½	..	50	..	7	..	..	..	57
AA	Tender (superheated) ..	18	24	6	4 1	6	30½	..	10	..	..	..	..	..	10
AB	" "	17	26	6	4 6	{ 2 4	26½ 30½	..	87	..	54	..	..	..	141
AB	" (409) "	17	26	6	4 6	6	30½	..	..	..	1	..	..	..	1
B	" (3 superheated)	16	22	8	3 6½	4	30½	..	..	..	8	..	..	..	8
BA	" (superheated)	16	22	8	3 6½	4	26½	..	..	..	10	..	..	..	10
BB	" "	17	22	8	3 6½	4	26½	..	30	..	..	..	..	..	30
F	Tank ..	10½	18	6	3 0½	..	..	2	23	..	37	4	1	..	67
FA	" "	12	18	6	3 0½	2	24	..	7	..	3	2	3	2	17
G	" Garratt " (articulated)	16½	24	6	4 9	4	33	..	1	..	..	..	..	..	1
H	Tank (Fell) ..	14	16	4	2 8	2	30½	..	6	..	..	..	..	..	6
J	Tender ..	14	20	6	3 6½	2	24½	..	9	..	11	..	..	..	20
L	Tank ..	12	18	4	3 6½	6	26½	..	3	..	1	..	..	..	4
N	Tender ..	15	20	6	4 1½	4	28½	..	3	..	..	..	..	..	3
N	" "	15	20	6	4 1½	4	30½	..	..	..	1	..	..	..	1
NA	" (compound) ..	10 & 17	20	6	4 1	4	30½	..	1	..	..	..	..	..	1
NC	" "	10 & 17	20	6	4 1	4	30½	..	1	..	..	..	..	..	1
OA	" "	11 & 18	20	8	3 7	2	30½	..	1	..	..	..	..	..	1
OB	" "	16	20	8	3 7	2	30½	..	2	..	..	..	..	..	2
OC	" (compound) ..	11 & 18	20	8	3 7	2	30½	..	1	..	..	..	..	..	1
P	" "	15	20	8	3 5	2	26½	..	..	..	1	..	..	..	1
Q	" (2 superheated)	16	22	6	4 1½	{ 2 4	30½ 26½	..	6	..	7	..	..	..	13
R	Single Fairlie ..	12½	16	6	3 0½	4	36½	..	..	..	5	..	..	..	5
U	Tender (superheated)	16	20	6	4 6	4	30½	..	..	..	9	..	..	..	9
UA	" (2 superheated)	16	20	6	4 1½	4	30½	..	..	..	6	..	..	..	6
UB	" (3 superheated)	16	20	6	4 1½	4	26½	..	..	..	20	..	..	..	20
UB	" (1 superheated)	16	22	6	4 1½	4	30½	..	..	..	2	..	..	..	2
UC	" "	16	22	6	4 1½	4	30½	..	..	..	10	..	..	..	10
UD	" "	16½	22	6	4 10	4	28	..	2	..	..	..	..	..	2
W	Tank ..	14	20	6	3 0½	4	26½	..	..	..	2	..	..	..	2
WA	" "	14	20	6	3 3½	4	28½	..	1	6	3	..	..	..	10
WA	" (converted) ..	14	20	6	3 6½	4	24½	..	3	..	1	..	..	..	4
WAB	" (superheated) ..	17	26	6	4 6	{ 4 4	30½ 26½	..	6	..	10	..	..	..	16
WB	" "	14	20	6	3 3½	4	25	..	4	..	..	6	..	..	10
WD	" "	14	20	6	3 3½	6	25	..	11	..	7	..	..	..	18
WE	" (1 superheated)	16	22	6	3 6½	8	30½	..	..	..	2	..	..	..	2
WF	" "	14	22	6	3 9	6	30½	..	17	..	17	..	3	4	41
WG	" (8 superheated)	14	22	6	3 9	8	26½	..	20	..	..	..	..	..	20
WS	" (superheated) ..	17	26	6	4 6	{ 4 4	30½ 26½	..	14	..	..	..	..	..	14
WW	" "	15½	22	6	3 9	8	26½	..	48	..	2	..	..	..	50
X	Tender (4-cyl. balanced compound) ..	13½ & 22	22	8	3 9	{ 2 4	30½ 26½	..	18	..	..	..	..	..	18
..	Electric ..	..	..	8	3 8½	..	..	..	..	..	11	..	..	..	11
..	Battery ..	..	..	8	3 0½	..	..	..	..	..	1	..	..	..	1
	Totals ..	..	..	..	..	..	..	2	385	6	249	12	7	6	667

STATEMENT No. 31.
PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31ST MARCH, 1929.

Type.	Number of Engines.															Type.	
	Engine-mileage.					Quantity of Stores.		Cost.				Cost per Engine-mile, in Pence.					Days in Steam.
	Details.			Total	Running.		Repairs.	Running.			Repairs.	Running.			Total.		
	Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.		Coal.	Oil.		Wages and Material.	Stores.	Fuel.		Wages.	Wages and Material.	Stores.			

KAIHU SECTION.

F	2	17,393	5,030	16	22,439	Cwt.	Qt.	£	£	£	£	£	£	£	£	£
..	..	..	..	..	..	4,486	669	393	49	565	947	1,954	4-20	0-52	6-04	10-14
..	..	..	..	..	..	..	..	..	..	..	..	129	..	..	..	20-90
..	..	..	..	..	..	..	..	..	..	..	..	17	..	..	..	1-38
..	..	..	..	..	..	..	..	..	..	..	..	54	..	..	..	0-18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3-03
Totals	..	..	..	..	22,439	..	..	..	..	..	..	2,154	..	..	..	23-04
																F.

GISBORNE SECTION.

WA	6	76,586	16,156	3	92,745	37,895	3,483	1,986	187	6,436	3,135	£	£	£	£	£
..	..	..	..	..	..	..	..	..	..	..	..	11,744	5-14	0-48	8-11	30-39
..	..	..	..	..	..	..	..	..	..	..	..	682	..	..	..	1-76
..	..	..	..	..	..	..	..	..	..	..	..	168	..	..	..	0-43
..	..	..	..	..	..	..	..	..	..	..	..	1,168	..	..	..	3-03
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	76,586	16,156	3	92,745	..	..	..	..	..	..	13,762	..	..	..	35-61
..	..	..	..	3*	3	..	..	..	..	..	..	..	..	..	..	..
Totals	..	76,586	16,156	..	92,742	..	..	..	..	..	..	13,762	..	..	..	..
																WA.

* Gisborne Section : Mileage of engines performing work-train services for Maintenance, "Working-expenses" classifications.

STATEMENT NO. 31—continued,
PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

Type.	Number of Engines.	Engine-mileage.			Quantity of Stores.			Cost.				Cost per Engine-mile, in Pence.				Days in Steam.	Type.		
		Details.			Running.			Repairs.		Running.		Repairs.		Running.					
		Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.	Total	Coal.	Oil.	Wages and Material.	Stores.	Fuel.	Wages.	Total.	Wages and Material.	Stores.	Fuel.			Wages.	Total.
A	50	1,069,482	241,497	9,738	1,320,717	Cwt.	Qt.	£	£	£	£	7-01	0-56	10-66	8-17	26-40	11,115	A.	
AA	10	197,238	39,364	1,922	238,524	148,149	8,134	3,632	485	16,018	7,298	3-65	0-49	16-12	7-34	27-60	2,184	AA.	
AB	87	2,690,321	590,153	3,079	3,283,553	1,550,534	107,032	68,782	6,283	150,110	89,921	5-03	0-46	10-97	6-57	23-03	22,483	AB.	
BB	30	597,526	179,844	3,702	781,072	418,482	28,730	15,912	1,728	44,047	27,797	4-89	0-53	13-54	8-54	27-50	7,282	BB.	
F	23	6,723	165,249	17,814	189,786	62,571	5,849	4,396	386	5,286	10,858	5-56	0-49	6-68	13-73	26-46	3,666	F.	
FA	7	7,550	83,544	417	91,511	35,986	3,200	894	209	3,063	5,452	2-34	0-55	8-03	14-30	25-22	1,327	FA.	
G	1	104	631	3	738	457	35	44	1	52	91	14-31	0-33	16-91	29-59	61-15	12	G.	
H	6	13,482	26,006	..	39,488	45,020	2,993	5,758	183	5,083	3,845	35-00	1-11	30-89	23-37	90-37	1,157	H.	
J	9	104	144,714	193	145,011	72,367	4,896	5,602	329	6,379	9,053	9-27	0-54	10-57	14-98	35-36	1,997	J.	
L	3	14,039	17,899	48	31,986	10,113	869	145	61	978	1,626	1-09	0-46	7-33	12-20	21-08	623	L.	
M	1	1,374	3,686	18	5,078	2,048	172	29	11	230	268	1-37	0-52	10-87	12-67	25-43	75	M.	
N	3	7,029	41,156	1,114	49,299	26,434	1,831	551	118	2,198	2,663	2-68	0-57	10-71	12-96	26-92	697	N.	
NA	1	16,305	3,792	688	20,785	9,460	747	162	47	705	679	1-87	0-54	8-14	7-84	18-39	186	NA.	
NC	1	5,578	3,676	..	9,254	4,860	379	244	23	549	407	6-33	0-60	14-23	10-56	31-72	129	NC.	
OA	1	32	8,507	2,907	11,446	6,165	469	260	30	449	636	5-45	0-63	9-41	13-34	28-83	160	OA.	
OB	2	7,507	2,498	..	10,005	5,883	383	131	22	665	355	3-14	0-53	15-95	8-52	28-14	127	OB.	
OC	1	10,934	5,463	..	16,397	9,520	675	122	40	1,075	622	1-79	0-59	15-73	9-10	27-21	205	OC.	
Q	6	145,340	29,924	3,341	178,605	98,031	5,642	1,481	366	8,978	5,915	1-99	0-49	12-06	7-95	22-49	1,501	Q.	
UD	2	29,420	16,298	..	38,718	17,181	1,525	244	93	1,415	1,623	1-51	0-58	8-77	10-06	20-92	479	UD.	
WA	1	5,842	12,878	91	18,811	8,090	659	929	41	766	991	11-85	0-52	9-77	12-65	34-79	299	WA.	
WA (converted)	3	10,285	40,661	77	51,023	22,795	2,075	1,014	126	1,960	2,771	4-77	0-59	9-22	13-04	27-62	598	WA (converted).	
WAB	6	114,294	24,606	875	139,775	78,581	5,867	3,145	318	8,760	3,732	5-40	0-55	15-04	6-41	27-40	1,329	WAB.	
WB	4	54,173	34,602	2,202	90,977	51,166	3,293	569	198	3,087	3,878	1-50	0-52	8-14	10-22	20-38	1,092	WB.	
WD	11	56,897	148,510	1,951	207,358	111,331	7,359	7,501	468	9,784	10,711	8-68	0-54	11-32	12-40	32-94	2,460	WD.	
WF	17	96,369	161,065	14,524	271,958	121,436	9,195	10,757	570	11,865	12,352	9-49	0-50	10-47	10-91	31-37	3,355	WF.	
WG	20	109,946	216,959	14,788	341,693	182,279	12,681	15,462	785	16,849	16,174	10-86	0-55	11-83	11-37	34-61	4,071	WG.	

NORTH ISLAND MAIN LINE AND BRANCHES.

STATEMENT NO. 31—continued.

PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31st MARCH, 1929—continued.

Type.	Number of Engines.	Engine-mileage.			Quantity of Stores.		Cost.					Cost per Engine-mile, in Pence.				Days in Steam.	Type.
		Details.			Running.		Repairs.	Running.				Repairs.	Running.				
		Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.	Total	Coal.		Oil.	Stores.	Fuel.	Wages.		Stores, Fuel, Wages.	Total.			
Ws	14	346,030	77,600	1,022	424,652	224,447	15,154	£	899	£	18,298	£	15,920	£	47,628	26-92	Ws.
Ww	48	758,564	360,871	89,187	1,208,622	567,930	42,435	£	2,524	£	55,042	£	46,198	£	136,840	27-17	Ww.
X	18	336,341	42,547	4,443	383,331	301,069	26,303	£	1,289	£	32,379	£	13,955	£	64,837	40-59	X.
Totals (steam)	386	6,701,829	2,724,200	174,144	9,600,173	4,872,337	350,789	£	249,133	£	464,736	£	340,752	£	1,075,336	26-88	..
Rm 1	1	3,683	349	..	4,032	351	186	£	175	£	41	£	111	£	339	20-18	Rm 1 (steam).
Totals (including rail-motor)	387	6,705,512	2,724,549	174,144	9,604,205	4,872,688	350,975	£	249,308	£	464,777	£	340,863	£	1,075,675	26-88	..
Betterments and depreciation	..	..	..	..	..	..	..	£	..	£	..	£	..	£	57,702	1-44	..
Water charges	..	..	..	..	..	..	..	£	..	£	..	£	..	£	14,519	0-36	..
Conversions and alterations	..	..	..	..	..	..	..	£	..	£	..	£	..	£	20,299	0-51	..
General charges	..	..	..	..	..	..	..	£	..	£	..	£	..	£	129,277	3-23	..
Totals	..	6,705,512	2,724,549	174,144	9,604,205	4,872,688	350,975	£	249,308	£	464,777	£	340,863	£	1,075,675	32-42	..
	..	..	5,615*	15,895†	21,510	..	..	£	..	£	..	£	..	£	3,130†	..	..
	..	6,705,512	2,718,934	158,249	9,582,695	..	..	£	..	£	..	£	..	£	1,294,342	..	..

NOTE.—One FA, five J, one M, one N, one NA, one NC, one R, one T, one WA, one WB, one WH written off. One G, three Wp new during the year.

* Mileage of engines performing shunting services for workshops. † Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.

‡ Credits for same.

STATEMENT NO. 31—continued.

PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31st MARCH, 1929—continued.

Type.	Engine-mileage.				Quantity of Stores.				Cost.				Cost per Engine-mile, in Pence.				Days in Steam.	Type.
	Details.			Total	Running.		Repairs.	Running.			Total.	Running.		Total.				
	Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.		Coal.	Oil.		Wages and Material.	Stores.	Fuel.		Wages.						
Number of Engines.		Cwt.	Qt.	£	£	£	£	£	£	£	£	£	£	£	£	£		
A	7	165,103	27,199	192,302	109,140	9,079	7,316	420	7,947	6,201	21,884	9.13	0.52	9.92	7.74	27.31	1,480	A.
AB 409	1	19,418	3,622	23,208	11,302	758	1,521	36	880	632	3,069	16.36	0.39	9.47	6.80	33.02	181	AB 409.
AB	54	1,693,902	457,318	2,154,928	1,089,385	82,374	51,244	3,496	84,980	59,200	198,920	5.71	0.39	9.46	6.59	22.15	13,966	AB.
B	8	92,434	74,275	167,404	106,668	7,148	4,214	332	8,059	7,451	20,056	6.04	0.48	11.55	10.68	28.75	1,950	B.
BA	10	98,295	83,847	183,215	116,173	9,409	6,255	430	9,088	8,962	24,735	8.19	0.56	11.91	11.74	32.40	2,418	BA.
F	37	16,786	459,036	480,285	197,499	18,559	13,967	943	14,369	29,817	59,096	6.98	0.47	7.18	14.90	29.53	7,772	F.
FA	3	13,409	25,780	39,255	16,286	1,633	1,825	81	1,238	1,995	5,139	11.15	0.50	7.57	12.20	31.42	618	FA.
J	11	22,800	182,047	210,889	98,893	8,674	2,301	441	7,845	12,940	23,527	2.62	0.50	8.93	14.72	26.77	2,995	J.
L	1	4,468	2,612	7,086	3,445	198	62	9	251	338	660	2.10	0.30	8.50	11.45	22.35	115	L.
N	1	14,347	9,303	23,835	10,989	680	373	36	871	872	2,152	3.76	0.36	8.77	8.78	21.67	236	N.
P	1	2,495	7,487	28,528	14,193	1,000	487	48	1,048	1,230	2,813	4.10	0.40	8.82	10.35	23.67	341	P.
Q	7	149,908	32,513	182,497	95,814	6,024	5,403	267	7,483	5,549	18,702	7.11	0.35	9.83	7.30	24.59	1,579	Q.
R	5	8,473	44,287	52,923	20,428	1,830	2,743	90	1,703	3,266	7,802	12.44	0.41	7.72	14.81	35.38	1,075	R.
U	9	208,247	30,943	239,625	119,400	8,603	4,856	416	8,966	7,575	21,813	4.86	0.42	8.98	7.59	21.85	2,272	U.
UA	6	124,286	23,487	153,164	83,013	5,065	2,649	244	6,225	5,096	14,214	4.15	0.38	9.75	7.99	22.27	1,501	UA.
UB	22	457,181	104,087	564,396	339,739	19,360	13,314	889	26,432	18,544	59,179	5.66	0.38	11.23	7.89	25.16	5,093	UB.
UC	10	190,228	55,480	253,261	134,374	8,713	5,993	399	10,440	8,585	25,417	5.68	0.38	9.89	8.14	24.09	2,448	UC.
W	2	15,532	11,979	27,665	13,928	1,240	543	59	1,078	1,395	3,075	4.71	0.51	9.35	12.10	26.67	448	W.
WA	3	25,772	14,064	41,351	20,601	1,782	1,473	87	1,608	2,148	5,316	8.55	0.50	9.33	12.47	30.85	649	WA.
WA (converted)	1	7,635	7,896	15,531	6,414	684	142	35	512	738	1,427	2.19	0.54	7.91	11.41	22.05	211	WA (converted).
WAB	10	315,181	26,580	341,859	225,888	13,165	6,501	546	17,420	9,297	33,764	4.56	0.38	12.23	6.53	23.70	2,484	WAB.
WD	7	26,102	53,757	90,522	51,884	4,467	3,432	216	3,924	4,952	12,524	9.10	0.57	10.40	13.13	33.20	1,453	WD.
WE	2	20,708	9,257	29,965	21,054	1,459	1,036	68	1,642	1,659	4,405	8.30	0.54	13.15	13.29	35.28	479	WE.
WF	17	238,889	122,421	374,358	187,292	14,828	9,536	704	14,525	15,540	40,305	6.11	0.45	9.32	9.96	25.84	4,283	WF.
WW	2	36,697	12,007	49,354	28,250	2,078	1,189	101	2,143	2,194	5,627	5.78	0.49	10.42	10.67	27.36	509	WW.
Totals (steam)		237	3,974,296	1,882,184	5,927,406	3,122,052	228,810	148,375	240,677	216,176	615,621	6.01	0.42	9.75	8.75	24.93	56,556	
E 1	1	38,112	47,522	85,690	8,562	112	256	8	93	191	548	14.41	0.45	5.24	10.76	30.86	85	E 1 (elec. battery).
E 2-6	5	12,286	3,715	16,733	422,515	311	241	20	17,257	1,688	21,968	8.10	0.37	48.33	4.73	61.53	1,240	E 2-6 (electric).
E 7-12	6								972	224	1,457	3.46	0.29	13.94	3.21	20.90	222	E 7-12 (electric).

STATEMENT NO. 31—continued.

PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

Type.	Number of Engines.	Engine-mileage.			Quantity of Stores.			Cost.						Cost per Engine-mile, in Pence.				Days in Steam.	Type.	
		Details.			Running.			Repairs.			Running.			Repairs.						
		Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.	Total	Coal.	Oil.	Wages and Material.	Stores.	Fuel.	Wages.	Total.	Wages and Material.	Stores.	Fuel.	Wages.	Total.			
SOUTH ISLAND MAIN LINE AND BRANCHES—continued.																				
Rm 2	..	1	12,348	570	..	12,918	Cwt. 1,345	422	£ 185	£ 26	£ 194	£ 457	£ 862	3-44	0-48	3-60	8-49	16-01	160	Rm 2 (steam).
Rm 4	..	1	6,235	1,523	..	7,758	Gals. 550	113	196	6	55	148	405	6-06	0-19	1-70	4-58	12-53	270	Rm 4 (petrol).
Rm 5	..	1	5,762	534	..	6,296	464	75	90	4	46	121	261	3-43	0-15	1-75	4-62	9-95	209	Rm 5 (petrol).
Rm 5	..	1	46,507	1,055	..	47,562	Units. 154,615	449	1,126	15	1,159	340	2,640	5-68	0-08	5-84	1-72	13-32	276	Rm 6 (electric).
Totals (including rail-motors, &c.)	253	4,095,546	1,937,160	75,919	6,108,625	3,123,397	232,075	153,360	10,604	260,453	219,345	643,762	6-03	0-42	10-22	8-62	25-29	59,018		
Betterments and depreciation	..	..	..	..	..	..	..	..	..	..	..	52,070	..	..	..	..	2-05	..		
Water charges	..	..	..	..	..	..	..	..	..	..	..	8,988	..	..	..	..	0-35	..		
Conversions and alterations	..	..	..	..	..	..	..	..	..	..	..	21,507	..	..	..	..	0-85	..		
General charges	..	..	..	..	..	..	..	..	..	..	..	93,925	..	..	..	..	3-69	..		
Totals	..	4,095,546	1,937,160	75,919	6,108,625	3,123,397	232,075	153,360	10,604	260,453	219,345	643,762	6-03	0-42	10-22	8-62	25-29	59,018		
		..	..	5,674*	11,836	..	..	..	..	..	..	1,895†	..	..	..	..	32-23	..		
		4,095,546	1,931,486	69,757	6,096,789	..	..	..	..	..	..	818,357	..	..	..	..	..	..		
NOTE.—Four F, one J, one K, one LA, two P, one R, one T, one V written off. Six electric (7-12) new during the year.																				
* Mileage of engines performing shunting services for workshops.																				
† Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.																				
† Credits for same.																				
WESTPORT SECTION.																				
F	..	4	1,907	24,338	411	26,656	Cwt. 7,873	Qt. 1,067	£ 881	£ 60	£ 512	£ 1,721	£ 3,174	7-93	0-54	4-61	15-50	28-58	427	F.
FA	..	2	9,960	20,587	215	30,762	12,161	1,315	870	73	786	1,671	3,400	6-79	0-57	6-13	13-04	26-53	450	FA.
WB	..	6	80,444	36,218	239	116,901	68,882	4,853	4,547	266	4,481	4,944	14,238	9-34	0-55	9-20	10-14	29-23	1,352	WB.
Totals	..	12	92,311	81,143	865	174,319	88,916	7,235	6,298	399	5,779	8,336	20,812	8-67	0-55	7-96	11-47	28-65	2,229	
Betterments and depreciation	..	..	..	..	..	..	..	..	..	..	..	..	1,454	..	..	..	..	2-00	..	
Water charges	..	..	..	..	..	..	..	..	..	..	..	..	281	..	..	..	..	0-39	..	
Conversions and alterations	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	0-02	..	
General charges	..	..	..	..	..	..	..	..	..	..	..	..	3,782	..	..	..	..	5-21	..	
Totals	..	..	92,311	81,143	865	174,319	88,916	7,235	6,298	399	5,779	8,336	20,812	8-67	0-55	7-96	11-47	28-65	2,229	
		..	..	249*	2†	251	..	..	..	..	..	..	42†	..	..	..	..	36-27	..	
		92,311	80,894	863	174,068	..	..	..	..	..	..	..	26,344	..	..	..	..	..	..	
		..	..	..	..	..	..	..	..	..	..	..	26,392	..	..	..	..	..	..	
* Mileage of engines performing shunting services for workshops.																				
† Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.																				
† Credits for same.																				

SOUTH ISLAND MAIN LINE AND BRANCHES—continued.

NOTE.—Four F, one J, one K, one LA, two P, one R, one T, one V written off. Six electric (7-12) new during the year.
 * Mileage of engines performing shunting services for workshops.
 † Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.
 ‡ Credits for same.

WESTPORT SECTION.

F	..	4	1,907	24,338	411	26,656	Cwt. 7,873	£ 60	£ 512	£ 1,721	£ 3,174	7-93	0-54	4-61	15-50	28-58	427	F.
FA	..	2	9,960	20,587	215	30,762	12,161	73	786	1,671	3,400	6-79	0-57	6-13	13-04	26-53	450	FA.
WB	..	6	80,444	36,218	239	116,901	68,882	266	4,481	4,944	14,238	9-34	0-55	9-20	10-14	29-23	1,352	WB.
Totals	..	12	92,311	81,143	865	174,319	88,916	399	5,779	8,336	20,812	8-67	0-55	7-96	11-47	28-65	2,229	
Betterments and depreciation	..	..	..	..	..	..	..	..	..	..	1,454	..	..	..	..	2-00	..	
Water charges	..	..	..	..	..	..	..	..	..	..	281	..	..	..	..	0-39	..	
Conversions and alterations	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	0-02	..	
General charges	..	..	..	..	..	..	..	..	..	..	3,782	..	..	..	..	5-21	..	
Totals	..	..	92,311	81,143	865	174,319	88,916	399	5,779	8,336	20,812	8-67	0-55	7-96	11-47	28-65	2,229	
	..	..	..	249*	2†	251	..	..	..	..	42†	..	..	..	..	36-27	..	
	..	..	92,311	80,894	863	174,068	..	..	..	..	26,302	..	..	..	..	..	..	

* Mileage of engines performing shunting services for workshops.
 † Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.
 ‡ Credits for same.

STATEMENT NO. 31—continued.

PERFORMANCES OF LOCOMOTIVES FOR THE YEAR ENDED 31ST MARCH, 1929—continued.

Type.	Number of Engines.	Engine-mileage.				Quantity of Stores.			Cost.				Cost per Engine-mile, in Pence.				Days in Steam.	Type.			
		Details.			Total	Running.		Repairs.	Running.		Repairs.	Running.		Total.							
		Train.	Shunting, Assisting, Light, and Miscellaneous.	Work train.		Coal.	Oil.		Stores.	Fuel.		Wages.	Stores.		Fuel.	Wages.					
F	..	1	110	425	6,147	6,682	Cwt.	Qt.	£	£	£	£	£	£	1-44	0-29	5-28	9-01	16-02	93	F.
FA	..	3	13,464	11,379	103	24,946	7,764	175	40	8	147	251	446	2,991	9-02	0-44	9-31	10-01	28-78	438	FA.
WF	..	3	46,151	7,664	12	53,827	19,794	1,935	2,014	94	2,465	1,547	6,120	1,034	8-98	0-42	10-99	6-90	27-29	573	WF.
Totals	..	7	59,725	19,468	6,262	85,455	28,746	3,038	2,992	148	3,580	2,837	9,557	11,175	8-40	0-42	10-05	7-97	26-84	1,104	
Water charges	..	..	..	..	..	..	..	..	..	..	..	..	461	123	..	..	..	..	1-29	..	
General charges	..	..	..	..	..	..	..	..	..	..	..	..	1,034	..	..	..	..	..	0-35	..	
Totals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2-90	..	
Totals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31-38	..	
NELSON SECTION.																					
PICTON SECTION.																					
FA	..	2	3,618	2,707	..	6,325	Cwt.	Qt.	£	£	£	£	£	£	70-65	0-42	11-01	9-75	91-83	97	FA.
WF	..	4	62,791	26,796	98	89,685	31,872	2,741	1,862	138	3,960	3,071	8,827	8,827	4-44	0-37	10-60	8-21	23-62	897	WF.
Totals	..	6	66,409	29,503	98	96,010	34,208	2,959	3,520	149	4,250	3,328	11,247	12,768	8-80	0-37	10-62	8-32	28-11	994	
Water charges	..	..	..	..	..	..	..	..	..	..	..	..	496	85	..	..	..	..	1-24	..	
General charges	..	..	..	..	..	..	..	..	..	..	..	..	940	..	..	..	..	..	0-21	..	
Totals	..	..	66,409	29,503	98	96,010	..	..	..	..	..	..	..	77	..	..	..	..	2-36	..	
Totals	..	..	66,409	29,503	46	95,958	..	..	..	..	..	..	12,761	..	..	..	..	..	31-92	..	

* Mileage of engines performing work-train services for Maintenance "Working-expenses" classifications.

† Credits for same.

STATEMENT NO. 31—continued.

SUMMARY.

Section.	Number of Engines.	Engine-mileage.				Quantity of Stores.		Cost.			Section.								
		Detail.		Total.	Running.		Repairs.	Running.		Total.									
		Train.	Shunting, Assisting, Light, and Miscellaneous.		Coal.	Oil.		Stores.	Fuel.			Wages.							
													Work-train.						

Includes cost of 1,014 gallons benzine and 2,159,742 units electric current.

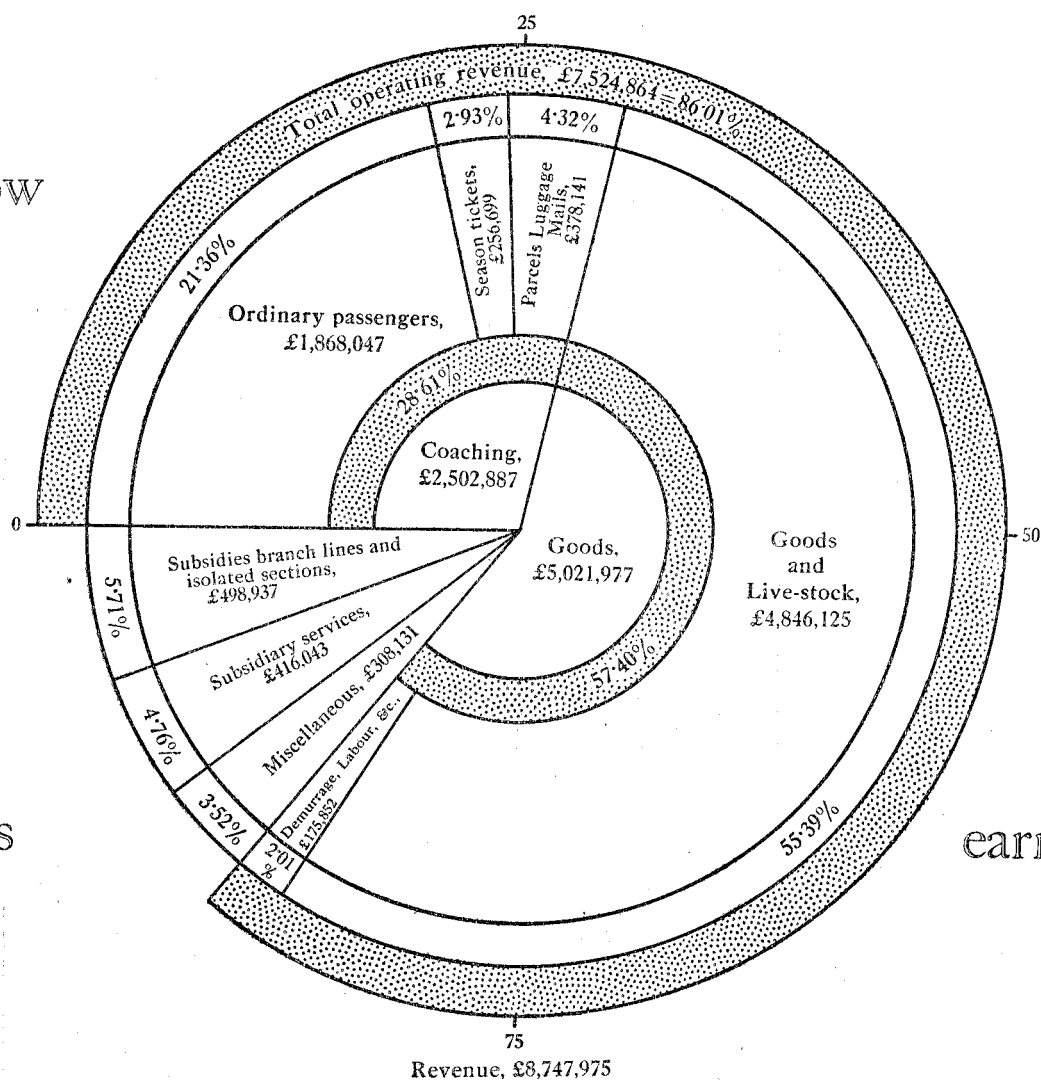
Revenue and Expenditure, Year ended 31st March, 1929.

How

it

was

earned.

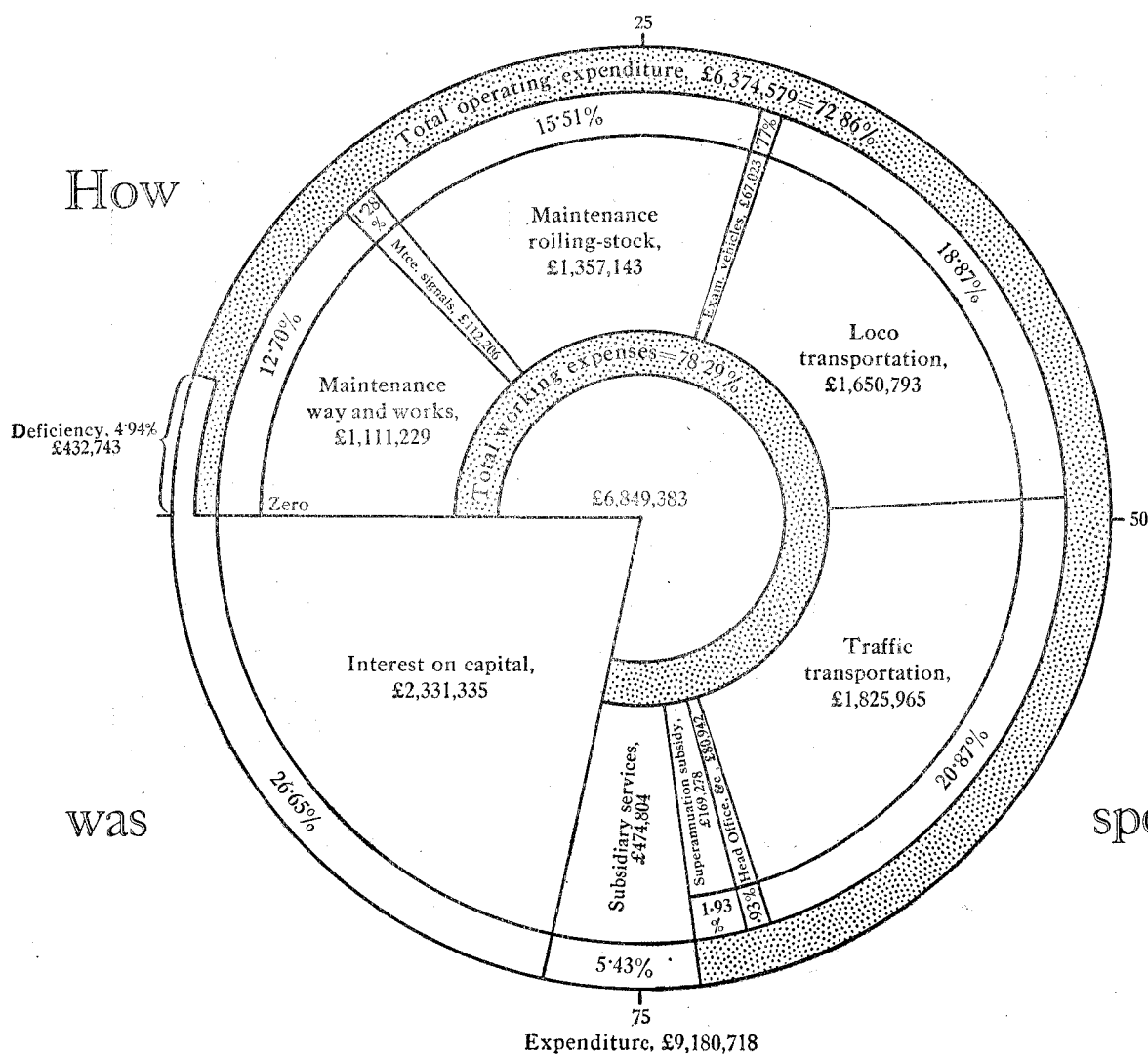


How

it

was

spent.



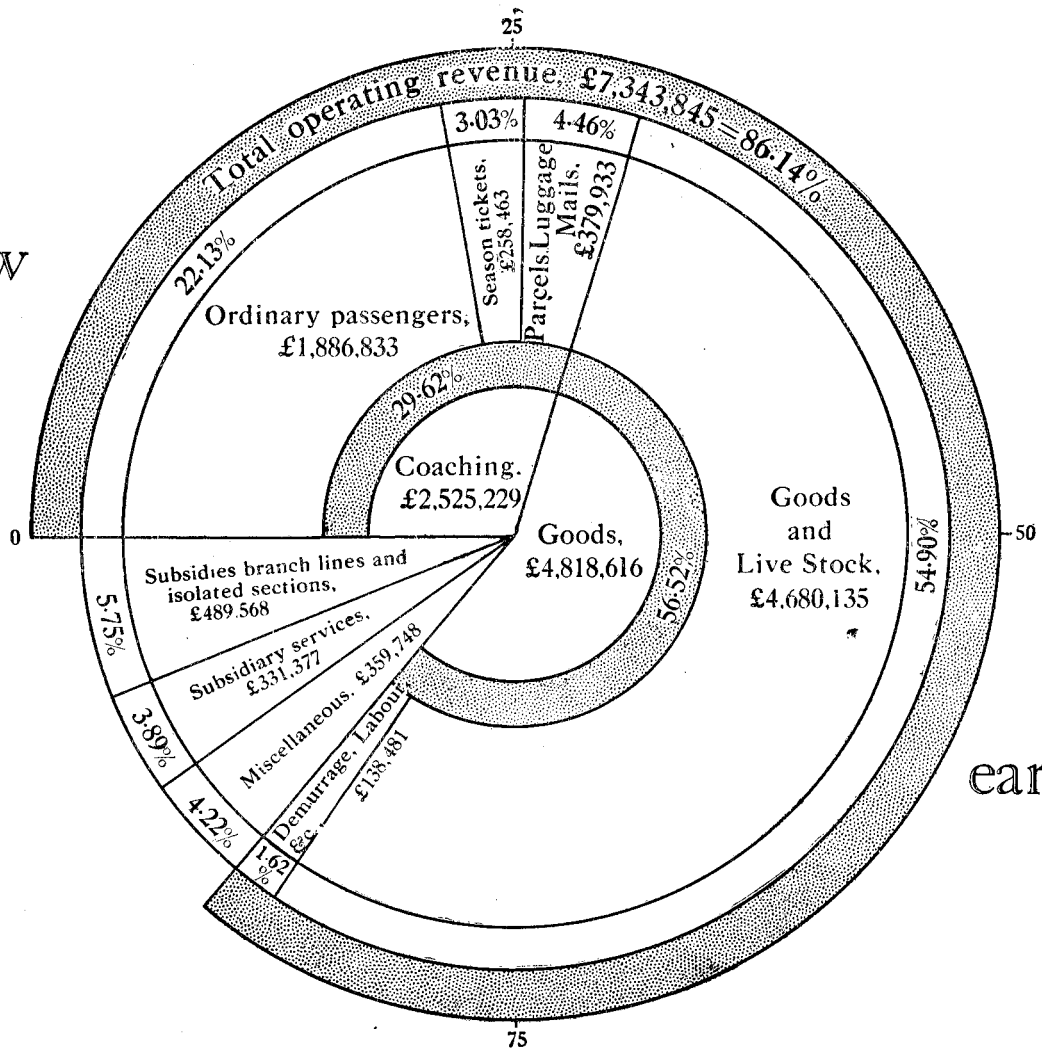
Revenue and Expenditure, Year ended 31st March, 1928.

How

it

was

earned.



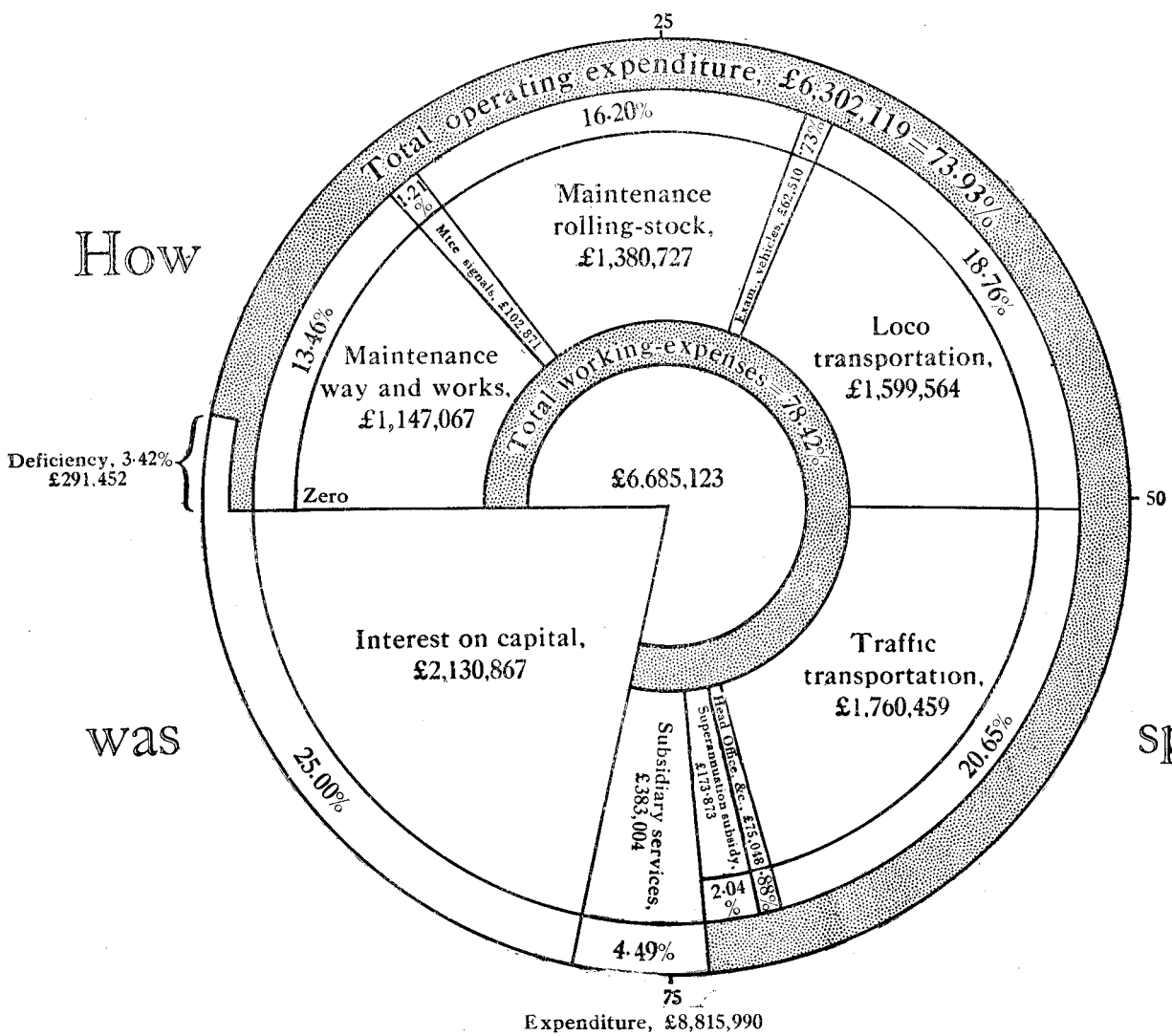
Revenue, £8,524,538

How

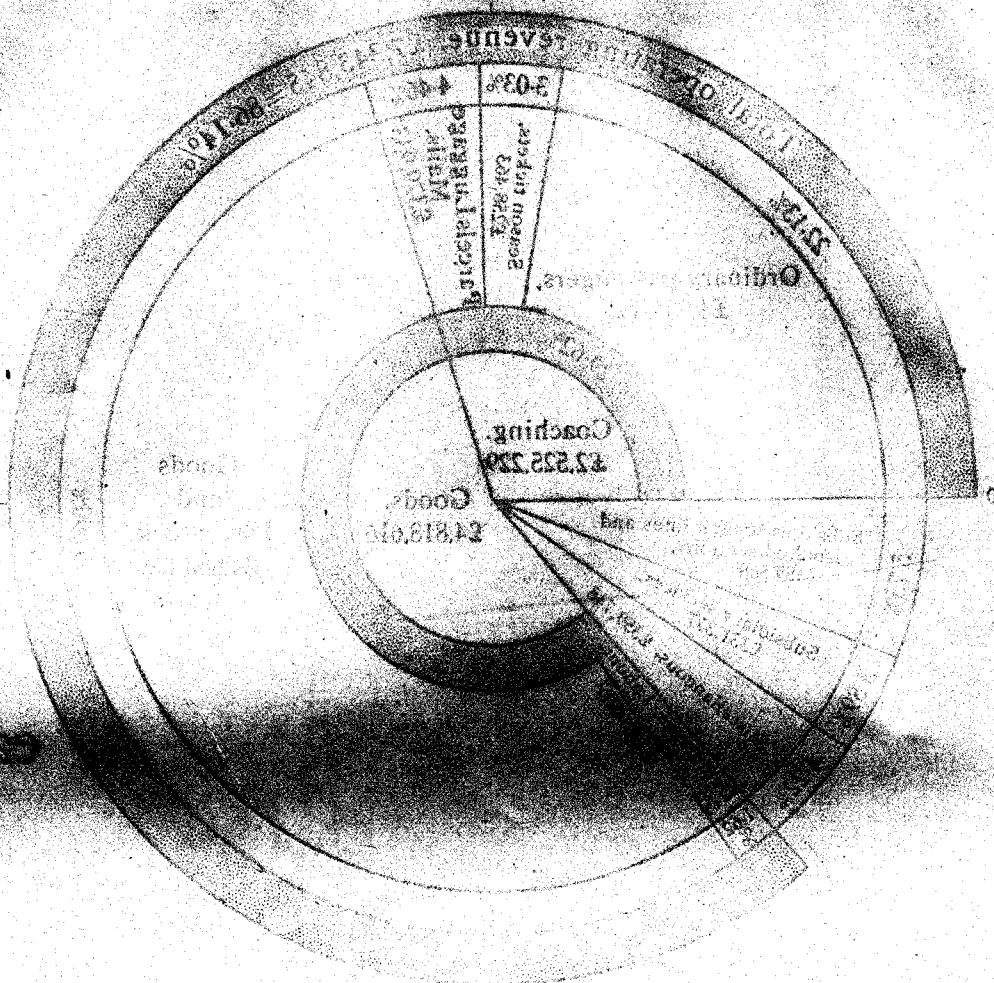
it

was

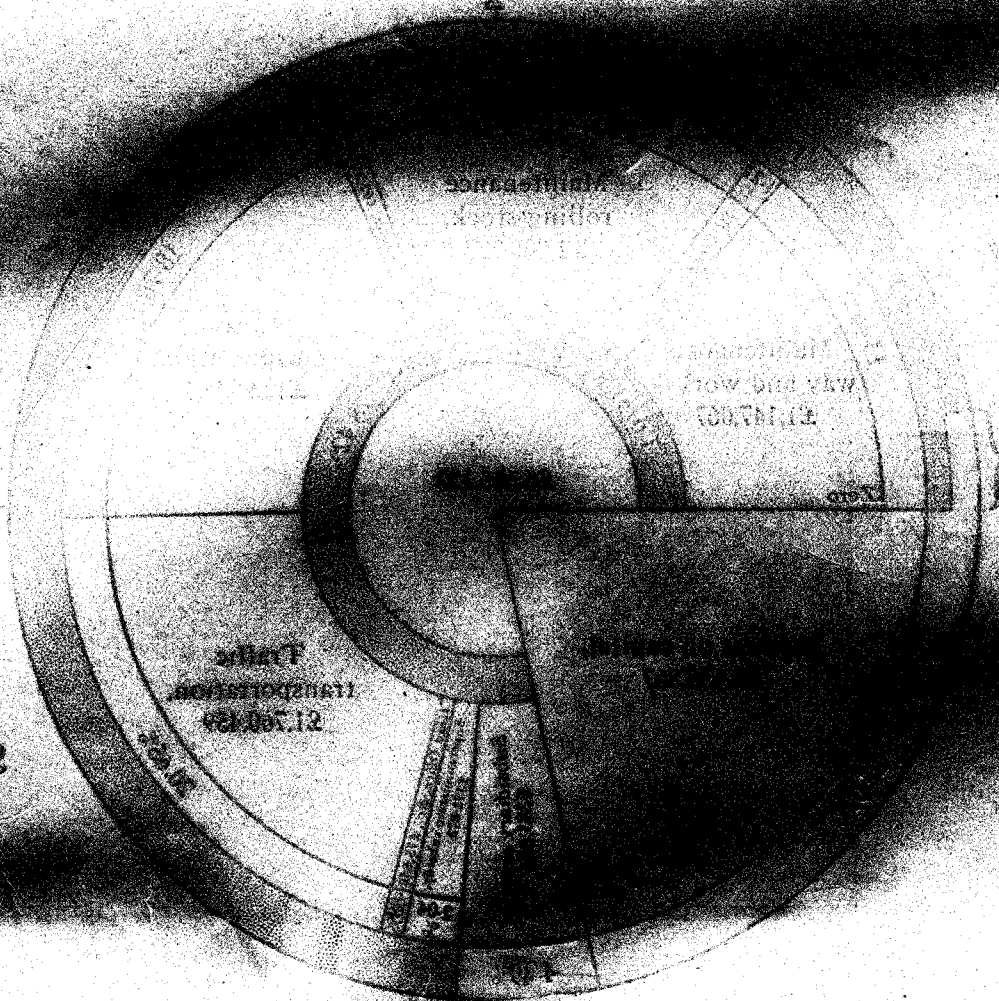
spent.



Expenditure, £8,815,990



Revenue Rs. 1,18,18,000

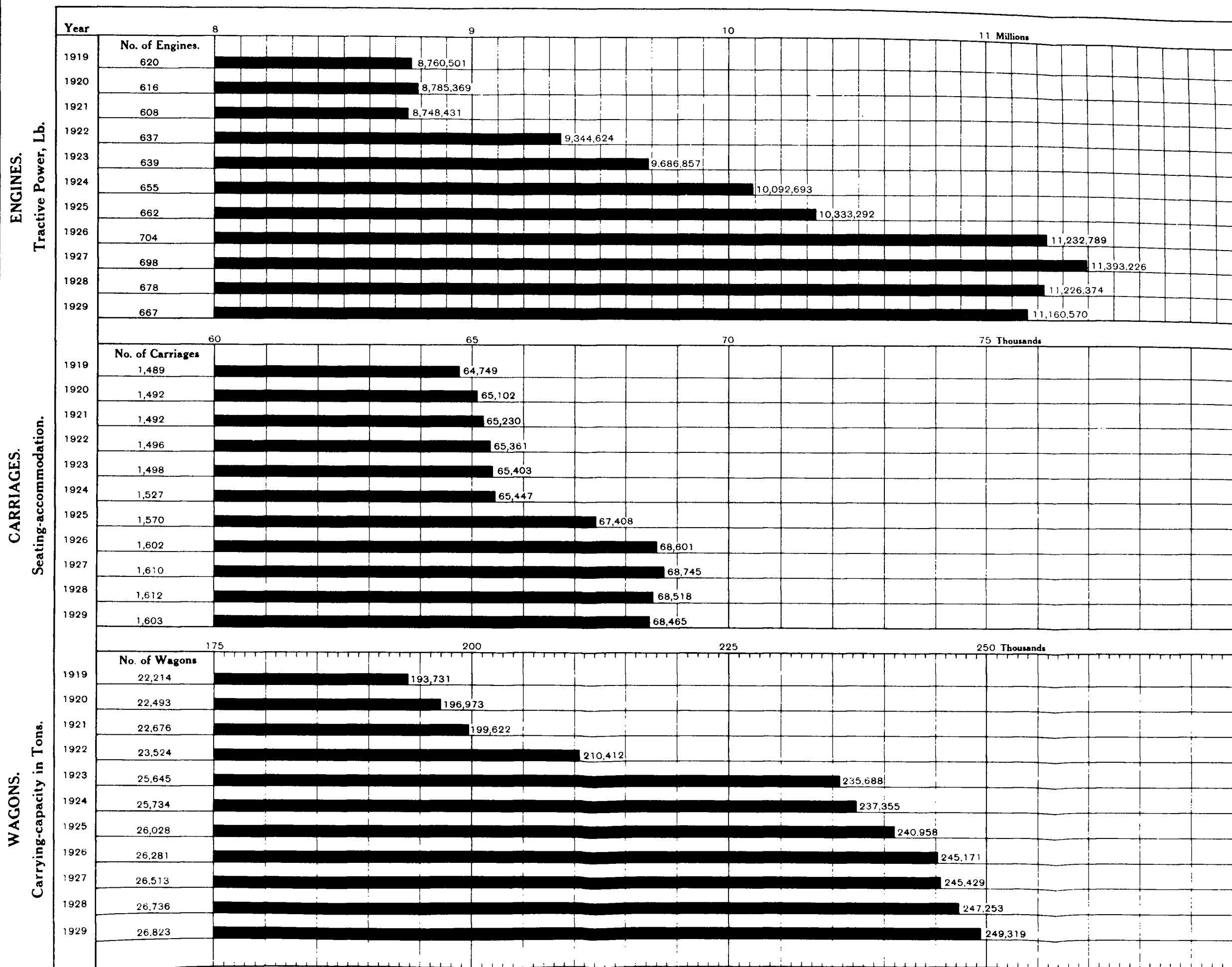


Revenue Rs. 1,18,18,000

Expenditure Rs. 1,18,18,000

NEW ZEALAND GOVERNMENT RAILWAYS.

Number of Engines and Tractive Power. Number of Carriages and Seating-accommodation.
Number of Wagons and Carrying-capacity in use from 1919 to 1929.



Percentage of Increase,
1919-1929

Engines
7.58 per cent.

Tractive Power
27.40 per cent.

Percentage of Increase,
1919-1929

Carriages
7.65 per cent.

Seating-accommodation
5.74 per cent.

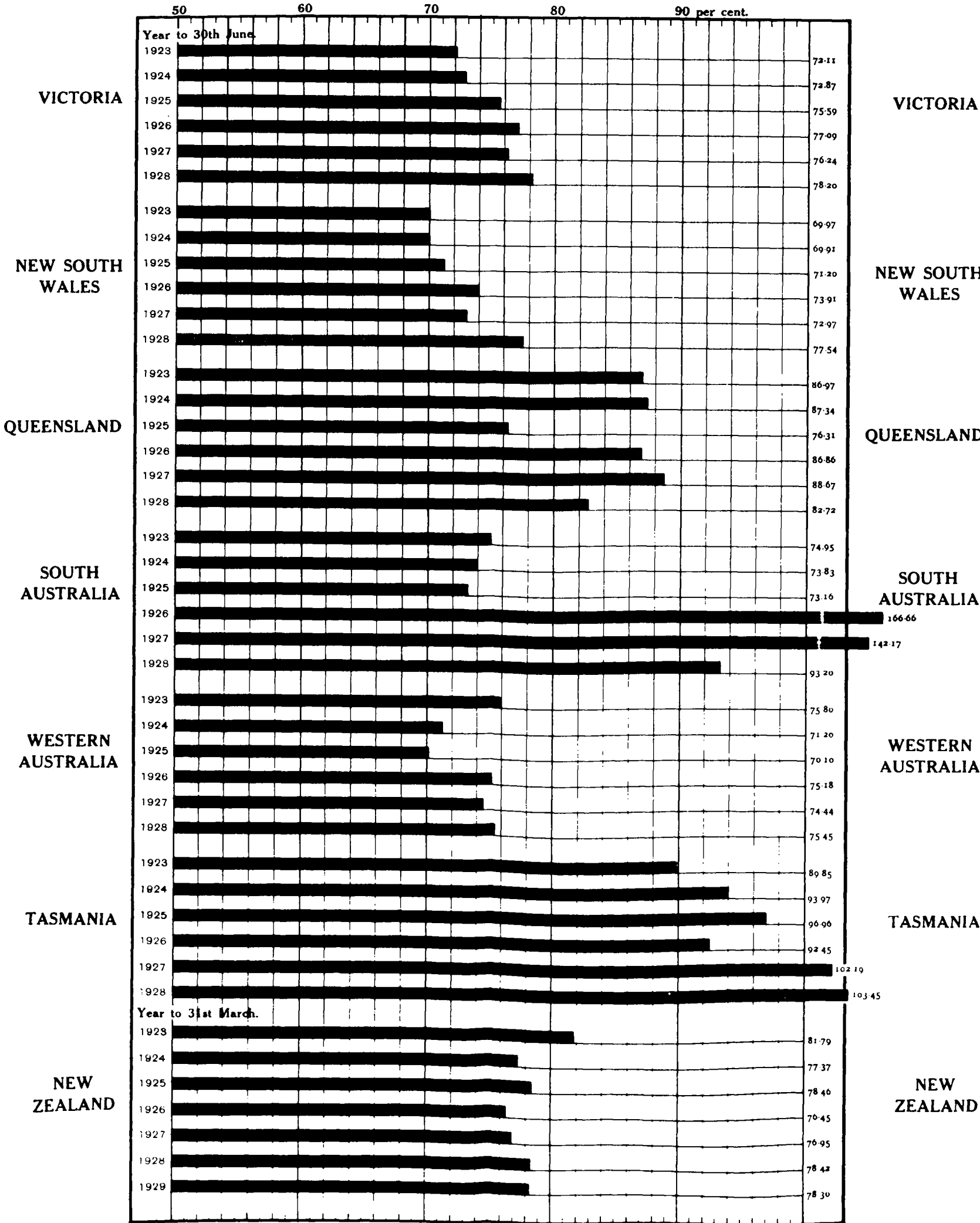
Percentage of Increase
1919-1929

Wagons
20.75 per cent.

Carrying-capacity
28.69 per cent.

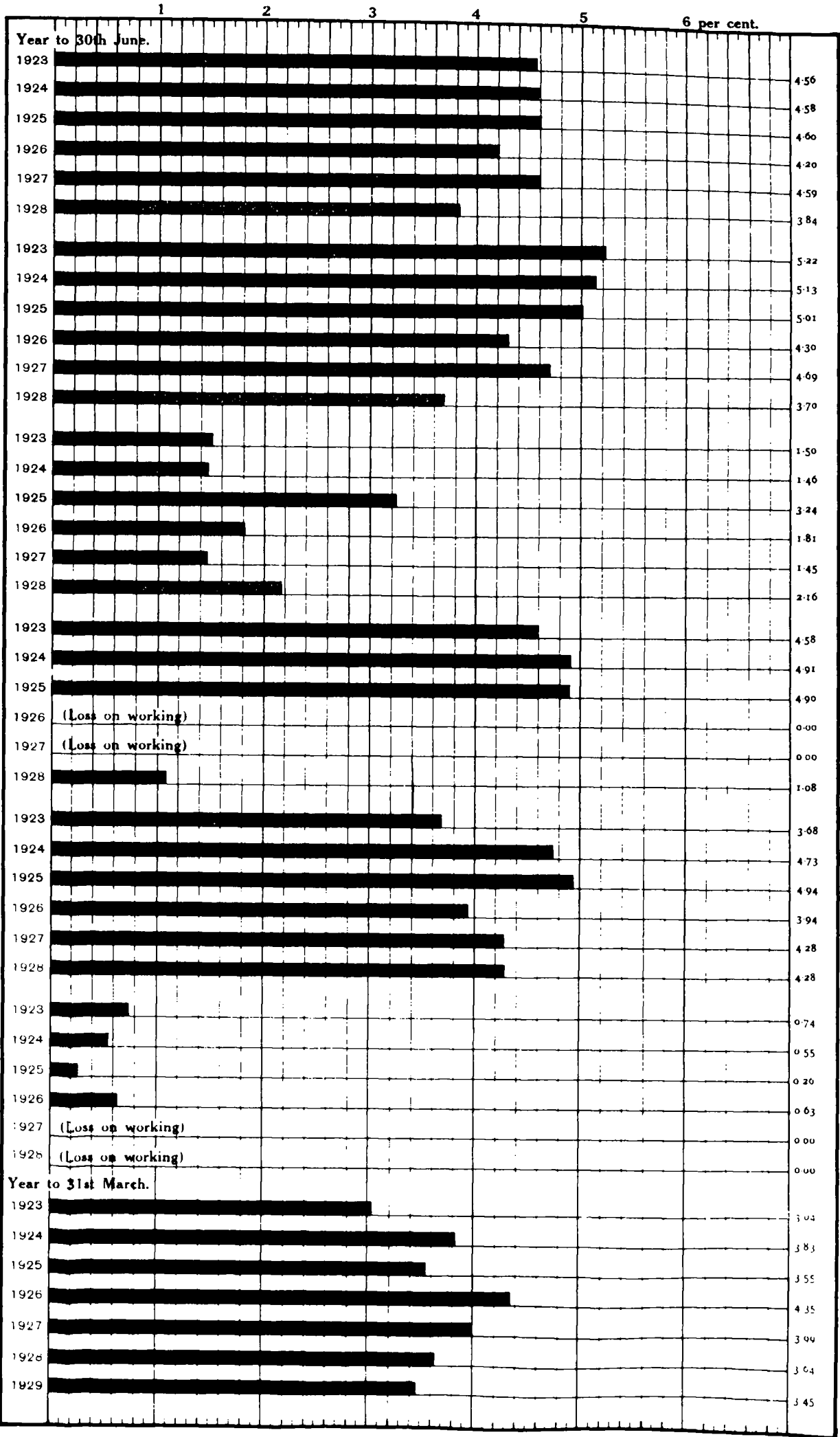
GOVERNMENT RAILWAYS OF AUSTRALIA AND NEW ZEALAND.
COMPARATIVE STATEMENT.

Percentage of Working-expenses to Earnings from 1923 to 1929.

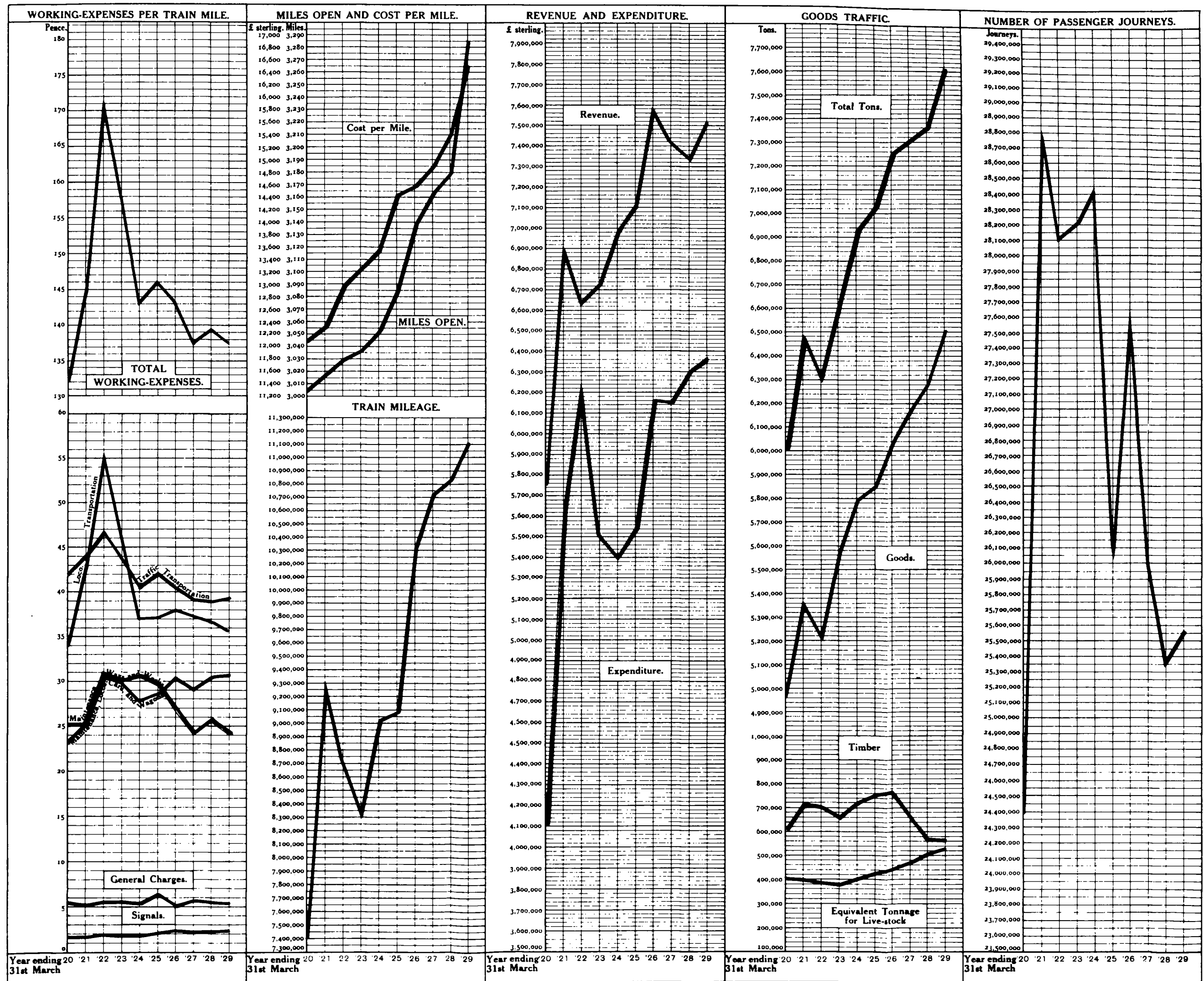


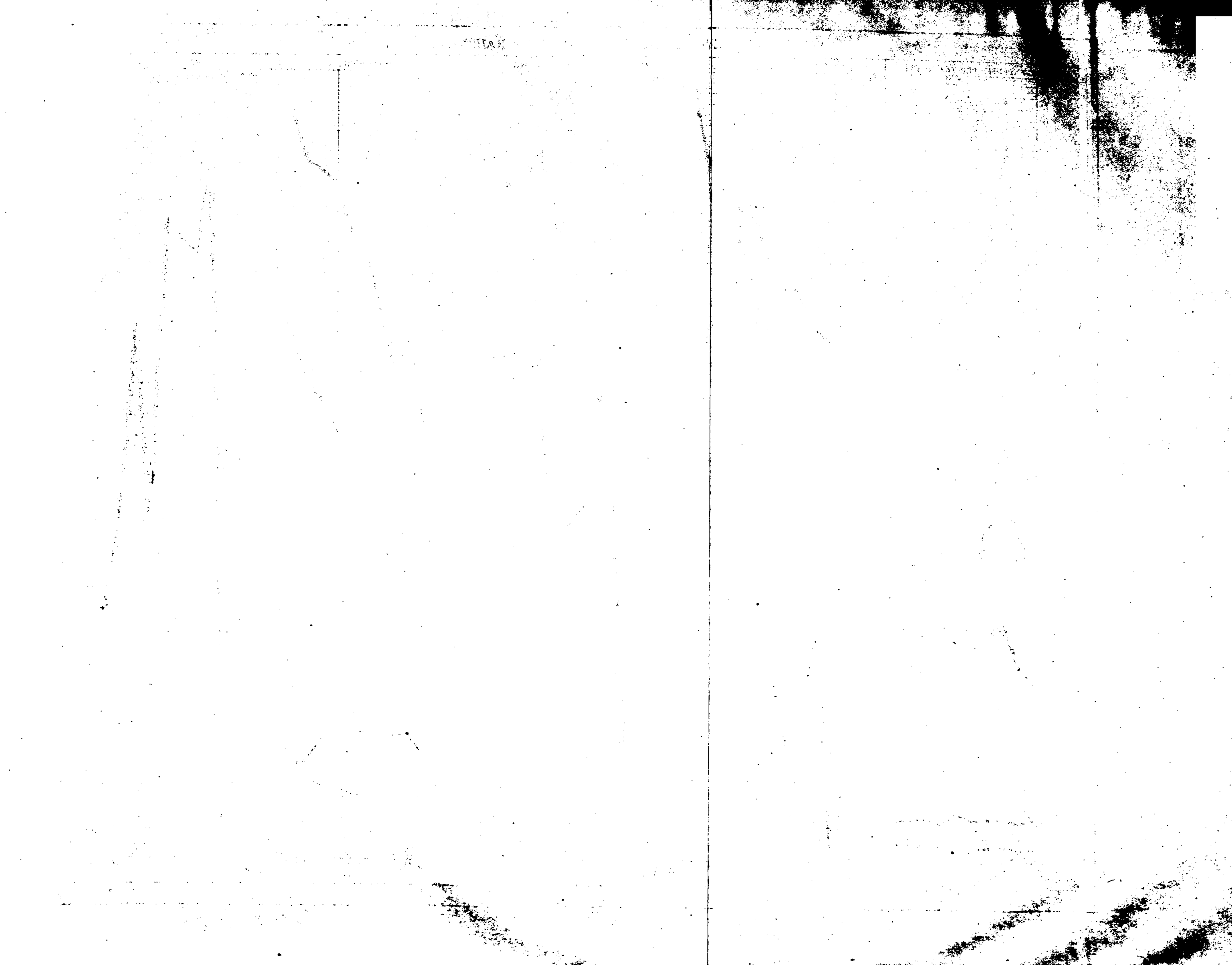
GOVERNMENT RAILWAYS OF AUSTRALIA AND NEW ZEALAND.
COMPARATIVE STATEMENT.

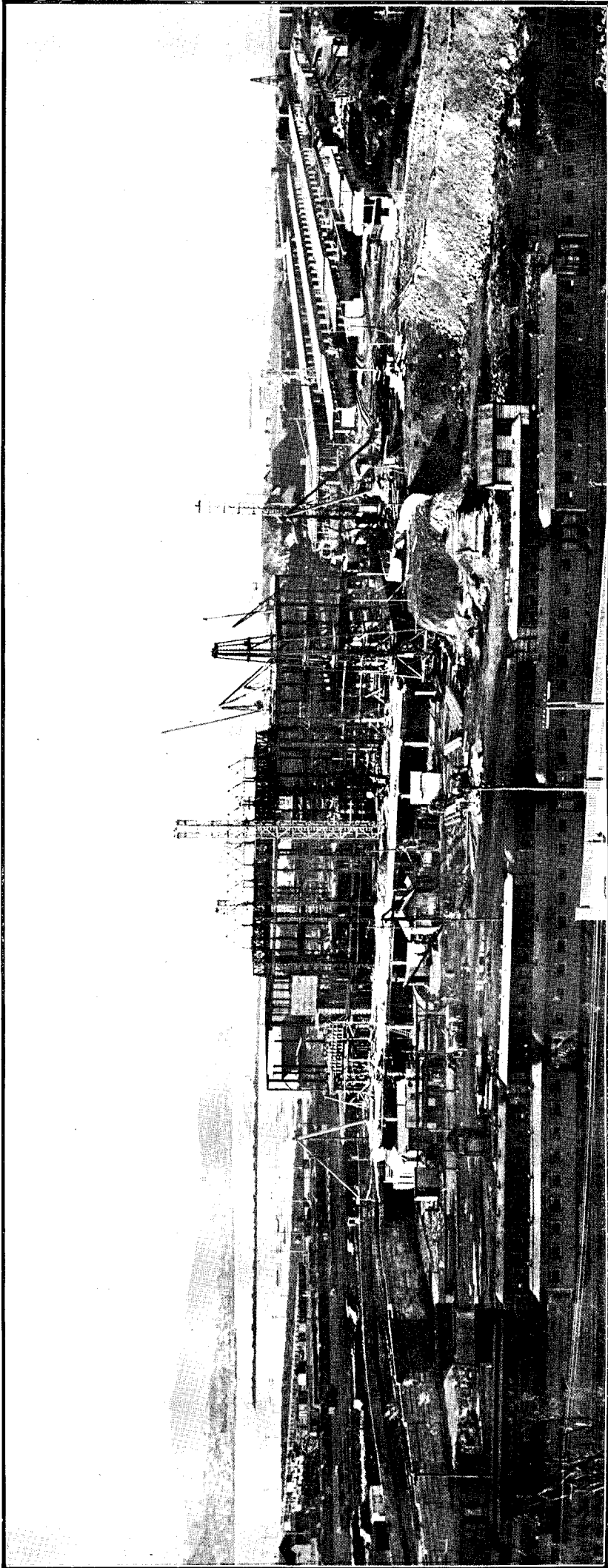
Percentage of Net Earnings to Capital from 1923 to 1929.



NEW ZEALAND GOVERNMENT RAILWAYS.



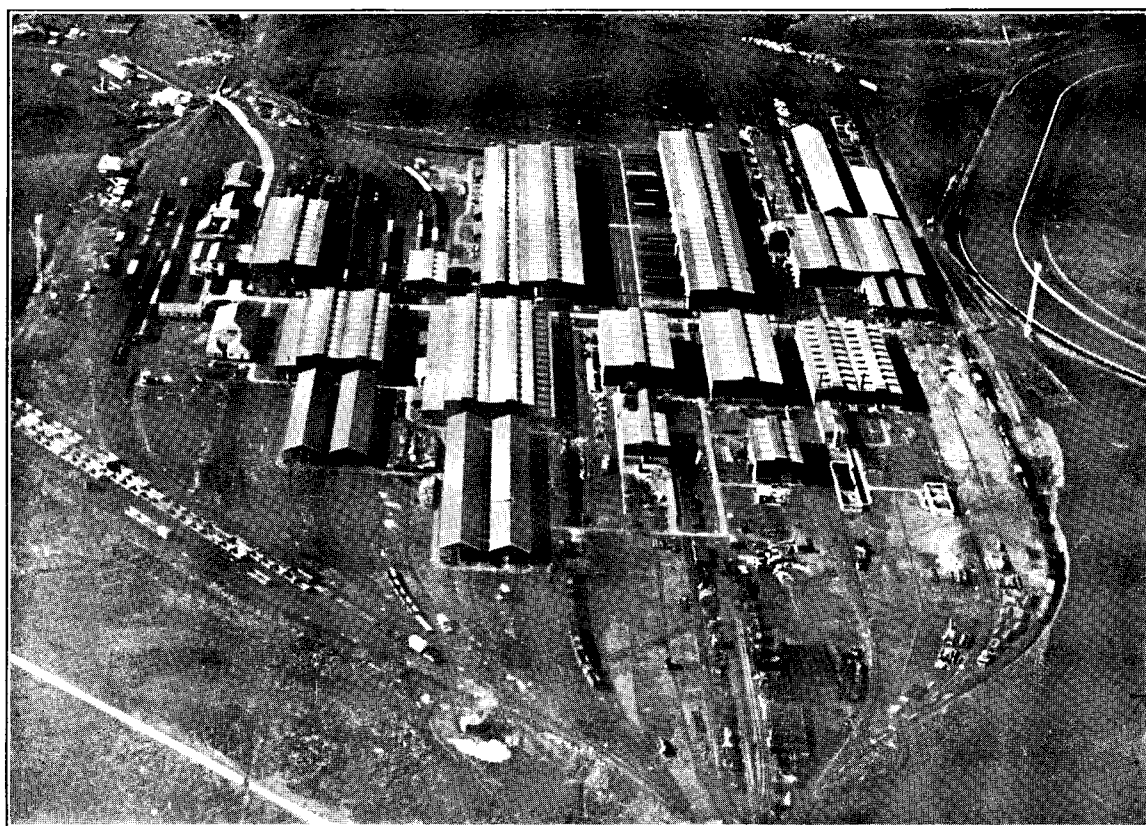




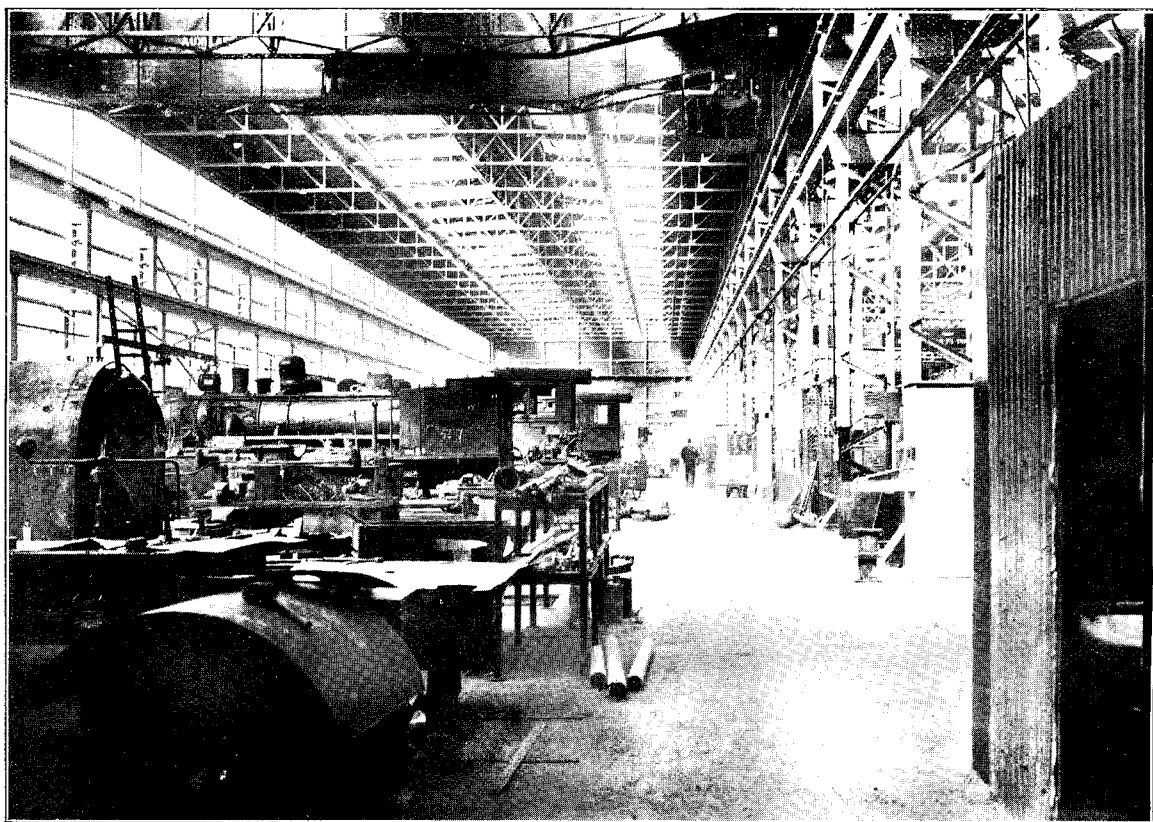
NEW RAILWAY-STATION, AUCKLAND, UNDER CONSTRUCTION.



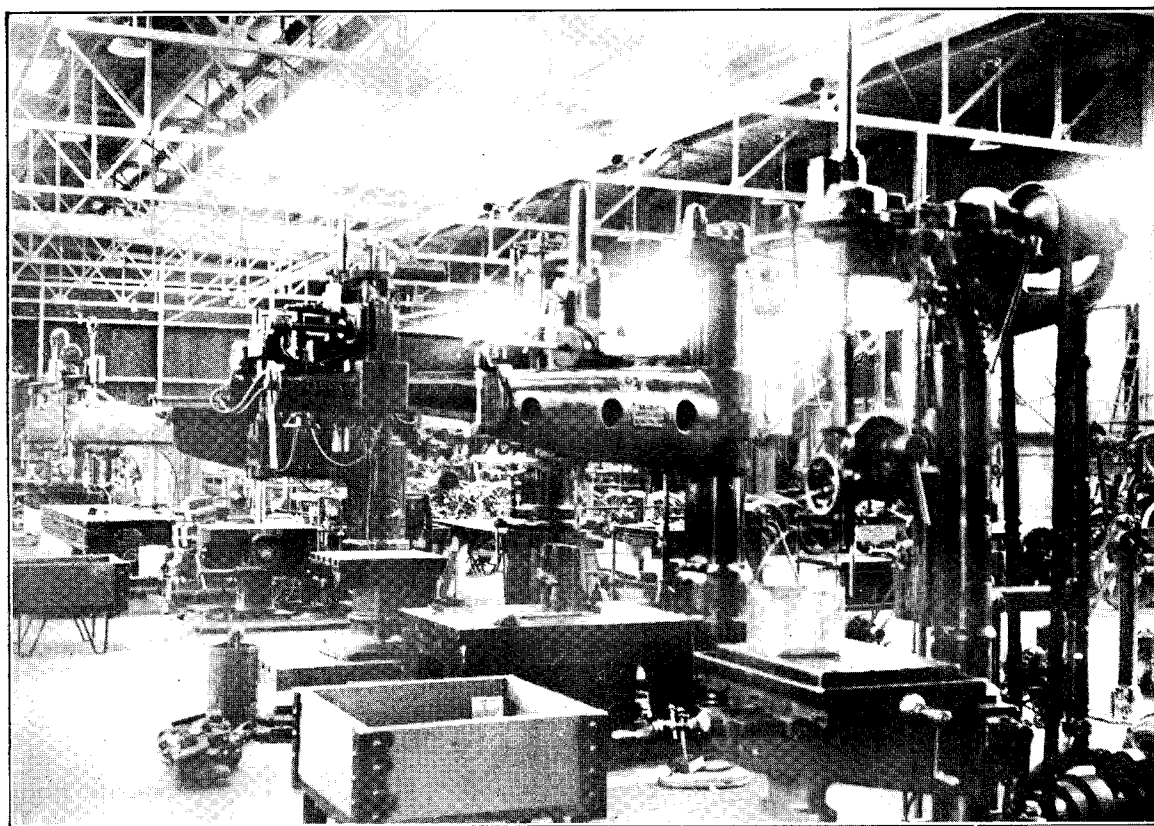
HEAVY-MACHINE SHOP, HUTT VALLEY.



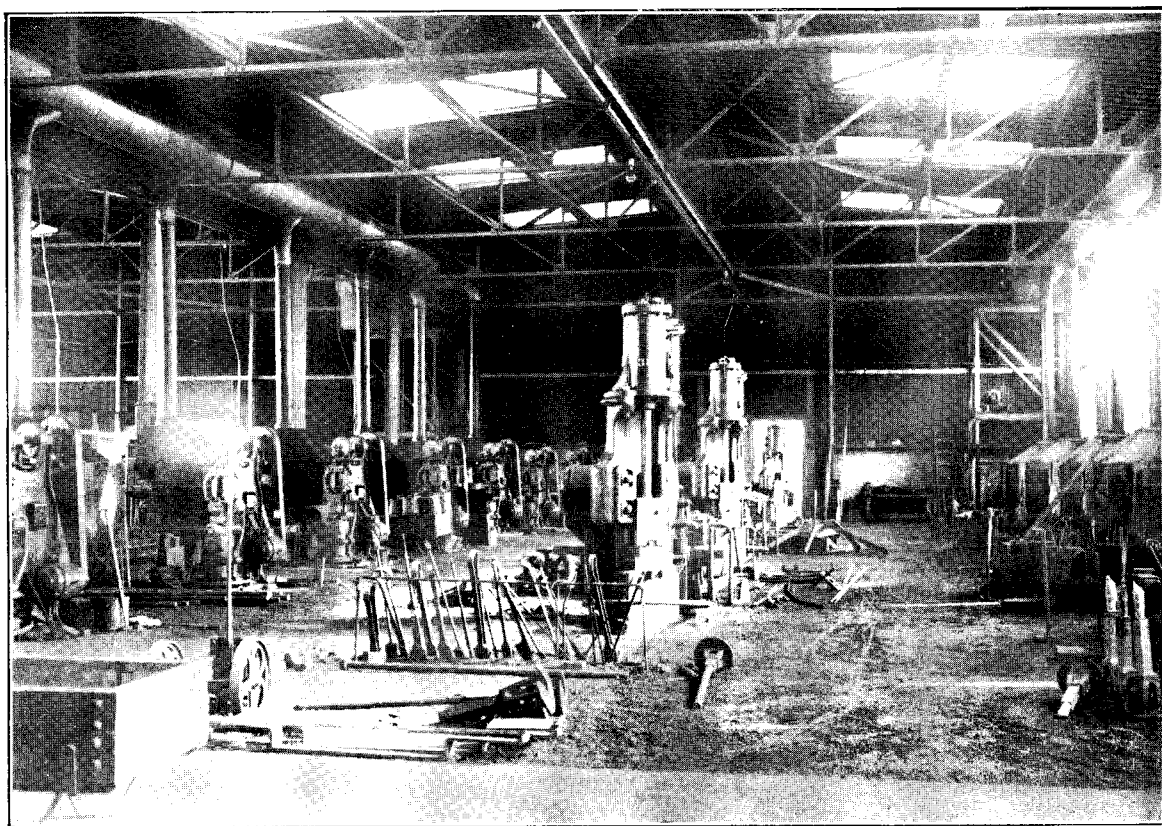
AERIAL PHOTOGRAPH OF NEW WORKSHOPS, OTAHUHU.



LOCOMOTIVE-ERECTING SHOP, HUTT VALLEY.



INTERIOR OF MACHINE SHOP, OTAHUHU.



INTERIOR OF BLACKSMITHS' SHOP, OTAHUHU.



INTERIOR OF NO. 2 CAR SHOP, OTAHUHU.

MAP OF NEW ZEALAND, SHOWING RAILWAY AND STEAMER ROUTES, AND ROAD CONNECTIONS.

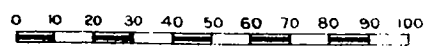
STATISTICS.

Government Railways open for traffic on 31st March, 1929	3,287 miles
Capital cost of Government Railways open on 31st March, 1929	£56,568,538
Revenue from Government Railways, year ending 31st March, 1929	£8,747,975
Expenditure on " "	£6,849,383
Gauge " "	3' 6"
Passengers carried on " "	9,074,993
Number of season tickets issued, " "	656,169
Live-stock, tonnage carried, " "	535,951
Goods, tonnage carried, " "	7,086,680
Number of miles travelled by trains, " "	11,113,482
Number of locomotives, " "	667
Number of passenger-carriages " "	1,603
Number of wagons and brake-vans " "	27,303
Area of Dominion, square miles " "	103,861
Population, estimated, at 31st March, 1929 (including Maoris)	1,470,649

Chief Cities:—

Auckland	Population with Suburbs	209,800
Wellington	(approximate)	133,770
Christchurch		125,410
Dunedin		85,630

Scale of English miles.



REFERENCE.

Government railways shown thus:	
Road connections	
Steamer routes	

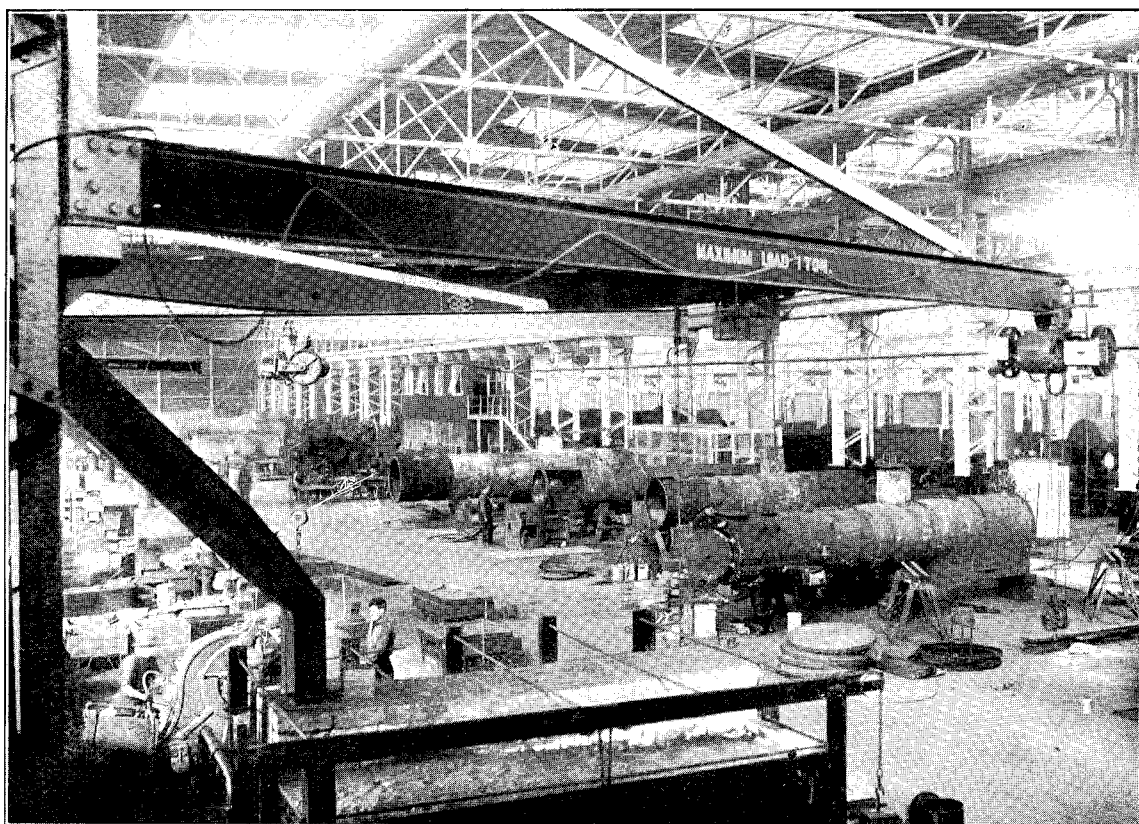
NORTH ISLAND

SOUTH ISLAND

DISTANCES BY RAILWAY.

	Miles.
Auckland to Opua	184
" Whangarei	131
" Rotorua	171
" Thames	148
" Tauranga	179
" Taneatua	240
" Wanganui	344
" New Plymouth	445
" Napier	451
New Plymouth to Wanganui	107
" Napier	276
" Rotorua	447
" Wellington (via Manawatu)	251
" Wellington (via Wairarapa)	298
Napier to Wellington (via Manawatu)	199
" (via Wairarapa)	210
Wellington to Rotorua	428
" Auckland	426
Pictou to Blenheim	18
" Whararui	56
Nelson to Kaitiaki	63
Inangahua Jn. to Greymouth	66
Greymouth to Hokitika	24
Hokitika to Ross	15
Christchurch to Waiatu	82
" Culverden	69
" Parnassus	85
" Arthur's Pass	87
" Greymouth	145
" Hokitika	170
" Timaru	100
" Dunedin	230
" Invercargill	368
Timaru to Oamaru	53
Oamaru to Dunedin	73
Dunedin to Cromwell	155
" Roxburgh	96
" Gore	100
" Kingston (via Waima line)	174
" Kingston (via Invercargill)	226
" Invercargill	139
Invercargill to Kingston	87
" Orawia	64
" Bluff	17
Kingston to Queenstown (by steamer)	25
Queenstown to Head of Lake (by steamer)	35

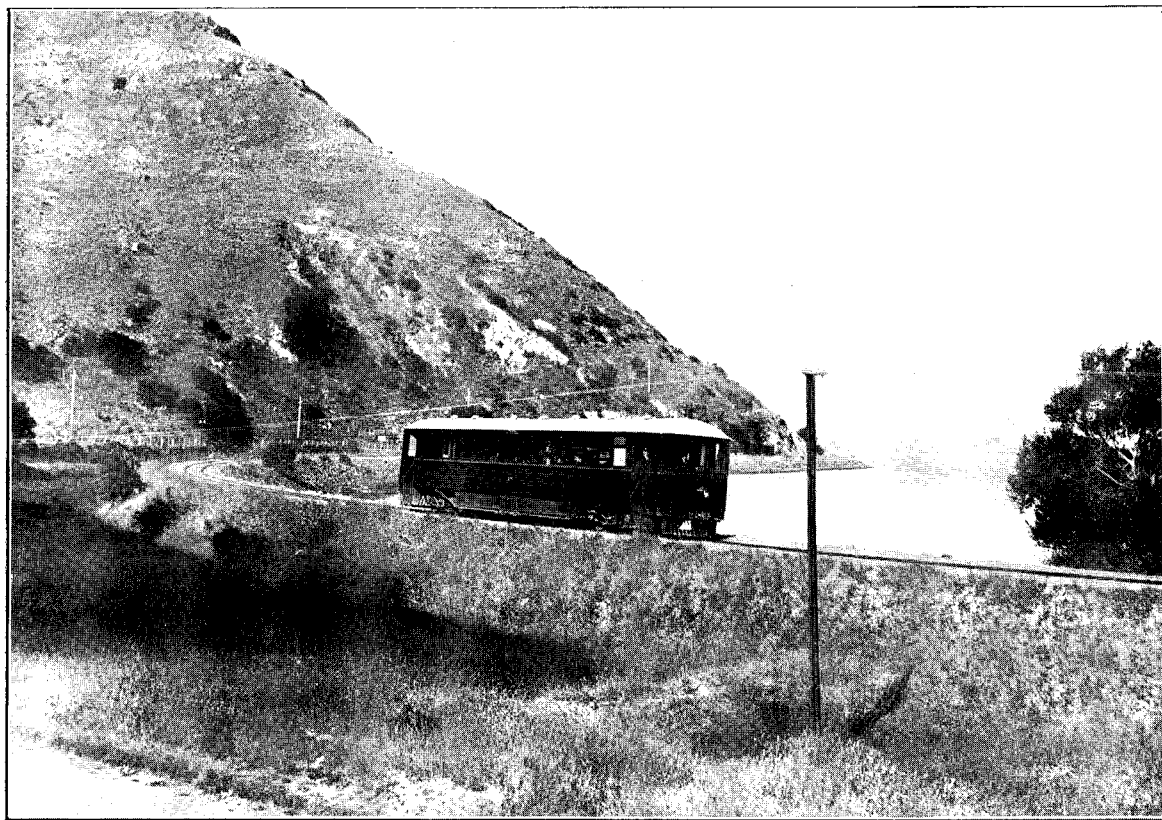




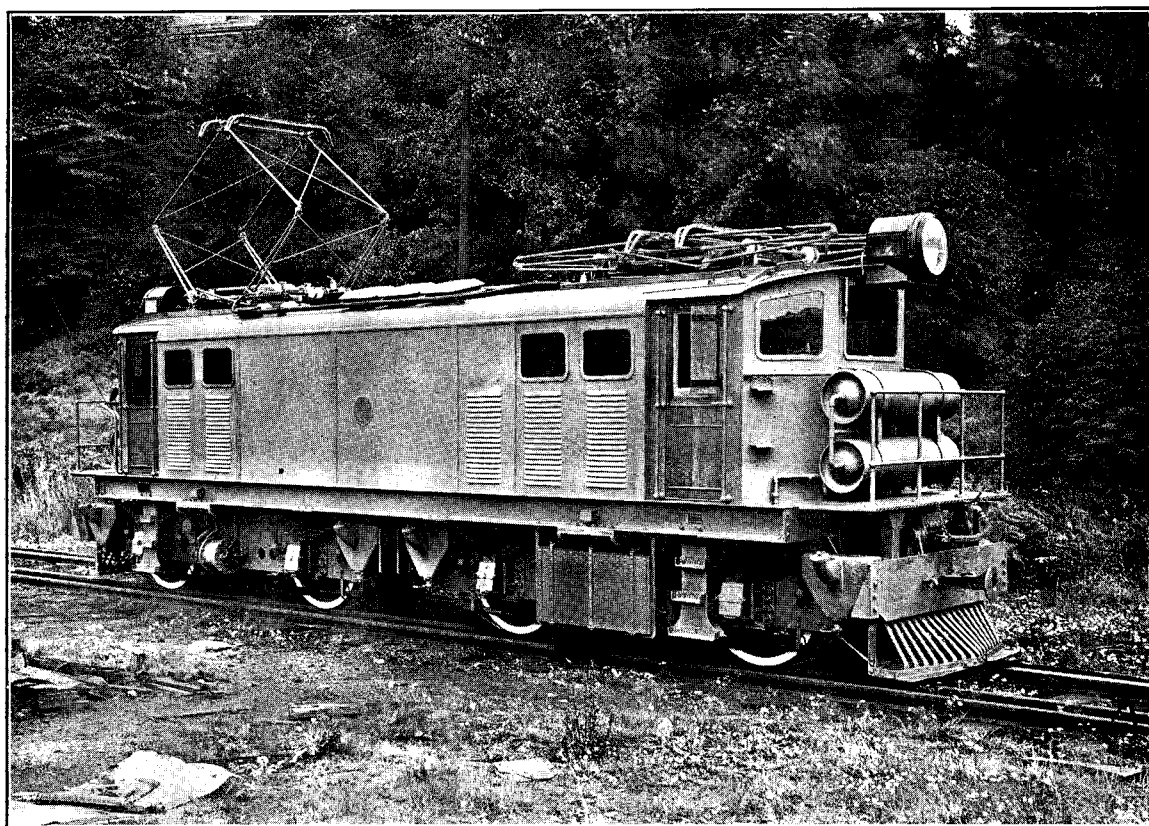
LOCOMOTIVE-BOILER SHOP, HUTT VALLEY.



NEW OUTWARD-GOODS SHED, AUCKLAND.



EDISON ELECTRIC RAIL-CAR AT LAKE FORSYTH, LITTLE RIVER BRANCH.



ELECTRIC LOCOMOTIVE IN LYTTELTON—CHRISTCHURCH ELECTRIC SERVICE.