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 1½ 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