1936.
NEW ZEALAND.

GOVERNMENT RAILWAYS SUPERANNUATION FUND.

ACTUARIAL EXAMINATION FOR THE SEPTENNIAL PERIOD ENDING 31ST MARCH, 1934.

Laid before Parliament in pursuance of Section 25 of the Finance Act (No. 2), 1935.

REPORT BY THE ACTUARY APPOINTED BY HIS EXCELLENCY THE GOVERNOR-GENERAL TO MAKE THE ACTUARIAL EXAMINATION OF THE GOVERNMENT RAILWAYS SUPERANNUATION FUND AS AT 31ST MARCH, 1934.

Government Actuary's Department, Wellington, 21st September, 1936.

1. I have the honour to submit the following report on the Government Railways Superannuation Fund as at the 31st March, 1934, as required by section 25 of the Finance Act (No. 2), 1935.

2. The Fund which was established on the 1st January, 1903, gave existing employees of the Railway Department the option to become contributors, but compulsorily brought within its scope all subsequent permanent employees. Those employees taken over with the Manawatu Railway, however, were given the option of becoming contributors. The Fund is administered by a Board consisting of nine members—namely, the Minister of Railways, the Solicitor-General, the Public Trustee, the Chairman of the Government Railways Board, and five contributors' representatives, two of whom are elected from the First Division and three from the Second Division.

3. The Fund, which was the first of the three existing Funds to be established for the superannuation of Government servants, differs somewhat from the other two. For example, the contributions of members who joined prior to 1908 (including employees of the Manawatu Railway Co.), at ages under fifty, are lower by 2 per cent. per annum of salary than those in the other schemes, and furthermore, any contributor may retire at age sixty instead of age sixty-five. On the other hand, the Fund becomes liable for the widows' and children's allowances only if the contributor dies while in service, whereas the other Funds extend the benefits to the widow and children of a deceased pensioner.

4. The Government Railways Superannuation Fund also differs from the other Government Superannuation Funds, in that there is no provision for a statutory subsidy by the State, as employer. The original Act contained a guarantee to the effect that "in the event of the Fund at any time being unable to meet the charges upon it" the deficiency would be met by the Consolidated Fund. The contributions in respect of males under fifty were fixed without seeking any actuarial advice, at rates 2 per cent. less than were subsequently adopted when the other two Funds were established. Members joining prior to 1st January, 1908, have, however, never been called on to make good the shortage in their contributions, and have therefore enjoyed a distinct advantage as compared with their fellow-officers in other branches of the Government Service, or with Railway servants joining the Fund on or after 1st January, 1908. The obvious deficiency created by the free gift of that portion of the pension allowed for each year of service prior to the establishment of the Fund, together with the assessment of the contributions of the original members at rates inadequate to provide even for future service, was left entirely to the future, and the

Fund proceeded to pay the pensions of the older members from the accumulations of the younger men instead of following the sound practice of keeping intact these accumulations, together with the interest earned thereon, to meet, as they matured, the pensions they were designed to furnish.

5. In 1911—after the scheme had been in operation for seven years—an annual subsidy of £25,000 was commenced. The first actuarial examination of the Fund was made by Mr. Morris Fox as at the 31st March, 1912, and disclosed a deficiency of £1,151,851 after allowing for an annual subsidy of £25,000. Mr. Fox pointed out that an annual subsidy of £50,000 was necessary in respect merely of pensions and allowances in possession or accruing within the ensuing three years. No effect was given to the recommendation made, although the increased subsidy was paid for one year, 1915.

6. As the result of the second actuarial investigation, made by Mr. P. Muter, F.I.A., as at the 31st March, 1919, a deficiency of £3,959,455 was disclosed. Mr. Muter, not being bound by any statutory provisions regarding subsidy, decided, very properly in my opinion, that the subsidy should bear a direct relation to the deficiency, and recommended that the future annual subsidy be increased to £170,000, so as to extinguish the deficiency in about seventy-five years. He went on to state—

> "The amount should, of course, be subject to occasional adjustment to meet changes in the factors. As already stated, the total pay-roll of the employees included in the Fund is £2,256,369 per annum, and it may be pointed out that the subsidy recommended represents approximately 7½ per cent. thereon. It is usually considered by the highest actuarial authorities that a subsidy of 5 or 6 per cent. on the pay-roll is quite a reasonable amount for an employer to pay for the undoubted benefits he gets from a pension fund. In this case the figure is somewhat higher by reason of the fact that the State (as employer) failed to make the proper contributions to the Fund from the very inception, and has now to provide not only the short payments of the past, but interest thereon."

7. I had the honour of making the third actuarial investigation as at 31st March, 1927, and found that, as the result mainly of the effect of the World War on salary levels and the policy of early retirements, the deficiency had increased from £3,959,455 at 1919 to £6,810,204 at 1927. The reasons for this abnormal increase of nearly £3,000,000 were set out fully in paragraphs 18 to 21 of my report which was laid on the table of the House of Representatives by leave (parliamentary paper 1932, D.–5A). I pointed out that the deficiency, which was guaranteed by the State as employer, was equivalent to an annual interest income (at 4½ per cent.) of £306,459, and as this amount constituted an annual payment in perpetuity, and did not include any subsidy to new entrants, I recommended a future annual subsidy equal to 10 per cent. of the salary roll, commencing at about £340,000 per annum. I further pointed out that, if it were desired to go further so as to more rapidly redeem the deficiency, a higher subsidy than 10 per cent. could be fixed, or, alternatively, the Fund could be strengthened by suitable amendments to the Government Railways Act. The most important amendment suggested was that the employees' right to retire after forty years' service be abolished. So for as I am aware, none of my recommendations has been given effect to. Instead, some hundreds of retirements of officers with thirty-five years' service have been effected, irrespective of age.

Legislation.

8. Since the date of the last valuation, important legislation affecting the Fund has been passed by Parliament. The amendments having a direct bearing on the actuarial position may be briefly summarized as follows:—

(*a*) Section 14 of the Finance Act, 1931, as amended by section 42 of the Finance Act, 1931 (No. 4), extended to any existing contributor the benefit of an "actuarial" pension on compulsory retirement within five years of the date when the contributor would have been entitled to retire as of right, or with the consent or approval of the Minister in Charge of the Department in which he is employed. In such cases it is provided that "the allowance shall not in any case be of an amount greater than the minimum amount which the Government Actuary certifies can be granted by way of such retiring-allowance without imposing on the Superannuation Fund any additional liability by reason of such retiring-allowance being granted before the earliest date on which the contributor would have been entitled, as of right, to receive a retiring-allowance on his voluntary retirement." It does not appear to be sufficiently appreciated by the average contributor that the Superannuation Fund neither gains nor loses by such a method of providing for compulsory retirements. Prior to this valuable concession to contributors, the Fund made a material gain as the benefit was limited to a return of contributions.

(*b*) Section 8 of the Finance Act, 1931, gave to all contributors whose salaries were "cut" in accordance with the general reductions the option to protect their superannuation rights by continuing to contribute and receive pensions based on not less than the pre-cut salary, or alternatively, to pay contributions and have pensions based on actual salaries, in which latter case, contributions paid in the past on any salary in excess of the amount to which the salary was "cut" were in effect refunded to the contributor as they were applied, until exhausted, by the Superannuation Board in reduction of contributions thereafter becoming payable. This latter gesture was too generous, inasmuch as some deduction from the full refund should have been made to cover the cost of the contingent additional liability in respect of the contributor retiring medically unfit.

(*c*) Section 9 of the National Expenditure Adjustment Act, 1932, as amended by sections 24 and 25, Finance Act, 1932–33 (No. 2), dealt with the position caused by the second salary "cuts" in a manner somewhat similar to (*b*) above, but introduced a new element as regards the contributions paid in the past on "excess" salaries by those officers who elected to contribute in future on actual salary, as it was provided that such excess payments should be held by the Superannuation Board to the credit of the contributor, and paid to him on the date of his retirement, or his earlier death. This provision is obviously a compromise, and like most compromises will not stand examination. In effect, it provides that the younger the contributor the more heavily is his refund subjected to the operation of discount. Actually the reverse should be the case, since there need be very little deduction (if any) in the case of the youngest contributors as the risk to the Fund of having to provide a medically-unfit benefit at such ages is negligible and is offset by the interest on the "excess" contributions. As the member's age increases, so does the risk of retiring medically unfit call for a larger deduction from the contributions, till an age is reached where the Fund is liable to make a loss if any portion of the "excess" contributions is refunded. The total amount of such "refunds" have been transferred from the accumulated funds to a special reserve and accordingly they require no special treatment in the actuarial valuation.

(*d*) The New Zealand Debt Conversion Act, 1932–33, and the Local Authorities Interest Reduction and Loans Conversion Act, 1932–33, had the effect of substantially reducing the interest-yields on Government securities and local body debentures as from the 1st April, 1933. It is gratifying to note, however, that the Consolidated Fund has for the period under review, reimbursed the Fund in respect of such reductions in the interest-income from these classes of securities.

Particulars of Valuation.

9. The contributions and the benefits provided by the Act, together with statements showing the progress of active membership, and of pensions for each year, will be found in Tables I to III of the Appendix to this report. The number of contributors at the date of the valuation, together with their ages, salaries, and contributions, and the pensions granted during the valuation period, with the ages at which they were granted, are shown in Tables IV and V of the Appendix.

Pensioners.

10. At the valuation date there were 2,348 pensioners with annual pensions of £424,458 2s. 5d., and I submit hereunder an analysis of the pensions under four main headings, namely—

(*a*) Normal pensions payable in respect of officers who retired as of right on completion of the statutory period of service or attained the statutory retiring-age.
(*b*) Medically-unfit pensions, payable to those who broke down in service.
(*c*) Actuarial pensions, payable in respect of those compulsorily retired within five years of normal retirement.
(*d*) Pensions under the extended provisions of the Act.

—	Number.	Annual Amount of Pension.
		£ s. d.
Normal pension	1,249	238,101 13 4
Medically unfit pension	492	57,620 4 1
Actuarial pension	131	15,245 6 0
Extended provisions of Act	476	113,490 19 0
Totals	2,348	424,458 2 5

11. Section 102 of the Government Railways Act sets out the conditions for normal retirement of contributors with the proviso that the Government Railways Superannuation Fund Board may, "with the consent of the Minister, extend the provisions of this section to any case where the contributor's service is not less than thirty-five years, but does not amount to forty years." I think it can be taken for granted that the original intention of this proviso was to deal with special cases and that accordingly the power was to be sparingly exercised. The serious aspect of these early retirements was stressed in my last actuarial report on the Fund as at 31st March, 1927, and it must surely be self-evident that officers retiring at ages from fifty to fifty-five years throw a heavy burden on the Fund, not only from the greater number of years during which pensions have to be paid, but also from the loss of contributions until the normal retiring-age.

Unfortunately for the finances of the Government Railways Superannuation Fund, these warnings have been ignored.

An idea of the use made by the Board of the extended provisions of the Act may be gained from the above table, which discloses that of the 2,348 pensioners existing at the valuation date, no less than 476 or slightly over 20 per cent. failed to remain in the Service for the normal period, or until the attainment of the normal retiring-age. In comparing these figures with similar percentages in the other Government Funds, it is important to bear in mind that contributors to the Government Railways Superannuation Fund may retire as of right at age sixty, whereas in the other Funds, unless combined with forty years' service, retirement at age sixty would be under the extended provisions of the Act.

An analysis according to length of service and attained age at date of retirement of the existing pensioners retired under the extended provisions of the Act is given in Table IIIA of the Appendix. This shows that out of the 476 retirements above referred to, 284 (60 per cent.) retired at or under age fifty-five.

I pointed out in my last actuarial report that although the Act gave the contributor the right to elect to retire after forty years' service, there was a vast difference, as far as the Fund's finances were concerned, in providing pensions for the small proportion of contributors who will be in a financial position so to exercise their right to retire than having to bear the burden of wholesale enforced retirements. I also indicated that any financial strain due to policy measures of the Railway Department should be a charge not on the Superannuation Fund but on the Department by way of special subsidy.

How little notice was taken of my warnings will be seen by the following figures (taken from the annual reports), giving the number and amount of annual pensions granted in respect both of ordinary and medically-unfit contributors:—

—	Physically-fit Retirements.*		Medically-unfit Retirements.*	
	Number of New Pensions.	Amount of Annual Pensions.	Number of New Pensions.	Amount of Annual Pensions.
		£		£
Average for 1919–27 ..	90	19,800	27	3,100
Year ending—				
31st March, 1928 ..	87	16,779	21	2,330
31st March, 1929 ..	77	18,378	19	2,441
31st March, 1930 ..	109	22,977	21	2,729
31st March, 1931 ..	155	34,222	28	3,712
31st March, 1932 ..	646	124,281	113	16,427
31st March, 1933 ..	92	17,549	55	5,934
31st March, 1934 ..	25	4,073	48	6,268
1927–34 ..	1,191	238,259	305	39,841

*** It has not been found possible to reconcile these figures with the totals of the cards supplied (see Table V of the Appendix.)**

The phenomenal increase in retirements during the year 1931–32 is obviously due to the retrenchment policy followed by the Department.

As far as men with forty years are concerned, the Department must accept the responsibility for throwing such a strain on the Fund without paying a special subsidy to cover such retirements.

It has to be pointed out, however, that a considerable number of these retirements were under the extended provisions of the Act, and for this the Superannuation Board must accept the full responsibility. As pointed out earlier, section 102 of the Act gives this power to the Superannuation Board—the Minister can veto such extension of the provisions of the Act but cannot initiate it—and in view of the Board's duty to protect the Fund, it seems clear either that it allowed the power to be taken out of its hands, or weakly agreed to the use of the Fund for retrenchment purposes.

It will also be noticed that the same year saw an increase in the number of medically-unfit retirements to five or six times the normal number. I think that it may fairly be assumed that the Superannuation Board slackened the standard of medical-unfitness, possibly to assist retrenchment, but certainly at the expense of the Fund.

One would have expected the retirement in one year of 759 contributors to be worthy of some comment, but the Board's annual report is quite silent.

12. The income and outgo of the Fund since the previous valuation were as follow:—

CONSOLIDATED REVENUE ACCOUNT OF THE GOVERNMENT RAILWAYS SUPERANNUATION FUND FROM THE 1ST APRIL 1927, TO THE 31ST MARCH, 1934.

Income.	£ s. d.	*Outgo.*	£ s. d.
Funds at 1st April, 1927	985,828 4 0	Pensions to members	2,182,650 3 8
Members' contributions	1,091,380 15 4	Allowances to widows and children ..	191,379 6 2
Government subsidy	1,190,000 0 0	Refund of contributions	222,418 19 3
Additional subsidy on account of		Transfers to other funds	2,283 17 4
widows and children	86,537 18 1	Public Trust Commission	13,041 0 8
Interest	519,003 8 2	Interest remitted	558 10 0
Fines	302 7 6	Audit fees	350 0 0
Other receipts	2,917 9 10	Travelling-expenses	625 5 6
		Office expenses	11,071 13 6
		Reserve for bad debts	10,760 11 2
		Funds at 31st March, 1934	1,240,830 15 8
	£3,875,970 2 11		£3,875,970 2 11

13. *Income.*—On the income side, the chief items of importance are the average annual increases of about £21,000 and £43,000 in the contribution income and the interest earnings respectively as compared with the previous valuation period. The net effective rates of interest credited to the Fund each year for the period under review are given below, together with those of the previous seven years for the purpose of comparison.

	£ s. d.		£ s. d.
1920–21	5 3 3	1927–28	5 14 4
1921–22	4 14 1	1928–29	5 14 9
1922–23	4 15 1	1929–30	5 15 3
1923–24	4 13 1	1930–31	5 15 2
1924–25	5 7 11	1931–32	5 18 3
1925–26	5 12 9	1932–33	6 1 8
1926–27	5 12 10	1933–34	6 0 5

These interest rates are on the average about ¾ per cent. per annum greater than those earned during the previous valuation period, a feature of great importance to the Fund, as a good margin between the rate of interest earned and that assumed in the valuation tends to counteract the adverse effect of any fall in the estimated mortality rates above the pension age.

14. *Outgo.*—The average annual outgo for pensions to members is more than double that of the previous valuation period. The causes of this increased outgo are the increased number of pensioners referred to earlier in this report. The cumulative effect is shown in the following figures in respect of new pensions granted (excluding those to contributors retired medically unfit).

Valuation Period.	Number of Retirements.	New Annual Pensions.
		£
1912–19	435	48,282
1919–27	719	158,452
1927–34	1,191	238,259

It will be seen that in the seven years covered by the present valuation, there were more retirements and more new annual pensions granted than in the previous fifteen years.

15. The Consolidated Revenue Account shows that the funds have increased by approximately £255,000 during the period under review as compared with £622,000 during the previous valuation period of eight years. Whether or not this is evidence of progress can be determined only by actuarial valuation of the liabilities, and noting if the increase in funds is keeping pace with the increase in accrued net liabilities.

To explain what I mean by accrued liabilities, let me take the case of an officer who has served for twenty years and paid £300 into the Fund. By his service, he has earned the right to a deferred pension at the rate of twenty-sixtieths of his final salary. True, the pension will not emerge till he is sixty or sixty-five years of age, but the Fund is in the position of having in effect issued a promissory note or an obligation to pay him such a pension when it falls due, and if this contributor's money is in the Fund—and it is supposed to be, since the Fund is liable to repay it in the event of his death or withdrawal from the Service—it should be regarded as ear-marked for him.

Applying this reasoning to the whole body of contributors, and assuming that officers in receipt of £2,700,000 per annum contributed for the full seven years covered by the valuation, it will be seen that on the most favourable assumption to the Fund—namely, that they will receive no further salary increases between now and retirement—the Fund has incurred the liability of deferred pensions totalling £315,000 per annum. Even allowing for those dying in service before earning a pension, it should be apparent at a glance that the small increase of £255,000 in the Fund is very far from keeping pace with the above-mentioned deferred liabilities in respect of the additional pensions "earned" during the period under review at the rate of seven-sixtieths of the total retiring salaries.

DATA.

16. The preliminary particulars required for this examination have been obtained from cards supplied by the Chief Accountant of the Railway Department—a separate card being compiled for each member who was in the Service at the valuation date or who had died or withdrawn since the inception of the Fund—and these particulars form the main basis of this investigation and valuation.

17. It is difficult to avoid the conclusion that sooner or later some reconstruction of the Fund is inevitable, and in order to be in a position to report expeditiously on any such proposals for reconstruction, I decided to use Powers machines to punch special cards and tabulate the data in the form required for valuation. Both the Railway Department and the Post and Telegraph Department very willingly placed Powers machines at my disposal and arranged for the supervision of the work. It is unnecessary to point out that the assembly of the data by means of such machines permits rapid resorting and tabulation in any number of groupings that may be desired, thereby curtailing the time involved in investigations into the cost of making any modifications of the benefits of the Fund either for the whole Service or for either Division or for officers joining on or after any given date.

THE VALUATION.

18. The main object of an actuarial valuation is to ascertain whether the current funds, together with the present value of the future contributions, will be sufficient to meet the total liabilities. Before the valuation can be carried out it is necessary to make a careful estimate of the various factors on which the payment of the benefits and contributions is dependent. These factors may be briefly summarized as follows:—

(*a*) Rate of interest.

(*b*) Mortality-rates of pensioners.

(*c*) Average salary scales.

(*d*) Mortality-rates of contributors.

(*e*) Voluntary-withdrawal rates of contributors.

(*f*) Retirement-rates of contributors.

(*g*) Marriage-rates of contributors.

(*h*) Probability of a member leaving children under fourteen years of age, and the average number of such children.

(*i*) Remarriage-rates of members' widows.

19. The rate of interest used in valuing benefits and contributions was 4½ per cent., as the Fund is State-guaranteed.

20. The mortality-rates adopted for pensioners were those used in the previous valuation and were based on an investigation of the combined experience of the three Government Superannuation Funds (Public Service, Railways, and Teachers) for the period 1919–1927.

21. Average salary scales in respect of the First and Second Divisions separately had to be constructed for the year immediately following the valuation date. This presented considerable difficulty as it was complicated by the salary "cuts" and the fact that there were two classes of officers, one contributing on hypothetical salaries (*i.e.*, pre-cut salaries as far back in some cases as 1921), and the other on actual salaries. To have constructed average salary scales based on the heterogeneous contributory salaries, and applied to the contributory salary of each contributor as at the 1st April, 1934, the resulting ratios of increase from age to age would have considerably overestimated the pension liabilities, as under normal circumstances the average officer contributing on actual salary would not rise to the hypothetical maximum salary, and pensions are based on salaries during the three years preceding retirement. Even if actual salaries were used to obtain the ratios of increase from age to age, the prospective salaries would have been divorced from realities in view of the fact that a large number of officers would never by normal promotions bridge the gap between their actual salaries and the hypothetical salaries on which they were contributing. The problem would have been simplified had the options to pay on higher salary been exercised, as one would have expected, only by the older officers, or by those who had been at the top of a grade so long that they took a very conservative estimate of the possibilities of future promotion. In actual fact, out of the total of 11,816 contributors, no less than 4,166 elected to pay on the pre-cut salaries and this included contributors from age twenty-four upwards, many of whom must, except under very exceptional circumstances, have recovered the amount of the salary "cuts" by promotion during the remainder of service. The tacit assumption made by each officer electing to contribute on his salary prior to the cuts was that his actual salary would not rise to the higher figure prior to retirement (normal or medically unfit), but even a brief glance at the two sets of salaries showed that at the younger

ages the disparity between actual and hypothetical salaries was not wide enough to justify the assumption of valuing on the basis that future salary increases would not bridge the gap. It therefore became necessary, not only to separate those contributing on actual and on hypothetical salaries, but also to make two valuations of those contributing on hypothetical salaries to allow for the fact that First Division officers under age forty-nine and Second Division officers under age thirty-eight would, on the average, rise to a higher actual salary than the hypothetical salary on which they were contributing. In making these several valuations, it was essential to allow for the fact that the salaries supplied on the cards had been automatically increased by 5 per cent. as from 1st April, 1934, and to make some assumption as to an early restoration of portion of the remainder of the salary "cuts." For this purpose I assumed that an all-round increase of 5 per cent. would be forthcoming on 1st April, 1935. Actually, a 7½-per-cent. increase was subsequently granted in August, 1935, and all salary "cuts" were fully restored as from 1st July, 1936.

22. The cards supplied in respect of discontinuances did not agree with the figures given in the annual reports, but for what it is worth, I give the result of the experience during the septennium based on the cards supplied.

23. The actual deaths during the septennium were 77 in the First Division and 308 in the Second Division, as against respective numbers of 72 and 310 expected by the tables used in the previous valuation.

24. The withdrawals were 216 in the First Division and 1,314 in the Second Division, as against an expectation of 458 and 3,231 respectively. This appears to have been directly due to the economic depression, the difficulty of finding remunerative employment checking the former tendency of officers to leave the Service for private employment.

25. The retirements in the First Division were 570 and in the Second Division 922, as against numbers of 273 and 600 expected, and the excess was reflected at all ages from forty-five onwards. These excessive retirements were commented on earlier in this report, and it will be sufficient here to point out that the total number of pensioners (exclusive of widows and children) which had increased from 1,417 in 1927 to 1,514 in 1930, grew to no less than 2,348 in 1934.

26. In view of the above figures and the special influences operating during the septennium, the experience could scarcely be regarded as a normal guide to the future, and it was decided to adopt rates of mortality, withdrawal, and retirement based on the period 1919 to 1927 and used in the 1927 valuation.

27. Details of the experience tables adopted and the life and service tables deduced therefrom are given in Tables VI and VII of the Appendix.

28. The factors necessary for the valuation of widows' and children's benefits were built up from population statistics combined with the experience of the Fund itself.

RESULTS OF VALUATION.

29. The valuation of the Fund has been made on the bases above mentioned and the valuation balance-sheet is given in detail in Table IX of the Appendix, but the results may be shortly summarized as follows:—

	£	£
Present value of existing pensions and allowances		4,394,747
Present value of prospective benefits	7,441,957	
Less present value of members' contributions	1,495,975	
		5,945,982
Total net liabilities		10,340,729
Funds in hand		1,240,831
Present value of total liability of State		9,099,898
Less present value of existing annual subsidy of £170,000 (if treated as a perpetuity)		3,777,778
And less present value of State subsidy in respect of allowances to widows and children under section 114 of the Act		257,760
Value of future subsidies to be provided for by the State over and above the present subsidies		£5,064,360

30. The above statement shows a total State liability of £9,099,898 as compared with £6,810,204 at the last valuation, giving an increase of £2,289,694. The increase is due partly to the accumulation at interest of the difference between the annual subsidies paid and those recommended in my last actuarial report, and partly to the excessive number of retirements of comparatively young officers.

31. As regards the first-mentioned source of valuation loss, it is scarcely necessary to point out that if a fund is in deficiency at one valuation, the amount of the deficiency at the succeeding valuation will, in the absence of profit and loss from other sources, increase at compound interest, since, in addition to the shortage in capital, the fund is deprived of the interest which that capital would have earned during the valuation period.

As regards the second great factor in the increase of the State's liability during the valuation period under review—namely, the retirement irrespective of age of men with service of thirty-five years and upwards—the following table is illuminating:—

TABLE SHOWING FOR EACH OF THE FOUR VALUATION PERIODS THE AGE INCIDENCE OF THE PENSIONS GRANTED (EXCLUDING RETIREMENTS MEDICALLY UNFIT).

Ages.	Number of Contributors retiring as the Result of attaining Pension Age, or Length of Service.				Number of Retirements at each Age or Age-group expressed as a Percentage of Total Retirements.			
	1903–12.	1912–19.	1919–27.	1927–34.	1903–12.	1912–19.	1919–27.	1927–34.
					Per Cent.	Per Cent.	Per Cent.	Per Cent.
Under 55	..	6	51	274	..	1·4	7·1	23·1
55	1	2	41	92	0·1	0·4	5·7	7·7
56	..	7	49	106	..	1·6	6·8	8·9
57	..	3	48	107	..	0·7	6·7	9·0
58–59	2	16	65	129	0·3	3·7	9·0	10·9
60	232	166	124	191	30·5	38·2	17·3	16·1
61	110	98	134	100	14·5	22·5	18·6	8·4
62–65	245	123	151	155	32·2	28·3	21·0	13·0
Over 65	170	14	56	35	22·4	3·2	7·8	2·9
	760	435	719	1,189	100·0	100·0	100·0	100·0

The table shows that in the first valuation period no contributors were retired under age fifty-five, while in the second period 1·4 per cent. of the total retirements took place before this age, in the third period 7·1 per cent., and in the valuation period under review no less than 23·1 per cent. of the total retirements were at ages under fifty-five. It also shows that while for the period 1903–1912 the retirements under age sixty were less than ½ per cent., for the 1912–1919 about 8 per cent., for 1919–1927 about 35 per cent., in the period 1927–1934 the percentage of such retirements under age sixty to the total retirements was about 59½ per cent.

If, on account of the special circumstances following the inception of the Superannuation Fund, the first period is ignored, and the experience of the second valuation period is taken as an indication of the extent to which contributors voluntarily elect to retire after forty years' service, the difference between the percentages in the last two columns of the above table gives a rough measure of the effect of the policy adopted by the Railway Department during the period of compulsorily retiring men irrespective of age.

The extent to which this policy was carried may be seen from the age distribution of contributors given in Table IV of the Appendix. At the valuation date, out of nearly 12,000 contributors, there were twenty aged sixty-one and only two over that age.

32. The importance of the ascertainment of the state of the Fund in the form given in paragraph 29 lies in the fact that the shortage in the Fund to be made good by the State—viz., £9,099,898—is equivalent to an annual interest income (at 4½ per cent.) of £409,495. It follows that if any less sum than £409,495 is paid in by the State as subsidy the present deficiency will increase, and the subsidy must accordingly by way of compensation rise later on to a much higher figure than £409,495 per annum in respect of present contributors alone. If, however, any annual amount in excess of £409,495 is paid in, the Fund would, in respect of present members, attain solvency within a definite period of time. It should be clearly understood that this amount of £409,495 is a perpetuity, and does not cease with the lifetime of the present members, nor does it include any subsidy to new entrants.

RECOMMENDATIONS.

33. Section 119 of the Government Railways Act, 1926, as amended in 1927, provides as follows:—

"In the event of the Fund at any time being unable to meet the charges upon it, and as often as such occurs, the following special provisions shall apply:—

"(*a*) The Board shall forthwith report the fact to the Minister of Finance, setting forth the amount of deficiency and the causes thereof.

"(*b*) If the Minister of Finance is satisfied that the deficiency exists, and that provision should be made therefor, there shall, without further appropriation than this section, be paid into the Fund out of the Working Railways Account, a sum sufficient to meet the deficiency."

34. I have shown above that to keep the Fund solvent the annual State subsidy must be fixed at some amount greater than £409,495, exclusive of such additional amount as is necessary to cover salaries and expenses charged to the Superannuation Fund. I also made it clear that this minimum amount only represents interest, and accordingly will not redeem the deficiency, but merely prevents it from increasing, nor does it include any subsidy in respect of new entrants. It will therefore be apparent that, subject to future salary and other conditions remaining as at present, the payment of such minimum subsidy will mean that at each succeeding valuation of the Fund an increase in the annual subsidy will be required by reason of the number of new employees enrolled in the Fund at rates of contributions which in general are less than adequate to provide the benefits. In order to avoid large increases in the subsidy at intervals of, say, seven or eight years, it would be advisable to

adopt an automatic basis that will provide a gradually increasing subsidy and reflect salary fluctuations, and accordingly I recommend for consideration an annual subsidy of 15 per cent. of the salary roll, which with the full restoration of salaries would give a commencing subsidy of about £450,000 per annum.

35. It may be asked whether, judged by ordinary commercial standards, this is too high a price for the State as employer to pay for the advantages it derives from the existence of a Staff Superannuation Fund. In order to enable comparisons to be made, I cannot do better than to quote the following extract from the report of a Commission on the Pension Funds of the City of New York:—

> "The Commission has made a broad review of existing pension systems in operation, both in the United States and abroad, on which it was able to secure information. This inquiry has brought out the fact that the development of pension measures as a result of an experience of over a hundred years is in the direction of equal division of cost between the employer and the employed, and that this tendency applies equally to systems for public employees and for industrial workers."

My recommendation for the future State subsidy to be 15 per cent. of the salary roll does not differ very much from apportioning the cost equally between the employer and the employee when account is taken of the initial deficiency created in the Fund by the gift of back service in calculating the pensions payable to employees in the Service when the Fund was established, the considerable amount by which past subsidies have fallen short of the contributions paid by employees, and the additional financial strain thrown on the Fund by the Railway Department's policy of compulsorily retiring, irrespective of age, officers with over thirty-five years' service. It may also be of interest to call attention to the increase in the requisite automatic subsidy from 7½ per cent. recommended in the 1919 actuarial report to the present figure of 15 per cent.

36. I have previously stated that, on account of the large deficiency in the Fund, the subsidy is in the nature of a perpetuity, and consequently my recommendation of an automatic subsidy equal to 15 per cent. of the pay-roll will require modification if at any time the present constitution of the Fund is altered, as, for example, by refusing or even making voluntary the enrolment in the Fund of new employees.

37. In recommending that the amount of the automatic subsidy be fixed at 15 per cent. of the pay-roll I have endeavoured not only to place the Fund on a firmer footing, but also to keep the cost to the State as low as is reasonably possible.

In view of the opinions expressed from time to time by certain Service organizations that the actuarial valuations of the Fund have no touch with realities, and are unnecessarily stringent, it may not be out of place to state that such valuation differs considerably from the actuarial valuation of a profit-distributing institution like a life-assurance office. In the latter case, the need to provide for the maintenance of the same rate or even for an increasing rate of bonus calls for the use of caution in distributing profits and the actuary takes the same view as those engaged in dealing with the profits of any other commercial institution, whereas in a superannuation fund, and particularly in a Government Superannuation Fund, the question of profit does not arise, and there is no need in the actuarial valuation to adopt bases any more stringent than the actual experience of the Fund requires. That the bases adopted for the Government Railways Superannuation Fund cannot be regarded as stringent will be obvious by considering them seriatim. In the first place, the future rate of interest has been taken at 4½ per cent. per annum, which can hardly be regarded as conservative, and it is unnecessary to point out that the liabilities are underestimated if the average rate of interest earned by the Fund during the lifetime of contributors falls below this figure. Again, the rates of withdrawal used were considerably heavier than those actually experienced during the septennium under review, and if this latter experience can be taken as a guide that in future officers will be more reluctant to leave the employ of the Railway Department than they were prior to 1927, it is clear that the estimated liabilities for future pensions will need to be increased. Further, the rates of retirement adopted in the valuation fall far short of those operating during the last valuation period, and if this latter trend continues, the estimated liabilities will naturally need to be increased. There is very little valuation profit or loss from mortality as the actual number of deaths in Service corresponds very closely with the expected. The above remarks should make it clear that if the present valuation errs at all, it is not on the side of stringency, but rather of underestimating the liabilities.

If Government considers the annual subsidy too big a price to pay for the benefits of a Railways Superannuation Fund, it would be better to face up to the position and reconstruct the Fund in accordance with the State's ability to pay. Such a procedure would at least have the merit of letting officers know where they stand, and of enabling them, if desired, to make alternative provision for their old age.

38. It may be as well at this stage to point out that there is no statutory obligation on the State, through the Working Railways Account to pay into the Fund the present annual subsidy of £170,000. It is in the power of the Railway Department at any time to discontinue the payment of any subsidy whatever, and although such a contingency may appear remote, it is interesting and instructive to examine the resulting position of the Fund. For this purpose, it is only necessary to submit the following figures as at 31st March, 1934:—

	£
Amount of accumulated funds	1,240,831
Amount of contributions paid by contributors still in the Service	1,802,393
Capital value of pensions and allowances actually entered upon	4,394,747

Railways Superannuation Fund.

On	There were Pensioners on the Fund. (1.)	With Pensions amounting to (2.)	Having Capital Value of (3).	And if the Value of existing Widows' and Orphans' Allowances are added, giving a Total Current Liability of (4.)	While the Amount at Credit of the Fund was (5.)	Leaving (6.)	As in addition there were Contributors (7.)	With Prospective (Dormant) Net Liabilities (*i.e.*, Value of Benefits less Contributions) of (8.)	The Net Result is a Deficiency of (9.)
		£	£	£	£	£	£	£	£
31st March, 1912 ..	714	52,463	390,828	442,021	233,457	*Dr.* bal. 208,564	9,248	1,568,287	1,776,851
31st March, 1919 ..	1,001	89,315	756,663	867,818	363,804	*Dr.* bal. 504,014	10,657	3,455,441	3,959,455
Increase of	..	..	..	*425,797*	*130,347*	*Dr.* *295,450*	..	*1,887,154*	*2,182,604*
31st March, 1927 ..	1,417	221,522	2,034,431	2,257,446	985,828	*Dr.* bal. 1,271,618	13,310	5,538,586	6,810,204
Increase of	..	..	..	*1,389,628*	*622,024*	*Dr.* *767,604*	..	*2,083,145*	*2,850,749*
31st March, 1934 ..	2,348	424,458	4,133,199	4,394,747	1,240,831	*Dr.* bal. 3,153,916	11,865	5,945,982	9,099,898
Increase of	..	..	..	*2,137,301*	*255,003*	*Dr.* *1,882,298*	..	*407,396*	*2,289,694*

It will be seen that, if the Fund were put into liquidation on the basis of treating existing pensioners, widows, &c., as preference shareholders with a prior right of having their claims satisfied before the existing contributors shared in the assets, the former would receive only 28·23 per cent. (5s. 8d. in the pound) of their pensions or allowances, thus suffering a cut of 71·77 per cent. (14s. 4d. in the pound), while contributors still in the Service would be unable to recover any contributions paid into the Fund.

If, on the other hand, the Fund were liquidated on the basis of terminating all pensions and of dividing the accumulated funds amongst the existing contributors the total capital available would pay them only 68·84 per cent. (13s. 9d. in the pound) of their past contributions (without interest) equivalent to the forfeiture of 31·16 per cent. (6s. 3d. in the pound).

How far the Fund has retrogressed will be seen by comparing the above position on hypothetical liquidation with similar figures taken out in connection with the last statutory valuation, and shown on page 25 of the report of the Parliamentary Committee set up in 1932 to consider the proposed Government Superannuation Funds Bill.

The figures are important if for no other reason than to show why the Fund should receive an adequate subsidy in the future.

39. As this will probably be the last occasion on which I shall have the privilege of making an actuarial report on the Government Railways Superannuation Fund, I submit in Table VIII of the Appendix a consolidated Revenue Account of the Fund since its inception.

I have also prepared the following concise summary of the position of the Fund at the successive dates of actuarial valuation. It will be seen that for illustrative purposes, the accumulatated funds have been regarded as applicable to a hypothetical pensioners' account and the balance to a contributors' account. This strips the problem of all technicalities and throws the position of the Fund into clear perspective. The table should convince any thoughtful person that reconstruction is urgently needed, unless Government is able and willing to shoulder the enormous liability shown therein.

40. The causes of the present large deficiency in the Fund may briefly be summarized as follows:—

(*a*) The accumulation at interest of the unredeemed amount of the initial deficiency caused by the gift, in respect of service prior to the inception of the Fund, of free pensions for each year of such "back service" at the same rate as for future contributory service.

The State definitely incurred this liability in making a gift of that portion of the pension based on service prior to the establishment of the Fund, and the soundest plan would have been to take steps to pay the full capital sum into the Fund, or, alternatively, to provide for its redemption within a reasonable period of from twenty to thirty years, and to make a small additional annual subsidy to assist the contributions of new entrants.

A lot of nonsense is uttered from time to time that the Government Railways Superannuation Fund was never intended to be on an actuarial basis. The repetition of this shibboleth is equivalent to the action of the ostrich in hiding its head in the sand, as it cannot obscure the fundamental principle that the granting of benefits in excess of those provided by the contributions can end only in disaster. Those who favour the "non-actuarial" basis will find it difficult to explain why the Fund only ran for eight years before it was found necessary to be subsidized by £25,000 per annum, and that the annual subsidies thereafter increased to £75,000 per annum from 1920, and to £170,000 per annum from 1926, and in the two years following the present valuation to over £250,000 per annum. It would be better for both the State and the contributors if the annual subsidies were fixed at an adequate percentage of the pay-roll, having regard to the actuarial requirements, than to be faced with having to provide an amount progressing by leaps and bounds, and eventually reaching a figure that may be beyond the capacity of the Working Railways Account or the State to support.

(*b*) The burden thrown on the Fund as the result of the practice followed, particularly from 1919 onwards, in compulsorily retiring men with forty years' service irrespective of their attained ages or their own wishes and the extensive use of the extended provisions in the Act for retirement after thirty-five years.

(*c*) The great increase in pension liability due to the effect of the War on salary levels and to the inclusion of house allowance as salary for the purpose of computing pensions. At the most a contributor would only contribute on his increased salary for his future service whereas he would obtain the same pension benefit as if he had been in receipt of such a salary for the whole period of his service. Some idea of the increased pension liability can be obtained from the fact that between 1913 and 1927 the average salary of contributors aged fifty and over increased by £125 in respect of the First Division and £100 in respect of the Second Division.

(*d*) Additional concessions granted to contributors from time to time, as for example, the options to contribute on salaries prior to the cuts of 1921–22, 1931, and 1932 or to accept refunds of contributions on excess payments.

(*e*) Inadequate contribution scales.

GENERAL REMARKS.

41. *Actuarial Pensions.*—There appears to be an impression in some quarters that an actuarial pension represents a curtailment of a contributor's rights. Actually this is a concession designed to provide that any officer who, as the result of retrenchment or other policy causes, is compelled after long service to retire before attaining the specified age or length of service, may elect to receive such pension as is the actuarial equivalent of the pension he would have received had he completed his full period of service and paid contributions till the date of retirement. Without any such provision for actuarial pensions, compulsorily retired contributors would be limited to accepting a refund of their contributions.

In the Australian Government Superannuation schemes actuarial pensions are limited to the cases of officers who retire between age sixty and sixty-five. In the New Zealand Government Railways Fund, however, this is carried much further, as the right to an actuarial pension is granted to any male officer who is compulsorily retired for reasons other than misconduct at any age over fifty-five, or provided he has served at least thirty years.

It may appear somewhat inconsistent that an officer who is compulsorily retired at certain ages obtains better treatment than one who voluntarily retires. While actuarial pensions involve no financial strain on the Superannuation Fund, and it would not impair the stability of the Fund to bring the compulsory and voluntary retirements into line, one good reason for the differentiation is that a superannuation scheme has for one of its objects the retention of good men in the Service. To facilitate their retirement at comparatively early ages on any amount of pension however small would encourage them to seek more remunerative positions in private employment.

42. *Medically Unfit Pensions.*—This is probably one of the most difficult problems in the administration of the Fund, as on the one hand some officers are classed " medically unfit " although they are quite competent to undertake work other than the particular work they have been performing in the Service, while on the other hand, some officers totally unfit to engage in any occupation at all do not fall within the statutory definition of " medically unfit."

It seems advisable to consider the desirability of creating a special class of " medically unfit for duty " officers, grading each such officer as 100 per cent., 90 per cent., &c., unfit to carry on his occupation.

An officer graded 100 per cent. medically unfit would, of course, receive a full pension based on length of service, an officer graded 50 per cent. medically unfit for duty might be allowed a pension half-way between a " length of service " pension and an " actuarial " pension, and all other grades be dealt with similarly.

43. *Provision for Joint Life and Survivor Pensions.*—There have from time to time been suggestions to increase the widows' pension now standing at £31 per annum. The cost of making any material increase is too high to warrant any recommendation that it should be provided out of the Consolidated Fund, and, moreover, it may very well be argued that it is no duty of the State as employer to relieve the employee of his own obligation to provide for his widow by life assurance or other means.

On the other hand there would be objections raised to any suggestion that all employees should be asked to pay an extra contribution for an increased widows' allowance, partly because of the high cost of such a benefit and partly because in the cases where a pensioner or contributor died as a bachelor or a widower, he would have been paying a substantial contribution for no benefit at all. It would be possible, however, to meet the case of any employee who would prefer to accept a smaller retiring allowance on the understanding that his widow's allowance was increased, by making provision in the Act for such an option on terms that would involve no increased strain on the Fund. One plan would be to allow such contributors the option to exchange their retirement pensions for a joint life and survivor pension payable so long as either the husband or wife were alive. Alternatively, another rate of pension could be payable to the contributor on the basis of a reduction on his death to, say, half-rates for his widow.

The Fund's finances could be adequately protected, by providing for such an option to be exercised by the contributor not less than five years prior to the date of retirement, this to obviate any adverse selection against the Fund by the contributor. In order to meet the case of present contributors who are now within five years of retirement, or even of any existing pensioners, provision might also be made for them to have an option to exchange their pensions for joint life and survivor pensions within a specified period, say six months from the date of passing of the amendments, subject to the furnishing of such evidence of medical fitness as is determined by the Superannuation Board.

44. *Removal of Pension Limitation of £300 per annum.*—The National Expenditure Commission of 1932 made a strong recommendation for the removal of the arbitrary pension limitation of £300 per annum in respect of officers joining the Service after the 24th December, 1909, so as to bring them into line with officers joining the Service before that date.

The principle of compelling officers to contribute to a Fund and at the same time limiting them to a pension of £300 irrespective of the value of their contributions is in no way different from compelling a body of men to place a specific portion of salary in a savings-bank on the understanding that in no case shall they receive back more than a uniform arbitrary amount determined by the directors of the savings-bank.

There is a further aspect of this arbitrary pension limitation which is probably not fully appreciated by contributors generally, and that is, its anomalous effect on officers compulsorily retired on actuarial pensions. If an officer paying contributions on a salary of £900 per annum retires after the completion of forty years' service, he receives a pension computed at a rate for each year of service equal to only one-half of the rate received by an officer of similar age and service retired on a salary of £450, but he at least receives the same annual pension (£300). If, however, after twenty-five years' service these two officers are compulsorily retired on actuarial pensions in accordance with the provisions of the Act, the officer receiving a salary of £900 per annum will actually be granted a pension of smaller amount than the officer drawing a salary of £450, this paradoxical result being due to the fact that the loss to the Fund of his future contributions would be greater than in the case of the officer drawing £450 per annum. The Fund, having in each case to provide for a deferred pension of £300, requires less capital in hand if its future income from contributions is greater, and accordingly will pay a smaller immediate pension to the more highly-paid contributor if he is compulsorily retired on an actuarial pension. Having established that with an arbitrary maximum pension limit of £300 per annum the higher the officer's salary the smaller will be his actuarial pension, it only remains to be seen whether it is possible for an officer's actuarial pension to vanish altogether—*i.e.*, a *reductio ad absurdum*.

Such a position would arise in the case of any officer who joined the Fund after 24th December, 1909, at age twenty and who succeeded in attaining a salary of £2,840 or over at age forty-five and was then retrenched. We have recently seen a General Manager of Railways in receipt of £3,500 per annum at age forty-five retired under the compulsory provisions of the Act, and if he had been subject to the £300 pension limit, his actuarial pension would have been nil. This may readily be verified from the fact that future contributions to the Superannuation Fund of £175 per annum from age forty-five to age sixty would be of greater capital value than a maximum deferred pension of £300 per annum at age sixty, and, accordingly, if future contributions are more than sufficient to provide the benefits the Fund would lose by his compulsory retirement even if it paid him no pension.

Amid the welter of evidence that was submitted to the Parliamentary Committee, appointed to consider the proposed Government Superannuation Funds Bill in 1932–33, there is a danger in connection with this £300 arbitrary limit that the aspect of grave injustice to the higher-paid officers—which has never been denied—may obscure one of the fundamental reasons for establishing a staff superannuation scheme—namely, to induce men of ability to join and continue in the Service, and to offer an adequate retiring-allowance to those who rise to high positions as the result of outstanding merit.

A superannuation scheme is not established by an employer—whether a Government or a private firm—from philanthropic motives, but rather from motives of enlightened self-interest. The State, in common with any employer of labour, does not remunerate its officers on philanthropic grounds nor on the basis of levelling-down all salaries to a uniform amount irrespective of the work performed, and it is unreasonable to suppose that it has in mind an intention to depart suddenly from sound business principles just when some of its employees reach old age. My object in stressing this aspect of the employer's motive is that once the principle is admitted that the establishment of a superannuation scheme is from enlightened self-interest, we are infallibly led to a certain line of reasoning regarding the relative benefits a superannuation fund should pay and the way the employer's subsidy should be allocated.

The opinion of any competent critic on the New Zealand Government superannuation scheme with its *maximum* pension of £300 per annum, especially when considered side by side with the *minimum* pension of £300 provided by the superannuation fund of an old established New Zealand bank would not only be unflattering to the State, but would also bring out prominently that those responsible for the 1909 amendment lost sight of the elementary principles of a staff superannuation scheme. Compared with the generally accepted idea that merit should be rewarded and an adequate subsidy paid on the contributions of all employees, the State is actually penalizing its best officers, present and future, and in effect allowing the Superannuation Fund to confiscate portion of their contributions and interest accretions.

Up to the present the position has been masked by the fact that those who have already retired were not subject to any pension limitation, since it only applies to officers joining less than twenty years ago. Obviously the bulk of these are many years short of the retiring-age and of the balance joining the Service late in life, none of those who have retired on salaries up to £900 per annum could possibly have been affected by the restriction.

I am strongly of opinion that the abolition of the present arbitrary pension limitation would be in the best interests of the Railway Department.

45. In conclusion, I have to acknowledge the assistance of the small but efficient staff engaged in carrying out the heavy work of the valuation.

C. Gostelow,
Fellow of the Institute of Actuaries (London),
Government Actuary.

APPENDIX.

TABLE I.

The Benefits and Contributions provided for by the Act.

The contributions vary according to the age at the time when the first contribution becomes payable, and are as follows:—

Contributions

For contributors who joined prior to the 1st January, 1908—		
Age 30 and under	..	3 per cent. of pay.
Over 30 and not exceeding 35	..	4 ,,
,, 35 ,, 40	..	5 ,,
,, 40 ,, 45	..	6 ,,
,, 45 ,, 50	..	7 ,,
,, age 50	..	10 ,,
For contributors who joined the scheme on or after the 1st January, 1908—		
Age 30 and under	..	5 per cent. of pay.
Over 30 and not exceeding 35	..	6 ,,
,, 35 ,, 40	..	7 ,,
,, 40 ,, 45	..	8 ,,
,, 45 ,, 50	..	9 ,,
,, age 50	..	10 ,,

Benefits ..

I. *On attainment of Pension Age 60, or after Forty Years' Service.*

(1) A pension of one-sixtieth of yearly salary for each year's service, with a limit of forty-sixtieths (two-thirds) of salary. Maximum pension for entrants after 24th December, 1909, £300.

(2) Or the option, in lieu thereof, of a return of contributions, together with any compensation the contributor may be entitled to under section 76 of the Government Railways Act, 1887.

With the consent of the Minister a contributor may retire after thirty-five years' service.

II. *On retirement before Pension Age (on the Grounds of being Medically Unfit for Future Duty).*

(1) A pension of one-sixtieth of yearly salary for every year of service, limited to forty-sixtieths. In the case of entrants after 24th December, 1909, maximum pension £300.

(2) Or the option, in lieu thereof, of a return of contributions, together with any compensation the contributor may be entitled to under section 76 of the Government Railways Act, 1887.

III. *On Retirement before Pension Age (on other Grounds than Medical Unfitness).*

(1) On voluntary retirement or dismissal for any other reason than misconduct, a return of contributions, together with any compensation the contributor may be entitled to under section 76 of the Government Railways Act, 1887.

(2) On dismissal for misconduct, return of contributions.

IV. *At Death, before becoming entitled to a Retiring-allowance.*

(1) Leaving no widow or children: A return of contributions, together with any compensation the contributor is entitled to under section 76 of the Government Railways Act, 1887.

(2) Leaving a widow:—

(*a*) £31 per annum during widowhood, or, if she so elects,

(*b*) A return of such portion of the contributions and of the compensation to which the contributor was entitled as the Board, having regard to the rights of the children, thinks fit.

(3) Leaving children: 10s. weekly to each child until age 14.

V. *At Death, after becoming entitled to a Pension.*

Return of the contributions and compensation (if any) less any sums received from the Fund.

Pensions are payable by monthly instalments, and are computed on the final salary, unless the contributor has during the previous three years served in any inferior grade to that held at the time of retirement, in which case the average salary for the last three years, or the final salary he was receiving prior to such promotion (whichever is the greater) is taken.

TABLE II.

Statement of Progress of Active Membership.

Year.	New Members. Joining Scheme. M.	F.	Transferred from other Funds. M.	Total.	Discontinued. By Death. M.	F.	By Withdrawal or Dismissal. M.	By Pensions. Old Age or Length of Service. M.	F	Total.	Medically Unfit. M.	By Transfer to other Funds. M.	Total discontinued.	Members Contributing at End of Financial Year. M.	F.	Total.
Part 1903 ..	3,425	1	..	3,426	6	..	7	8	..	8	5	..	26	3,399	1	3,400
1903–12	10,307*	5	9	10,321	332	..	3,247	751	1	752	127	15	4,473	9,243	5	9,248
1912–19	7,974	..	20	7,994	803	2	5,180	435	..	435	142	23	6,585	10,654	3	10,657
1919–20	1,044	..	1	1,045	24	..	1,213†	95	..	95	35	5	1,372	10,328	2	10,330
1920–21	1,660	..	3	1,663	25	..	1,080	77	..	77	26	3	1,211	10,780	2	10,782
1921–22	1,329	..	1	1,330	26	..	566	90	..	90	28†	..	710	11,401	1	11,402
1922–23	864	..	1	865	30	..	475	80	..	80	31	2	618	11,648	1	11,649
1923–24	1,426	..	4	1,430	33	..	698	74	..	74	32	1	838	12,240	1	12,241
1924–25	1,309	..	4	1,313	26	..	620	116	..	116	22	2	786	12,767	1	12,768
1925–26	1,216	..	7	1,223	36	..	609	70	..	70	26	4	745	13,245	1	13,246
1926–27	602	..	5	607	186	..	220	117	..	117	19	1	543	13,309	1	13,310
1927–28	440	..	1	441	43	..	242	87	..	87	21	4	397	13,353	1	13,354
1928–29	577	..	2	579	45	..	203	77	..	77	19	3	347	13,585	1	13,586
1929–30	717	3	..	720	53	..	222	109	..	109	21	1	406	13,896	4	13,900
1930–31	118	..	..	118	58	..	157	155	..	155	28	17	415	13,599	4	13,603
1931–32	39	..	..	39	63	..	282	645	1	646	113	23	1,127	12,512	3	12,515
1932–33	53	..	..	53	45	..	258	92	..	92	55	1	451	12,114	3	12,117
1933–34	53	..	..	53	59	..	221	25	..	25	48	1	354	11,813	3	11,816
Totals ..	33,153	9	58	33,220	1,893	2	15,500	3,103	2	3,105	798	106	21,404	..	..	..

(Compiled from information supplied by Department.)

* Includes 335 ex employees of Wellington and Manawatu Railway Co. † Includes one female.

TABLE III.

Statement of Progress on Pensions.

Year.	Attainment of Pension Age or Length of Service. Granted. Number.	Granted. Pension.	Void by Death. Number.	Void by Death. Pension.	In Force. Number.	In Force. Pension.	Retired Medically Unfit. Granted. Number.	Granted. Pension.	Void by Death. Number.	Void by Death. Pension.	In Force. Number.	In Force. Pension.
		£		£		£		£		£		£
1903–12	760	55,539	126	7,865	634	47,674	132	7,777	52	2,988	80	4,789
1912–19	435	48,282	227	18,382	842	77,574	142	10,358	63	3,406	159	11,741
1919–20	95	16,262	53	4,356	884	89,480	35	2,998	14	928	180	13,811
1920–21	77	15,614	50	3,998	911	101,096	26	2,969	14	1,684	192	15,096
1921–22	90	18,686	38	3,611	963	116,171	28	3,228	9	485	211	17,839
1922–23	80	17,342	55	5,916	988	127,597	31	4,204	4	415	238	21,628
1923–24	74	16,827	54	5,019	1,008	139,405	32	3,016	10	1,032	260	23,612
1924–25	116	32,401	57	6,207	1,067	165,599	22	3,044	9	1,089	273	25,567
1925–26	68	17,357	46	5,390	1,089	177,566	26	3,283	14	1,105	285	27,745
1926–27	119	23,614	75	8,206	1,133	192,974	19	2,089	20	1,286	284	28,548
1927–28	87	16,779	66	7,526	1,154	202,227	21	2,330	13	1,186	292	29,692
1928–29	77	18,378	51	7,957	1,180	212,648	19	2,441	14	1,489	297	30,644
1929–30	109	22,977	82	10,665	1,207	224,960	21	2,729	12	1,071	306	32,302
1930–31	155	34,222	72	9,751	1,290	249,431	28	3,712	11	1,265	323	34,749
1931–32	646	124,281	62	8,063	1,874	365,649	113	16,427	15	1,605	421	49,571
1932–33	92	17,549	56	7,448	1,910	375,750	55	5,934	16	2,340	460	53,165
1933–34	25	4,073	81	13,941	1,854	365,882	48	6,268	16	1,761	492	57,672
Adjustments*	..	+30	+3	−885	−3	+915	..	−103	−4	+77	+4	−180
	..	..	..	..	1,851	366,797	..	..	..	..	496	57,492
Totals ..	3,105	500,213	1,254	133,416	..	..	798	82,704	302	25,212	..	..

Year.	Death of Contributor. Family Pension. Granted. Number.	Granted. Pension.	Void by Death or Expiry. Number.	Void by Death or Expiry. Pension.	In Force. Number.	In Force. Pension.	Total Pensions. Granted. Number.	Granted. Pensions.	Void. Number.	Void. Pension.	In Force. Number.	In Force. Pension.
		£		£		£		£		£		£
1903–12	583	8,579	152	2,116	431	6,463	1,475	71,895	330	12,969	1,145	58,926
1912–19	781	11,528	321	4,523	891	13,468	1,358	70,168	611	26,311	1,892	102,783
1919–20	55	830	54	747	892	13,551	185	20,090	121	6,031	1,956	116,842
1920–21	92	1,316	72	1,036	912	13,831	195	19,899	136	6,718	2,015	130,023
1921–22	77	1,136	59	862	930	14,105	195	23,050	106	4,958	2,104	148,115
1922–23	85	1,245	83	1,184	932	14,166	196	22,791	142	7,515	2,158	163,391
1923–24	98	1,429	62	901	968	14,694	204	21,272	126	6,952	2,236	177,711
1924–25	65	965	88	1,224	945	14,435	203	36,410	154	8,520	2,285	205,601
1925–26	104	2,869	81	2,201	968	15,103	198	23,509	141	8,696	2,342	220,414
1926–27	93	14,769	98	2,529	963	27,343	231	40,472	193	12,021	2,380	248,865
1927–28	72	2,012	78	2,128	957	27,227	180	21,121	157	10,840	2,403	259,146
1928–29	78	2,188	99	2,644	936	26,771	174	23,007	164	12,090	2,413	270,063
1929–30	81	2,281	95	2,560	922	26,492	211	27,987	189	14,296	2,435	283,754
1930–31	95	2,640	98	2,613	919	26,519	278	40,574	181	13,629	2,532	310,699
1931–32	110	3,100	78	2,083	951	27,536	869	143,808	155	11,751	3,246	442,756
1932–33	97	2,717	65	1,755	983	28,498	244	26,200	137	11,543	3,353	457,413
1933–34	94	2,629	74	2,009	1,003	29,118	167	12,970	171	17,711	3,349	452,672
Adjustments*	−1	+32	−2	+16	+1	+16	−1	−41	−3	−792	+2	+751
	..	..	..	..	1,004	29,134	..	..	..	..	3,351	453,423
Totals	2,659	62,265	1,655	33,131	..	..	6,562	645,182	3,211	191,759	..	..

* Figures adjusted to agree with Annual Report.

TABLE IIIA.

Existing Pensioners (1st April, 1934), who retired under the Extended Provisions of the Act.

Years of Service.	Number of Cases.	Amount of Pensions.	Age at Retirement.	Number of Cases.	Amount of Pension.
		£ s. d.			£ s. d.
23 ..	1	90 13 0	46	1	1,447 0 0
24 ..	1	55 17 0	49	1	250 10 0
28 ..	1	65 2 0	50	10	2,527 5 0
29 ..	2	248 13 0	51	35	8,136 4 0
30 ..	4	1,820 15 0	52	51	12,052 7 0
31 ..	2	233 17 0	53	51	11,974 0 0
32 ..	3	564 16 0	54	59	16,379 5 0
33 ..	3	629 14 0	55	76	18,063 11 0
34 ..	4	945 13 0	56	72	17,268 16 0
35 ..	141	30,440 14 0	57	52	11,772 3 0
36 ..	79	16,959 12 0	58	24	4,897 10 0
37 ..	69	15,593 9 0	59	30	5,767 11 0
38 ..	72	18,186 19 0	60	14	2,954 17 0
39 ..	64	19,119 18 0	..	..	..
Over 39 ..	30	8,535 7 0	..	..	..
Totals ..	476	113,490 19 0	..	476	113,490 19 0

TABLE IV.

Present Annual Pay and Contributions of Officers now in Service.*

Age attained.	First Division. Number.	First Division. Salaries as at 1st April, 1934 (exclusive of 5 per cent. Increase in Partial Restoration of Salary Cuts). Actual.	First Division. Salaries … Contributing.	First Division. Present Annual Contribution.	Second Division. Number.	Second Division. Salaries as at 1st April, 1934 (exclusive of 5 per cent. Increase in Partial Restoration of Salary Cuts). Actual.	Second Division. Salaries … Contributing.	Second Division. Present Annual Contribution.	Age attained.
		£	£	£		£	£	£	
16	..	..	..	..	5	380	380	19	16
17	..	..	..	..	47	3,691	3,691	185	17
18	..	..	..	..	37	3,003	3,003	151	18
19	..	..	..	..	30	3,765	3,765	146	19
20	17	2,377	2,377	119	26	3,676	3,676	184	20
21	43	6,549	6,549	328	128	18,426	18,426	922	21
22	67	10,884	10,884	544	55	9,269	9,269	464	22
23	87	15,689	15,689	784	58	11,259	11,259	563	23
24	146	29,665	29,665	1,481	125	24,764	24,831	1,242	24
25	132	28,060	28,060	1,401	213	43,296	43,915	2,196	25
26	117	26,334	26,334	1,315	217	43,898	44,643	2,232	26
27	100	23,142	23,151	1,156	250	49,653	50,244	2,513	27
28	71	16,791	16,901	845	329	65,680	66,831	3,344	28
29	72	17,619	17,908	895	317	63,322	64,576	3,230	29
30	70	16,785	17,153	857	361	72,210	73,585	3,680	30
31	71	17,256	17,750	887	331	66,689	67,592	3,380	31
32	82	19,752	20,557	1,029	352	71,379	72,474	3,624	32
33	116	28,197	29,750	1,487	317	64,308	65,306	3,267	33
34	135	33,572	35,303	1,765	338	69,408	71,068	3,564	34
35	103	25,668	27,273	1,367	315	64,546	66,295	3,339	35
36	86	22,948	24,691	1,234	374	77,160	79,261	4,013	36
37	93	25,490	28,035	1,402	339	70,236	71,878	3,654	37
38	71	18,883	21,274	1,066	305	64,167	66,110	3,386	38
39	55	16,224	17,833	892	295	62,751	65,357	3,364	39
40	49	13,820	15,454	775	289	61,883	64,924	3,420	40
41	42	12,679	14,545	731	270	57,916	61,744	3,257	41
42	74	20,784	23,671	1,059	249	52,647	56,382	2,938	42
43	83	24,235	27,465	1,085	264	56,266	60,319	3,109	43
44	67	19,551	22,418	797	241	52,034	56,921	2,988	44
45	48	15,605	18,281	633	242	52,721	57,814	2,879	45
46	56	17,291	20,527	644	293	63,868	70,960	3,374	46
47	51	17,927	20,021	688	271	58,535	65,174	3,127	47
48	59	20,640	23,577	809	226	49,345	56,241	2,602	48
49	61	20,618	23,476	774	222	48,817	55,980	2,535	49
50	69	27,020	29,986	1,001	207	45,517	52,845	2,422	50
51	50	18,676	21,219	696	187	42,331	49,657	2,108	51
52	35	11,968	13,546	483	181	39,161	45,332	2,038	52
53	48	16,397	18,153	592	152	32,573	38,184	1,827	53
54	28	9,695	10,604	350	149	31,797	37,619	1,727	54
55	24	8,193	9,027	304	125	25,957	30,758	1,415	55
56	34	11,322	12,485	463	109	22,922	27,424	1,249	56
57	23	7,222	8,376	290	77	15,846	19,026	851	57
58	16	5,290	5,835	218	80	16,510	19,837	883	58
59	16	5,111	6,035	213	75	15,752	19,183	913	59
60	14	4,780	5,600	210	40	8,298	10,089	421	60
61	5	1,494	1,675	63	15	3,033	3,761	199	61
62	..	..	..	..	1	219	270	19	62
63	..	..	..	..	1	219	289	20	63
Totals ..	2,686	712,203	769,113	33,732	9,130	1,881,103	2,008,168	98,983	

* Compiled from cards.

TABLE V.

RAILWAYS SUPERANNUATION FUND.

CLASSIFICATION OF PENSIONS GRANTED, SHOWING THE AGES AT WHICH THEY WERE GRANTED FOR PERIOD FROM 1ST APRIL, 1927, TO 31ST MARCH, 1934.*

Age at which Pensions granted.	Attainment of Pension Age or Length of Service. (Section 102.)		Retired Medically Unfit. (Section 111.)		Widows and Children. (Section 113.)		Total.	
	Number.	Amount of Pension.	Number.	Amount of Pension.	Number.	Amount of Pension.	Number.	Amount of Pension.
		£ s. d.		£ s. d.		£		£ s. d.
74	1	154 13 0	..	..	..	..	1	154 13 0
73	..	..	..	..	..	..	..	..
72	3	412 0 0	..	..	..	..	3	412 0 0
71	2	251 12 0	..	..	..	..	2	251 12 0
70	1	161 17 0	..	..	..	..	1	161 17 0
69	1	207 18 0	..	..	..	..	1	207 18 0
68	6	756 5 0	..	..	..	..	6	756 5 0
67	6	831 16 0	..	..	..	..	6	831 16 0
66	15	2,367 8 0	..	..	..	..	15	2,367 8 0
65	35	5,881 13 0	..	..	..	..	35	5,881 13 0
64	22	3,441 1 0	..	..	..	..	22	3,441 1 0
63	44	7,413 2 0	..	..	1	31	45	7,444 2 0
62	54	8,971 15 0	..	..	2	62	56	9,033 15 0
61	100	16,617 8 0	2	254 10 0	..	..	102	16,871 18 0
60	191	30,061 3 0	9	1,444 19 0	4	124	204	31,630 2 0
59	66	13,505 8 0	22	3,177 9 0	1	31	89	16,713 17 0
58	63	13,880 6 0	27	3,945 13 0	1	31	91	17,856 19 0
57	107	26,359 9 0	16	2,313 7 0	4	124	127	28,796 16 0
56	106	26,010 17 0	23	3,426 3 0	2	62	131	29,499 0 0
55	92	22,026 9 0	18	2,651 12 0	2	62	112	24,740 1 0
54	67	17,813 4 0	16	2,376 18 0	2	62	85	20,252 2 0
53	43	9,926 11 0	18	2,737 18 0	6	186	67	12,850 9 0
52	54	11,639 5 0	10	1,503 18 0	7	217	71	13,360 3 0
51	46	9,024 7 0	19	3,302 12 0	5	155	70	12,481 19 0
50	21	3,876 6 0	15	2,457 16 0	9	279	45	6,613 2 0
49	27	3,045 1 0	16	2,234 16 0	12	372	55	5,651 17 0
48	7	944 6 0	16	2,211 13 0	9	279	32	3,434 19 0
47	6	705 19 0	8	1,334 9 0	10	310	24	2,350 8 0
46	2	1,540 19 0	8	1,130 15 0	3	93	13	2,764 14 0
45	1	85 19 0	6	461 18 0	8	248	15	795 17 0
44	..	..	1	178 9 0	9	279	10	457 9 0
43	..	..	2	289 9 0	6	186	8	475 9 0
42	..	..	2	59 10 0	10	310	12	369 10 0
41	..	..	5	194 13 0	9	279	14	473 13 0
40	..	..	2	183 12 0	8	248	10	431 12 0
39	..	..	5	375 18 0	5	155	10	530 18 0
38	..	..	7	226 9 0	13	403	20	629 9 0
37	..	..	10	719 18 0	7	217	17	936 18 0
36	..	..	2	134 13 0	9	279	11	413 13 0
35	..	..	1	47 19 0	8	248	9	295 19 0
34	..	..	2	107 5 0	7	217	9	324 5 0
33	..	..	4	168 12 0	8	248	12	416 12 0
32	..	..	3	150 11 0	10	310	13	460 11 0
31	..	..	1	55 19 0	5	155	6	210 19 0
30	..	..	1	65 10 0	7	217	8	282 10 0
29	..	..	2	77 10 0	10	310	12	387 10 0
28	..	..	..	..	7	217	7	217 0 0
27	..	..	2	66 5 0	1	31	3	97 5 0
26	..	..	..	..	4	124	4	124 0 0
25	..	..	2	48 15 0	3	93	5	141 15 0
24	..	..	2	28 0 0	5	155	7	183 0 0
23	..	..	..	..	5	155	5	155 0 0
22	..	..	1	19 15 0	3	93	4	112 15 0
21	..	..	..	..	2	62	2	62 0 0
19	..	..	..	..	2	62	2	62 0 0
14	..	..	..	..	12	312		312 0 0
13	..	..	..	..	23	598		598 0 0
12	..	..	..	..	30	780		780 0 0
11	..	..	..	..	32	832		832 0 0
10	..	..	..	..	32	832		832 0 0
9	..	..	..	..	31	806		806 0 0
8	..	..	..	..	23	598		598 0 0
7	..	..	..	..	32	832	373	832 0 0
6	..	..	..	..	32	832		832 0 0
5	..	..	..	..	24	624		624 0 0
4	..	..	..	..	21	546		546 0 0
3	..	..	..	..	27	702		702 0 0
2	..	..	..	..	17	442		442 0 0
1	..	..	..	..	21	546		546 0 0
0	..	..	..	..	16	416		416 0 0
	1,189	237,913 17 0	306	40,164 18 0	624	17,479	2,119	295,557 15 0

* Compiled from cards.

TABLE VI.

EXPERIENCE TABLE.

Age.	Contributing Members, First Division. Probabilities of Withdrawal. Death or Retirement within a Year (expressed as a Percentage of the Number existing in the Service at Beginning of the Year). Withdrawal.	Death.	Retirement.	Contributing Members, Second Division. Probabilities of Withdrawal. Death or Retirement within a Year (expressed as a Percentage of the Number existing in the Service at Beginning of the Year). Withdrawal.	Death.	Retirement.	Age.
15	7·60	0·18	..	11·00	0·19	..	15
16	7·50	0·18	..	10·95	0·19	..	16
17	7·20	0·18	..	10·90	0·19	..	17
18	6·55	0·18	..	10·80	0·19	..	18
19	5·90	0·18	..	10·60	0·19	..	19
20	5·25	0·19	..	10·30	0·20	..	20
21	4·60	0·19	..	9·90	0·21	..	21
22	4·00	0·19	..	9·40	0·22	..	22
23	3·50	0·19	..	8·85	0·23	0·10	23
24	3·10	0·19	..	8·35	0·24	0·10	24
25	2·80	0·19	..	7·85	0·25	0·10	25
26	2·60	0·19	..	7·35	0·26	0·10	26
27	2·44	0·20	..	6·87	0·27	0·10	27
28	2·30	0·21	0·10	6·41	0·28	0·10	28
29	2·17	0·22	0·10	5·98	0·29	0·10	29
30	2·04	0·23	0·10	5·58	0·30	0·10	30
31	1·91	0·24	0·10	5·21	0·31	0·10	31
32	1·78	0·25	0·10	4·86	0·32	0·11	32
33	1·65	0·26	0·10	4·53	0·33	0·11	33
34	1·52	0·27	0·10	4·22	0·34	0·11	34
35	1·40	0·28	0·10	3·93	0·35	0·11	35
36	1·28	0·29	0·10	3·66	0·36	0·12	36
37	1·16	0·30	0·10	3·41	0·37	0·12	37
38	1·05	0·31	0·10	3·18	0·38	0·12	38
39	0·94	0·32	0·10	2·97	0·39	0·13	39
40	0·83	0·33	0·11	2·77	0·41	0·13	40
41	0·73	0·34	0·12	2·57	0·43	0·13	41
42	0·63	0·35	0·13	2·38	0·45	0·14	42
43	0·53	0·36	0·14	2·20	0·47	0·15	43
44	0·43	0·38	0·15	2·02	0·50	0·17	44
45	0·34	0·40	0·17	1·84	0·53	0·20	45
46	0·26	0·42	0·22	1·67	0·57	0·25	46
47	0·19	0·44	0·30	1·51	0·61	0·33	47
48	0·14	0·46	0·42	1·36	0·66	0·45	48
49	0·11	0·48	0·60	1·22	0·71	0·62	49
50	0·09	0·51	0·90	1·08	0·76	0·84	50
51	0·07	0·54	1·40	0·95	0·82	1·12	51
52	0·05	0·57	2·20	0·82	0·88	1·47	52
53	0·03	0·61	3·30	0·70	0·94	1·90	53
54	0·01	0·65	4·70	0·58	1·00	2·40	54
55	..	0·70	6·50	0·46	1·07	3·00	55
56	..	0·76	9·00	0·34	1·14	4·00	56
57	..	0·83	12·50	0·22	1·22	5·50	57
58	..	0·91	17·50	0·11	1·30	7·50	58
59	..	1·00	25·00	..	1·39	10·00	59
60	..	1·11	40·00	..	1·48	50·00	60
61	..	1·24	40·00	..	1·58	32·50	61
62	..	1·40	40·00	..	1·68	30·00	62
63	..	1·60	40·00	..	1·79	30·00	63
64	..	1·85	40·00	..	1·90	32·50	64
65	..	..	100·00	..	..	100·00	65

TABLE VII.

LIFE AND SERVICE TABLE.

BASED UPON THE RATES PER CENT. PER ANNUM OF WITHDRAWALS, MORTALITIES, AND RETIREMENTS GIVEN IN TABLE VI APPLIED TO 100,000 ENTRANTS AT AGE 15.

	First Division.				Second Division.				
Age.	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Age.
15	100,000	7,600	180	..	100,000	11,000	190	..	15
16	92,220	6,917	166	..	88,810	9,725	169	..	16
17	85,137	6,130	153	..	78,916	8,602	150	..	17
18	78,854	5,165	142	..	70,164	7,578	133	..	18
19	73,547	4,339	132	..	62,453	6,620	119	..	19
20	69,076	3,626	131	..	55,714	5,739	111	..	20
21	65,319	3,005	124	..	49,864	4,937	105	..	21
22	62,190	2,488	118	..	44,822	4,213	99	..	22
23	59,584	2,085	113	..	40,510	3,585	93	41	23
24	57,386	1,779	109	..	36,791	3,072	88	37	24
25	55,498	1,554	105	..	33,594	2,637	84	34	25
26	53,839	1,400	102	..	30,839	2,267	80	31	26
27	52,337	1,277	105	..	28,461	1,955	77	28	27
28	50,955	1,172	107	51	26,401	1,692	74	26	28
29	49,625	1,077	109	50	24,609	1,472	71	25	29
30	48,389	987	111	48	23,041	1,286	69	23	30
31	47,243	902	113	47	21,663	1,129	67	22	31
32	46,181	822	115	46	20,445	994	65	22	32
33	45,198	746	118	45	19,364	877	64	21	33
34	44,289	673	120	44	18,402	777	63	20	34
35	43,452	608	122	43	17,542	689	61	19	35
36	42,679	546	124	43	16,773	614	60	20	36
37	41,966	487	126	42	16,079	548	59	19	37
38	41,311	434	128	41	15,453	491	59	19	38
39	40,708	383	130	41	14,884	442	58	19	39
40	40,154	333	133	44	14,365	398	59	19	40
41	39,644	289	135	48	13,889	357	60	18	41
42	39,172	247	137	51	13,454	320	61	19	42
43	38,737	205	139	54	13,054	287	61	20	43
44	38,339	165	146	58	12,686	256	63	22	44
45	37,970	129	152	65	12,345	227	65	25	45
46	37,624	98	158	83	12,028	201	69	30	46
47	37,285	71	164	112	11,728	177	72	39	47
48	36,938	52	170	155	11,440	156	76	51	48
49	36,561	40	175	219	11,157	136	79	69	49
50	36,127	33	184	325	10,873	117	83	91	50
51	35,585	25	192	498	10,582	101	87	119	51
52	34,870	17	199	767	10,275	84	90	151	52
53	33,887	10	207	1,118	9,950	70	94	189	53
54	32,552	3	212	1,530	9,597	56	96	230	54
55	30,807	..	216	2,002	9,215	42	99	277	55
56	28,589	..	217	2,573	8,797	30	100	352	56
57	25,799	..	214	3,224	8,315	18	101	457	57
58	22,361	..	203	3,913	7,739	9	101	580	58
59	18,245	..	182	4,561	7,049	..	98	705	59
60	13,502	..	150	5,401	6,246	..	92	3,123	60
61	7,951	..	99	3,180	3,031	..	48	985	61
62	4,672	..	65	1,869	1,998	..	34	599	62
63	2,738	..	44	1,095	1,365	..	24	409	63
64	1,599	..	30	640	932	..	18	303	64
65	929	..	..	929	611	..	..	611	65

TABLE VIII.

CONSOLIDATED REVENUE ACCOUNT.

Government Railways Superannuation Fund from 1st January, 1903, to 31st March, 1934.

Income.	£ s. d.	*Expenditure.*	£ s. d.
Fund at 1st January, 1903	..	Pensions to members	4,182,841 9 1
Transfer from Railway Servants' Fund	3,606 7 9	Allowances to widows and children	419,412 12 10
Members' contributions	3,155,436 0 8	Contributions refunded	626,569 5 0
Arrears of contributions, employees Wellington–Manawatu Railway Co.	7,232 10 8	Transfers to other Funds	4,754 19 6
Contributions by Wellington–Manawatu Railway Co.	5,000 0 0	Public Trust Office Commission	23,060 4 10
Contribution by Amalgamated Society Railway Servants	1,500 0 0	Travelling and legal expenses	1,903 11 2
Government subsidy	2,310,000 0 0	Fines remitted	75 13 4
Subsidy under section 114, Government Railways Act, 1926	111,611 11 11	Other payments	27,713 2 11
Subsidy Amalgamated Society Railway Servants	214 13 4	Funds at 31st March, 1934	1,240,830 15 8
Interest from investments	919,663 17 8		
Transfers from other Funds	17 12 0		
Fines	9,525 1 4		
Other receipts	3,353 19 0		
	£6,527,161 14 4		£6,527,161 14 4

TABLE IX.

SUMMARY OF GOVERNMENT RAILWAYS SUPERANNUATION FUND.

Valuation Balance-sheet as at 31st March, 1934.

Liabilities.	£
Value of—	
2,348 pensions for £424,458 2s. 6d. per annum already granted	4,133,199
606 pensions for £18,786 per annum granted to widows of contributors	222,964
398 pensions for £10,348 per annum granted to children of contributors	38,584
Prospective pensions for back service	4,093,533
Prospective pensions for future service	2,601,294
Prospective pensions to widows	226,969
Prospective pensions to children	99,575
Return of contributions on death	30,105
Return of contributions on withdrawal	390,481
	£11,836,704

Assets.	£
Accumulated funds	1,240,831
Value of—	
Future contributions	1,495,975
Subsidy of £170,000 per annum now being paid	3,777,778
Subsidy under section 114, Government Railways Act, 1926	257,760
Future increases in subsidy to be provided	5,064,360
	£11,836,704

Approximate Cost of Paper.—Preparation, not given; printing (944 copies), £28 10s.

By Authority: G. H. Loney, Government Printer, Wellington.—1936.

Price 9d.]