

1915.
NEW ZEALAND.

PUBLIC SERVICE SUPERANNUATION FUND:

ACTUARIAL EXAMINATION FOR THE TRIENNIUM ENDED 31st DECEMBER, 1913.

Laid before Parliament in pursuance of Section 48 (4) of the Public Service Classification and Superannuation Act, 1908.

REPORT

BY THE ACTUARY APPOINTED BY HIS EXCELLENCY THE GOVERNOR TO MAKE THE ACTUARIAL EXAMINATION OF THE PUBLIC SERVICE SUPERANNUATION FUND FOR THE TRIENNIAL PERIOD ENDED 31st DECEMBER, 1913.

1. I HAVE the honour to submit the following report on the Public Service Superannuation Fund as at the 31st December, 1913, as required by section 48 of the Public Service Classification and Superannuation Act, 1908.

2. The scheme, which came into operation on the 1st January, 1908, with the few exceptions set out in section 52, embraces all permanent public servants outside the Government Railways Superannuation Fund and the Teachers' Superannuation Fund.

3. The contributions and benefits provided by the Act, together with statements showing the progress of active membership, discontinuance of membership from various causes, and the progress of pensions for each year, will be found in Tables I to IV of the appendix to this report. The ages of the contributors at the date of the valuation, together with their contributions and other particulars, are shown in Table V, and the pensions granted during the triennium, with the ages at which they were granted, in Table VI.

4. The number of pensioners on the fund at 31st December, 1913, was 811, drawing pensions amounting to £60,970 per annum; the number of contributors at the same date was 10,809, with aggregate salaries amounting to £1,820,379 and paying contributions at the rate of £118,006 per annum.

5. The income and outgo of the fund during the three years are shown in the Consolidated Revenue Account, which is as follows:—

CONSOLIDATED REVENUE ACCOUNT OF THE PUBLIC SERVICE SUPERANNUATION FUND FROM THE 1ST JANUARY, 1911, TO THE 31ST DECEMBER, 1913.

<i>Income.</i>	£	s.	d.	<i>Outgo.</i>	£	s.	d.
Funds at 1st January, 1911 ...	263,948	0	0	Pensions to members ...	145,067	17	6
Members' contributions ...	321,567	4	5	Pensions to widows and children ...	8,124	5	5
Government contributions ...	94,000	0	0	Contributions returned ...	29,174	16	3
Transfers from other funds ...	554	16	0	Compensation ...	6,605	14	10
Interest ...	49,706	18	0	Transfers to other funds ...	35	13	11
Fines ...	789	0	8	Salaries ...	2,458	2	1
				Public Trust Office commission ...	396	15	8
				Travelling and office expenses ...	774	17	6
				Other payments ...	13	9	8
				Funds at 31st December, 1913 ...	537,914	6	3
	£730,565	19	1		£730,565	19	1

VALUATION.

6. The rate of interest used in the valuation was 4 per cent. The funds are invested with the Public Trustee at $4\frac{1}{4}$ per cent., and whilst there is no doubt that a more remunerative rate

of interest could be obtained at the present time by direct investment, a higher average rate than 4 per cent. could not be assumed with safety for the long period involved in a pension scheme.

7. The Experience Table (Table VII) contains the rates per cent. per annum of withdrawal, mortality, retirement on pension, and increase of salary assumed in arriving at the liability. These have as far as possible been calculated from the experience of the fund itself, but owing to the limited time the scheme has been in operation—six years—the data are not always sufficient, consequently the death-rates amongst males have been arrived at by including the experience of the salaried division of the Government Railways (1903–1912), and the death-rate and rate of retirement on pension amongst females by including the experience of the female teachers.

The Life and Service Table deduced from these rates is given in Table VIII of the appendix.

In valuing the benefits to widows and children the statistics of the fund itself have been made use of as far as possible, but the rate of remarriage of widows has been taken from the statistics of the general population (widows and spinsters), and the death-rates of widows and children from Dr. Farr's Healthy English Mortality Tables.

It has been assumed that all male and female contributors will retire at the ages of sixty-five and sixty respectively if they have not retired before reaching these ages.

8. The valuation balance-sheet is given in detail in Table IX, a summary being as follows:—

<i>Liabilities.</i>		£
Value of contributors' pensions already granted for £56,744 per annum	...	464,919
Value of widows' and children's pensions already granted for £4,226 per annum	...	37,384
Value of prospective pensions (to present contributors) for back service	...	1,692,148
Value of prospective pensions (to present contributors) for future service	...	1,323,625
Value of prospective pensions to widows and children of present contributors	...	375,842
Value of return of contributions on death or withdrawal	...	352,464
		<u>£4,246,382</u>

<i>Assets.</i>		£
Accumulated funds	...	537,914
Value of contributors' future contributions	...	1,327,002
Value of present and future Government subsidies	...	2,381,466
		<u>£4,246,382</u>

9. Compared with the previous valuation, the liabilities show an increase of £1,287,266, and the funds and value of future contributions an increase of £637,908, making a net increase in the Government's liability of £649,358. This is chiefly accounted for by increases in the number of contributors and in the salaries on which future pensions are to be based.

The pensions have increased from £39,944 per annum to £60,970; the number of contributors from 8,371 to 10,809; and the salaries from £1,358,119 to £1,820,379. The average salary per contributor has increased from £162 to £168, and the additions being greater at the older ages have had a greater effect on the liability.

10. The Act (section 48 (2)) requires the report to be so prepared "as to show the state of the fund at the close of the period, having regard to the prospective liabilities and assets and the probable annual sums required by the fund to provide the retiring and other allowances falling due in the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions." This has been taken to mean that the estimated pensions falling due during the three years following the valuation are to be divided into two parts—viz., (a) containing that part of the pensions provided for by the contributions, and (b) the remainder, which includes the pensions for service prior to joining the fund, and (as the contributions are insufficient to purchase full benefits for even future service) such part of the pensions for years of contribution as the contributions are not sufficient to provide for.

The first is clearly a liability which should be borne by the fund, but the second is not, and it is assumed that the intention of section 49 is that it should be paid for by a subsidy, to be increased from time to time if necessary according to the Actuary's report.

As the contributions at most can only have been paid for six years, while many of the pensions granted are for forty years' service, the amount to be paid by subsidy at present is much the larger, but the portion provided out of the contributions shows a steady increase.

The estimated pensions falling due during 1914, 1915, and 1916, and the parts provided by the contributions and to be paid by subsidy respectively, are as follows:—

Required for	1914. £	1915. £	1916. £
Current ordinary pensions	53,437	50,225	47,095
New pensions and family pensions	13,227	24,440	35,963
	<u>66,664</u>	<u>74,665</u>	<u>83,058</u>
Deduct amount of pensions provided by contributions	6,501	8,379	10,542
Subsidies required for ensuing three years...	60,163	66,286	72,516

I have to report, therefore, that in addition to the annual subsidy of £48,000 now being paid, further subsidies of £12,000, £18,000, and £25,000 will be required for the years 1914, 1915, and 1916 respectively, or an average of about £18,000 per annum.

11. The subsidies paid to the fund so far have in reality been old payments in a new guise, taking the place of compensation for loss of office and gratuities; for while the Government's total contribution to the fund for the six years has been £156,500, the compensation the pensioners would have been entitled to if they had not accepted pensions was £149,554. This sum is computed only to the date these pensioners joined the fund, whereas if there had been no fund there would have been further compensation from that date to the date of retirement, bringing the sum in excess of the actual subsidy. There has also been a great saving in gratuities, for while these amounted to £26,210 for the five years prior to the establishment of the fund, for the next succeeding five years they only amounted to £6,065, or a decrease of over £20,000.

PROPOSED ALTERATIONS AND AMENDMENTS TO THE SCHEME.

12. One of the principal amendments that has been suggested is to alter the form of the Government subsidy to a fixed percentage of the annual salary. The present subsidy is based on the pensions paid in excess of those that the contributions will produce, an amount which for many years will be an increasing one. Every increase in the subsidy appears to involve new legislation, with its consequent delay, and a more automatic method of obtaining the necessary vote is much to be desired. A subsidy based on the annual salaries of contributors would, as long as new entrants are admitted, provide a yearly payment increasing with the growth of the service, and would pay the deficiency of the contributions in the case of new entrants, and also provide a certain amount which could be placed against the liability for the older members. If ever the fund were closed for new entrants, however, the present method would have to be reverted to, or some other means found of meeting the deficiency. The Government guarantee of the solvency of the fund should therefore be retained in addition to the subsidy.

13. The annual salaries of the contributors at 31st December, 1913, were £1,820,379 per annum, and 3½ per cent. would produce £63,713, increasing at the rate of about £5,000 per annum, as compared with the estimated subsidies of £60,000, £66,000, and £73,000 for the years 1914, 1915, and 1916 respectively.

The subsidy required increases rather faster than 3½ per cent. on the salaries, and I would recommend that 4 per cent. be paid. As far as can be seen at present a 4-per-cent. subsidy would provide for the deficiency in the contributions for future service and gradually liquidate the liability for the pensions for back service.

14. I may say that in the schemes approved under the Local Authorities Superannuation Act, 1908 (the contributions and benefits under which are identical with those of the Public Service scheme, save that pensions for back service are not payable out of the fund), the least subsidy paid is equivalent to 4 per cent. of salaries. The schemes and subsidies are as follows:—

Wellington Harbour Board: Subsidy 65 per cent. of the members' contributions, equivalent to 5 per cent. of the salaries.

Auckland Harbour Board: Subsidy 60 per cent. of the members' contributions, equivalent to 4 per cent. of the salaries.

Buller County Council: Subsidy 80 per cent. of the members' contributions, equivalent to 7 per cent. of the salaries.

As already stated, in these schemes pensions are not payable out of the fund for back service. The Act, however, gives power to pay them out of the ordinary revenues of the local authority, and in addition to the subsidies mentioned the Wellington Harbour Board pays full pensions, and the Buller County Council half-pensions, for back service, thus greatly increasing the nominal subsidies and thereby actually placing the funds in a stronger position than the Public Service scheme.

15. *Increasing the Allowance to Widows under Section 42 of the Act.*—In this connection I have been asked to make a computation (1) of the effect of increasing the widow's allowance to £52 per annum by (a) a reduction of the contributor's retiring-allowance if he survives, (b) increased contributions; the election of the contributor to the proposed reduction of his retiring-allowance to be made not less than three years prior to his retirement: (2) what amount of annual contribution would be required from the Consolidated Fund to make the above increase without (a) reduction of the contributor's retiring-allowance or (b) increased contributions.

16. If an equivalent reduction is made in the contributor's retiring-allowance an increased allowance could be given to his widow without extra cost to the fund, provided it is sufficiently guarded against adverse selection. It is quite clear, however, that the fund would not be sufficiently protected by the selection being made "not less than three years before retirement," and a strict medical examination would be absolutely necessary before allowing any transfer of pension. For example, an officer in bad health would risk very little by giving up part of his pension for the benefit of his widow, even if the selection had to be made (say) five years before death or retirement, for if he died before retirement his widow would be no worse off than under the old arrangement; while if he lived to retire, by sacrificing a part of his pension when by reason of his bad health his pension would only be worth a few years' purchase (if any), he would have secured a substantial annuity for his wife. The fund, in fact, would have everything to lose and nothing to gain.

I see no particular objection, however, to a pensioner able to pass a medical examination being allowed to surrender a certain portion of his pension to purchase an annuity payable to his present wife if she survives him, the calculation to be based on the ages of the pensioner and his wife at the date of the surrender. The present allowance is payable to the contributor's

or pensioner's widow, who is not necessarily his present wife, but this contingency could hardly be allowed for without further experience, and under the proposed arrangement the increased annuity would only be payable should the existing wife be the survivor.

The following example shows the relative values of an annuity to a man aged 65 and a reversionary annuity to his wife, assuming various ages and using the British Offices Life Annuity Experience with $3\frac{1}{2}$ per cent. interest.

Value of an annuity of £100 per annum to a man aged 65, £930.

Age of Wife.	Value of Annuity of £34 (£52-£18) to Wife, commencing on the Death of Husband.	Reduction in Pension necessary to produce the Annuity to Wife.
	£	£
60	150	16
50	231	25
40	302	33
30	365	39

The age of the wife would therefore have a very material effect on the transaction.

17. *Paying for an Increase in the Annuity to the Widow by an Increased Contribution.*—The cost, as I have already shown, depends in individual cases on the state of health of the husband and the age of the wife (if any); but on the assumption that all male contributors are compelled to pay the increased contributions, whether they are married or not, the cost per cent. of salary would be as follows:—

Age.	Premiums to be returned on Death or Withdrawal. Percentage of Salary.	Premiums not to be returned. Percentage of Salary.
15	1.166	766
20	1.343	926
25	1.649	1.206
30	2.035	1.588
35	2.459	2.029
40	2.936	2.544
45	3.620	3.274
50	4.864	4.561
55	7.787	7.141
60	14.551	14.396

18. *Paying the Cost of the Increase out of the Consolidated Fund.*—The value of the prospective pensions to widows of £18 per annum is £315,254, while the value of the pensions granted is £28,085, making a total of £343,339, and an additional £34 per annum would add £648,529 to the present liability.

19. *Increase of Allowance on Retirement as medically unfit.*—If a minimum pension is decided on, as has been proposed, I think it should apply to all cases of retirement, whether for ill health, old age, or length of service—in fact, the vast majority of the small pensions have been granted for retirements in the ordinary course under section 35. A minimum pension of £52 has been suggested for all classes of retirement, and under the Education Act, 1908, section 233, this forms part of the benefits for original members who have elected to remain subject to the provisions of that Act instead of accepting the more liberal benefits under the Public Service Classification and Superannuation Amendment Act, 1908. Of the current pensions payable out of the Public Service Superannuation Fund, 135—viz., 116 males and 19 females—are under £52 per annum, of which 108 have been granted for old age or length of service and 27 for ill health, and the additional cost of bringing these up to £52 would be £2,776 19s. 8d. per annum; capital value, £22,719. The additional capital cost of increasing future pensions to a minimum of £52 per annum would be about £76,242, making a total increase in the liabilities of the fund of £98,961.

As the scheme embraces all classes of public servants, many of whom have entered late in life, while others do not devote their whole time to the service, there are a number of contributors whose salaries will probably never reach the amount of the proposed minimum pension of £52 per annum. An absolute minimum applying to all cases is therefore impossible. For example, the following cases appear amongst other small salaries in the data supplied for females:—

Contributor.	Age at 31st December, 1913.	Salary.	Service.
No. 6678	59	£15	12 years.
No. 2716	65	£50	3 years.

and the introduction of a minimum pension would enable these contributors to retire at once on allowances in excess of their present salaries.

Another point is that retirements for ill health, such as incipient phthisis, are not infrequently made with a view more to remove the risk of infection to other members of the staff than to the absolute inability of the officer to perform his duties, and his earning-capacity outside the Public Service may not be seriously impaired. If in view of the increased liability a minimum pension would entail, it is still considered advisable, I would suggest that in lieu thereof the Board be given power to increase pensions up to £52 per annum, and not exceeding two-thirds of the annual salary, taking into account the particular merits of each individual case. Thus salary, length of service (whether wholly or partially employed in the Public Service), the loss of earning-power, and the number of dependants, &c., could all be given their due weight and

the increase be fixed accordingly. This would somewhat reduce the liability of £98,961 already stated, and, while meeting cases of real hardship, would prevent the fund being imposed upon.

20. *Investment of the Funds.*—I would strongly support the endeavour which is being made to obtain a more remunerative method of investing the funds. The interest ($4\frac{1}{2}$ per cent.) which is now being received is considerably under the market rate, and the probable effect of the war will be to still further increase the demand for money, and consequently the rate of interest. At present the excess interest goes to swell the profits of the Public Trust Office instead of increasing the stability of the fund, and if a higher rate of interest were earned the Government subsidy might eventually be reduced. As the subsidy is increasing, it is necessary to take a somewhat conservative view in considering proposals which will augment the liabilities of the fund, but this would not be so essential if a higher rate of interest could be looked forward to, and in a large fund, such as the Public Service Superannuation Fund will become, a rise of even $\frac{1}{2}$ per cent. in the rate of interest will make a very large increase in the annual revenue.

21. In regard to the proposal that a special investment committee should be set up, for the purpose of investing the moneys belonging to the Public Service, Government Railways, and Teachers' Superannuation Funds, now invested through the Public Trustee, I would point out that merely investing the money through the same Board does not necessarily involve any other change whatever, and each scheme could be as completely independent of the others as it is at present. It would simplify the investments to deal with the money as a whole, and not allocate any individual investment to any particular fund, and besides its simplicity it would assure each receiving the same rate of interest and would prevent any possible loss through a bad investment falling wholly on one fund. The uninvested balance would also be much smaller than if each fund were invested separately, and the interest, less losses (if any) and the expenses of investing the moneys and collecting the interest, could be allotted according to the average amount to the credit of each particular fund. A higher rate of interest would materially strengthen the financial position of the funds, and probably this could best be secured by pooling the moneys for investment purposes, as stated above. Other questions, such as the subsidies to be paid to the various funds, appear to have no particular connection with this matter, and at present there seems to be no necessity for associating them for any purpose other than that of investment.

PERCY MUTER, F.I.A.,

Acting-Actuary to the Government Insurance Department.

Wellington, 1st March, 1915.

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	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 ..
	„ 50	..	..	..	..	10 ..
<p>I. <i>On Attainment of Pension. Males at Age 65, or after Forty Years' Service; Females at Age 55, or after Thirty Years' Service.</i></p> <p>(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.</p> <p>(2.) Or the option, in lieu thereof, of a return of total contributions.</p> <p>(NOTE.—The Minister in charge of a Department may retire contributors on pension in the following cases:—</p> <p>(a.) Where the age of a male contributor is not less than 60, or of a female contributor not less than 50.</p> <p>(b.) Where the age of a male contributor is not less than 55, if his length of service is not less than thirty years.</p> <p>(c.) Where the length of service of a male contributor is not less than thirty-five years.</p> <p>In any such exceptional cases the Minister may impose upon the retiring contributor such terms and conditions as to payments into the Fund or otherwise as he thinks fit.)</p> <p>II. <i>On retirement before Pension Age (on the Grounds of being medically unfit for Future Duty).</i></p> <p>(1.) At any time, on the certificate of two doctors approved by the Board, a pension of one-sixtieth of yearly salary for each year's service, limited to forty-sixtieths.</p> <p>(2.) Or the option, in lieu thereof, of a return of total contributions. (Where officers of the Police Force are incapacitated by injuries received on duty the Board may increase the pension up to three-fifths of salary.)</p> <p>III. <i>On Retirement before Pension Age (on other Grounds than Medical Unfitness).</i></p> <p>(1.) On voluntary retirement or dismissal for misconduct, a return of total contributions.</p> <p>(2.) On compulsory retirement for any reason other than misconduct, after twenty years' service, a return of total contributions with 3½ per cent. compound interest.</p> <p>IV. <i>At Death, whether before or after becoming entitled to a Retiring-allowance.</i></p> <p>(1.) Leaving no widow or children: A return of total contributions less any sums received from the Fund during lifetime.</p> <p>(2.) Leaving a widow:—</p> <p>(a.) £18 yearly during widowhood, or</p> <p>(b.) A return of total contributions, together with such compensation (if any) as the contributor would have been entitled to receive from the Consolidated Fund on compulsory retirement, less any sums received from the Fund during lifetime. (If death occurs before retirement the compensation is paid from the Consolidated Fund: if after retirement, from the Superannuation Fund.)</p> <p>(3.) Leaving children: 5s. weekly to each child until age 14.</p>						
Benefits	<p>(NOTE.—The contributions and pensions are payable monthly, and the pensions are computed on the average salary for the last three years.)</p>					

TABLE II.
STATEMENT OF PROGRESS OF ACTIVE MEMBERSHIP.*

Year.	New Members.			Increase by Promotion.		Discontinued.			Total in Force at End of Year		
	Number.	Salaries.	Annual Contributions.	Salaries.	Annual Contributions.	Number.	Salaries.	Annual Contributions.	Number.	Salaries.	Annual Contributions.
1908 ..	7,546	£ 1,112,099	£ 80,526	£ 37,769	£ 2,301	310	£ 42,521	£ 3,463	7,236	£ 1,107,346	£ 79,364
1909 ..	717	77,877	5,290	58,268	3,425	630	103,414	8,575	7,323	1,140,077	79,504
1910 ..	1,520	205,427	12,814	73,936	4,509	472	61,322	4,238	8,371	1,358,119	92,589
1911 ..	1,253	134,065	8,196	81,431	4,906	484	69,174	5,021	9,140	1,504,441	100,670
1912 ..	1,471	145,396	8,980	96,863	5,730	584	80,469	5,540	10,027	1,666,231	109,840
1913 ..	1,428	123,493	7,047	118,571	7,022	646	87,916	5,903	10,809	1,820,379	118,006
Totals	13,935	1,798,357	122,853	466,838	27,893	3,126	444,816	32,740	..	..	..

TABLE III.
PARTICULARS OF DISCONTINUANCE OF ACTIVE MEMBERSHIP.*

Year.	By Death.			By Withdrawal or Dismissal.		By Pensions.						By Transfer to other Funds.		Total discontinued.		
	Number.	Amount paid on Retirement.		Number.	Amount paid on Retirement.	Old Age or Length of Service.			Medically unfit.			Number.	Amount paid on Transfer.	Number.	Amount paid on Retirement.	
		Family Pension.	£			£	Number.	Amount paid on Retirement.	Pensions entered upon.	Number.	Amount paid on Retirement.				Pensions entered upon.	£
1908 ..	24	£ 41	£ 437	190	£ 421	74	£ ..	£ 6,658	20	£ ..	£ 1,838	2	£ 22	310	£ 484	£ 8,938
1909 ..	37	148	676	417	3,454	154	21	17,039	19	..	1,958	3	5	630	3,628	19,673
1910 ..	28	768	380	387	4,964	42	..	4,147	13	..	1,101	2	13	472	5,745	5,628
1911 ..	33	1,634	292	354	5,853	73	215	8,631	19	..	1,314	5	10	484	7,712	10,237
1912 ..	45	2,222	784	450	8,388	64	..	6,992	19	61	1,017	6	21	584	10,692	8,793
1913 ..	40	1,149	1,043	516	9,364	73	115	8,716	13	78	591	4	5	646	10,711	10,350
Totals ..	207	5,962	3,612	2,314	32,444	480	351	52,183	103	139	7,819	22	76	3,126	38,972	63,614

TABLE IV.
STATEMENT OF PROGRESS OF PENSIONS.*

Year.	Attainment of Pension Age or Length of Service. (Sec. 35, &c.)						Retired medically unfit. (Sec. 36, &c.)					
	Granted or transferred.		Void by Death or Expiry.		In Force.		Granted or transferred.		Void by Death or Expiry.		In Force.	
	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.
1908 ..	74	£ 6,658	1	£ 57	73	£ 6,601	20	£ 1,838	..	£ ..	20	£ 1,838
1909 ..	153	17,038	4	324	222	23,315	19	1,959	4	677	35	3,119
1910† ..	84	8,737	12	945	294	31,107	56	4,706	5	680	86	7,146
1911 ..	72	8,631	23	2,593	343	37,145	19	1,314	10	621	95	7,839
1912 ..	64	6,992	22	2,124	385	42,013	18	1,017	9	526	104	8,330
1913 ..	71	8,716	18	2,003	438	48,726	11	591	14	903	101	8,018
Totals ..	518	56,772	80	8,046	..	..	143	11,425	42	3,407	..	..

Year.	Death of Contributor or Pensioner. Family Pension. (Secs. 42 and 43, &c.)						Total Pensions.					
	Granted or transferred.		Void by Death or Expiry.		In Force.		Granted or transferred.		Void.		In Force.	
	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.
1908 ..	30	£ 455	1	£ 13	29	£ 442	124	£ 8,951	2	£ 70	122	£ 8,881
1909 ..	47	751	3	39	73	1,154	219	19,748	11	1,040	330	27,589
1910† ..	40	635	6	98	107	1,691	180	14,078	23	1,723	487	39,944
1911 ..	40	625	11	163	136	2,153	131	10,570	44	3,377	574	47,137
1912 ..	72	1,086	14	197	194	3,042	154	9,095	45	2,847	683	53,385
1913 ..	90	1,355	12	171	272	4,226	172	10,662	44	3,077	811	60,970
Totals ..	319	4,907	47	681	..	..	980	73,104	169	12,134	..	..

* Compiled from Annual Reports.

† Includes pensioners transferred from Police Provident Fund.

TABLE V.
PRESENT ANNUAL PAY AND CONTRIBUTIONS OF OFFICERS NOW IN SERVICE.

Age attained.	Number.		Present Annual Pay.		Present Annual Contributions.		Age attained
	Male.	Female.	Male.	Female.	Male.	Female.	
			£	£	£	£	
78	1	..	160	..	16-0	..	78
74	2	..	351	..	35-1	..	74
73	1	..	189	..	18-9	..	73
72	3	..	410	..	41-0	..	72
71	4	..	683	..	68-3	..	71
70	3	..	482	..	48-2	..	70
69	4	..	1,547	..	154-7	..	69
68	5	..	1,285	..	123-5	..	68
67	6	1	1,739	120	173-9	12-0	67
66	17	..	4,920	..	492-0	..	66
65	31	2	8,494	200	849-4	20-0	65
64	37	1	10,082	105	994-9	10-5	64
63	41	..	12,195	..	1,200-1	..	63
62	42	..	11,195	..	1,106-0	..	62
61	71	..	19,445	..	1,915-4	..	61
60	63	2	16,389	285	1,622-5	28-5	60
59	65	2	16,948	115	1,665-3	11-5	59
58	77	3	22,315	334	2,211-6	33-4	58
57	97	5	25,407	504	2,447-2	50-4	57
56	114	7	33,288	749	3,115-4	74-9	56
55	118	3	33,391	319	3,020-4	31-0	55
54	101	8	27,774	980	2,493-5	92-4	54
53	102	10	29,108	1,156	2,592-5	105-6	53
52	111	6	30,968	790	2,775-2	71-1	52
51	127	9	33,467	1,115	2,895-5	98-4	51
50	103	5	27,667	666	2,234-0	55-5	50
49	108	8	28,729	740	2,308-3	60-5	49
48	135	8	34,126	1,065	2,735-2	86-3	48
47	133	13	31,193	1,570	2,457-7	125-6	47
46	157	19	39,584	2,569	2,990-4	206-1	46
45	167	8	40,796	1,028	2,884-2	75-3	45
44	168	16	38,975	2,206	2,742-8	161-8	44
43	161	14	37,820	1,980	2,616-8	142-7	43
42	171	15	38,016	1,887	2,611-5	134-5	42
41	178	21	39,660	2,502	2,599-7	172-4	41
40	202	15	42,235	1,897	2,594-6	121-6	40
39	184	22	39,671	2,879	2,435-9	177-3	39
38	210	26	44,641	3,214	2,712-1	198-3	38
37	263	23	56,136	2,697	3,358-9	163-8	37
36	230	23	47,959	2,838	2,729-5	167-3	36
35	220	26	42,797	3,098	2,263-6	168-9	35
34	251	32	48,899	3,992	2,593-0	211-9	34
33	255	28	48,756	3,615	2,522-3	195-2	33
32	279	39	54,291	4,441	2,774-2	229-2	32
31	266	36	47,771	4,320	2,424-9	216-0	31
30	249	47	44,497	4,896	2,227-6	244-8	30
29	276	58	48,853	6,203	2,442-7	310-2	29
28	298	56	51,194	5,480	2,559-7	274-0	28
27	307	58	51,501	5,485	2,575-0	274-3	27
26	285	60	45,095	4,858	2,254-7	242-9	26
25	253	71	37,865	5,847	1,893-2	292-4	25
24	294	79	40,804	6,249	2,040-2	312-4	24
23	341	62	44,193	4,523	2,209-7	226-2	23
22	337	88	38,789	6,128	1,939-5	306-4	22
21	319	70	31,316	4,627	1,565-8	231-3	21
20	336	43	26,828	2,811	1,341-4	140-6	20
19	329	30	22,328	1,790	1,116-4	89-5	19
18	373	12	21,630	630	1,081-5	31-5	18
17	327	8	17,336	467	866-8	23-4	17
16	152	..	7,675	..	383-8	..	16
15	48	..	2,400	..	120-0	..	15
14	3	..	150	..	7-5	..	14
Totals	9,611	1,198	1,704,408	115,970	111,296-6	6,709-8	

TABLE VI.

CLASSIFICATION OF PENSIONS GRANTED FROM 1ST JANUARY, 1911, TO 31ST DECEMBER, 1913, INCLUSIVE, SHOWING THE AGES AT WHICH THEY WERE GRANTED.

Age at which Pension granted.	Attainment of Pension Age or Length of Service (Sec. 35, &c.).			Retired medically unfit (Sec. 36, &c.).			Widows and Children (Sec. 42, 43, &c.).		Total.			Age at which Pension granted.				
	Number.			Number.			Number.	Amount of Pension.	Number.				Amount of Pension.			
	M.	F.	Total.	M.	F.	Total.			M.	F.	Total.					
			£ s. d.			£ s. d.		£			£ s. d.					
77	1	..	1	..	..	..	..	..	1	..	1	53 8 0	77	
75	1	..	1	..	..	..	..	18	1	2	2	62 2 0	75	
73	..	..	..	..	..	..	..	36	..	2	2	36 0 0	73	
71	2	..	2	..	..	..	..	..	2	..	2	74 2 0	71	
70	..	1	1	..	..	..	..	..	..	1	1	15 2 0	70	
68	4	..	4	..	..	..	..	..	4	..	4	400 10 0	68	
67	6	..	6	..	..	..	..	..	6	..	6	561 4 0	67	
66	13	..	13	..	..	..	..	..	13	..	13	1,230 17 0	66	
65	59	..	59	..	..	..	..	36	59	2	61	5,543 3 0	65	
64	8	..	8	..	..	..	..	18	8	1	9	985 7 0	64	
63	9	1	10	..	..	..	..	54	3	4	13	906 7 0	63	
62	16	..	16	..	..	..	..	36	2	18	18	2,061 9 0	62	
61	9	..	9	1	..	1	76 16 0	..	10	..	10	1,709 8 0	61			
60	9	1	10	..	..	..	..	18	1	2	11	1,287 4 0	60	
59	6	3	9	3	..	3	172 8 0	2	9	5	14	1,241 11 0	59			
58	7	1	8	3	..	3	313 19 0	2	36	10	3	13	1,668 0 0	58		
57	10	..	10	1	..	1	65 19 0	..	..	11	..	11	1,809 5 0	57
56	17	..	17	2	..	2	176 8 0	1	18	19	1	20	2,387 19 0	56		
55	14	1	15	2	..	2	178 2 0	2	36	16	3	19	1,954 0 0	55		
54	4	1	5	2	..	2	84 13 0	1	18	6	2	8	1,337 9 0	54		
53	1	..	1	1	..	1	169 16 0	1	18	2	1	3	349 6 0	53		
52	1	..	1	..	..	..	..	54	1	3	4	4	180 10 0	52
51	1	..	1	1	..	1	184 3 0	2	36	2	2	4	375 16 0	51		
50	..	..	..	2	..	2	215 0 0	6	108	2	6	8	323 0 0	50
49	..	..	..	2	..	2	206 7 0	1	18	2	1	3	224 7 0	49
48	..	..	..	..	..	..	..	90	..	5	5	5	90 0 0	48
47	..	..	..	1	..	1	23 4 0	..	..	..	1	1	23 4 0	47
46	..	..	..	1	..	1	13 6 0	4	72	1	4	5	85 6 0	46
45	..	..	..	1	..	1	110 12 0	2	36	1	2	3	146 12 0	45
44	..	..	..	4	..	4	223 18 0	2	36	4	2	6	259 18 0	44
43	..	..	..	1	..	1	6 13 0	4	72	1	4	5	78 13 0	43
42	..	..	..	..	..	..	..	36	..	2	2	2	36 0 0	42
41	..	..	..	1	..	1	78 6 0	2	36	1	2	3	114 6 0	41
40	..	..	..	1	..	1	11 8 0	2	36	..	3	3	47 8 0	40
39	..	..	..	1	..	1	112 15 0	..	..	1	..	1	112 15 0	39
38	..	..	..	1	..	1	35 2 0	..	..	..	1	1	35 2 0	38
37	..	..	..	..	..	..	..	18	..	1	1	1	18 0 0	37
36	..	..	..	4	..	4	175 8 0	2	36	4	2	6	211 8 0	36
35	..	..	..	1	..	1	15 1 0	5	90	1	5	6	105 1 0	35
34	..	..	..	3	..	3	100 9 0	3	54	3	3	6	154 9 0	34
33	..	..	..	..	..	..	..	144	..	8	8	8	144 0 0	33
32	..	..	..	1	..	1	8 8 0	3	54	1	3	4	62 8 0	32
31	..	..	..	..	..	..	..	54	..	3	3	3	54 0 0	31
30	..	..	..	1	..	1	34 17 0	1	18	1	1	2	52 17 0	30
29	..	..	..	..	..	..	..	18	..	..	1	1	18 0 0	29
27	..	..	..	3	..	3	75 4 0	1	18	3	1	4	93 4 0	27
26	..	..	..	1	..	1	24 16 0	..	..	1	..	1	24 16 0	26
24	..	..	..	1	..	1	16 1 0	2	36	1	2	3	52 1 0	24
23	..	..	..	1	..	1	13 2 0	1	18	1	1	2	31 2 0	23
22	..	..	..	..	..	..	..	18	..	..	1	1	18 0 0	22
13	..	..	..	..	..	..	..	117	..	..	9	9	117 0 0	13
12	..	..	..	..	..	..	..	104	..	..	8	8	104 0 0	12
11	..	..	..	..	..	..	..	52	..	..	4	4	52 0 0	11
10	..	..	..	..	..	..	..	143	..	..	11	11	143 0 0	10
9	..	..	..	..	..	..	..	78	..	..	6	6	78 0 0	9
8	..	..	..	..	..	..	..	130	..	..	10	10	130 0 0	8
7	..	..	..	..	..	..	..	104	..	..	8	8	104 0 0	7
6	..	..	..	..	..	..	..	78	61	53	6	6	78 0 0	6
5	..	..	..	..	..	..	..	130	..	..	10	10	130 0 0	5
4	..	..	..	..	..	..	..	104	..	..	8	8	104 0 0	4
3	..	..	..	..	..	..	..	39	..	..	3	3	39 0 0	3
2	..	..	..	..	..	..	..	117	..	..	9	9	117 0 0	2
1	..	..	..	..	..	..	..	65	..	..	5	5	65 0 0	1
0	..	..	..	..	..	..	..	208	..	..	16	16	208 0 0	0
*	..	..	..	..	..	..	..	13	..	..	1	1	13 0 0	*
Totals	198	9	207	24,339	15 0	45	3 48	2,922	1 0	202	3,066	304	153	457	30,327	16 0

* Not stated. Adjusted to agree with annual report

TABLE VII.

EXPERIENCE TABLE.

RATES PER CENT. PER ANNUM OF WITHDRAWAL, MORTALITY, RETIREMENT, AND INCREASE OF SALARY.

Contributing Members: Males.					Contributing Members: Females.				
Age.	Rate of Withdrawal (Public Service Super-annuation Fund).	Rate of Mortality (combined New Zealand Super-annuation Funds).	Rate of Retirement (combined New Zealand Super-annuation Funds).	Rate of Increase of Salary (Public Service Super-annuation Fund).	Rate of Withdrawal (Public Service Super-annuation Fund).	Rate of Mortality (assumed).	Rate of Retirement (combined New Zealand Super-annuation Funds).	Rate of Increase of Salary (Public Service Super-annuation Fund).	Age.
15	6.50	0.20	..	2.4	3.00	0.22	..	0.8	15
16	6.40	0.20	..	3.6	3.15	0.23	..	1.3	16
17	6.28	0.20	..	6.6	3.40	0.24	..	1.6	17
18	6.16	0.20	..	9.6	3.90	0.25	..	1.9	18
19	6.03	0.20	..	13.2	5.50	0.26	..	2.7	19
20	5.90	0.21	..	14.0	7.40	0.27	..	3.7	20
21	5.75	0.21	..	14.0	9.30	0.29	..	3.5	21
22	5.61	0.22	..	14.0	11.10	0.30	..	3.9	22
23	5.46	0.23	0.10	13.0	12.80	0.31	..	4.1	23
24	5.30	0.24	0.10	10.6	13.70	0.31	..	4.2	24
25	5.13	0.25	0.10	8.8	13.90	0.32	..	4.6	25
26	4.95	0.26	0.10	7.4	13.90	0.32	..	5.7	26
27	4.76	0.27	0.10	5.8	13.70	0.32	..	6.3	27
28	4.55	0.28	0.10	4.8	13.30	0.32	..	5.9	28
29	4.30	0.29	0.10	4.2	12.80	0.32	..	5.5	29
30	4.10	0.30	0.10	3.8	12.00	0.32	..	3.3	30
31	3.90	0.32	0.12	3.8	11.00	0.32	..	2.8	31
32	3.73	0.34	0.14	4.2	10.00	0.32	..	2.4	32
33	3.57	0.36	0.16	4.2	9.20	0.32	0.25	2.0	33
34	3.43	0.38	0.18	3.8	8.60	0.32	0.25	1.6	34
35	3.32	0.40	0.20	3.8	8.10	0.33	0.25	1.5	35
36	3.22	0.42	0.20	3.8	7.75	0.33	0.25	1.4	36
37	3.12	0.44	0.20	3.6	7.40	0.33	0.25	1.1	37
38	3.02	0.46	0.21	3.4	7.10	0.33	0.30	0.9	38
39	2.92	0.49	0.22	3.4	6.90	0.34	0.40	0.7	39
40	2.82	0.52	0.23	3.8	6.70	0.34	0.50	0.8	40
41	2.72	0.53	0.24	3.8	6.50	0.36	0.60	0.6	41
42	2.62	0.54	0.25	4.0	6.20	0.38	0.70	0.4	42
43	2.52	0.55	0.26	4.2	5.90	0.40	0.88	0.3	43
44	2.42	0.57	0.27	4.8	5.50	0.44	1.08	0.4	44
45	2.32	0.59	0.28	4.6	5.10	0.48	1.38	0.1	45
46	2.22	0.60	0.29	5.0	4.55	0.52	1.83	..	46
47	2.12	0.63	0.30	5.4	3.85	0.57	2.58	..	47
48	2.01	0.67	0.41	5.6	..	0.63	3.63	..	48
49	1.91	0.70	0.53	6.6	..	0.69	4.63	..	49
50	1.81	0.73	0.68	5.6	..	0.76	5.90	..	50
51	1.70	0.78	0.88	3.8	..	0.83	7.43	..	51
52	1.60	0.82	1.12	2.4	..	0.90	9.25	..	52
53	1.50	0.86	1.37	1.2	..	0.98	11.88	..	53
54	1.40	0.92	1.69	0.8	..	1.07	14.63	..	54
55	1.30	0.98	2.07	..	..	1.15	17.38	..	55
56	1.20	1.05	2.52	..	..	1.25	19.88	..	56
57	1.09	1.15	3.05	..	..	1.34	21.30	..	57
58	0.98	1.25	3.74	..	..	1.45	22.50	..	58
59	0.88	1.37	4.57	..	..	1.56	25.00	..	59
60	0.73	1.52	5.81	..	..	..	..	..	60
61	0.52	1.69	7.91	..	..	..	..	..	61
62	..	1.88	13.00	..	..	..	..	..	62
63	..	2.12	21.20	..	..	..	..	..	63
64	..	2.40	29.50	..	..	..	..	..	64

TABLE VIII.
LIFE AND SERVICE TABLE.
BASED UPON THE RATES PER CENT. PER ANNUM OF WITHDRAWAL, MORTALITY, AND RETIREMENT
GIVEN IN TABLE VII.

Age.	MALES.					FEMALES.					Age.
	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Average Salary.	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Average Salary.	
15 ..	100,000	6,500	200	..	48.6	100,000	3,000	219	..	54.0	15
16 ..	93,300	5,971	186	..	51.0	96,781	3,049	222	..	54.8	16
17 ..	87,143	5,473	175	..	54.6	93,510	3,179	224	..	56.1	17
18 ..	81,495	5,020	163	..	61.2	90,107	3,515	225	..	57.7	18
19 ..	76,312	4,602	153	..	70.8	86,367	4,749	224	..	59.6	19
20 ..	71,557	4,222	150	..	84.0	81,394	6,024	220	..	62.3	20
21 ..	67,185	3,864	141	..	98.0	75,150	6,989	217	..	66.0	21
22 ..	63,180	3,545	139	..	112.0	67,944	7,542	204	..	69.5	22
23 ..	59,496	3,248	137	59	126.0	60,198	7,705	186	..	73.4	23
24 ..	56,052	2,970	135	56	139.0	52,307	7,166	163	..	77.5	24
25 ..	52,891	2,714	132	53	149.6	44,978	6,252	142	..	81.7	25
26 ..	49,992	2,475	130	50	158.4	38,584	5,363	122	..	86.3	26
27 ..	47,337	2,253	128	47	165.8	33,099	4,534	105	..	92.0	27
28 ..	44,909	2,044	126	45	171.6	28,460	3,785	91	..	98.3	28
29 ..	42,694	1,835	124	43	176.4	24,584	3,147	79	..	104.2	29
30 ..	40,692	1,668	122	41	180.6	21,358	2,563	68	..	109.7	30
31 ..	38,861	1,516	124	47	184.4	18,727	2,060	60	..	113.0	31
32 ..	37,174	1,387	126	52	188.2	16,607	1,661	53	..	115.8	32
33 ..	35,609	1,272	128	57	192.4	14,893	1,370	48	37	118.2	33
34 ..	34,152	1,171	130	61	196.6	13,438	1,156	43	34	120.2	34
35 ..	32,790	1,089	131	66	200.4	12,205	989	40	30	121.8	35
36 ..	31,504	1,015	132	63	204.2	11,146	864	36	28	123.3	36
37 ..	30,294	945	133	61	208.0	10,218	756	33	26	124.7	37
38 ..	29,155	880	134	61	211.6	9,403	668	31	28	125.8	38
39 ..	28,080	820	138	62	215.0	8,676	598	29	35	126.7	39
40 ..	27,060	763	141	62	218.4	8,014	537	28	40	127.4	40
41 ..	26,094	710	138	63	222.2	7,409	482	26	44	128.2	41
42 ..	25,183	660	136	63	226.0	6,857	425	26	48	128.8	42
43 ..	24,324	613	134	63	230.0	6,358	375	26	56	129.2	43
44 ..	23,514	569	134	63	234.2	5,901	324	26	64	129.5	44
45 ..	22,748	528	134	64	239.0	5,487	280	26	75	129.9	45
46 ..	22,022	489	132	64	243.6	5,106	233	27	93	130.0	46
47 ..	21,337	452	134	64	248.6	4,753	183	27	123	130.0	47
48 ..	20,687	416	139	85	254.0	4,420	..	28	160	130.0	48
49 ..	20,047	383	140	106	259.6	4,232	..	29	196	130.0	49
50 ..	19,418	351	142	132	266.2	4,007	..	30	237	130.0	50
51 ..	18,793	320	147	165	271.8	3,740	..	31	278	130.0	51
52 ..	18,161	290	149	203	275.6	3,431	..	31	317	130.0	52
53 ..	17,519	263	151	240	278.0	3,083	..	30	367	130.0	53
54 ..	16,865	236	155	285	279.2	2,686	..	28	393	130.0	54
55 ..	16,189	210	159	335	280.0	2,265	..	26	394	130.0	55
56 ..	15,485	186	163	390	280.0	1,845	..	23	367	130.0	56
57 ..	14,746	160	170	450	280.0	1,455	..	19	310	130.0	57
58 ..	13,966	136	175	522	280.0	1,126	..	16	254	130.0	58
59 ..	13,133	116	180	600	280.0	856	..	13	214	130.0	59
60 ..	12,237	90	186	711	280.0	629	..	..	629	130.0	60
61 ..	11,250	58	190	890	280.0	..	..	..	..	..	61
62 ..	10,112	..	190	1,315	280.0	..	..	..	..	..	62
63 ..	8,607	..	182	1,825	280.0	..	..	..	..	..	63
64 ..	6,600	..	158	1,947	280.0	..	..	..	..	..	64
65 ..	4,495	..	..	4,495	280.0	..	..	..	..	..	65

TABLE IX.
SUMMARY OF PUBLIC SERVICE SUPERANNUATION RESULTS.
VALUATION BALANCE-SHEET AS AT 31ST DECEMBER, 1913.

<i>Liabilities.</i>		£	£
MALES—			
	Value of 517 pensions for £56,065 0s. 1d. per annum already granted ..	457,626	
	„ 138 pensions for £2,484 granted to widows of contributors or pensioners	28,085	
	„ 134 pensions for £1,742 granted to children of deceased contributors or pensioners	9,299	
	„ prospective pensions for back service	1,635,454	
	„ „ for future service	1,258,159	
	„ „ to widows	315,254	
	„ „ to children	60,588	
	„ return of contributions on death	20,904	
	„ „ on withdrawal	303,064	
		4,088,433	
FEMALES—			
	Value of 22 pensions for £679 6s. 10d. per annum already granted ..	7,293	
	„ prospective pensions for back service	56,694	
	„ „ for future service	65,466	
	„ return of contributions on death or withdrawal	28,496	
		157,949	
		£4,246,382	
<i>Assets.</i>			
	Accumulated funds		537,914
	Value of future contributions from males		1,277,915
	„ „ from females		49,087
	„ subsidy of £48,000 per annum		1,200,000
	„ future increases in subsidy to be provided		1,181,466
			£4,246,382

Approximate Cost of Paper.—Preparation, not given: printing (13,500 copies), £35.

Price 6d.]

By Authority: JOHN MACKAY, Government Printer, Wellington.—1915.