

SESSION II.

1912.

NEW ZEALAND.

TEACHERS' SUPERANNUATION FUND

(REPORT BY THE ACTUARY APPOINTED BY HIS EXCELLENCY THE GOVERNOR TO MAKE THE ACTUARIAL EXAMINATION OF THE).

Laid before Parliament in pursuance of Section 38 (4) of the Public Service Classification and Superannuation Amendment Act, 1908.

REPORT

BY THE ACTUARY APPOINTED BY HIS EXCELLENCY THE GOVERNOR TO MAKE THE ACTUARIAL EXAMINATION OF THE TEACHERS' SUPERANNUATION FUND FOR THE QUINQUENNIAL PERIOD ENDED 31st DECEMBER, 1910, AS PROVIDED BY SECTION 38 OF THE PUBLIC SERVICE CLASSIFICATION AND SUPERANNUATION AMENDMENT ACT, 1908.

Wellington, 31st July, 1912.

1. I HAVE made an actuarial examination of the Teachers' Superannuation Fund as at the 31st December, 1910, as required by the Public Service Classification and Superannuation Amendment Act, 1908, sections 38 and 39 of which are as follows:—

“38. (1.) For the period ending on the thirty-first day of December, nineteen hundred and ten, and for each triennial period thereafter, an examination of the fund shall be made by an actuary appointed for that purpose by the Governor.

“(2.) The actuary shall set forth the result of his examination in a report, which shall 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 funds to provide the retiring and other allowances falling due within the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions.

“(3.) The Board shall cause the said report to be printed, and a copy thereof to be supplied to each contributor.

“(4.) A copy of the report shall, within ten days after it is received, be laid before Parliament if then sitting, or, if not, then within ten days after the commencement of the next ensuing session.

“39. (1.) In the month of January in every year after the passing of this Act the Minister of Finance shall pay into the fund and out of the Consolidated Fund, without further appropriation than this Act, the sum of seven thousand pounds, together with such further amount (if any) as is deemed by the Governor in Council, in accordance with the aforesaid report of the actuary, to be required to meet the charges on the fund during the ensuing year.

“(2.) A statement of all additional amounts so paid into the fund shall be laid before Parliament within ten days after the payment thereof if Parliament is then sitting, or, if not, then within ten days after the commencement of the next ensuing session.”

2. The Teachers' Superannuation Act, 1905, which came into operation on the 1st January, 1906, established a superannuation fund for teachers, which gave full pensions of one-sixtieths for future service, but only one-half pensions for back service, subject to a minimum pension of £52 per annum. The benefits were, however, brought into line with those of the Public Service by the Public Service Classification and Superannuation Amendment Act, 1908. This Act gave all persons who were contributors under the provisions of Part IX of the Education Act, 1908 (with which the Teachers' Superannuation Act, 1905, was consolidated), the option of joining the new fund within six months of the passing of the Amendment Act, and this was subsequently extended to the 1st July, 1910. There are now only 128 remaining contributing teachers who

elected to stay under the provisions of the old Act. The new Act also made it compulsory for all persons to become contributors who are first permanently employed after the passing of the Act—

- (a.) In the Education service as a teacher in any public school; or
- (b.) In any branch of the Education service which is also a branch of the Government service.

Other persons first permanently employed in the Education service not included under (a) or (b) have the option of joining the fund within six months of the date of their appointment.

3. "Education service" means service in any capacity for not less than twenty hours a week—

- (a.) Under an Education Board;
- (b.) Under the governing body of a secondary school;
- (c.) Under the managers of associated classes under Part VII of the Education Act, 1908; or
- (d.) Under the Education Department in the case of Inspectors of Schools, or of Inspectors, Managers or Visiting Officers of industrial schools, or of teachers of any schools under the control of that Department.

4. Particulars of the contributions and benefits provided by the Act, together with statements showing the progress of active membership, the discontinuance of membership from various causes, and the progress of the 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 ages at which pensions have been granted in Table VI.

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

CONSOLIDATED REVENUE ACCOUNT OF THE TEACHERS' SUPERANNUATION FUND FROM THE 1ST JANUARY, 1906, TO THE 31ST DECEMBER, 1910.

<i>Income.</i>			<i>Outgo.</i>		
	£	s. d.		£	s. d.
Funds at the 1st January, 1906—			Allowances	35,469	11 11
Members' contributions	164,377	14 0	Contributions refunded	8,628	14 7
Government contributions	19,000	0 0	Public Trust Office commission	1,447	18 8
Refunds	23	0 9	Miscellaneous	16	16 6
Interest	16,374	3 5	Funds at 31st December, 1910	154,211	16 6
	<u>£199,774</u>	<u>18 2</u>		<u>£199,774</u>	<u>18 2</u>

6. The rate of interest used was 4 per cent. throughout, and the average rate earned on the funds has ranged from £4 6s. 4d. per cent. to £4 12s. 9d. per cent. during the five years.

7. The Experience Table (Table VII) contains the rates per cent. per annum of withdrawal, mortality, retirement, and increase of salary. With the exception of the rate of mortality (which has been assumed to be the same as in Dr. Farr's Healthy English Mortality), all these rates have been taken from the experience of the fund itself; and from them has been constructed the Life and Service Table (Table VIII), showing, out of 100,000 entering at age 15, the numbers that will withdraw, die, and retire on pension in each year. This Life and Service Table is the basis of the present calculations with reference to the fund.

8. By comparing Table VII with the similar table in the Public Service Superannuation Report (H.-26A, 1912), it will be seen that the rates of withdrawal are much lower among both male and female teachers than among the members of the Public Service Fund; also, the rates of retirement on pension and the average salaries are much higher, and the rate of increase in salary greater at the younger ages. Consequently, as may be seen from a comparison of Table IX in the two reports, the cost of pensions on the lives of the teachers is higher than in the case of the Public Service.

9. It has been assumed that all male teachers will have retired on pension by age 65, and all female teachers by age 60, although there are a few still contributing at higher ages. The contributors remaining under the old Act—128 in all—have been valued as if they were entitled to the higher benefits provided by the new Act. Probably this will not overstate the real liability, as they exercised a decided selection in choosing between the old and new schemes.

10. In dealing with widows' and children's benefits the same rates of interest and mortality were used as before indicated, but it was not possible to utilize the experience of the teachers themselves, as the family statistics were not given on the cards. Where necessary, therefore, the experience of the Public Service has been used, and is doubtless suitable for the purpose.

11. I have estimated "the probable annual sums required by the fund to provide the retiring and other allowances falling due within the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions," as required by the Act, and the following is the result:—

Required for	1911.	1912.	1913.
	£	£	£
Current ordinary pensions	11,629	11,140	10,637
Prospective pensions to existing contributors now over pension age	1,965	1,885	1,803
New pensions, family pensions, and miscellaneous benefits	2,930	6,344	9,908
Total sums for retiring and other allowances	16,524	19,369	22,348
Deduct amounts provided by contributors' contributions without having recourse to the actuarial reserve appertaining to them	1,804	2,279	2,828
Subsidies required for ensuing three years	14,720	17,090	19,520

I have therefore to report that, in addition to the annual subsidy of £7,000 now being paid, further subsidies of £7,720, £10,090, and £12,520 will be the minimum likely to be required for the years 1911, 1912, and 1913 respectively, and I recommend that the present subsidy be increased by £10,000 per annum for each year of the current triennium.

12. The "amounts provided by contributors' contributions," referred to in the last paragraph, may appear very small, but it will increase sensibly year by year. Table X has been prepared to throw light on this point, which was somewhat fully dealt with on page 4 of the Public Service Superannuation Report. It may be seen from Table X that these amounts were only 5·7 per cent. of the pensions; in 1911 they increased to 10·9 per cent.; in 1912 this will be 11·8 per cent., and in 1913 will have increased to 12·6 per cent. This increasing proportion will continue as the fund grows older.

13. The actuarial valuation of the whole of the liabilities, together with the corresponding assets, is given in detail in Table XI, and the following is a summary:—

<i>Liabilities.</i>				£
Value of existing pensions	...	...	...	136,492
Value of prospective pensions	...	...	...	1,298,929
Value of return of contributions	...	...	...	70,258
				<u>£1,505,679</u>
<i>Assets.</i>				£
Accumulated funds	...	...	...	154,212
Value of contributors' contributions	...	...	...	367,649
Value of present subsidy of £7,000 per annum	...	...	...	175,000
Value of proposed additional subsidy of £10,000 per annum	...	...	...	250,000
Value of future increases in subsidy to be provided	...	...	...	558,818
				<u>£1,505,679</u>

It will be seen that, as in the Public Service Fund, the total discounted liabilities are equalized by the sum of the accumulated funds and the total discounted contributions (including annual subsidies, present and future), and the item subject to adjustment is the subsidies. I have already made a recommendation as to the adjustment necessary at the present time, and, as I remarked in reporting on the Public Service Fund, the increased subsidy now recommended will need to be paid out every year, and no portion of it will be used to augment the funds being accumulated by the contributions.

14. I would advise the same caution as in the case of the Public Service Fund in granting any further benefits that may be asked for by contributors or pensioners. I think, however, that when there is any benefit that is not shared in equally by the two services the matter is one for reconsideration. For instance, it has been brought under my notice that, in the case of reduction of status owing to advanced age or infirmity, there is no provision in regard to the teachers that the pension should be computed on the higher salary, as in the Public Service Fund (*vide* section 39 of the Public Service Classification and Superannuation Act, 1908). I have not any data at hand to show the cost of such a concession, but I think it is quite possible that the absence of this provision is very likely to do injustice in some cases, and may at the same time act harmfully on the fund by forcing some to retire at an earlier age than they otherwise would.

15. The data cards did not show the annual *rate of salary* at the end of the year, but in most cases the *amount of salary* actually paid during the year, and consequently the salaries and contributions shown in the annual report, are rather greater than in the valuation schedules. The teachers are not directly under the Education Department, and their salaries are not always a fixed quantity; there is consequently considerable difficulty in getting absolutely correct information. The differences are really trifling, being only 2½ per cent. in the one case and less than 1 per cent. in the other, and to have reconciled these two items would have meant returning the cards again, and delaying the investigation indefinitely.

16. In conclusion, I may say that the late appearance of this report is due to the fact that the cards containing the data were not received finally correct until about the middle of last November. By that time the triennial work in connection with the valuation and allotment of bonus in the Government Insurance Department had to receive the practically undivided attention of myself and the actuarial staff, and this investigation had to be put on one side for some months. As soon as other work permitted it was proceeded with and completed.

MORRIS Fox,

Actuary to the Government Insurance Department.

APPENDIX.

TABLE I.

THE BENEFITS AND CONTRIBUTIONS PROVIDED FOR BY THE ACT.

(These benefits are slightly modified in the case of those existing contributors (numbering 128) who elected to remain under the provisions of Part IX of the Education Act, 1908.)

		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 "
	" age 50	..	..	..	10 "

I. On Attainment of Pension. Males at Age 65, or after Forty Years' Service ; Females at Age 55, or after Thirty 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 total contributions.

(NOTE.—The Board may, with the approval of the Minister of Education, retire contributors on pension in the following cases :—

(a.) Where the age of a male contributor is not less than 60, or of a female contributor not less than 50.

(b.) Where the age of a male contributor is not less than 55, if his length of service is not less than thirty years.

(c.) Where the length of service of a male contributor is not less than thirty-five years.

In any such exceptional cases the Board may, with the approval of the Minister of Education, impose upon the retiring contributor such terms and conditions as to payments into the Fund or otherwise as the Board thinks fit.)

II. On retirement before Pension Age (on the Grounds of being medically unfit for Future Duty).

Benefits (1.) At any time after fifteen years' service, 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.

(2.) Or the option, in lieu thereof, of a return of total contributions.

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

(1.) On voluntary retirement or dismissal for misconduct, a return of total contributions.

IV. At Death, whether before or after becoming entitled to a Retiring-allowance.

(1.) Leaving no widow or children : A return of total contributions less any sums received from the Fund during lifetime.

(2.) Leaving a widow :—

(a.) £18 yearly during widowhood ; or

(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.)

(3.) Leaving children : 5s. weekly to each child until age 14.

(NOTE.—The contributions and pensions are payable monthly, and the pensions are computed on the average salary for the last three years.)

TABLE II.
STATEMENT OF PROGRESS OF ACTIVE MEMBERSHIP.

Year.	New Members.			Increase by Pro- motion.		Discontinued.			Total in Force at End of Year.		
	Number.	Salaries.	Annual Contribu- tions.	Salaries.	Annual Contribu- tions.	Number.	Salaries.	Annual Contribu- tions.	Number.	Salaries.	Annual Contribu- tions.
1906-7 ..	2,939	£ 444,950	£ 33,652	£ ..	£ ..	127	£ 18,095	£ 1,604	2,812	£ 426,855	£ 32,048
1907-8 ..	247	34,600	1,860	14,446	914	177	29,294	1,952	2,882	446,607	32,870
Part 1908	161	19,083	1,075	14,000	825	112	25,044	1,713	2,931	454,646	33,057
1909 ..	334	37,327	1,185	41,670	2,975	119	22,403	1,673	3,152	511,240	35,544
1910 ..	287	35,734	1,862	36,466	2,416	192	35,508	2,537	3,247	547,932	37,285
Totals ..	3,968	571,694	39,634	106,582	7,130	721	130,344	9,479	..	..	..

TABLE III.
PARTICULARS OF DISCONTINUANCE OF ACTIVE MEMBERSHIP.

Year.	By Death.			By With- drawal or Dismissal.		By Retirement.					Total discontinued.		
						Old Age or Length of Service.		Medically unfit.					
	Number.	Amount paid on Retire- ment.	Family Pen- sion.	Number.	Amount paid on Retire- ment.	Number.	Pensions entered upon.	Number.	Amount paid on Retire- ment.	Pensions entered upon.	Number.	Amount paid on Retire- ment.	Pensions en- tered upon.
		£	£		£		£		£	£		£	£
1906-7 ..	6	58	155	35	276	78	4,207	8	137	312	127	471	4,674
1907-8 ..	13	220	212	136	1,014	20	1,182	8	234	208	177	1,468	1,602
Part 1908	10	341	341	83	1,276	9	504	10	51	491	112	1,668	1,336
1909 ..	9	436	321	76	1,389	24	2,049	4	..	343	113	1,825	2,713
1910 ..	9	656	114	131	2,863	46	4,813	6	..	559	192	3,519	5,486
Totals ..	47	1,711	1,143	461	6,818	177	12,755	36	422	1,913	721	8,951	15,811

TABLE IV.
STATEMENT OF PROGRESS OF PENSIONS.

Year.	Attainment of Pension-age or Length of Service.						Retired medically unfit.					
	Granted or transferred.		Void by Death.		In Force.		Granted or transferred.		Void by Death or Expiry.		In Force.	
	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.
1906-7 ..	78	£ 4,207	..	£ ..	78	£ 4,207	6	£ 312	..	£ ..	6	£ 312
1907-8 ..	20	1,182	4	220	94	5,169	4	208	1	52	9	468
Part 1908	9	503	3	156	100	5,516	9	491	1	52	17	907
1909 ..	24	2,049	4	248	120	7,317	4	343	4	237	17	1,013
1910 ..	46	4,813	8	693	158	11,437	6	559	2	164	21	1,408
Totals ..	177	12,754	19	1,317	..	..	29	1,913	8	505	..	..

Year.	Death of Contributor or Pensioner: Family Pension.						Total Pensions.					
	Granted or transferred.		Void by Death or Expiry.		In Force.		Granted or transferred.		Void.		In Force.	
	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.	Num- ber.	Pension.
1906-7 ..	10	£ 155	..	£ ..	10	£ 155	94	£ 4,674	..	£ ..	94	£ 4,674
1907-8 ..	20	310	3	39	27	426	44	1,700	8	311	130	6,063
Part 1908	26	403	2	31	51	798	44	1,397	6	239	168	7,221
1909 ..	32	476	5	65	78	1,209	60	2,868	13	550	215	9,539
1910 ..	17	269	4	62	91	1,416	69	5,641	14	919	270	14,261
Totals ..	105	1,613	14	197	..	..	311	16,280	41	2,019	..	..

TABLE V.

PRESENT ANNUAL PAY AND CONTRIBUTIONS, WITH PROSPECTIVE PENSIONS TO OFFICERS NOW IN SERVICE.

Age attained.	Number.		Present Annual Pay.		Present Annual Contributions.		Prospective Pensions at Retiring-age or for Length of Service.		Age attained.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
			£	£	£	£	£	£	
70	1	..	51	..	5-0	..	52	..	70
67	2	..	400	..	40-0	..	187	..	67
66	3	..	495	..	49-5	..	239	..	66
65	10	..	3,059	..	305-9	..	1,599	..	65
64	5	..	1,779	..	177-9	..	894	..	64
63	16	1	3,630	70	363-0	7-0	1,918	2	63
62	12	2	3,048	270	304-8	27-0	1,706	145	62
61	16	1	3,481	150	348-1	15-0	1,918	3	61
60	13	..	2,938	..	293-8	..	1,569	..	60
59	11	7	2,885	1,071	288-5	107-1	1,550	467	59
58	20	2	4,796	238	479-6	23-8	2,875	57	58
57	20	2	5,485	300	548-5	30-0	3,241	180	57
56	20	5	5,390	838	539-0	83-8	3,306	272	56
55	27	8	7,005	1,277	681-9	117-0	4,159	602	55
54	19	9	5,510	1,228	495-9	112-2	3,596	707	54
53	27	9	6,590	1,277	596-4	115-0	3,757	790	53
52	34	14	9,705	2,143	873-5	192-8	6,171	1,184	52
51	27	16	6,769	2,528	609-2	227-5	4,189	1,518	51
50	30	21	8,707	3,308	759-9	293-5	5,452	1,759	50
49	15	23	3,530	3,378	284-3	274-6	2,195	1,935	49
48	46	20	11,293	3,252	908-4	264-1	6,976	1,931	48
47	43	29	10,685	4,226	859-8	342-0	6,767	2,434	47
46	39	39	9,788	5,446	784-5	436-9	6,287	3,392	46
45	45	51	11,468	8,013	891-0	604-0	7,203	4,554	45
44	46	46	11,559	7,108	817-5	501-0	7,505	4,553	44
43	37	48	10,135	7,371	711-4	522-0	6,687	4,591	43
42	44	38	10,540	5,581	740-5	391-4	7,053	3,486	42
41	48	45	12,558	6,735	880-1	471-5	8,510	4,266	41
40	45	40	10,811	5,903	725-3	397-0	7,421	3,551	40
39	42	50	9,801	7,256	595-5	441-1	6,884	4,740	39
38	41	50	9,542	7,330	579-9	449-6	6,984	4,725	38
37	40	50	8,373	6,714	508-0	410-1	6,134	4,468	37
36	48	57	11,211	7,911	675-6	474-7	8,580	5,411	36
35	43	43	9,518	5,532	542-9	321-0	7,473	3,784	35
34	35	60	7,263	8,201	369-4	423-0	5,812	5,864	34
33	32	60	7,006	7,814	355-5	401-7	5,757	5,611	33
32	55	52	10,773	6,861	548-8	354-4	8,945	4,860	32
31	51	78	10,385	10,564	520-4	531-8	8,937	7,779	31
30	47	59	8,796	7,327	439-8	366-3	7,707	5,434	30
29	40	62	7,773	7,418	388-7	370-9	6,996	5,665	29
28	49	71	9,284	8,412	464-2	420-6	8,595	6,580	28
27	35	77	5,956	8,853	297-8	442-6	5,707	7,150	27
26	43	91	7,717	10,346	385-9	517-3	7,704	8,591	26
25	32	82	5,389	9,221	269-4	461-1	5,663	8,162	25
24	20	86	3,044	9,158	152-2	457-9	3,416	8,532	24
23	35	81	5,426	7,884	271-3	394-2	6,743	8,048	23
22	33	75	4,141	6,811	207-0	340-5	5,982	7,917	22
21	16	21	1,311	1,528	65-6	76-4	2,295	2,086	21
20	8	14	676	743	33-8	37-2	1,484	1,212	20
19	9	15	506	700	25-3	35-0	1,369	1,398	19
18	4	6	160	292	8-0	14-6	527	744	18
17	4	7	205	249	10-2	12-5	793	755	17
16	1	2	45	40	2-2	2-0	188	138	16
Totals ..	1,484*	1,725*	328,391	218,876	23,080-6	13,312-7	..	..	Totals.

* In addition there are 38 members who have ceased contributing, but have not yet been written off as void.

TABLE VI.

CLASSIFICATION OF PENSIONS GRANTED, SHOWING THE AGES AT WHICH THEY WERE GRANTED

Age at which Pension granted.	Attainment of Pension-age or Length of Service.			Retired medically unfit.			Widows and Children.		Total.											
	Number.			Number.			Number.	Amount of Pension.	Number.			Amount of Pension.								
	M.	F.	Total.	M.	F.	Total.			M.	F.	Total.									
77	1	..	1	£	s.	d.	..	..	..	1	18	1	1	2	£	s.	d.
75	..	..	..	58	19	9	..	..	..	1	18	..	1	1	76	19	9
74	1	..	1	52	0	0	..	..	..	1	18	1	1	1	18	0	0
73	4	..	4	449	12	3	..	..	..	..	..	4	..	4	449	12	3
72	3	..	3	156	0	0	..	..	..	..	..	3	..	3	156	0	0
71	6	..	6	555	13	0	..	..	..	..	..	6	..	6	555	13	0
70	4	1	5	260	0	0	..	..	..	3	54	4	4	8	314	0	0
69	4	..	4	386	2	0	..	..	..	1	18	4	1	5	404	2	0
68	6	1	7	582	0	8	..	..	..	..	..	6	1	7	582	0	8
67	7	3	10	670	4	1	..	..	..	1	18	7	4	11	688	4	1
66	16	1	17	1,453	3	9	..	..	..	1	18	16	2	18	1,471	3	9
65	23	1	24	1,943	13	0	..	..	..	2	36	23	3	26	1,979	13	0
64	5	2	7	707	6	8	..	..	..	1	18	5	3	8	725	6	8
63	6	..	6	312	0	0	..	..	..	..	..	6	..	6	312	0	0
62	6	2	8	546	4	0	1	..	1	..	..	7	2	9	638	6	0	
61	9	3	12	645	12	0	1	..	1	2	36	10	5	15	779	7	0			
60	10	3	13	953	4	1	2	..	2	1	18	12	4	16	1,113	13	1			
59	..	2	2	104	0	0	1	..	1	..	..	1	2	3	156	0	0	
58	..	3	3	156	0	0	1	..	1	1	18	1	4	5	337	7	0			
57	2	6	8	511	16	0	1	..	1	1	18	3	7	10	581	16	0			
56	..	5	5	288	18	0	..	..	..	1	18	..	6	6	306	18	0
55	..	5	5	307	17	9	1	..	1	..	..	1	5	6	359	17	9	
54	..	3	3	154	14	9	..	..	..	3	£59/4	..	6	6	213	18	9
53	..	3	3	156	0	0	1	..	1	..	..	1	3	4	208	0	0	
52	..	3	3	212	6	0	1	..	1	..	2	36	1	5	6	323	9	0		
51	..	6	6	435	14	0	..	..	..	..	..	..	6	6	435	14	0
50	..	8	8	445	10	0	2	1	3	215	15	4	1	10	12	679	5	4		
49	..	2	2	174	19	4	..	..	..	2	£43/19	..	4	4	218	18	4
48	1	1	2	104	0	0	1	1	2	104	0	0		
47	..	..	..	..	..	..	..	..	..	1	18	..	1	1	18	0	0
46	..	..	..	..	..	..	..	..	..	2	36	..	2	2	36	0	0
45	..	1	1	74	15	0	1	..	1	..	2	36	1	3	4	162	15	0		
44	1	5	6	312	0	0	1	6	7	330	0	0		
43	1	1	52	0	0	..	1	1	52	0	0		
42	1	1	63	12	0	..	1	1	63	12	0		
41	2	..	2	132	17	10	..	2	2	132	17	10		
40	1	1	2	150	2	0	1	1	3	168	2	0		
39	1	18	..	2	2	1	18	0	0		
38	..	..	..	..	..	..	..	..	..	3	54	..	3	3	54	0	0
37	..	..	..	..	..	..	..	..	..	2	36	..	2	2	36	0	0
36	..	..	..	..	..	..	..	..	..	3	54	..	3	3	54	0	0
35	..	..	..	..	..	..	..	..	..	1	18	..	1	1	18	0	0
34	1	1	52	0	0	..	2	2	70	0	0		
31	..	..	..	..	..	..	..	..	..	2	36	..	2	2	36	0	0
30	..	..	..	..	..	..	..	..	..	2	36	..	2	2	36	0	0
14	3	39	2	3	39	0	0		
13	4	52	3	4	52	0	0		
12	5	65	5	5	65	0	0		
11	5	65	5	5	65	0	0		
10	7	91	7	7	91	0	0		
9	4	52	4	4	52	0	0		
8	5	65	22	36	5	5	65	0	0		
7	5	65	5	5	65	0	0		
6	4	52	4	4	52	0	0		
5	1	13	1	1	13	0	0		
4	1	13	1	1	13	0	0		
3	8	104	8	8	104	0	0		
1	4	52	4	4	52	0	0		
0	2	26	2	2	26	0	0		
Totals	113	64	177	12,754	6	1	18	11	29	1,913	3	.2	105	1613/3	153	158	311	16,280	12	3

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 (Teachers' Super-annuation Fund).	Rate of Mortality (Healthy English).	Rate of Retirement (Teachers' Super-annuation Fund).	Rate of Increase of Salary (Teachers' Super-annuation Fund).	Rate of Withdrawal (Teachers' Super-annuation Fund).	Rate of Mortality (Healthy English).	Rate of Retirement (Teachers' Super-annuation Fund).	Rate of Increase of Salary (Teachers' Super-annuation Fund).	Age.
15	6.6	0.43	..	..	2.4	0.55	..	..	15
16	5.9	0.47	..	7.2	2.6	0.60	..	12.2	16
17	5.4	0.53	..	18.4	2.8	0.65	..	19.7	17
18	4.9	0.58	..	21.2	3.1	0.70	..	26.6	18
19	4.5	0.64	..	23.4	3.6	0.74	..	23.0	19
20	4.1	0.70	..	25.3	4.2	0.77	..	18.7	20
21	3.7	0.71	..	21.2	5.0	0.78	..	15.8	21
22	3.4	0.73	..	16.3	5.7	0.80	..	13.0	22
23	3.1	0.75	..	10.8	6.2	0.82	..	7.9	23
24	2.9	0.76	..	6.7	6.7	0.83	..	5.8	24
25	2.7	0.78	..	5.2	7.0	0.84	..	4.6	25
26	2.5	0.78	..	3.7	7.2	0.85	..	3.3	26
27	2.4	0.79	..	3.3	7.2	0.86	..	2.7	27
28	2.2	0.80	..	2.8	7.1	0.88	..	2.2	28
29	2.1	0.81	..	2.5	6.9	0.89	..	2.0	29
30	2.0	0.82	..	2.3	6.7	0.89	..	1.7	30
31	1.9	0.83	..	2.1	6.4	0.90	..	1.5	31
32	1.8	0.84	..	2.0	6.2	0.92	..	1.5	32
33	1.7	0.85	..	1.9	5.8	0.92	..	1.2	33
34	1.6	0.85	..	2.1	5.5	0.93	0.1	1.1	34
35	1.5	0.87	..	2.1	5.1	0.94	0.1	1.3	35
36	1.5	0.88	..	2.2	4.7	0.95	0.1	1.5	36
37	1.4	0.89	..	2.2	4.2	0.97	0.1	2.4	37
38	1.4	0.90	..	2.4	3.7	0.98	0.1	1.8	38
39	1.3	0.92	0.3	2.5	3.1	0.99	0.2	1.4	39
40	1.2	0.94	0.3	2.7	2.6	1.00	0.3	1.0	40
41	1.2	0.96	0.3	1.7	2.2	1.02	0.6	0.7	41
42	1.1	0.99	0.3	1.2	1.9	1.03	0.7	0.4	42
43	1.1	1.01	0.3	0.7	1.6	1.05	0.7	0.1	43
44	1.1	1.04	0.3	0.4	1.3	1.07	0.7	..	44
45	1.0	1.08	0.3	0.2	1.0	1.09	0.7	..	45
46	1.0	1.11	0.4	..	0.5	1.11	0.9	..	46
47	1.0	1.15	0.4	..	..	1.14	1.8	..	47
48	1.0	1.20	0.5	..	..	1.16	3.4	..	48
49	1.0	1.25	0.5	..	..	1.19	4.8	..	49
50	1.0	1.30	0.5	..	..	1.22	6.6	..	50
51	0.9	1.36	0.5	..	..	1.25	8.8	..	51
52	0.9	1.43	0.6	..	..	1.29	10.7	..	52
53	0.8	1.50	0.6	..	..	1.33	11.6	..	53
54	0.7	1.57	0.8	..	..	1.37	14.1	..	54
55	0.7	1.66	1.0	..	..	1.41	18.3	..	55
56	0.6	1.74	1.5	..	..	1.46	23.6	..	56
57	0.5	1.84	2.0	..	..	1.62	30.8	..	57
58	0.3	1.94	2.6	..	..	1.82	42.2	..	58
59	0.2	2.14	3.5	..	..	2.03	51.9	..	59
60	..	2.37	5.7	..	..	..	..	..	..
61	..	2.61	12.3	..	..	..	..	..	..
62	..	2.85	19.7	..	..	..	..	..	..
63	..	3.11	32.7	..	..	..	..	..	..
64	..	3.39	45.1	..	..	..	..	..	..

TABLE VIII.
LIFE AND SERVICE TABLE.

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

MALES.						FEMALES.					
Age.	Existing in Service.	With- drawals.	Deaths.	Retire- ments.	Average Salary.	Existing in Service.	With- drawals.	Deaths.	Retire- ments.	Average Salary.	Age.
					£					£	
15 ..	100,000	6,600	430	..	..	100,000	2,400	549	..	..	15
16 ..	92,970	5,485	437	..	41.6	97,051	2,525	580	..	29.4	16
17 ..	87,048	4,657	461	..	44.6	93,946	2,632	609	..	33.0	17
18 ..	81,930	4,015	475	..	52.8	90,705	2,814	632	..	39.5	18
19 ..	77,440	3,485	496	..	64.0	87,259	3,144	643	..	50.0	19
20 ..	73,459	3,012	514	..	79.0	83,472	3,507	642	..	61.5	20
21 ..	69,933	2,588	497	..	99.0	79,323	3,964	621	..	73.0	21
22 ..	66,848	2,273	488	..	120.0	74,738	4,260	598	..	84.5	22
23 ..	64,087	1,999	481	..	139.5	69,880	4,335	571	..	95.5	23
24 ..	61,607	1,787	468	..	154.6	64,974	4,354	539	..	103.0	24
25 ..	59,352	1,602	463	..	165.0	60,081	4,205	505	..	109.0	25
26 ..	57,287	1,443	447	..	173.6	55,371	3,958	472	..	114.0	26
27 ..	55,397	1,313	438	..	180.0	50,941	3,666	440	..	117.8	27
28 ..	53,646	1,191	429	..	186.0	46,835	3,327	411	..	121.0	28
29 ..	52,026	1,093	421	..	191.2	43,097	2,975	382	..	123.7	29
30 ..	50,512	1,010	414	..	196.0	39,740	2,662	354	..	126.2	30
31 ..	49,088	933	407	..	200.5	36,724	2,350	331	..	128.4	31
32 ..	47,748	860	401	..	204.6	34,043	2,112	312	..	130.3	32
33 ..	46,487	790	395	..	208.6	31,619	1,833	292	..	132.2	33
34 ..	45,302	725	385	..	212.6	29,494	1,622	275	29	133.8	34
35 ..	44,192	676	385	..	217.0	27,568	1,405	259	28	135.3	35
36 ..	43,131	634	380	..	221.6	25,876	1,215	247	26	137.0	36
37 ..	42,117	589	375	..	226.4	24,388	1,025	236	24	139.0	37
38 ..	41,153	556	370	..	231.4	23,103	856	226	23	142.3	38
39 ..	40,227	523	370	137	237.0	21,998	683	217	33	144.8	39
40 ..	39,197	482	369	133	242.8	21,065	548	210	67	146.8	40
41 ..	38,213	458	367	130	249.4	20,240	446	207	111	148.2	41
42 ..	37,258	425	369	126	253.6	19,476	370	201	136	149.2	42
43 ..	36,338	403	367	124	256.6	18,769	300	197	131	149.8	43
44 ..	35,444	383	369	120	258.5	18,141	236	194	127	150.0	44
45 ..	34,572	360	373	117	259.5	17,584	167	192	130	150.0	45
46 ..	33,722	344	374	118	260.0	17,095	89	190	160	150.0	46
47 ..	32,886	329	378	132	260.0	16,656	..	189	301	150.0	47
48 ..	32,047	320	385	147	260.0	16,166	..	188	549	150.0	48
49 ..	31,195	306	390	156	260.0	15,429	..	184	741	150.0	49
50 ..	30,343	291	394	152	260.0	14,504	..	177	957	150.0	50
51 ..	29,506	272	401	153	260.0	13,370	..	167	1,176	150.0	51
52 ..	28,680	250	410	158	260.0	12,027	..	155	1,288	150.0	52
53 ..	27,862	228	418	176	260.0	10,584	..	140	1,228	150.0	53
54 ..	27,040	200	425	208	260.0	9,216	..	126	1,300	150.0	54
55 ..	26,207	173	435	273	260.0	7,790	..	110	1,425	150.0	55
56 ..	25,326	144	441	380	260.0	6,255	..	91	1,477	150.0	56
57 ..	24,361	112	448	488	260.0	4,687	..	75	1,444	150.0	57
58 ..	23,313	75	452	606	260.0	3,168	..	58	1,337	150.0	58
59 ..	22,180	44	475	776	260.0	1,773	..	36	920	150.0	59
60 ..	20,885	..	495	1,190	260.0	817	..	..	817	150.0	60
61 ..	19,200	..	501	2,362	260.0	..	..	..	..	..	..
62 ..	16,337	..	466	3,218	260.0	..	..	..	..	..	..
63 ..	12,653	..	393	4,138	260.0	..	..	..	..	..	..
64 ..	8,122	..	275	3,663	260.0	..	..	..	..	..	..
65 ..	4,184	..	..	4,184	260.0	..	..	..	..	..	..

TABLE IX.

CONTRIBUTIONS PER CENT. OF SALARY

PAYABLE UNDER THE SCHEME, TOGETHER WITH THOSE NECESSARY TO PRODUCE THE VARIOUS BENEFITS
OF THE FUND FOR FUTURE SERVICE.

MALES.							FEMALES.			
Age at Date of joining Fund.	Contribu- tion per Cent. payable by Act.	For Pension for Old Age, Length of Service, or Ill Health.	For Pension to Widows during Widow- hood.	For Pension to Children under Age 14.	For Return of Contribu- tions on Withdrawal, or on Death if unmarried.	Total Contribution necessary.	For Pension for Old Age, Length of Service, or Ill Health.	For Return of Contribu- tions on Death or Withdrawal.	Total Contribution necessary.	Age at Date of joining Fund.
16	5	4-081	0-789	0-272	0-980	6-122	5-025	2-206	7-231	16
17	5	4-145	0-807	0-278	0-956	6-186	5-090	2-189	7-279	17
18	5	4-211	0-826	0-284	0-935	6-256	5-164	2-173	7-337	18
19	5	4-286	0-847	0-292	0-913	6-338	5-264	2-154	7-418	19
20	5	4-374	0-873	0-300	0-892	6-439	5-405	2-126	7-531	20
21	5	4-482	0-903	0-311	0-869	6-565	5-591	2-087	7-678	21
22	5	4-610	0-940	0-324	0-844	6-718	5-830	2-037	7-867	22
23	5	4-754	0-983	0-339	0-815	6-891	6-125	1-974	8-099	23
24	5	4-905	1-029	0-355	0-785	7-074	6-470	1-896	8-366	24
25	5	5-066	1-078	0-372	0-754	7-260	6-853	1-809	8-662	25
26	5	5-190	1-126	0-389	0-724	7-429	7-267	1-716	8-983	26
27	5	5-330	1-175	0-405	0-694	7-604	7-704	1-618	9-322	27
28	5	5-475	1-223	0-419	0-665	7-782	8-159	1-517	9-676	28
29	5	5-625	1-269	0-432	0-638	7-964	8-626	1-416	10-042	29
30	6	5-778	1-315	0-443	0-734	8-270	9-100	1-578	10-678	30
31	6	5-935	1-361	0-452	0-704	8-452	9-577	1-460	11-037	31
32	6	6-094	1-406	0-458	0-675	8-633	10-053	1-345	11-398	32
33	6	6-256	1-451	0-462	0-648	8-817	10-525	1-235	11-760	33
34	6	6-420	1-497	0-463	0-621	9-001	10-988	1-130	12-118	34
35	7	6-586	1-545	0-462	0-694	9-287	11-438	1-204	12-642	35
36	7	6-757	1-594	0-459	0-665	9-475	11-875	1-098	12-973	36
37	7	6-932	1-646	0-453	0-637	9-668	12-297	1-001	13-298	37
38	7	7-111	1-703	0-447	0-609	9-870	12-712	0-913	13-625	38
39	7	7-297	1-766	0-439	0-581	10-083	13-122	0-833	13-955	39
40	8	7-494	1-829	0-430	0-632	10-385	13-526	0-870	14-396	40
41	8	7-706	1-899	0-421	0-601	10-627	13-922	0-795	14-717	41
42	8	7-936	1-979	0-412	0-569	10-896	14-309	0-727	15-036	42
43	8	8-180	2-067	0-404	0-536	11-187	14-687	0-667	15-354	43
44	8	8-437	2-166	0-396	0-503	11-502	15-048	0-614	15-662	44
45	9	8-705	2-276	0-389	0-529	11-899	15-385	0-640	16-025	45
46	9	8-983	2-398	0-382	0-491	12-254	15-692	0-598	16-290	46
47	9	9-268	2-534	0-375	0-454	12-631	15-962	0-563	16-525	47
48	9	9-560	2-686	0-369	0-417	13-032	16-198	0-532	16-730	48
49	9	9-861	2-855	0-364	0-380	13-460	16-403	0-502	16-905	49
50	10	10-168	3-047	0-360	0-383	13-958	16-583	0-525	17-108	50
51	10	10-482	3-270	0-357	0-344	14-453	16-739	0-492	17-231	51
52	10	10-801	3-530	0-357	0-308	14-996	16-881	0-459	17-340	52
53	10	11-123	3-838	0-358	0-273	15-592	17-021	0-424	17-445	53
54	10	11-448	4-206	0-359	0-240	16-253	17-156	0-389	17-545	54
55	10	11-772	4-655	0-362	0-210	16-999	17-277	0-352	17-629	55
56	10	12-094	5-209	0-365	0-183	17-851	17-386	0-314	17-700	56
57	10	12-413	5-908	0-370	0-159	18-850	17-499	0-272	17-771	57
58	10	12-728	6-822	0-382	0-138	20-070	17-641	0-216	17-857	58
59	10	13-037	8-087	0-407	0-121	21-652	17-873	0-137	18-010	59
60	10	13-331	9-925	0-446	0-106	23-808	..	..	..	..
61	10	13-598	12-729	0-516	0-093	26-936	..	..	..	..
62	10	13-845	16-812	0-612	0-078	31-347	..	..	..	..
63	10	14-096	24-058	0-778	0-061	38-993	..	..	..	..
64	10	14-408	40-653	1-122	0-038	56-221	..	..	..	..

TABLE X.

PENSIONS IN FORCE (EXCLUDING PENSIONS TO WIDOWS AND CHILDREN).

(1) Purchased by contribution. (2) Payable out of subsidy.

Age at Retirement.	Number retired on Pension.	Total Contributions paid.	Annual Pensions.	(1) Pensions purchased by Contribution.	(2) Pensions payable out of Subsidy.	Age at Retirement.
MALES.						
77	1	£ s. d. 0 16 8	£ s. d. 58 19 9	£ s. d. 0 3 1	£ s. d. 58 16 8	77
73	3	197 15 10	397 12 3	30 14 2	366 18 1	73
72	2	12 4 0	104 0 0	1 16 3	102 3 9	72
71	5	207 13 0	495 13 0	29 10 2	466 2 10	71
70	4	31 13 8	208 0 0	4 6 3	203 13 9	70
69	4	209 2 9	386 2 0	27 6 4	358 15 8	69
68	3	34 7 6	218 16 3	4 6 3	214 10 0	68
67	4	246 15 2	317 13 0	29 15 1	287 17 11	67
66	13	878 6 5	1,232 5 9	101 18 10	1,130 6 11	66
65	19	1,073 1 7	1,639 18 8	119 19 10	1,519 18 10	65
64	5	451 0 4	603 6 8	48 12 11	554 13 9	64
63	6	207 9 4	312 0 0	21 12 1	290 7 11	63
62	7	288 2 10	478 5 0	28 19 10	449 5 2	62
61	10	338 18 8	575 16 0	32 19 8	542 16 4	61
60	11	738 14 1	812 13 1	69 11 8	743 1 5	60
58	1	134 10 0	163 7 0	11 17 11	151 9 1	58
57	2	175 7 1	199 16 0	15 1 3	184 14 9	57
53	1	28 13 4	52 0 0	2 4 5	49 15 7	53
52	1	38 9 9	75 3 0	2 18 3	72 4 9	52
50	1	28 12 0	52 0 0	2 1 6	49 18 6	50
48	1	30 0 0	52 0 0	2 1 10	49 18 2	48
44	1	21 9 0	52 0 0	1 7 11	50 12 1	44
40	1	60 7 6	98 2 0	3 14 3	94 7 9	40
Total males	106	5,433 10 6	8,585 9 5	592 19 9	7,992 9 8	..
FEMALES.						
70	1	6 13 4	52 0 0	0 17 5	51 2 7	70
68	1	3 17 6	52 0 0	0 9 4	51 10 8	68
67	3	9 13 1	156 0 0	1 2 5	154 17 7	67
66	1	6 11 4	52 0 0	0 14 8	51 5 4	66
65	1	9 0 0	52 0 0	0 19 5	51 0 7	65
64	2	33 17 4	104 0 0	3 10 6	100 9 6	64
62	2	95 0 0	160 1 0	9 5 0	150 16 0	62
61	3	65 17 7	167 11 0	6 4 3	161 6 9	61
60	3	114 4 8	181 10 0	10 8 10	171 1 2	60
59	2	39 7 2	104 0 0	3 9 10	100 10 2	59
58	3	56 3 4	156 0 0	4 16 8	151 3 4	58
57	6	123 18 6	312 0 0	10 7 2	301 12 10	57
56	5	84 10 10	288 18 0	6 17 4	282 0 8	56
55	5	111 8 6	307 17 9	8 16 3	299 1 6	55
54	3	112 3 2	154 14 9	8 13 0	146 1 9	54
53	3	26 0 11	156 0 0	1 19 3	154 0 9	53
52	3	106 9 2	212 6 0	7 16 10	204 9 2	52
51	5	222 16 9	363 17 0	16 1 6	347 15 6	51
50	9	306 16 5	497 10 0	21 13 11	475 16 1	50
49	2	91 1 0	174 19 4	6 6 4	168 13 0	49
48	1	3 6 0	52 0 0	0 4 6	51 15 6	48
45	1	48 12 2	74 15 0	3 3 2	71 11 10	45
44	4	57 16 4	208 0 0	3 14 0	204 6 0	44
43	1	4 16 0	52 0 0	0 6 1	51 13 11	43
42	1	64 2 2	63 12 0	3 19 11	59 12 1	42
40	1	5 10 3	52 0 0	0 6 8	51 13 4	40
34	1	17 17 0	52 0 0	1 0 5	50 19 7	34
Total females	73	1,827 10 6	4,259 11 10	143 4 8	4,116 7 2	..

TABLE XI.

VALUATION BALANCE-SHEET OF THE TEACHERS' SUPERANNUATION FUND AS AT 31ST DECEMBER, 1910.

Liabilities.

		£	£
MALES—			
Value of 106 pensions for £8,585 9s. 5d. per annum already granted	.. .. .	73,487	
" 44 pensions for £805 3s. per annum granted to widows of contributors or pensioners	.. .. .	9,956	
" 47 pensions for £611 per annum granted to the children of deceased contributors or pensioners	.. .. .	2,678	
" prospective pensions for back service	.. .. .	439,862	
" " for future service	.. .. .	242,050	
" " to widows	.. .. .	87,600	
" " to children	.. .. .	16,249	
" return of contributions on death	.. .. .	7,105	
" " on withdrawal	.. .. .	24,717	
			903,704

FEMALES—			
Value of 73 pensions for £4,259 11s. 10d. per annum already granted	.. .. .	50,371	
" prospective pensions for back service	.. .. .	302,694	
" " for future service	.. .. .	210,474	
" return of contributions on death or withdrawal	.. .. .	38,436	
			601,975
			£1,505,679

Assets.

		£
Accumulated funds	.. .. .	154,212
Value of future contributions from males	.. .. .	248,238
" " females	.. .. .	119,411
" subsidy of £7,000 per annum	.. .. .	175,000
" additional annual subsidy of £10,000 per annum now recommended	250,000
" future increases in subsidy to be provided	558,818
		£1,505,679

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