

SCHOOL EMPLOYEES RETIREMENT SYSTEM
OF OHIO

ACTUARIAL VALUATION
JUNE 30, 1968

RETIREMENT LAW AFTER
1968 AMENDMENTS

*1968 Actuarial
Valuations
After ~~to~~ 1968
Amendments*

■ HUGGINS & COMPANY, INC.

CONSULTING ACTUARIES
EMPLOYEE BENEFIT
PLAN CONSULTANTS

PART I - ACTUARIAL BALANCE SHEET

Using the various monetary tables developed in connection with the 1965 Evaluation, a complete valuation of the system was made as of June 30, 1968 in which the present and prospective assets and liabilities were calculated, based on the contributions and benefits in effect after the 1968 amendments. The results are shown in the actuarial balance sheet on the following page.

It will be noted that the assets in the balance sheet consist of the present assets and future assets represented by prospective employee and employer contributions. The various fund balances included in the total present assets of \$220,913,172 obtained from the financial reports of the Board are shown in the balance sheet and the physical distribution of the present assets according to cash, investments and accrual items is shown in the footnote. The present value of the future employee contributions of the present members and the present value of the future employer contributions is shown in a combined total of \$369,298,349. In Parts II and III we discuss the proper allocation of this total between the members and the employers.

On the liability side of the balance sheet the main division of the total liability of \$590,211,521 is between the liability for the benefits presently payable on account of present retirants and beneficiaries amounting to \$136,207,631 and the liabilities for present active and inactive members amounting to \$453,808,864. In addition, there are two minor reserves totalling \$195,026. An analysis of the various liability items and a comparison of liabilities with the corresponding fund balances follow the balance sheet, beginning on page 3.

ACTUARIAL BALANCE SHEET SHOWING PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
OF THE SCHOOL EMPLOYEES' RETIREMENT SYSTEM - JUNE 30, 1968

RETIREMENT LAW AFTER 1968 AMENDMENTS

A S S E T S

L I A B I L I T I E S

<p><u>Present assets:</u></p> <p>Employees' Savings Fund-----\$ 78,783,778</p> <p>Interest Reserve Fund----- 2,054,394</p> <p>Annuity and Pension Reserve Fund----- 107,144,534</p> <p>Survivors' Benefit Fund----- 17,456,974</p> <p>Employers' Trust Fund----- 15,260,611</p> <p>Cleveland Custodians' Fund----- 4,387</p> <p>Members' Additional Annuity Fund----- 13,468</p> <p>Expense Fund----- 11</p> <p>Miscellaneous----- 195,015</p> <p><u>Total present assets-----\$220,913,172*</u></p>	<p><u>Present value of benefits</u></p> <p>payable on account of pre-</p> <p>sent retirants and benefi-</p> <p>ciaries from the -</p> <p>Annuity and Pension Reserve Fund:</p> <p>Superannuation retirants-----\$ 92,861,365</p> <p>Beneficiaries under options----- 3,459,098</p> <p>Disability retirants----- 6,112,912</p> <p><u>Total A & PRF-----\$102,433,375</u></p> <p>Cost-of-Living Adjustment Fund----- 15,064,019</p> <p>Survivors' Benefit Fund----- 18,710,237</p> <p><u>Total retirants and beneficiaries-----\$136,207,631</u></p> <p><u>Future assets:</u></p> <p>Present value of prospective employee</p> <p>contributions and employer contributions-----\$369,298,349</p> <p>Superannuation pensions-----\$349,213,649</p> <p>Disability pensions----- 14,380,956</p> <p>Survivor benefits----- 20,500,045</p> <p>Refunds----- 69,696,359</p> <p>Cleveland Custodians' Fund----- 4,387</p> <p>Additional annuities----- 13,468</p> <p><u>Total active and inactive members----- 453,808,864</u></p> <p>Reserve for expenses----- 11</p> <p>Reserve for contingencies; miscellaneous----- 195,015</p> <p><u>TOTAL LIABILITIES-----\$590,211,521</u></p>
--	---

*Distributed as follows: Cash-----\$ 1,498,602

Investments (at Book Value)----- 209,763,194

Accounts Receivable (including

\$9,513,714 due from employers)- 9,529,679

Accrued interest and miscellaneous 121,697

\$220,913,172

Liability related to present retirants and beneficiaries-----\$136,207,631

A breakdown of the liability of \$136,207,631 related to present retirants and beneficiaries according to the type of benefit payment as well as a division of the liability between that related to the regular allowance and the four cost-of-living adjustments is shown in the following table.

CATEGORY	LIABILITY - JUNE 30, 1968			Total Allowance
	Regular Allowance	---Cost-of-Living Increases--- 1957 + 1959 + 1965	1968	
Superannuation retirants-----	\$ 92,861,365	\$8,044,161	\$5,354,741	\$106,260,267
Beneficiaries receiving optional allowances-----	3,459,098	680,551	260,904	4,400,553
Disability retirants-----	6,112,912	406,596	317,066	6,836,574
Sub-total-----	\$102,433,375	\$9,131,308	\$5,932,711	\$117,497,394
Survivors' Benefit Fund beneficiaries---	18,710,237	-	-	18,710,237
Total Liability-----	<u>\$121,143,612</u>	<u>\$9,131,308</u>	<u>\$5,932,711</u>	<u>\$136,207,631</u>

It is interesting to compare the above liabilities with the corresponding fund balances shown in the actuarial balance sheet. Thus, the liabilities charged against the Annuity and Pension Reserve Fund result from the regular allowances to superannuation and disability retirants and the optional allowances payable to surviving beneficiaries of deceased retirants. The total of these liabilities is \$102,433,375 charged to the Annuity and Pension Reserve Fund, as compared with the fund balance of \$107,144,534, leading to a surplus of \$4,711,159. It will be noted that the Survivors' Benefit Fund had a fund balance of \$17,456,974 as compared with the liability of \$18,710,237, leading to a deficit of \$1,253,263.

The net surplus of \$3,457,896 in the Annuity and Pension Reserve Fund and the Survivors' Benefit Fund is not sufficient to offset the liability due to the four cost-of-living increases which are unfunded to the extent of \$15,064,019. The net remaining deficiency of \$11,606,123 for all retirants and survivors is included in the future assets.

The corresponding number of present retirants and beneficiaries and their annual allowances as of June 30, 1968 are shown in the following table.

CATEGORY	NUMBER	ANNUAL ALLOWANCES - JUNE 30, 1968			Total Allowance
		Regular Allowance	-Cost-of-Living Increases-		
			1957 + 1959 + 1965	1968	
Superannuation retirants-----	9,438	\$ 9,618,312	\$ 953,940	\$611,508	\$11,183,760
Beneficiaries receiving optional allowances-----	568	412,882	78,093	31,879	522,854
Disability retirants-----	519	568,117	39,328	30,163	637,608
Sub-total-----	10,525	\$10,599,311	\$1,071,361	\$673,550	\$12,344,222
Survivors' Benefit Fund beneficiaries---	1,253	1,743,329	-	-	1,743,329
Total allowances on June 30, 1968	<u>11,778</u>	<u>\$12,342,640</u>	<u>\$1,071,361</u>	<u>\$673,550</u>	<u>\$14,087,551</u>

The age distributions of the retirants and beneficiaries in the various categories are shown in schedules at the end of this report, as follows:

	Schedule
Superannuation retirants - men-----	A
Superannuation retirants - women-----	B
Beneficiaries receiving optional allowances-----	C
Disability retirants - men and women-----	D
Survivor beneficiaries - current-----	E
Survivor beneficiaries - deferred-----	F

Liability related to present active and inactive members-----\$453,808,864

The \$453,808,864 of liability related to the active and inactive members of the system is based on the data summarized briefly in the table below.

	<u>M e n</u>	<u>W o m e n</u>	<u>T o t a l</u>
Active members:			
Number-----	24,307	39,108	63,415
Salaries-----	\$101,960,777	\$ 92,447,617	\$194,408,394
Present value of 1% of future salaries---	\$ 8,838,532	\$ 8,244,839	\$ 17,083,371
Number of inactive members-----	16,188	20,542	36,730

The age distribution of the active members is shown at the end of this report in Schedule G and the age distribution of the inactive members is shown in Schedule H.

Reserve for expenses-----\$ 11

This is the balance in the Expense Fund, after payment of the operating expenses.

Reserve for contingencies; miscellaneous-----\$ 195,015

This is the total of the Security and Replacement Funds and the Suspense Accounts.

Total liabilities-----\$590,211,521

The total liability represents the present value of all obligations of the System for all future benefits, both those related to service prior to June 30, 1968 and those that will be related to subsequent service.

The actuarial assumptions used in this valuation are summarized in Schedule I at the end of this report.

PART II - RATES OF CONTRIBUTIONS

As a result of the 1968 legislation, and based on preliminary cost studies, the member contribution rate was increased from 7% to 7.9% effective July 1, 1968. However, provision was made for a like increase in the employer contribution rate effective July 1, 1969 plus additional increases resulting from Senate Bill No. 59, House Bill No. 402 and the delay in making the increase in rate effective. Based on our cost estimates in 1968, the employer rate increase corresponding to the increase of 0.9% of salary for members was 1.4% of total payroll to be effective July 1, 1969. Consequently, in this valuation, we must examine what the proper member rate should be and the corresponding increase in the employer rate effective July 1, 1969.

We have determined that the normal contribution rate after the 1968 legislation is 16.21% of salary, distributed as follows:

Superannuation retirement benefits-----	10.97%
Disability retirement benefits-----	0.61
Survivor benefits-----	1.20
Refund of contributions-----	<u>3.43</u>
Total normal contribution rate-----	16.21%
Normal contribution rate prior to the 1968 legislation-----	<u>14.95</u>
Increase in normal contribution rate due to the 1968 legislation-----	<u>-1.26%</u>
Increase payable by member-----	-0.63%
Increase payable by employer-----	<u>-0.63%</u>

The problem is to allocate the present value of the future assets, amounting to \$369,298,349, between member and employer contributions. The normal contribution rate as mentioned above, changed as follows:

	<u>Member</u>	<u>Employer</u>	<u>Total</u>
Rates prior to 1968-----	7.00%	7.95%	<u>14.95%</u>
Increases due to 1968 legislation-----	<u>0.63</u>	<u>0.63</u>	<u>1.26</u>
Total-----	<u>7.63%</u>	<u>8.58%</u>	<u>16.21%</u>

We can now determine the present value of these rates since we calculated that 1% of total payroll has a present value of \$17,083,371.

	<u>Member</u>	<u>Employer</u>	<u>T o t a l</u>
Present value prior to 1968-----	\$119,583,597	\$135,812,799	\$255,396,396
Present value of increases-----	10,762,524	10,762,524	21,525,048
Present value of total normal contribu- tions-----	<u>\$130,346,121</u>	<u>\$146,575,323</u>	<u>\$276,921,444</u>

We can, therefore, deduct these present values from the total amount in order to determine the portion funded by the deficiency contributions:

Total future assets-----	\$369,298,349
DEDUCT: Present value of future normal contri- butions-----	<u>276,921,444</u>
Balance to be funded by deficiency contribu- tions-----	\$ 92,376,905
Deficiency funded by employer rate prior to 1968 legislation (2.05%)-----	<u>74,775,256</u>
Balance of deficiency to be funded-----	\$ 17,601,649
Deficiency funded by employer for S.B. 59, H.B. 402 and delay in rate increase (0.46%)-----	<u>16,778,960</u>
Balance of deficiency to be funded by member and employer equally-----	<u>\$ 822,689</u>
Rate required (total)-----	<u>0.02%</u>
Portion paid by member-----	0.01%
Portion paid by employer-----	0.01%

In connection with the funding of these deficiencies, it is important to state the period over which it is assumed they are to be funded. What we have used for this purpose are the same periods as determined in the earlier valuation as of June 30, 1968, depending on the assumptions as to future payroll increases, as follows:

	<u>Assumptions as to Future Payrolls</u>		
	<u>Level</u>	<u>3% Annual Increase</u>	<u>5% Annual Increase</u>
Period of deficiency funding-----	33.3 years	20.8 years	17.5 years
	-- 7 -- 30.9	20.0	16.9

Such assumed increases in future payrolls are not unreasonable in view of the past history, which has been in accordance with the following trend since 1961.

Year Ending June 30,	Total Payroll of Members	Percentage Increase	Actual
1961-----	\$101,278,000	8.55%	101,653,000
1962-----	108,558,000	7.19	109,652,000
1963-----	116,378,000	7.20	117,219,000
1964-----	124,121,000	6.65	122,633,000
1965-----	133,134,000	7.26	135,159,000
1966-----	149,160,000	12.04	150,965,000
1967-----	176,422,000	18.28	172,855,000
1968-----	199,733,000	13.21	199,817,000
1969	219,935,000	10.11	220,278,000
1970	242,242,000	10.14	
1971	266,805		

for 69-70

12/17/69 DPA Minutes

We may, therefore, summarize the required contributions as follows:

	Member	Employer	Total
Normal rate prior to 1968 legislation-----	7.00%	7.95%	14.95%
Increases due to 1968 legislation-----	0.63	0.63	1.26
Total normal rate-----	7.63%	8.58%	16.21%
Deficiency rate prior to 1968-----	0	2.05	2.05
Deficiency rate due to S.B. 59, H.B. 402 and delay	0	0.46	0.46
Deficiency rate divided equally due to other 1968 legislation-----	0.01	0.01	0.02
Total contribution rate-----	<u>7.64%</u>	<u>11.10%</u>	<u>18.74%</u>
Total increases because of 1968 legislation-----	<u>0.64%</u>	<u>1.10%</u>	<u>1.74%</u>

These results indicate that the increase in member contribution rate effective July 1, 1968 of 0.9% of salary was higher than determined by this valuation; furthermore, the estimated increase in the employer rate of 1.4% of payroll quoted in our letter of April 26, 1968 was also higher than the 1.10% of payroll determined above. In each case the actual increases are roughly three-quarters of those predicted last year.

PART III - SUMMARY

This valuation indicates that the liability items for active members are approximately 8% higher than the corresponding items in the earlier valuation as of June 30, 1968, due to the liberalizations enacted in 1968. The corresponding increases for retirants are closer to 5%.

This valuation indicates that the increase in the member contribution rate to 7.9% which became effective July 1, 1968, was somewhat high since the result obtained in Part II is 7.64%. Virtually all of this rate is a normal contribution rate of 7.63% which is not affected by the period of funding. The deficiency contribution rate of 0.01% is the remaining part, and is assumed to be funded over periods varying from 33.3 years to 17.5 years, depending on assumptions as to future payroll increases. An extension of the funding period would decrease the member rate only with respect to the 0.01% portion, and would not affect it.

The indicated employer rate obtained in this valuation is 11.1% which should be effective at the earliest time, July 1, 1969. An extension of the funding period would affect this rate substantially since 2.52% of payroll constitutes the deficiency contribution rate. However, the proposed liberalizations being considered for action in 1969 should be considered since we have quoted the effects of extending the funding periods in connection with these changes.

We would request the opportunity of discussing this report with the Retirement Board before making final recommendations.

*Ans. Rec.
4/28/69*

*7.7 Employer
11.2 Employer*

SUPERANNUATION RETIRANTS - JUNE 30, 1968 - MEN

AGE	STRAIGHT LIFE		OPTIONS		TOTAL	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
52	1	\$ 4,111	-	\$ -	1	\$ 4,111
54	-	-	1	3,628	1	3,628
56	2	4,186	3	4,596	5	8,782
57	3	3,567	5	13,847	8	17,414
58	6	17,274	4	6,463	10	23,737
59	9	14,409	6	24,516	15	38,925
60	11	19,986	12	22,025	23	42,011
61	38	49,459	26	30,595	64	80,054
62	51	53,491	26	35,586	77	89,077
63	59	59,291	47	55,390	106	114,681
64	84	89,354	42	55,464	126	144,818
65	99	112,130	49	76,339	148	188,469
66	124	131,325	72	97,763	196	229,088
67	121	121,813	88	106,047	209	227,860
68	143	182,007	87	154,497	230	336,504
69	156	172,739	99	148,879	255	321,618
70	175	190,234	87	121,682	262	311,916
71	183	265,448	108	170,721	291	436,169
72	178	229,341	99	154,381	277	383,722
73	174	250,425	103	141,592	277	392,017
74	173	224,279	89	140,588	262	364,867
75	193	245,784	63	99,943	256	345,727
76	168	221,024	70	86,074	238	307,098
77	145	184,241	70	104,161	215	288,402
78	133	174,472	52	66,410	185	240,882
79	117	142,039	60	76,975	177	219,014
80	113	140,065	44	51,178	157	191,243
81	85	94,675	39	42,567	124	137,242
82	84	108,820	41	47,688	125	156,508
83	68	84,251	21	18,590	89	102,841
84	60	68,061	23	21,294	83	89,355
85	47	58,317	22	24,630	69	82,947
86	39	40,182	15	14,412	54	54,594
87	30	30,547	7	7,806	37	38,353
88	26	32,891	4	2,995	30	35,886
89	20	18,295	6	3,985	26	22,280
90	10	9,613	-	-	10	9,613
91	15	17,577	-	-	15	17,577
92	6	4,790	1	1,427	7	6,217
93	8	5,746	2	949	10	6,695
94	8	7,461	2	2,035	10	9,496
95	1	1,078	1	402	2	1,480
96	2	2,063	-	-	2	2,063
97	1	270	1	612	2	882
100	1	1,299	-	-	1	1,299
TOTAL	3,170	\$ 3,888,430	1,597	\$ 2,238,732	4,767	\$ 6,127,162

SCHEDULE A

SUPERANNUATION RETIRANTS - JUNE 30, 1968 - WOMEN

AGE	STRAIGHT LIFE		OPTIONS		TOTAL	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
56	4	\$ 11,888	-	\$ -	4	\$ 11,888
57	6	15,740	1	1,250	7	16,990
58	10	27,824	1	650	11	28,474
59	6	11,271	1	906	7	12,177
60	23	38,234	3	5,579	26	43,813
61	114	127,144	13	14,839	127	141,983
62	143	149,098	7	4,508	150	153,606
63	190	204,706	3	5,670	193	210,376
64	217	234,781	7	16,716	224	251,497
65	206	201,676	12	15,638	218	217,314
66	273	280,944	20	32,545	293	313,489
67	232	235,719	16	15,058	248	250,777
68	263	261,155	15	26,870	278	288,025
69	220	236,163	9	12,214	229	248,377
70	278	314,106	9	7,768	287	321,874
71	235	260,716	15	16,336	250	277,052
72	249	286,652	11	15,487	260	302,139
73	244	256,488	12	10,041	256	266,529
74	222	217,275	7	11,049	229	228,324
75	210	225,182	11	12,900	221	238,082
76	171	192,309	11	9,747	182	202,056
77	168	183,172	9	8,669	177	191,841
78	122	136,170	8	9,216	130	145,386
79	122	131,322	9	8,509	131	139,831
80	115	115,960	7	9,050	122	125,010
81	82	97,513	6	4,609	88	102,122
82	74	80,363	4	7,523	78	87,886
83	66	71,684	2	1,279	68	72,963
84	46	48,557	1	542	47	49,099
85	25	21,251	1	694	26	21,945
86	34	32,628	2	1,642	36	34,270
87	22	23,129	1	757	23	23,886
88	11	9,879	1	1,005	12	10,884
89	9	8,137	-	-	9	8,137
90	5	5,503	1	224	6	5,727
91	6	3,686	1	716	7	4,402
92	4	3,039	-	-	4	3,039
93	5	3,822	-	-	5	3,822
94	2	1,506	-	-	2	1,506
TOTAL	4,434	\$ 4,766,392	237	\$ 290,206	4,671	\$ 5,056,598

SCHEDULE B

BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES - JUNE 30, 1968

AGE	OPTIONAL LIFE PENSIONS				OPTIONAL TERM CERTAIN PEN.		
	M E N		W O M E N		YEAR OF EXPIRY	NUMBER	ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE			
37	1	\$ 370	-	-			
38	+	-	1	457	68	11	\$ 11,977
44	+	-	1	193			
45	+	-	1	788			
46	+	-	2	1,455			
49	+	-	1	468	69	20	31,066
52	+	-	4	2,150			
53	+	-	2	1,331			
55	+	-	1	362			
57	+	-	9	12,581	70	16	24,725
58	+	-	1	482			
59	+	-	5	3,938			
60	1	823	5	5,724			
61	+	-	4	3,287	71	12	19,194
62	+	-	11	11,397			
63	1	767	10	5,806			
64	+	-	11	10,333			
65	+	-	13	10,258	72	10	10,871
66	+	-	16	12,706			
67	+	-	20	17,272			
68	+	-	22	24,037			
69	+	-	14	16,518	73	9	7,380
70	+	-	17	20,151			
71	1	529	22	18,643			
72	1	1,831	16	22,331			
73	+	-	23	18,016	74	8	14,744
74	+	-	20	13,485			
75	+	-	22	14,446			
76	1	1,315	24	16,509			
77	+	-	17	11,473	75	2	1,505
78	1	730	17	12,189			
79	1	553	20	13,526			
80	+	-	18	12,301			
81	+	-	19	13,765	76	3	2,924
82	+	-	17	12,873			
83	+	-	17	12,483			
84	+	-	5	1,800			
85	+	-	5	4,091	77	2	2,673
86	+	-	9	6,597			
87	+	-	8	5,179			
88	+	-	6	9,087			
89	+	-	3	2,051	81	1	869
90	+	-	1	310			
92	+	-	3	2,996			
93	+	-	2	1,544			
94	+	-	1	619			
TOTAL	8	\$ 6,918	466	\$ 388,008		94	\$127,928

SCHEDULE C

DISABILITY RETIRANTS - JUNE 30, 1968

AGE	M E N		W O M E N	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
27	1	\$ 1,777	-	-
36	1	2,785	-	-
37	1	761	1	2,604
39	1	1,517	1	2,852
40	1	1,588	-	-
41	2	1,851	-	-
42	1	3,602	1	1,478
43	2	1,213	1	1,989
44	3	5,511	1	1,668
45	4	7,494	1	1,290
46	5	9,081	2	2,884
47	8	9,728	-	-
48	7	8,136	4	6,075
49	9	16,035	1	891
50	6	8,798	5	7,219
51	6	13,213	4	5,988
52	15	18,871	7	8,911
53	7	12,642	9	9,888
54	14	13,513	7	10,712
55	9	10,014	12	14,567
56	15	14,826	11	13,640
57	23	28,449	12	13,663
58	19	20,319	14	16,104
59	25	34,521	15	16,162
60	20	29,933	24	23,573
61	17	17,953	12	12,096
62	14	16,166	14	14,956
63	15	16,535	12	15,253
64	13	14,814	11	10,084
65	12	14,877	8	8,603
66	4	4,851	5	4,297
67	5	8,070	1	858
68	3	2,120	5	3,078
69	5	3,903	3	2,461
70	4	6,368	4	2,929
71	-	-	4	3,444
72	3	3,504	4	8,738
73	-	-	3	3,314
TOTAL	300	\$ 385,339	219	\$ 252,269

SCHEDULE D

SURVIVORS' BENEFIT FUND - JUNE 30, 1968

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES

AGE	OPTION 1 ALLOWANCES		SPOUSE WITH ELIGIBLE CHILDREN		DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD	
	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance
28	-	-	1	\$ 2,012	-	-
29	-	-	1	3,448	-	-
30	-	-	1	2,325	-	-
32	-	-	1	1,963	-	-
33	-	-	1	2,889	-	-
34	-	-	1	2,439	-	-
35	-	-	-	-	-	-
36	-	-	-	-	-	-
37	-	-	2	5,111	-	-
38	-	-	4	9,802	-	-
39	-	-	5	12,064	-	-
40	-	-	5	11,832	-	-
41	-	-	1	2,919	-	-
42	-	-	10	25,456	-	-
43	-	-	6	15,383	-	-
44	-	-	8	18,069	-	-
45	-	-	9	20,777	-	-
46	3	993	10	22,365	-	-
47	-	-	7	17,592	-	-
48	-	-	11	28,362	-	-
49	-	-	9	21,510	-	-
50	2	1,400	14	30,501	-	-
51	2	4,044	7	16,096	1	1,188
52	2	1,584	9	21,265	1	1,308
53	4	4,651	11	24,550	3	3,924
54	5	6,330	12	25,187	8	10,388
55	4	4,260	13	29,721	6	7,933
56	5	7,911	8	18,125	10	12,582
57	3	3,104	5	10,900	8	10,469
58	9	6,461	3	6,642	5	6,172
59	9	12,828	1	2,385	8	10,781
60	6	7,601	2	4,233	12	16,003
61	12	17,566	-	-	12	16,214
62	15	14,509	3	6,203	14	17,722
63	6	5,640	3	5,430	30	35,257
64	14	26,482	2	4,824	31	36,443

SCHEDULE E

SURVIVORS' BENEFIT FUND - JUNE 30, 1968

(continued)

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES

AGE	OPTION 1 ALLOWANCES		SPOUSE WITH ELIGIBLE CHILDREN		DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD		AGE OF YOUNGEST CHILD		CHILDREN WITH NO ELIGIBLE PARENT	
	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance
65	12	\$ 25,326	-	\$ -	35	\$ 53,554	5	4	\$ 3,858	
66	16	27,976	-	-	27	31,355	6	8	7,684	
67	11	11,750	-	-	26	31,796	7	5	4,357	
68	9	9,515	-	-	34	42,125	8	4	3,876	
69	11	22,924	1	2,412	25	30,161	9	3	2,068	
70	14	19,443	-	-	31	35,314	10	-	-	
71	13	19,119	-	-	31	36,704	11	8	7,370	
72	13	15,065	-	-	23	26,264	12	2	2,061	
73	16	24,830	-	-	18	21,534	13	2	2,327	
74	6	6,485	-	-	28	32,960	14	6	6,610	
75	6	8,817	-	-	16	18,078	15	3	3,151	
76	10	12,580	-	-	20	21,588	16	2	2,347	
77	3	5,829	-	-	21	23,551	17	4	4,423	
78	3	3,944	1	2,085	13	14,647	18	2	2,547	
79	4	2,761	-	-	10	10,880	-	-	-	
80	1	1,711	-	-	8	8,103	37	1	1,188	
81	1	1,059	-	-	8	7,788	-	-	-	
82	2	1,332	-	-	8	8,353	-	-	-	
83	-	-	-	-	1	763	-	-	-	
84	1	2,721	-	-	4	5,117	-	-	-	
85	-	-	-	-	2	1,882	-	-	-	
86	1	970	-	-	-	-	-	-	-	
90	-	-	-	-	1	1,048	-	-	-	
Totals	<u>254</u>	<u>\$349,521</u>	<u>188</u>	<u>\$436,877</u>	<u>539</u>	<u>\$649,949</u>		<u>54</u>	<u>\$ 53,867</u>	

SCHEDULE E
(continued)

SURVIVORS' BENEFIT FUND - JUNE 30, 1968

BENEFICIARIES NOW ENTITLED TO DEFERRED ALLOWANCE ONLY

AGE	DEFERRED TO AGE 65		DEFERRED TO AGE 62		DEFERRED TO AGE 50	
	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance
39	-	\$ -	1	\$ 1,220	-	\$ -
43	-	-	2	2,168	-	-
44	-	-	1	1,220	1	1,340
45	-	-	-	-	-	-
46	-	-	3	3,660	-	-
47	1	1,040	1	1,220	1	1,340
48	2	2,260	1	1,220	1	1,340
49	-	-	2	2,440	2	2,680
50	2	1,780	4	4,880	-	-
51	2	2,365	5	7,082	-	-
52	2	2,080	6	7,140	-	-
53	-	-	8	9,760	-	-
54	2	2,080	16	19,044	-	-
55	2	2,080	11	13,375	-	-
56	8	8,380	13	15,372	-	-
57	4	4,040	13	15,834	-	-
58	3	3,154	14	16,980	-	-
59	1	1,040	12	14,280	-	-
60	2	2,080	22	25,458	-	-
61	4	3,860	16	19,053	-	-
62	2	1,780	10	11,858	-	-
63	6	5,520	-	-	-	-
64	5	5,560	-	-	-	-
65	4	4,052	-	-	-	-
Total	<u>52</u>	<u>\$ 53,151</u>	<u>161</u>	<u>\$193,264</u>	<u>5</u>	<u>\$ 6,700</u>

SCHEDULE F

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1968

AGE	M E N		W O M E N	
	Number	Salaries	Number	Salaries
15	2	\$ 740	-	\$ -
16	6	5,299	2	670
17	15	12,299	5	7,000
18	55	68,384	75	93,614
19	100	244,791	322	707,744
20	136	366,472	352	801,448
21	119	299,576	409	988,991
22	198	526,978	315	834,741
23	196	514,312	233	612,168
24	232	635,526	236	634,029
25	265	789,014	213	612,461
26	309	892,153	265	778,290
27	325	958,008	306	719,488
28	316	958,642	324	701,380
29	362	1,049,089	369	784,414
30	396	1,282,833	419	901,856
31	394	1,282,915	523	1,065,135
32	397	1,365,546	589	1,053,656
33	443	1,469,941	678	1,319,909
34	411	1,312,793	769	1,495,992
35	428	1,535,326	764	1,476,385
36	433	1,619,081	901	1,805,105
37	456	1,672,556	955	1,865,600
38	501	1,813,599	1,033	2,015,174
39	516	1,990,073	1,140	2,308,933
40	484	1,869,952	1,174	2,439,453
41	574	2,371,415	1,303	2,886,687
42	549	2,127,921	1,330	2,993,264
43	602	2,488,733	1,275	2,841,250
44	616	2,576,232	1,473	3,415,854
45	639	2,934,996	1,389	3,201,758
46	644	2,807,458	1,512	3,579,403
47	618	2,749,284	1,525	3,728,922
48	691	3,219,815	1,471	3,624,873
49	622	2,883,691	1,327	3,295,275
50	654	3,062,161	1,411	3,506,093
51	665	2,958,440	1,320	3,370,522
52	695	3,358,703	1,257	3,253,361
53	721	3,422,480	1,259	3,298,345
54	720	3,396,937	1,131	2,959,257

SCHEDULE G

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1968 (continued)

AGE	M E N		W O M E N	
	Number	Salaries	Number	Salaries
55	740	\$ 3,463,283	1,045	\$ 2,589,816
56	761	3,595,801	1,006	2,630,727
57	678	3,257,730	862	2,262,114
58	692	3,260,472	846	2,333,725
59	659	3,170,470	739	2,008,353
60	621	3,058,210	694	1,825,876
61	578	2,954,545	542	1,512,053
62	581	2,939,560	490	1,342,460
63	461	2,253,560	371	1,005,667
64	402	1,934,174	284	724,688
65	405	1,990,463	241	651,263
66	306	1,440,098	159	429,255
67	191	854,708	133	329,193
68	225	953,539	99	286,377
69	141	647,241	64	149,449
70	106	501,686	57	131,806
71	72	262,996	40	95,107
72	26	75,767	23	52,079
73	37	114,995	19	42,633
74	22	74,094	14	20,482
75	24	60,435	8	13,534
76	25	71,224	5	6,516
77	14	34,634	7	14,152
78	10	31,285	1	390
79	7	10,696	2	4,938
80	10	20,528	-	-
81	5	22,404	-	-
82	1	5,922	-	-
83	2	5,688	-	-
84	1	405	1	3,982
85	-	-	-	-
86	-	-	-	-
88	-	-	1	2,482
Totals	<u>24,307</u>	<u>\$101,960,777</u>	<u>39,108</u>	<u>\$92,447,617</u>

SCHEDULE G
(concluded)

INACTIVE MEMBERS - JUNE 30, 1968

<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>	<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>
15	-	2	55	312	488
16	2	1	56	313	428
17	5	5	57	281	382
18	30	27	58	296	386
19	169	162	59	270	347
20	314	467	60	270	316
21	315	731	61	196	209
22	290	570	62	193	205
23	256	451	63	191	180
24	255	455	64	135	132
25	321	383	65	119	122
26	364	356	66	121	84
27	350	290	67	85	50
28	332	288	68	96	81
29	333	251	69	51	44
30	376	297	70	34	41
31	353	335	71	30	29
32	392	342	72	23	11
33	359	371	73	32	26
34	359	375	74	19	14
35	366	368	75	15	12
36	402	457	76	13	13
37	400	432	77	17	11
38	436	536	78	9	3
39	439	463	79	11	9
40	472	530	80	11	4
41	437	551	81	3	3
42	420	554	82	5	-
43	469	555	83	1	3
44	441	612	84	3	1
45	422	592	85	1	-
46	390	565	86	2	2
47	372	698	87	2	-
48	359	627	90	1	-
49	324	559	91	<u>1</u>	<u>-</u>
50	371	593	Totals	<u>16,188</u>	<u>20,542</u>
51	352	545			
52	331	520			
53	327	493			
54	321	497			

SCHEDULE H

ACTUARIAL ASSUMPTIONS - JUNE 30, 1968

SUPERANNUATION RETIRANTS, BENEFICIARIES,
AND SURVIVOR BENEFICIARIES

INTEREST: 4% per annum, compounded annually.

MORTALITY: 1955 American Annuity Table, with ages set up
2 years for Males, set back 4 years for Female
Members and set back 5 years for Female Bene-
ficiaries.

DISABILITY RETIRANTS

INTEREST: 4% per annum, compounded annually.

MORTALITY: Rates developed in 1965 Evaluation, based on
1961-1965 experience.

ACTIVE AND INACTIVE MEMBERS

INTEREST: 4% per annum, compounded annually.

WITHDRAWAL, MORTALITY, DISABILITY and SUPERANNUATION RATES and
SALARY SCALES: Rates and scales developed in 1965 Evaluation,
based on 1961-1965 experience. Values at speci-
men ages are shown in the table below.

	AGE	RATES OF SEPARATION DUE TO:				SALARY SCALE
		Withdrawal	Death	Disability	Superannuation	
<u>MEN</u>	20	.1855	.0005	-	-	\$2,726
	30	.0913	.0006	.0002	-	3,876
	40	.0556	.0019	.0009	-	5,141
	50	.0382	.0062	.0029	-	6,374
	55	.0314	.0094	.0047	.0048	6,964
	60	.0264	.0127	-	.0459	7,530
	65	.0245	.0159	-	.1735	8,005
	70	-	.0193	-	.3177	8,280
<u>WOMEN</u>	20	.2389	-	-	-	2,726
	30	.1146	.0001	.0001	-	3,876
	40	.0664	.0002	.0002	-	5,141
	50	.0409	.0015	.0015	-	6,374
	55	.0337	.0036	.0036	.0025	6,964
	60	.0309	-	-	.0759	7,530
	65	.0301	-	-	.1651	8,005
	70	-	-	-	.3210	8,280