

THIRD CLASS REGAN

*May*

SCHOOL EMPLOYEES RETIREMENT SYSTEM  
OF OHIO

---

ACTUARIAL VALUATION  
JUNE 30, 1969

**HUGGINS**  
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

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& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

1401 WALNUT STREET • PHILADELPHIA 19102 • (215) 665-1401

January 20, 1970

The Retirement Board  
School Employees Retirement System of Ohio  
88 East Broad Street  
Columbus, Ohio 43215

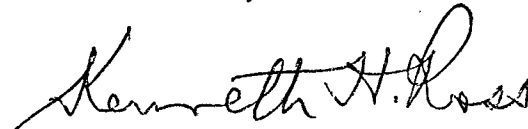
Gentlemen:

We are pleased to present herein the report on our actuarial valuation of the School Employees Retirement System of Ohio as of June 30, 1969.

We wish to take this opportunity of expressing our appreciation of the very fine cooperation which we received from Mr. Brennan and the members of the staff and also the excellent condition in which we found the various records of the Board from which information was furnished for our study.

Respectfully submitted,

HUGGINS & COMPANY, INC.

By   
KENNETH H. ROSS

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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, 1969 in which the present and prospective assets and liabilities were calculated, based on the contributions and benefits in effect on that date. 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 not only the present assets but also future assets represented by prospective contributions. The various fund balances included in the total present assets of \$257,190,453 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, accrual items and furniture and equipment 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 \$444,537,713. In Part II we discuss the proper allocation of this total between the normal and deficiency contributions.

On the liability side of the balance sheet the main division of the total liability of \$701,728,166 is between the liability for the benefits presently payable on account of present retirants and beneficiaries amounting to \$148,596,787 and the liabilities for present active and inactive members amounting to \$552,787,239. In addition, there is a minor reserve of \$344,140. 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, 1969

A S S E T S

L I A B I L I T I E S

Present assets:

Employees' Savings Fund .....	\$ 89,263,861
Interest Reserve Fund .....	2,864,688
Annuity and Pension Reserve Fund .....	119,570,942
Survivors' Benefit Fund .....	19,257,439
Employers' Trust Fund .....	25,884,996
Cleveland Custodians' Fund .....	4,387
General Fixed Assets .....	171,614
Expense Fund .....	0
Miscellaneous .....	<u>172,526</u>

Total present assets ..... \$257,190,453\*

Future assets:

Present value of prospective employee and employer contributions .....	\$444,537,713
Superannuation pensions .....	\$422,474,342
Disability pensions .....	17,673,023
Survivor benefits .....	26,209,246
Refunds .....	86,426,241
Cleveland Custodians' Fund ..	4,387
Additional annuities .....	<u>0</u>

Total retirees and beneficiaries ..... \$148,596,787

Total active and inactive members ..... 552,787,239  
Reserve for expenses ..... 0  
Reserve for contingencies; miscellaneous .. 344,140

TOTAL ASSETS ..... \$701,728,166 TOTAL LIABILITIES ..... \$701,728,166

\*Distributed as follows:

Cash .....	\$ 2,531,157
Investments (at Book Value) ..	243,307,175
Accounts Receivable (including \$11,116,812 due from employers)	11,126,849
Accrued interest .....	48,264
Furniture and equipment .....	<u>177,008</u>
	<u>\$257,190,453</u>

Liability related to present retirants and beneficiaries ----- \$148,596,787

A breakdown of the liability of \$148,596,787 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, 1969			Total Allowance
	Regular Allowance	---Cost-of-Living Increases---	1968	
	1957 + 1959 + 1965			
Superannuation retirants -----	\$103,893,317	\$7,300,020	\$4,916,101	\$116,109,438
Beneficiaries receiving optional allowances -----	3,926,970	702,119	280,801	4,909,890
Disability retirants -----	6,932,258	371,340	309,072	7,612,670
Sub-total -----	\$114,752,545	\$8,373,479	\$5,505,974	\$128,631,998
Survivors' Benefit Fund beneficiaries -	19,964,789	-	-	19,964,789
Total Liability -----	<u>\$134,717,334</u>	<u>\$8,373,479</u>	<u>\$5,505,974</u>	<u>\$148,596,787</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 \$114,752,545 charged to the Annuity and Pension Reserve Fund, as compared with the fund balance of \$119,570,942, leading to a surplus of \$4,818,397. It will be noted that the Survivors' Benefit Fund had a fund balance of \$19,257,439 as compared with the liability of \$19,964,789, leading to a deficit of \$707,350.

The net surplus of \$4,111,047 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 \$13,879,453. The net remaining deficiency of \$9,768,406 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, 1969 are shown in the following table.

CATEGORY	NUMBER	ANNUAL ALLOWANCES - JUNE 30, 1969			Total Allowance
		Regular Allowance	-Cost-of-Living Increases- 1957 + 1959 + 1965      1968		
Superannuation retirants -----	10,078	\$10,692,213	\$ 886,397	\$575,326	\$12,153,936
Beneficiaries receiving optional allowances ----	629	466,110	81,637	34,456	582,203
Disability retirants -----	565	645,767	37,269	29,653	712,689
Sub-total -----	11,272	\$11,804,090	\$1,005,303	\$639,435	\$13,448,828
Survivors' Benefit Fund beneficiaries -	1,335	1,868,681	-	-	1,868,681
Total allowances on June 30, 1969	<u>12,607</u>	<u>\$13,672,771</u>	<u>\$1,005,303</u>	<u>\$639,435</u>	<u>\$15,317,509</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:

	<u>Schedule</u>
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 ..... \$552,787,239

The \$552,787,239 of liability related to the active and inactive members of the system is based on the data summarized briefly in the table below.

	36 % <u>Men</u>	64 % <u>Women</u>	<u>Total</u>
Active members:			
	(Average Annual Sal.) \$ 5,230.00	\$ 2,765.00	\$ 3,652.00
Number .....	24,565	43,718	68,283
Salaries .....	\$128,492,445	\$120,896,601	\$249,389,046
Present value of 1% of future salaries -	\$ 11,064,104	\$ 10,776,934	\$ 21,841,038
Number of inactive members .....	18,518	25,123	43,641

111,924

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 ..... \$ 0

There was no balance in the Expense Fund, after payment of the operating expenses.

Reserve for contingencies; miscellaneous ..... \$ 344,140

This is the total of the Security and Replacement Funds and the Investment in General Fixed Assets.

Total liabilities ..... \$701,728,166

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, 1969 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

Based on the preliminary cost estimates of the 1968 legislation, the member contribution rate was increased from 7% to 7.9% effective July 1, 1968 and the employer rate was increased from 10.0% to 11.4% effective July 1, 1969, so that the total member-employer rate is now 19.3%.

In connection with the 1968 valuation, a New Entrant study was made in order to determine the normal contribution rate. The results of that study indicated a total normal rate of 16.21% of salary, with the breakdown shown in the table below:

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%

In order to determine what portion of the future asset item of \$444,537,713 will be funded by the total normal contribution rate of 16.21% of salary, we have determined that the present value of the present members' future salaries is \$2,184,103,800. The present value of future normal contributions is, therefore, 16.21% of \$2,184,103,800, or \$354,043,226. This leaves a deficiency of \$90,494,487 to be funded by the remainder of the future contributions. The corresponding figure a year earlier was \$92,376,905, which means that the deficiency decreased by \$1,882,418.

In order to analyze the deficiency funding, let us start with the present total contribution rate of 19.30% of payroll. If we deduct the normal contribution rate of 16.21%, we are left with a balance of 3.09% available for funding the deficiency. The question to be answered is over how long a period will this rate of 3.09% be required in order to fund the deficiency of \$90,494,487.



Before making this calculation, we should be aware of the consistently large increases in total payroll of the members in recent years, which have been as follows:

<u>Year Ending June 30</u>	<u>Total Payroll of Members</u>	<u>Percentage Increase</u>
1961 .....	\$101,278,000	8.6%
1962 .....	108,558,000	7.2
1963 .....	116,378,000	7.2
1964 .....	124,121,000	6.7
1965 .....	133,134,000	7.3
1966 .....	149,160,000	12.0
1967 .....	176,422,000	18.3
1968 .....	199,733,000	13.2
1969 .....	220,278,000	10.3

While we would not want to project future increases at these rates, which average over 10% annually, we have made our calculations on three different bases, in this respect, as follows:

1. Assuming that payrolls will continue at the 1968-1969 level of approximately \$221,000,000.
2. Assuming that payrolls will increase in the future at the rate of 3% per annum, compounded annually.
3. Assuming that payrolls will increase in the future at the rate of 5% per annum, compounded annually.

Our calculations indicate that, for the present total contribution rate of 19.30% of payroll, of which 16.21% is on account of the normal cost and 3.09% is on account of the deficiency, the funding periods on the three different assumptions as to future payrolls are as follows:

	<u>Assumptions as to Future Payrolls</u>		
	<u>No Increase</u>	<u>3% Annual Increase</u>	<u>5% Annual Increase</u>
Period of deficiency funding ..	19.3 years	<u>14.7 years</u>	13.0 years

These calculations indicate that the total employer rate of 11.4% of payroll, along with a member contribution rate of 7.9%, will fund the normal cost each year and complete the funding of the deficiency in periods varying from 13.0 years to 19.3 years, depending on those three assumptions as to future payroll increases.

These periods are considerably shorter than the corresponding periods determined

in the valuation as of June 30, 1968. Consequently, we consider that the employer contribution rate of 11.4% will provide adequate funding of the benefits in effect on June 30, 1969.

The sharp reduction in the length of the funding periods reflects the favorable experience in the year ending June 30, 1969. One important element is the high rate of return on investments, considerably in excess of the 4% rate of return assumed in our actuarial assumptions.

PART III - SUMMARY

This valuation reveals a vigorous expansion of the retirement system with substantial increases in the assets and the liabilities. With the continuation of the member contribution rate at 7.9% of salary and the employer contribution rate at 11.4% of payroll, the indicated funding period for the deficiency shows a marked increase since our valuation as of June 30, 1968. Using the results for the deficiency funding period based on assumed 3% annual increases in total payroll of covered members in the future, we find that the funding period for the deficiency decreased from 20.8 years to 14.7 years.

This favorable result is due in large part to the high rate of return on the invested assets. The earnings not required for crediting to the various funds have been transferred to the Employers' Trust Fund and this has resulted in the shortening of the funding period for the deficiency.

Since major changes in the Retirement Acts are being considered at the present time, we recommend the continuation of the present member contribution rate of 7.9% and the present employer contribution rate of 11.4%; after the Legislature has completed its action on the retirement bills this year we will reconsider this question and make final recommendations for the rates to be effective July 1, 1970. In any event, we think it is particularly desirable for the Retirement Acts to be amended to require a uniform rate of member contribution in all three state-wide retirement systems which have uniform benefits. Such a rate might well be set at 7 $\frac{3}{4}$ %, which would be little different from the existing rates for all systems at present, or at 8% if liberalizations in benefits included in the legislation might be considered to justify the increase from the present levels.

SUPERANNUATION RETIRANTS - JUNE 30, 1969 - MEN

AGE	STRAIGHT LIFE		OPTIONS		TOTAL	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
53	1	\$ 4,111	-	\$ -	1	\$ 4,111
55	-	-	1	3,628	1	3,628
57	3	7,780	4	7,084	7	14,864
58	6	10,290	7	17,699	13	27,989
59	8	20,658	6	13,315	14	33,973
60	15	28,542	8	25,900	23	54,442
61	47	59,834	29	53,409	76	113,243
62	55	62,654	35	49,132	90	111,786
63	83	103,758	39	47,544	122	151,302
64	73	78,890	61	79,947	134	158,837
65	102	109,559	55	80,265	157	189,824
66	168	204,848	73	121,155	241	326,003
67	152	184,349	93	141,271	245	325,620
68	131	130,794	99	137,781	230	268,575
69	155	197,542	98	183,988	253	381,530
70	159	183,528	106	156,175	265	339,703
71	191	224,262	92	139,684	283	363,946
72	187	274,428	108	189,530	295	463,958
73	173	222,795	90	134,774	263	357,569
74	163	233,005	101	139,637	264	372,642
75	172	229,373	83	130,793	255	360,166
76	187	232,236	62	97,398	249	329,634
77	155	205,866	61	77,296	216	283,162
78	140	177,343	64	96,237	204	273,580
79	125	160,008	51	64,724	176	224,732
80	107	129,363	50	68,755	157	198,118
81	99	121,285	45	52,897	144	174,182
82	78	83,381	36	39,509	114	122,890
83	76	99,602	37	43,295	113	142,897
84	59	72,026	20	17,890	79	89,916
85	51	59,239	21	20,019	72	79,258
86	42	50,934	14	16,097	56	67,031
87	31	32,168	10	9,941	41	42,109
88	26	25,939	4	4,153	30	30,092
89	21	28,529	4	2,995	25	31,524
90	16	16,095	5	3,352	21	19,447
91	10	9,613	-	-	10	9,613
92	13	15,217	-	-	13	15,217
93	6	4,790	1	1,427	7	6,217
94	4	2,562	1	405	5	2,967
95	6	3,685	2	2,035	8	5,720
96	-	-	1	402	1	402
97	2	2,063	-	-	2	2,063
98	1	270	-	-	1	270
101	1	1,299	-	-	1	1,299
<b>TOTAL</b>	<b>3,300</b>	<b>\$ 4,104,513</b>	<b>1,677</b>	<b>\$ 2,471,538</b>	<b>4,977</b>	<b>\$ 6,576,051</b>

SCHEDULE A

SUPERANNUATION RETIRANTS - JUNE 30, 1969 - WOMEN

AGE	STRAIGHT LIFE		OPTIONS		TOTAL	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
53	-	\$ -	1	\$ 4,550	1	\$ 4,550
54	1	5,234	-	-	1	5,234
55	2	2,315	-	-	2	2,315
56	5	7,261	-	-	5	7,261
57	4	11,888	-	-	4	11,888
58	5	14,559	1	1,250	6	15,809
59	10	27,824	1	650	11	28,474
60	33	34,902	1	906	34	35,808
61	123	129,135	5	7,915	128	137,050
62	176	185,204	19	20,919	195	206,123
63	234	245,654	11	12,745	245	258,399
64	236	256,863	4	6,855	240	263,718
65	240	258,238	9	23,150	249	281,388
66	258	262,519	15	20,313	273	282,832
67	297	315,563	21	33,348	318	348,911
68	243	253,210	17	17,695	260	270,905
69	273	280,869	16	30,178	289	311,047
70	228	248,106	8	11,718	236	259,824
71	296	337,562	11	16,284	307	353,846
72	246	284,478	15	16,336	261	300,814
73	244	282,318	11	16,720	255	299,038
74	243	257,344	12	10,041	255	267,385
75	223	218,599	7	11,049	230	229,648
76	202	211,809	10	11,823	212	223,632
77	167	187,640	10	9,006	177	196,646
78	162	180,574	9	8,669	171	189,243
79	118	133,307	7	8,537	125	141,844
80	111	118,444	8	7,963	119	126,407
81	108	111,098	6	7,552	114	118,650
82	77	93,126	6	4,609	83	97,735
83	70	75,222	4	7,523	74	82,745
84	61	64,288	1	477	62	64,765
85	44	49,865	1	542	45	50,407
86	25	21,251	1	694	26	21,945
87	28	26,457	2	1,642	30	28,099
88	21	22,181	1	757	22	22,938
89	10	9,218	-	-	10	9,218
90	8	7,466	-	-	8	7,466
91	5	5,503	1	224	6	5,727
92	3	2,090	1	716	4	2,806
93	3	2,501	-	-	3	2,501
94	3	1,338	-	-	3	1,338
95	2	1,506	-	-	2	1,506
<b>TOTAL</b>	<b>4,848</b>	<b>\$ 5,244,529</b>	<b>253</b>	<b>\$ 333,356</b>	<b>5,101</b>	<b>\$ 5,577,885</b>

SCHEDULE B

BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES - JUNE 30, 1969

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			
38	1	\$ 370	-	-			
39	-	-	1	457	69	19	\$ 31,121
45	-	-	1	193			
46	-	-	1	788			
47	-	-	3	3,101			
50	-	-	1	468	70	16	24,725
53	-	-	4	2,150			
54	-	-	3	3,305			
56	-	-	2	2,588			
58	1	260	9	12,581	71	15	21,143
59	-	-	3	2,547			
60	-	-	6	4,502			
61	1	823	7	7,933			
62	-	-	9	7,398	72	15	15,910
63	-	-	15	14,321			
64	1	767	10	5,806			
65	-	-	13	13,007			
66	1	1,077	18	13,638	73	14	15,288
67	-	-	20	15,172			
68	-	-	24	21,380			
69	1	496	24	28,822			
70	-	-	19	22,082	74	9	15,522
71	-	-	21	22,488			
72	1	529	26	22,578			
73	1	1,831	20	26,630			
74	-	-	25	18,276	75	3	2,252
75	1	1,245	21	13,924			
76	-	-	23	15,224			
77	2	2,056	24	16,423			
78	-	-	21	14,226	76	3	2,962
79	1	730	17	12,189			
80	-	-	21	14,069			
81	-	-	16	11,382			
82	-	-	18	12,054	77	3	3,094
83	-	-	16	12,631			
84	-	-	18	13,028			
85	-	-	5	1,800			
86	-	-	3	2,434	78	1	432
87	-	-	8	5,661			
88	-	-	8	5,179			
89	-	-	5	9,217			
90	-	-	3	2,051	81	1	869
91	-	-	1	310			
93	-	-	3	2,996			
94	-	-	1	1,073			
95	-	-	1	619			
<b>TOTAL</b>	<u>12</u>	<u>\$ 10,184</u>	<u>518</u>	<u>\$ 438,701</u>		<u>99</u>	<u>\$133,318</u>

SCHEDULE C

DISABILITY RETIRANTS - JUNE 30, 1969

AGE	M E N		W O M E N	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
28	1	\$ 1,777	-	-
37	1	2,785	-	-
38	-	-	1	2,604
39	1	612	-	-
40	1	1,517	1	2,852
41	1	1,588	-	-
42	2	1,851	-	-
43	1	3,602	2	3,907
44	3	3,865	1	1,989
45	5	8,669	1	1,668
46	5	10,799	1	1,290
47	6	11,963	2	2,884
48	8	8,295	-	-
49	9	11,526	5	7,457
50	11	19,209	1	891
51	7	9,744	5	5,658
52	9	16,518	7	10,122
53	16	20,775	9	10,679
54	9	18,289	11	12,809
55	14	14,620	9	13,200
56	13	17,092	13	17,664
57	21	22,416	11	13,539
58	26	31,646	16	19,645
59	25	25,968	14	16,232
60	28	42,006	19	21,303
61	22	30,916	23	22,768
62	17	17,953	12	12,096
63	14	16,166	14	14,956
64	12	12,157	12	15,253
65	12	14,160	10	9,248
66	11	12,738	7	7,640
67	4	4,851	3	2,266
68	5	8,070	1	858
69	3	2,120	5	3,078
70	3	2,759	3	2,461
71	4	6,368	3	2,129
72	-	-	4	3,396
73	3	3,504	4	8,738
74	-	-	2	2,515
TOTAL	<u>333</u>	<u>\$ 438,894</u>	<u>232</u>	<u>\$ 273,795</u>

SCHEDULE D

SURVIVORS' BENEFIT FUND - JUNE 30, 1969

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
26	-	\$ -	1	\$ 1,992	-	\$ -
29	-	-	2	4,844	-	-
30	-	-	1	3,448	-	-
31	-	-	1	2,324	-	-
32	-	-	1	2,832	-	-
33	-	-	1	1,963	-	-
34	-	-	2	5,777	-	-
35	-	-	1	2,439	-	-
36	-	-	1	1,872	-	-
37	-	-	2	5,064	-	-
38	-	-	2	5,111	-	-
39	-	-	6	13,906	-	-
40	-	-	7	17,728	-	-
41	-	-	3	6,550	-	-
42	-	-	2	5,511	-	-
43	-	-	12	29,082	-	-
44	-	-	5	12,808	-	-
45	-	-	9	20,573	-	-
46	-	-	8	18,456	-	-
47	3	993	11	23,964	-	-
48	-	-	7	16,829	-	-
49	-	-	12	29,048	-	-
50	1	826	10	23,633	1	1,272
51	2	1,400	18	37,086	1	1,308
52	2	4,044	8	19,206	1	1,188
53	2	1,584	9	20,656	2	2,580
54	4	4,651	9	18,624	5	6,699
55	6	6,672	11	23,821	9	11,660
56	5	6,044	14	31,953	6	7,933
57	8	9,955	6	12,023	10	12,546
58	5	8,531	2	4,567	10	13,013
59	13	11,207	1	2,285	9	11,176
60	10	18,247	3	5,769	8	10,781
61	8	11,623	1	2,012	13	17,275
62	13	17,917	-	-	23	28,665
63	18	19,028	3	6,203	29	35,254
64	8	9,019	2	3,018	33	38,891

SCHEDULE E



SURVIVORS' BENEFIT FUND - JUNE 30, 1969

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES (continued)

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
65	15	\$ 27,475	2	\$ 4,824	38	\$ 44,518	6	4	\$ 3,857
66	13	27,006	-	-	39	46,099	7	9	8,575
67	16	28,131	-	-	30	34,967	8	5	4,357
68	11	11,993	-	-	26	31,760	9	4	3,847
69	9	9,515	-	-	35	43,097	10	3	2,068
70	12	24,964	1	2,412	24	29,152	11	-	-
71	15	20,784	-	-	31	35,833	12	5	4,726
72	13	19,119	-	-	31	36,704	13	4	3,899
73	12	14,278	-	-	22	25,254	14	3	3,479
74	15	24,330	-	-	18	21,534	15	8	8,949
75	6	6,485	-	-	28	33,073	16	3	3,151
76	6	8,817	-	-	15	17,031	17	4	4,582
77	10	12,580	-	-	20	21,588	18	3	3,384
78	3	5,829	-	-	22	24,523	-	-	-
79	3	3,944	1	2,085	12	13,608	-	-	-
80	4	2,761	-	-	11	12,032	38	1	1,188
81	1	1,711	-	-	7	7,064	-	-	-
82	1	1,059	-	-	5	4,917	-	-	-
83	2	1,332	-	-	7	7,589	-	-	-
84	-	-	-	-	1	763	-	-	-
85	1	2,721	-	-	4	5,060	-	-	-
86	-	-	-	-	2	1,882	-	-	-
87	1	970	-	-	-	-	-	-	-
91	-	-	-	-	1	1,048	-	-	-
Totals	<u>277</u>	<u>\$387,545</u>	<u>198</u>	<u>\$452,298</u>	<u>589</u>	<u>\$699,337</u>		<u>56</u>	<u>\$ 56,062</u>

SCHEDULE E  
(concluded)

SURVIVORS' BENEFIT FUND - JUNE 30, 1969

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
40	-	\$ -	1	\$ 1,220	-	\$ -
41	-	-	2	2,512	-	-
44	-	-	3	3,424	-	-
45	-	-	2	2,476	1	1,340
46	-	-	2	2,512	-	-
47	-	-	4	4,924	1	1,340
48	1	1,040	3	3,696	1	1,340
49	1	1,220	3	3,660	1	1,340
50	-	-	5	6,136	1	1,340
51	3	3,000	5	6,136	-	-
52	2	2,365	5	5,918	-	-
53	2	2,080	7	8,396	-	-
54	-	-	10	12,244	-	-
55	2	2,080	17	20,300	-	-
56	2	2,080	11	13,375	-	-
57	8	8,380	18	21,589	-	-
58	5	5,147	15	18,234	-	-
59	3	3,154	18	21,828	-	-
60	1	1,040	13	15,500	-	-
61	2	2,080	23	26,678	-	-
62	5	4,995	12	14,460	-	-
63	4	4,220	-	-	-	-
64	6	5,520	-	-	-	-
65	3	3,120	-	-	-	-
<b>Total</b>	<u>50</u>	<u>\$ 51,521</u>	<u>179</u>	<u>\$215,218</u>	<u>5</u>	<u>\$ 6,700</u>

SCHEDULE F

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1969

AGE	M E N		W O M E N	
	Number	Salaries	Number	Salaries
15	-	\$ -	-	\$ -
16	-	-	-	-
17	29	36,265	12	23,440
18	80	137,188	126	178,789
19	145	384,010	362	854,541
20	183	603,760	503	1,307,166
21	176	596,904	504	1,219,645
22	249	765,279	504	1,347,478
23	275	916,490	338	1,065,092
24	240	825,011	241	723,347
25	274	988,197	253	777,486
26	291	1,074,128	273	840,099
27	333	1,243,763	321	998,271
28	346	1,399,888	382	943,827
29	301 <i>2922</i>	1,218,824	434 <i>4253</i>	1,046,174 <i>7175</i>
30	371	1,449,822	503	1,153,325
31	381	1,605,752	589	1,372,332
32	391	1,614,219	731	1,689,801
33	405	1,808,993	813	1,732,786
34	437	1,848,141	904	1,992,277
35	430	1,747,742	984	2,201,212
36	440	1,959,325	991	2,256,078
37	429	2,000,533	1,130	2,653,870
38	458	2,146,606	1,166	2,683,049
39	525 <i>4267</i>	2,481,658	1,255 <i>9066</i>	2,986,719 <i>13,333</i>
40	518	2,596,586	1,341	3,254,455
41	499	2,349,093	1,372	3,386,604
42	567	2,970,064	1,472	3,897,324
43	545	2,689,814	1,469	3,982,432
44	600	3,136,808	1,492	3,986,673
45	612	3,340,066	1,595	4,457,895
46	649	3,756,949	1,533	4,206,199
47	659	3,659,134	1,661	4,754,002
48	645	3,640,802	1,654	4,857,909
49	693 <i>5987</i>	4,115,094	1,550 <i>15,139</i>	4,598,801 <i>21,126</i>
50	618	3,545,589	1,391	4,190,956
51	661	3,820,728	1,482	4,441,080
52	658	3,771,658	1,338	4,189,314
53	706	4,324,781	1,321	4,015,479
54	720	4,330,180	1,287	4,065,972

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1969

(continued)

AGE	M E N		W O M E N	
	Number	Salaries	Number	Salaries
55	728 ✓	\$ 4,315,601	1,161	\$ 3,620,366
56	735 ✓	4,399,861	1,082	3,233,406
57	756 ✓	4,537,165	1,038	3,211,376
58	688 ✓	4,225,084	859	2,735,496
59	699 ✓	4,125,964	847	2,825,731
	<u>6969</u>		<u>11806</u>	<u>18,775</u>
60	656 ✓	3,944,475	717	2,331,129
61	607 ✓	3,725,986	633	1,993,274
62	559	3,568,489	462	1,541,523
63	527	3,311,188	503	1,318,681
64	429	2,595,745	325	1,031,062
	<u>2778</u>		<u>2640</u>	<u>5418</u>
65	373	2,268,078	239	722,533
66	329	1,880,363	189	596,186
67	255	1,402,498	131	382,070
68	157	824,043	111	314,283
69	172	854,276	88	286,972
	<u>1286</u>		<u>758</u>	<u>2044</u>
70	109	619,436	51	143,403
71	65	345,896	29	87,837
72	52	205,708	22	64,743
73	26	79,278	16	39,430
74	27	116,540	11	33,449
75	12	28,665	10	20,431
76	14	45,581	4	10,498
77	20	65,963	3	6,328
78	9	21,699	7	13,546
79	5	34,762	1	530
80	5	7,089	2	5,419
81	4	11,102	-	-
82	3	17,933	-	-
83	1	6,261	-	-
84	3	7,415	-	-
85	1	457	-	-
	<u>356</u>		<u>156</u>	<u>512</u>
Totals	<u>24,565</u>	<u>\$128,492,445</u>	<u>43,718</u>	<u>\$120,896,601</u>

24,565

SCHEDULE G  
(concluded)

249,388,046  
68,200  
3,646.05

INACTIVE MEMBERS - JUNE 30, 1969

<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>	<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>
15	-	-	55	362	567
16	-	-	56	346	518
17	9	6	57	344	490
18	28	26	58	311	434
19	93	145	59	313	419
20	284	357	60	295	358
21	415	682	61	240	288
22	415	991	62	199	210
23	376	780	63	205	204
24	358	522	64	198	188
25	347	503	65	125	142
26	431	449	66	112	110
27	442	432	67	114	87
28	430	350	68	86	51
29	379	400	69	94	72
30	415	365	70	57	40
31	441	415	71	28	39
32	420	464	72	30	32
33	439	481	73	22	12
34	420	481	74	32	24
35	400	530	75	18	13
36	403	511	76	14	13
37	465	592	77	16	13
38	440	570	78	16	10
39	496	641	79	14	3
40	475	578	80	9	7
41	506	661	81	8	4
42	513	695	82	4	3
43	480	720	83	4	-
44	526	667	84	1	3
45	494	754	85	2	1
46	468	691	86	1	-
47	409	671	87	2	2
48	396	765	90	2	-
49	383	767	91	1	-
50	364	654	92	<u>1</u>	<u>-</u>
51	421	685			
52	397	625			
53	354	574			
54	360	566			
			Totals	<u>18,518</u>	<u>25,123</u>
				25,123	
				43,641	

ACTUARIAL ASSUMPTIONS - JUNE 30, 1969

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 Beneficiaries.

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 specimen 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