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SCHOOL EMPLOYEES RETIREMENT SYSTEM
OF OHIO

ACTUARIAL VALUATION
JUNE 30, 1974

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

PHILADELPHIA

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

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

April 28, 1975

Mr. James O. Brennan, Executive Director
School Employees Retirement System of Ohio
88 East Broad Street
Columbus, Ohio 43215

Re: Health Care Benefits

Dear Mr. Brennan:

In connection with our valuation report as of June 30, 1974 bearing the date of April 25, 1975, we have made, for the first time, an actuarial valuation of the Health Care benefits. We previously included the Medicare equivalent benefit costs in our valuations, but the additional group hospitalization coverage was estimated to require an additional .75% of total payroll in developing the 1973-74 contribution rate without the benefit of a full valuation.

Based on the present benefit provisions, we have determined that the normal contribution rate should be 1.59% of payroll, and this figure is included in our total normal contribution rate of 17.12%. We have also determined that the liabilities included in the balance sheet for these benefits, projected into the future, are as follows:

	<u>Liability 6/30/74</u>
Retirants and other beneficiaries.....	\$ 33,546,464
Active and inactive members.....	<u>91,405,356</u>
Total liabilities.....	\$124,951,820
Deduct Health Care Account balance.....	<u>141,769</u>
Unfunded liability for Health Care.....	\$124,810,051
Present value of 1.59% future Normal Contribution...	<u>46,446,428</u>
Deficiency for Health Care benefits.....	<u>\$ 78,363,623</u>

When this deficiency of \$78,363,623 for future Health Care benefits is funded at the same rate as the total deficiency (over a period of 25.3 years as-

Mr. James O. Brennan, Executive Director
School Employees Retirement System of Ohio

April 28, 1975

suming 3% annual increases in total payroll) we arrive at a deficiency contribution rate for Health Care of 1.19% of payroll.

To summarize, we find that the total employer cost for Health Care benefits included in the overall employer rate of 12.50%, is as follows:

Normal contribution rate for Health Care.....	1.59%
Deficiency contribution rate.....	<u>1.19</u>
Total employer rate for Health Care.....	<u>2.78%</u>

Since the Health Care Account was established as of January 1, 1974, the Board has been crediting .75% of payroll to it each month, charging it with premiums paid to Aetna and the Kaiser Plan and crediting the premiums paid by the beneficiaries. We recommend that you consider the establishment of this account as a separate Fund on an actuarial basis and crediting it with the total rate determined from time to time. Initially, this rate would be 2.78% of payroll as above and would be subject to change upon subsequent valuation. If this is done, the Fund should also be credited with interest at 5% annually in the same manner as the other funds.

In our valuation of future Health Care benefits, we have taken into account a number of factors, as follows:

1. We have assumed that active members becoming covered in the future will, on the average, be eligible for Medicare benefits to the extent of 90% for males and 75% for females. The percentages currently applicable to current beneficiaries are higher, but we anticipate gradually lowering percentages in the future.
2. We have arrived at a composite current monthly premium rate of \$17.52 taking into account a number of variables such as sex, the age at retirement, the percentage of members electing joint pensions and the percentage not eligible for Medicare benefits.
3. By expressing \$17.52 as a percent of the average monthly superannuation pension for new retirees (we used the figure \$130.97 applicable for retirees from January 1974 through June 1974) we calculated liabilities as 13.38% of the liabilities for superannuation, disability and survivor benefits. Since our liability for superannuation allows for future increases in the average pension due to salary increases prior to retirement and cost-of-living increases after retirement, our method provides a built-in adjustment for future premium increases.

Mr. James O. Brennan, Executive Director
School Employees Retirement System of Ohio

April 28, 1975

As compared with this 1974-1975 total actuarial cost for Health Care benefits, we should point out that the 1973-1974 cost, included in the total employer rate of 12.50%, was as follows:

Normal contribution for Medicare equivalent benefits...	.77%
Estimated additional for Health Care.....	<u>.75</u>
Total rate for Health Care.....	<u>1.52%</u>

Respectfully submitted,

HUGGINS & COMPANY, INC.

By 

KENNETH H. ROSS

Member, American Academy of Actuaries

KHR:st

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

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

April 25, 1975

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, 1974.

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 his staff.

Respectfully submitted,

HUGGINS & COMPANY, INC.

By


KENNETH H. ROSS, M.A.A.A.

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PART I - ACTUARIAL BALANCE SHEET

Using the various monetary tables developed in connection with the 1970 Evaluation and the data prepared by the staff and submitted to us, a complete valuation of the system was made as of June 30, 1974 in which the present and prospective assets and liabilities were calculated, based on the contributions and benefits in effect on that date, including the changes made by House Bills 1476, 1160 and 1034. In addition, the assumed rate of future investment earnings has been changed from 4-3/4% to 5% annually. 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 and future State appropriations to fund House Bills 284 and 377 fully and 25% of House Bill 1476. The various fund balances included in the total present assets of \$512,819,826 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 \$722,738,329. 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 \$1,256,898,185 is between the liability for the benefits presently payable on account of present retirants and beneficiaries amounting to \$348,886,705 and the liabilities for present active and inactive members amounting to \$907,854,141. In addition, there is a minor reserve of \$157,339. 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, 1974.

A S S E T S

L I A B I L I T I E S

Present assets:

Employees' Savings Fund	\$ 163,707,988
Interest Reserve Fund	9,882,750
Annuity and Pension Reserve Fund	188,895,864
Survivors' Benefit Fund	34,094,058
Employers' Trust Fund	116,078,265
Cleveland Custodians' Fund	3,562
General Fixed Assets	<u>157,339</u>
Total present assets	\$ 512,819,826

Future assets

Present value of future state appropriations to finance House Bill 284, 377 and 25% of 1476

\$ 21,340,030

Present value of prospective employee and employer contributions

722,738,329

Total future assets

\$ 744,078,359

TOTAL ASSETS

\$1,256,898,185

*Distributed as follows:

Cash	\$ 569,755
Investments (at Book Value)	491,818,313
Accounts Receivable (including \$20,190,504 due from employers)	20,208,892
Furniture and equipment	<u>222,866</u>

Present value of benefits payable on account of present retirees and beneficiaries from the -	
Annuity and Pension Reserve Fund:	
Superannuation retirees	\$246,410,028
Beneficiaries under options .	11,280,787
Disability retirees	17,691,183
Health care	33,546,464
Death Benefit	<u>4,312,994</u>

Total A & PRF

\$313,241,456

Survivors' Benefit Fund

35,645,249

Total retirees and beneficiaries ...

\$ 348,886,705

Present value of benefits payable on account of active and inactive members -

Superannuation pensions	\$634,969,123
Disability pensions	16,047,280
Survivor benefits	32,132,749
Refunds	126,816,444
Health care	91,405,356
Retiree death benefit	6,479,627
Cleveland Custodians' Fund ..	<u>3,562</u>

Total active and inactive members ...

907,854,141

Reserve for contingencies; miscellaneous ..

157,339

TOTAL LIABILITIES

\$1,256,898,185

Liability related to present retirants and beneficiaries \$348,886,705

A breakdown of the \$348,886,705 of liability related to present retirants and beneficiaries according to the type of benefit payment is shown in the following table. The costs of providing the Health Care Benefit and the Death Benefit are shown separately.

	<u>Liability for Retirants and Beneficiaries</u>			
	<u>Total Allowance</u>	<u>Health Care</u>	<u>Death Benefit</u>	<u>Total</u>
Superannuation retirants .	\$246,410,028	\$25,010,663	\$4,034,134	\$275,454,825
Beneficiaries receiving optional allowances	11,280,787	1,345,969	-	12,626,756
Disability retirants	<u>17,691,183</u>	<u>2,978,354</u>	<u>278,860</u>	<u>20,948,397</u>
Sub-total	\$275,381,998	\$29,334,986	\$4,312,994	\$309,029,978
Survivors' Benefit Fund beneficiaries	<u>35,645,249</u>	<u>4,211,478</u>	-	<u>39,856,727</u>
Total Liability	\$311,027,247	\$33,546,464	\$4,312,994	\$348,886,705

Included in the \$275,381,998 of liability for present retirants and beneficiaries is \$15,429,099 related to House Bills 284 and 214, \$21,928,302 related to House Bill 1476 and \$5,999,253 related to past cost-of-living increases. Included in the \$35,645,249 of liability for present survivors is \$2,078,904 related to House Bills 377 and 214, \$3,488,824 related to House Bill 1476 and \$755,942 related to past cost-of-living increases.

It is informative to compare the above liabilities with the corresponding fund balances shown in the actuarial balance sheet. The liabilities charged against the Annuity and Pension Reserve Fund result from the allowances payable to superannuation and disability retirants, the optional allowances payable to surviving beneficiaries of decreased retirants and retirant death benefits.

The total of these liabilities is \$279,694,992 related to benefits to be paid from the Annuity and Pension Reserve Fund, which compares with

\$207,492,674 (the total of the A & PRF balance of \$188,895,864 and the anticipated House Bills 284 and 1476 state appropriations), leading to a deficiency of \$72,202,319. The corresponding deficiency a year earlier was \$43,045,212, so there was an increase in this deficiency during the year of \$29,157,107.

It will also be noted that the Survivors' Benefit Fund had a fund balance of \$36,837,278 (including anticipated House Bills 377 and 1476 appropriations) as compared with the liability of \$35,645,249 indicating a surplus of \$1,192,029 in that Fund compared with a deficiency of \$878,263 a year earlier.

The total deficiency in these two Funds is \$71,010,290.

The number of retirants and beneficiaries and their annual allowances as of June 30, 1974, corresponding to the liabilities shown on the previous page, are shown in the following table.

<u>Category</u>	<u>Number</u>	<u>Basic</u>	<u>ANNUAL ALLOWANCE</u>		
			<u>HB 214, 284 & 377 Increases</u>	<u>HB 1476 Increases</u>	<u>C-O-L Increases</u>
Superannuation re- tirants	14,697	\$19,754,301	\$1,689,480	\$2,435,690	\$641,124
Beneficiaries receiving optional allowances ..	835	794,998	185,496	305,924	39,324
Disability retirants ..	998	1,574,114	92,002	136,689	38,969
Sub-Total	16,530	\$22,123,413	\$1,966,978	\$2,878,303	\$719,417
Survivors' Benefit Fund beneficiaries ...	1,767	2,640,936	237,627	393,588	86,904
Total Allowances on June 30, 1974	18,297	\$24,764,349	\$2,204,605	\$3,271,891	\$806,321

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:	
Receiving allowances	E
Entitled to deferred allowances	F

Liability related to present active and inactive members \$907,854,141

The \$907,854,141 of liability related to the active and inactive members of the system compares with \$817,528,305 one year earlier and 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	29,891	66,360	96,251
Salaries	\$158,745,485	\$185,891,739	\$344,637,224
Present value of 1% of future salaries	12,682,516	16,529,074	29,211,590
Number of inactive members	22,321	34,918	57,239

Age distributions of the members are shown at the end of this report in Schedule G for active members and in Schedule H for inactive members.

Reserve for contingencies; miscellaneous \$ 157,339

This is the Investment in General Fixed Assets.

Total liabilities \$1,256,898,185

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, 1974 and those that will be related to subsequent service, based on the benefits in effect on that date.

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

PART II - RATES OF CONTRIBUTIONS

In connection with the 1974 valuation, a New Entrant study was made in order to determine the normal contribution rate. The results of that study, adjusted for changes in benefits and assumed future interest, indicate a total normal rate of 17.12% of salary, with the breakdown shown in the table below:

Superannuation retirement benefit	10.38%
Disability retirement benefit38
Survivor benefit	1.10
Refund of contributions	3.50
Health care	1.59
Retirant death benefit	<u>.17</u>
Total normal contribution rate	<u>17.12%</u>

In order to determine what portion of the future asset item of \$722,738,329 will be funded by the total normal contribution rate of 17.12% of salary, we have determined that the present value of 1% of the present members' future salaries is \$29,211,590. The present value of future normal contributions is, therefore, 17.12 times \$29,211,590, or \$500,102,421. This leaves a deficiency of \$222,635,908 to be funded by the remainder of the future contributions. The corresponding figure a year earlier was \$150,811,924, which means that the total system deficiency increased by \$71,823,984.

In order to analyze the deficiency funding, let us start with the present total contribution rate of 20.50% of payroll, of which the member pays 8.00% and the State 12.50%. If we deduct the normal contribution rate of 17.12%, we are left with a balance of 3.38% available for funding the deficiency. The question to be answered is over how long a period will this rate of 3.38% be required in order to fund the deficiency of \$222,635,908.

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 shown on the next page.

<u>Year Ending June 30</u>	<u>Total Payroll of Members</u>	<u>Percentage Increase</u>
1965	133,134,000	7.3
1966	149,160,000	12.0
1967	176,442,000	18.3
1968	199,733,000	13.2
1969	220,278,000	10.3
1970	247,774,000	12.5
1971	276,782,000	11.7
1972	305,167,000	10.3
1973	323,600,000	6.0
1974	342,400,000	5.8

While we would not want to project future increases at these rates, which have averaged almost 11% annually during the past ten years, we have made our calculations on three different bases, in this report, as follows:

1. Assuming that payrolls will continue at the 1973-1974 level of approximately \$342,400,000.
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 20.50% of payroll, of which 17.12% is on account of the normal cost and 3.38% 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 ..	50 + years	25.3 years	20.2 years

These calculations indicate that the total employer rate of 12.50% of payroll, along with a member contribution rate of 8.0%, will fund the normal cost each year and complete the funding of the deficiency in periods varying from 20.2 years to more than 50 years, depending on those three assumptions as to future payroll increases. These periods are higher than the corresponding periods determined in the valuation as of June 30, 1973.

PART III - SUMMARY

This valuation reveals a substantial expansion of the retirement system due to the continued increases in membership and payroll. In addition, the benefits were liberalized. The increases in liabilities and costs were partly offset by a change in the assumed rate of investment earnings from 4-3/4% to 5% annually.

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 increased from 15.6 years to 25.3 years going from 1973 to 1974. This increase in the funding period is due mainly to the recognition of the prospective liabilities for Health Care benefits and the additional liabilities resulting from the passage of House Bill 1476 (1974), 75% of the funding of which is assumed to be borne by the Fund.

The balance in the Employers' Trust Fund has increased in the past year from \$98,195,269, to \$116,078,265 and is slightly more than two-thirds of the balance of \$163,707,988 in the Employees' Savings Fund. This means that, on the average, the System has a reserve of only \$756 in addition to the employees' personal account, for each of the 153,490 active and inactive members. It is important, therefore, to continue to build up this reserve. Consequently, we recommend that, unless changes are made by 1975 legislation, the contribution rates be continued at present levels, namely:

Rate of member contribution	8.00%
Rate of employer contribution	<u>12.50</u>
Total rate of contribution	<u>20.50%</u>

SUPERANNUATION RETIRANTS - JUNE 30, 1974 - MEN

Age	Straight Life		Options		Total	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
54	-	\$ -	1	\$ 5,706	1	\$ 5,706
55	-	-	-	-	-	-
56	4	13,292	5	26,238	9	39,530
57	1	6,608	12	27,340	13	33,948
58	8	17,599	5	12,035	13	29,634
59	3	4,309	7	13,991	10	18,300
60	15	32,011	14	44,557	29	76,568
61	44	79,995	43	68,159	87	148,154
62	68	104,165	74	140,788	142	244,953
63	76	130,984	102	210,796	178	341,780
64	125	199,579	113	184,708	238	384,287
65	145	253,309	128	250,692	273	504,001
66	201	312,838	174	374,434	375	687,272
67	198	327,430	176	335,301	374	662,731
68	248	437,796	180	319,905	428	757,701
69	210	374,305	173	334,021	383	708,326
70	220	369,570	141	259,962	361	629,532
71	267	439,079	155	357,854	422	796,933
72	202	350,263	147	301,689	349	651,952
73	173	271,503	102	199,251	275	470,754
74	173	309,872	106	242,863	279	552,735
75	180	332,293	111	233,915	291	566,205
76	173	312,887	80	161,714	253	474,601
77	170	365,588	76	171,718	246	537,306
78	153	290,687	54	114,498	207	405,185
79	134	276,359	70	148,619	204	424,978
80	145	294,581	41	83,628	186	378,209
81	137	256,115	27	54,696	164	310,811
82	128	268,545	30	55,266	158	323,811
83	88	191,117	31	61,869	119	252,986
84	83	179,049	24	51,291	107	230,340
85	68	140,831	22	37,359	90	178,190
86	57	125,081	20	39,374	77	164,455
87	47	82,306	16	32,465	63	114,771
88	34	76,650	17	32,597	51	109,247
89	27	52,169	3	4,000	30	56,169
90	22	42,693	9	16,020	31	58,713
91	15	36,177	4	9,161	19	45,338
92	17	30,067	2	4,510	19	34,577
93	6	13,240	1	812	7	14,052
94	4	11,146	-	-	4	11,146
95	5	11,708	1	1,210	6	12,918
96	1	810	-	-	1	810
97	3	9,697	-	-	3	9,697
98	-	-	-	-	-	-
99	1	1,597	1	1,201	2	2,798
100	-	-	-	-	-	-
101	3	5,538	-	-	3	5,538
102	1	2,486	-	-	1	2,486
103	-	-	1	4,517	1	4,517
108	-	-	1	1,966	1	1,966
Total	<u>4,083</u>	<u>\$7,443,924</u>	<u>2,500</u>	<u>\$5,032,696</u>	<u>6,583</u>	<u>\$12,476,620</u>

SUPERANNUATION RETIRANTS - JUNE 30, 1974 - WOMEN

Age	Straight Life		Options		Total	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
54	1	\$ 4,650	1	\$ 6,054	2	\$ 10,704
55	1	4,390	1	2,166	2	6,556
56	5	27,220	3	5,948	8	33,168
57	8	24,650	2	6,375	10	31,025
58	8	27,214	5	22,762	13	49,976
59	10	39,915	1	1,376	11	41,291
60	61	66,894	13	19,455	74	86,349
61	193	216,940	65	67,080	258	284,020
62	227	266,712	91	90,886	318	357,598
63	301	355,149	102	102,720	403	457,869
64	379	494,940	118	140,170	497	635,110
65	384	466,796	91	97,935	475	564,731
66	424	573,280	85	107,131	509	680,411
67	426	588,076	72	84,785	498	672,861
68	453	623,683	54	98,523	507	722,206
69	399	590,748	32	45,332	431	636,080
70	369	549,059	30	59,368	399	608,427
71	383	544,075	24	34,972	407	579,047
72	367	548,471	30	64,109	397	612,580
73	286	433,910	22	36,950	308	470,860
74	296	470,187	22	35,942	318	506,129
75	240	392,933	12	19,463	252	412,396
76	271	444,351	5	8,696	276	453,047
77	230	388,684	11	17,501	241	406,185
78	213	386,023	7	13,126	220	399,149
79	212	332,461	6	9,296	218	341,757
80	197	317,942	2	2,920	199	320,862
81	166	289,635	3	4,502	169	294,137
82	138	254,540	6	7,327	144	261,867
83	123	236,853	5	9,282	128	246,135
84	79	156,733	2	2,752	81	159,485
85	76	139,076	5	7,222	81	146,298
86	67	126,919	3	7,096	70	134,015
87	47	104,564	1	1,320	48	105,884
88	47	108,912	1	3,240	48	112,152
89	30	68,616	1	1,128	31	69,744
90	19	45,863	1	1,274	20	47,137
91	11	22,156	-	-	11	22,156
92	11	22,466	-	-	11	22,466
93	9	20,353	-	-	9	20,353
94	4	8,491	-	-	4	8,491
95	5	6,920	-	-	5	6,920
96	1	4,480	-	-	1	4,480
97	-	-	-	-	-	-
98	-	-	-	-	-	-
99	1	855	-	-	1	855
102	1	999	-	-	1	999
Total	<u>7,179</u>	<u>\$10,797,784</u>	<u>935</u>	<u>\$1,246,184</u>	<u>8,114</u>	<u>\$12,043,968</u>

BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES - JUNE 30, 1974

Age	Optional Life Pensions				Optional Term Certain Pensions		
	Men		Women		Year of Expiry	Number	Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance			
36	-	\$ -	1	\$ 288			
37	-	-	-	-			
38	-	-	-	-			
39	-	-	-	-			
40	-	-	-	-	74	7	\$ 12,278
41	-	-	1	1,319			
42	-	-	-	-			
43	1	936	-	-			
44	-	-	1	1,154			
45	-	-	-	-	75	10	20,075
46	-	-	-	-			
47	-	-	1	656			
48	-	-	1	310			
49	-	-	-	-			
50	-	-	3	2,204	76	13	28,507
51	-	-	1	1,185			
52	-	-	3	7,499			
53	-	-	-	-			
54	-	-	-	-			
55	-	-	4	4,281	77	10	15,686
56	-	-	1	1,505			
57	-	-	6	5,768			
58	-	-	11	13,794			
59	-	-	6	11,501			
60	-	-	2	1,881	78	9	15,455
61	1	477	13	15,260			
62	1	798	12	13,286			
63	4	3,661	19	31,639			
64	1	1,351	12	15,196			
65	-	-	21	19,934	79	8	19,060
66	1	1,671	19	35,087			
67	-	-	19	28,391			
68	-	-	26	31,274			
69	2	1,471	31	43,824			
70	2	818	29	42,519	80	7	6,878
71	2	2,418	37	52,153			
72	1	937	30	42,198			
73	2	1,571	34	54,211			
74	2	1,668	31	57,915			
75	1	1,061	23	38,000	81	7	15,228
76	-	-	35	55,644			
77	1	1,027	31	50,694			
78	3	4,275	25	44,860			
79	1	1,895	35	60,200			
80	-	-	20	35,249	82	4	7,291
81	-	-	28	50,224			
82	1	2,364	29	47,039			
83	-	-	23	39,150			
84	2	2,772	17	30,666			
85	-	-	16	27,665	83	6	6,428
86	-	-	14	26,363			
87	-	-	15	31,756			
88	-	-	13	26,322			
89	-	-	10	18,643			
90	-	-	5	6,833	84	2	3,347
91	-	-	1	1,774			
92	-	-	3	6,587			
93	-	-	2	4,462			
94	-	-	1	2,144			
95	-	-	1	3,080	89	1	743
Total	<u>29</u>	<u>\$ 31,171</u>	<u>722</u>	<u>\$1,143,587</u>		<u>84</u>	<u>\$150,976</u>

SCHEDULE C

DISABILITY RETIRANTS - JUNE 30, 1974

Age	M E N		W O M E N	
	Number	Annual Allowance	Number	Annual Allowance
31	1	\$ 880	-	\$ -
32	-	-	-	-
33	1	2,284	-	-
34	-	-	-	-
35	-	-	-	-
36	1	1,709	-	-
37	3	9,557	-	-
38	-	-	2	4,844
39	2	5,675	1	1,916
40	2	11,871	2	3,660
41	-	-	-	-
42	2	7,332	1	1,516
43	3	8,771	1	3,573
44	5	16,310	5	8,380
45	5	14,320	3	7,786
46	4	10,130	7	9,856
47	11	28,536	2	3,116
48	7	21,083	11	19,439
49	7	14,367	11	15,899
50	13	30,303	10	17,562
51	17	48,030	12	18,339
52	15	46,545	17	29,717
53	21	34,870	9	17,640
54	19	39,539	17	26,979
55	27	70,846	13	17,727
56	21	57,074	20	28,735
57	25	47,416	31	48,046
58	38	79,388	33	47,697
59	32	73,459	34	49,648
60	44	80,440	35	52,459
61	24	39,861	33	52,075
62	34	51,312	25	36,832
63	26	39,526	19	27,493
64	19	29,630	16	24,010
65	17	31,044	18	28,845
66	17	37,390	21	28,540
67	11	17,504	10	13,678
68	12	18,523	13	18,761
69	8	18,266	10	18,038
70	7	12,083	8	12,636
71	8	15,750	6	9,689
72	3	4,951	2	2,601
73	3	4,214	-	-
74	3	4,073	3	3,999
75	2	3,294	2	3,177
76	3	7,326	1	1,247
77	-	-	3	4,892
78	2	5,357	3	11,762
79	-	-	2	5,599
102	1	2,529	-	-
Total	<u>526</u>	<u>\$1,103,368</u>	<u>472</u>	<u>\$ 738,408</u>

HUGGINS

SCHEDULE D

SURVIVORS' BENEFIT FUND - JUNE 30, 1974

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - MEN

Age	<u>OPTION 1 OR DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD</u>		<u>SPOUSE WITH ELIGIBLE CHILDREN</u>	
	<u>Number</u>	<u>Annual Allowance</u>	<u>Number</u>	<u>Annual Allowance</u>
36	1	\$ 2,513	-	\$ -
42	-	-	1	2,832
45	-	-	2	3,449
46	-	-	1	2,232
47	-	-	3	4,896
50	-	-	2	4,464
51	1	1,272	2	3,024
52	1	941	2	3,820
53	1	1,272	2	3,204
54	-	-	1	1,152
55	-	-	1	1,900
56	-	-	-	-
57	-	-	1	2,232
58	-	-	-	-
59	-	-	-	-
60	2	1,628	1	1,152
61	3	3,392	1	2,232
62	5	7,245	1	2,832
63	-	-	1	2,832
64	4	3,801	-	-
65	2	2,656	-	-
66	5	6,420	-	-
67	10	13,063	-	-
68	12	13,972	1	2,530
69	8	9,185	-	-
70	3	4,548	-	-
71	5	7,205	-	-
72	8	12,884	-	-
73	5	7,551	-	-
74	6	7,029	-	-
75	7	10,997	-	-
76	5	7,436	-	-
77	2	3,550	-	-
78	4	7,067	-	-
79	4	5,670	-	-
80	6	9,947	-	-
81	-	-	-	-
82	1	625	-	-
83	2	2,953	-	-
84	5	7,963	-	-
85	1	972	-	-
87	1	972	-	-
109	1	1,452	-	-
Total	<u>121</u>	<u>\$166,181</u>	<u>23</u>	<u>\$ 44,783</u>

SCHEDULE E(1)

SURVIVORS' BENEFIT FUND - JUNE 30, 1974

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - WOMEN

<u>Age</u>	<u>OPTION 1 OR DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD</u>		<u>SPOUSE WITH ELIGIBLE CHILDREN</u>	
	<u>Number</u>	<u>Annual Allowance</u>	<u>Number</u>	<u>Annual Allowance</u>
19	-	\$ -	-	\$ -
25	-	-	-	-
26	-	-	-	-
27	-	-	1	3,587
28	-	-	1	1,948
29	-	-	1	2,832
30	-	-	-	-
31	-	-	-	-
32	-	-	1	3,026
33	-	-	-	-
34	-	-	-	-
35	-	-	1	3,788
36	-	-	1	1,872
37	-	-	3	10,094
38	-	-	2	4,893
39	-	-	3	11,401
40	-	-	2	5,521
41	-	-	8	21,216
42	-	-	6	12,798
43	-	-	4	11,659
44	-	-	8	22,844
45	1	4,195	14	40,548
46	2	858	7	24,675
47	1	1,232	9	26,875
48	-	-	14	39,976
49	-	-	6	23,265
50	2	3,088	17	51,019
51	5	6,294	10	25,436
52	9	14,337	18	53,513
53	9	16,294	19	51,630
54	9	16,532	13	34,895
55	12	23,333	12	33,797
56	18	31,964	22	59,888
57	16	29,502	4	10,325
58	17	37,908	10	26,468
59	26	51,473	7	17,933
60	39	69,380	8	26,032
61	29	49,083	10	27,824
62	42	69,807	3	7,347
63	52	76,486	-	-
64	58	85,702	-	-

SCHEDULE E(2)

SURVIVORS' BENEFIT FUND - JUNE 30, 1974

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - WOMEN
(continued)

<u>Age</u>	<u>OPTION 1 OR DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD</u>		<u>SPOUSE WITH ELIGIBLE CHILDREN</u>	
	<u>Number</u>	<u>Annual Allowance</u>	<u>Number</u>	<u>Annual Allowance</u>
65	68	\$ 116,945	-	\$ -
66	71	113,351	1	2,832
67	64	107,926	-	-
68	62	106,347	1	2,812
69	58	93,703	2	4,134
70	52	96,135	1	3,083
71	60	113,817	-	-
72	46	92,340	-	-
73	42	72,737	-	-
74	39	70,224	-	-
75	26	60,521	1	2,996
76	39	72,063	-	-
77	32	70,266	-	-
78	27	54,653	-	-
79	25	61,442	-	-
80	22	48,387	-	-
81	14	32,979	-	-
82	17	38,660	-	-
83	17	34,833	-	-
84	11	21,024	1	2,713
85	9	15,595	-	-
86	8	14,036	-	-
87	5	10,345	-	-
88	5	8,519	-	-
89	1	1,518	-	-
90	2	3,684	-	-
91	2	3,373	-	-
Total	<u>1,171</u>	<u>\$2,122,891</u>	<u>252</u>	<u>\$ 717,495</u>

SCHEDULE E(2)
(concluded)

SURVIVORS' BENEFIT FUND - JUNE 30, 1974

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
27	-	\$ -	1	\$ 1,915	-	\$ -
28	-	-	1	1,228	-	-
29	-	-	1	1,152	-	-
30	-	-	1	2,366	-	-
32	-	-	1	1,799	-	-
33	-	-	1	1,152	-	-
34	-	-	1	1,833	-	-
35	-	-	1	2,264	-	-
36	-	-	1	-	-	-
37	-	-	1	2,037	-	-
43	-	-	1	1,152	-	-
44	-	-	1	1,008	-	-
45	-	-	1	1,238	-	-
46	-	-	3	3,562	-	-
47	-	-	2	2,370	-	-
48	-	-	1	1,065	1	1,636
49	-	-	4	4,820	-	-
50	1	1,152	4	4,808	1	1,272
51	2	2,304	6	7,339	-	-
52	-	-	3	3,559	1	1,272
53	-	-	2	2,368	-	-
54	1	1,152	5	6,273	-	-
55	-	-	8	9,241	-	-
56	-	-	9	11,156	-	-
57	-	-	8	9,315	-	-
58	1	1,188	4	5,093	-	-
59	1	1,218	6	7,061	-	-
60	1	1,152	9	10,474	-	-
61	-	-	7	8,261	-	-
62	-	-	8	11,318	-	-
63	-	-	2	2,011	-	-
64	-	-	-	-	-	-
65	-	-	-	-	-	-
Total	<u>7</u>	<u>\$8,166</u>	<u>104</u>	<u>\$129,238</u>	<u>3</u>	<u>\$4,182</u>

SCHEDULE F

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1974

AGE	MEN		WOMEN	
	NUMBER	SALARIES	NUMBER	SALARIES
18	91	\$ 84,723	94	\$ 52,035
19	258	484,720	337	639,931
20	375	884,220	450	952,652
21	428	1,132,054	591	1,446,361
22	553	1,446,182	774	1,657,268
23	637	1,900,127	779	1,848,484
24	635	2,011,032	702	1,770,225
25	593	2,024,314	723	2,070,461
26	616	2,179,475	657	1,746,063
27	618	2,120,307	763	1,834,987
28	519	1,851,301	745	1,720,963
29	405	1,531,175	688	1,418,449
30	422	1,643,533	838	1,720,925
31	476	1,830,114	1,068	2,126,973
32	489	2,015,175	1,383	2,743,054
33	447	1,910,017	1,394	2,788,323
34	455	1,871,840	1,529	3,190,825
35	494	2,184,450	1,646	3,538,978
36	488	2,323,065	1,865	4,046,140
37	500	2,254,050	1,980	4,511,028
38	482	2,527,197	1,955	4,457,721
39	547	2,684,431	2,063	4,889,424
40	530	2,754,758	1,976	4,884,349
41	563	2,889,429	1,967	5,045,791
42	544	2,795,141	2,080	5,412,645
43	547	2,971,265	1,968	5,288,219
44	651	3,506,738	2,062	5,702,198
45	629	3,692,940	2,057	5,903,683
46	582	3,296,308	2,126	6,079,642
47	712	4,352,257	2,095	6,487,862
48	644	3,881,299	2,036	6,179,960
49	700	4,251,440	1,958	5,911,900
50	751	4,740,395	2,089	6,671,648
51	788	5,270,543	1,959	6,233,410
52	725	4,928,905	2,040	6,850,763
53	757	4,914,796	2,078	7,089,249
54	781	5,259,227	1,857	6,373,093
55	712	4,744,612	1,585	5,438,847
56	789	5,289,851	1,668	5,938,392
57	736	4,950,513	1,458	5,111,056
58	751	5,219,315	1,356	4,639,135
59	812	5,584,173	1,338	4,842,139

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1974

-CONTINUED-

AGE	MEN		WOMEN	
	NUMBER	SALARIES	NUMBER	SALARIES
60	799	\$ 5,431,466	1,154	\$ 4,076,122
61	785	5,306,254	1,030	3,416,865
62	771	5,040,110	856	2,918,130
63	646	4,285,971	643	2,146,092
64	598	3,811,210	502	1,802,157
65	502	3,157,445	387	1,330,845
66	394	2,191,317	301	908,318
67	307	1,653,290	199	586,081
68	222	1,214,010	155	506,251
69	179	926,059	131	366,419
70	155	670,909	95	288,590
71	97	295,232	41	94,462
72	61	166,650	29	58,843
73	34	92,011	9	12,105
74	42	148,411	35	99,070
75	11	34,907	4	2,232
76	18	47,509	3	7,750
77	12	25,692		
78	8	9,768	6	4,356
79	4	10,203		
80	2	3,603	1	6,552
81	3	9,126	1	5,012
82	2	9,199		
83	4	10,748		
84	3	6,978	1	236
TOTAL	<u>29,891</u>	<u>\$158,745,485</u>	<u>66,360</u>	<u>\$185,891,739</u>

INACTIVE MEMBERS - JUNE 30, 1974

<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>	<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>
15	-	-	55	362	752
16	-	-	56	401	750
17	-	-	57	364	712
18	7	9	58	369	655
19	20	11	59	356	660
20	49	44	60	341	667
21	111	185	61	347	601
22	291	407	62	321	479
23	412	675	63	313	482
24	501	839	64	304	532
25	633	1,031	65	274	399
26	723	1,120	66	291	406
27	702	1,307	67	218	268
28	607	918	68	255	265
29	512	637	69	276	242
30	499	622	70	187	181
31	549	594	71	160	137
32	544	635	72	155	100
33	499	556	73	109	97
34	476	634	74	131	120
35	508	672	75	65	52
36	480	668	76	39	35
37	444	736	77	36	29
38	496	730	78	22	16
39	467	797	79	23	18
40	476	812	80	15	13
41	458	731	81	9	9
42	493	793	82	15	11
43	487	789	83	11	5
44	508	857	84	6	1
45	527	785	85	7	6
46	496	850	86	10	1
47	484	844	87	4	2
48	479	858	88	1	-
49	501	841	89	-	-
50	445	914	90	1	-
51	455	845	91	-	-
52	399	797	94	-	1
53	396	823	95	-	-
54	386	848	96	1	-
			97	1	-
			Totals	<u>22,321</u>	<u>34,918</u>

ACTUARIAL ASSUMPTIONS - JUNE 30, 1974

SUPERANNUATION RETIRANTS, BENEFICIARIES,
AND SURVIVOR BENEFICIARIES

INTEREST: 5% per annum, compounded annually.

MORTALITY: 1955 American Annuity Table, with ages set back 4 years for Females.

DISABILITY RETIRANTS

INTEREST: 5% per annum, compounded annually.

MORTALITY: Rates developed in 1970 Evaluation, based on 1965-1970 experience.

ACTIVE AND INACTIVE MEMBERS

INTEREST: 5% per annum, compounded annually.

WITHDRAWAL, MORTALITY, DISABILITY and SUPERANNUATION RATES and SALARY SCALES: Rates and scales developed in 1970 Evaluation, based on 1965-1970 experience. Values at specimen ages are shown in the table below.

	AGE	R A T E S O F S E P A R A T I O N D U E T O:				SALARY SCALE
		<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Superannuation</u>	
<u>MEN</u>	20	.2381	.0005	-	-	\$ 4,499
	30	.1103	.0007	.0001	-	7,644
	40	.0685	.0014	.0005	-	11,814
	50	.0438	.0044	.0020	-	16,583
	55	.0366	.0082	.0044	.0020	18,946
	60	.0324	.0120	-	.0594	21,124
	65	.0321	.0152	-	.1628	22,981
	70	-	.0195	-	.2764	24,394
<u>WOMEN</u>	20	.1915	.0002	-	-	4,499
	30	.1166	.0003	-	-	7,644
	40	.0707	.0007	.0001	-	11,814
	50	.0440	.0015	.0006	-	16,583
	55	.0341	.0028	.0026	.0010	18,946
	60	.0313	.0042	-	.0983	21,124
	65	.0303	.0056	-	.1639	22,981
	70	-	.0070	-	.2889	24,394

SCHEDULE I