

Library

SCHOOL EMPLOYEES RETIREMENT SYSTEM
OF OHIO

ACTUARIAL VALUATION
JUNE 30, 1975

Based on 1965-1970
Experience Factors

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

PHILADELPHIA

HUGGINS
& COMPANY, INC.

CONSULTING ACTUARIES • EMPLOYEE BENEFIT PLAN CONSULTANTS

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November 5, 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, 1975.

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, F.S.A.

Member American Academy of Actuaries

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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, 1975 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 and future State appropriations to fund House Bill 284. The various fund balances included in the total present assets of \$572,354,953 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 \$824,862,229. 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 \$1,409,234,627 is between the liability for the benefits presently payable on account of present retirants and beneficiaries amounting to \$402,231,232 and the liabilities for present active and inactive members amounting to \$1,006,855,564. In addition, there is a minor reserve of \$147,831. 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, 1975

A S S E T S

L I A B I L I T I E S

Present assets:

Employees' Savings Fund	\$ 180,574,679
Interest Reserve Fund	4,674
Annuity and Pension Reserve Fund	200,968,036
Survivors' Benefit Fund	37,661,189
Employers' Trust Fund	152,998,543
General Fixed Assets	<u>147,831</u>
 Total present assets	 \$ 572,354,953

Future assets

Present value of future state appro- priations to finance House Bill 284	\$ 12,017,445
 Present value of prospective employee and employer contributions	 <u>824,862,229</u>
 Total future assets	 \$ 836,879,674

TOTAL ASSETS \$1,409,234,627

:	Present value of benefits	
:	payable on account of pre-	
:	sent retirants and benefi-	
:	ciaries from the -	
:	Annuity and Pension Reserve Fund:	
:	Superannuation retirants	\$276,813,724
:	Beneficiaries under options .	12,308,559
:	Disability retirants	21,418,983
:	Health care	41,593,162
:	Death Benefit	<u>4,692,224</u>
:		
:	Total A & PRF	\$356,826,652
:		
:	Survivors' Benefit Fund	<u>45,404,580</u>
:		
:	Total retirants and beneficiaries ...	\$ 402,231,232
:		
:	Present value of benefits	
:	payable on account of active	
:	and inactive members -	
:	Superannuation pensions	\$699,413,917
:	Disability pensions	18,312,554
:	Survivor benefits	35,051,363
:	Refunds	138,749,886
:	Health care	109,529,175
:	Retirant death benefit	<u>5,798,669</u>
:		
:	Total active and inactive members ...	1,006,855,564
:	Reserve for contingencies; miscellaneous ..	<u>147,831</u>
:		
:	TOTAL LIABILITIES	<u>\$1,409,234,627</u>

*Distributed as follows:

Cash	\$ 248,074	
Investments (at Book Value)	550,142,110	
Accounts Receivable (including \$21,702,654 due from employers)	21,742,041	
Furniture and equipment	<u>222,727</u>	<u>\$572,354,952</u>

Liability related to present retirants and beneficiaries \$402,231,232

A breakdown of the \$402,231,232 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 .	\$276,813,724	\$31,476,977	\$4,373,444	\$312,664,145
Beneficiaries receiving optional allowances	12,308,559	1,764,907	-	14,073,466
Disability retirants	<u>21,418,983</u>	<u>4,392,392</u>	<u>318,780</u>	<u>26,130,155</u>
Sub-total	\$310,541,266	\$37,634,276	\$4,692,224	\$352,867,766
Survivors' Benefit Fund beneficiaries	<u>45,404,580</u>	<u>3,958,886</u>	<u>-</u>	<u>49,363,466</u>
Total Liability	\$355,945,846	\$41,593,162	\$4,692,224	\$402,231,232

Included in the \$310,541,266 of liability for present retirants and beneficiaries is \$14,138,171 related to House Bills 284 and 214, \$20,743,052 related to House Bill 1476 and \$7,759,468 related to past cost-of-living increases. Included in the \$45,404,580 of liability for present survivors is \$2,128,975 related to House Bills 377 and 214, \$3,471,554 related to House Bill 1476 and \$1,030,636 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 deceased retirants and retirant death benefits.

The total of these liabilities is \$315,233,490 related to benefits to be paid from the Annuity and Pension Reserve Fund, which compares with

\$212,985,481 (the total of the A & PRF balance of \$200,968,036 and the anticipated House Bill 284 state appropriation), leading to a deficiency of \$102,248,009. The corresponding deficiency a year earlier was \$72,202,319, so there was an increase in this deficiency during the year of \$30,045,690.

It will also be noted that the Survivors' Benefit Fund had a fund balance of \$37,661,189 as compared with the liability of \$45,404,580 indicating a deficit of \$7,743,391 in that Fund compared with a surplus of \$1,192,029 a year earlier.

The total deficiency in these two Funds is \$109,991,400.

The number of retirants and beneficiaries and their annual allowances as of June 30, 1975, corresponding to the liabilities shown on the previous page, are shown in the following table:

Category	Number	Basic	ANNUAL ALLOWANCE		
			HB 214, 284 & 377 Increases	HB 1476 Increases	C-O-L Increases
Superannuation retirants	16,041	\$22,385,918	\$1,568,568	\$2,365,051	\$ 827,732
Beneficiaries receiving optional allowances ..	961	933,022	192,240	314,435	53,618
Disability retirants ..	<u>1,144</u>	<u>1,954,234</u>	<u>84,336</u>	<u>133,350</u>	<u>51,182</u>
Sub-Total	18,146	\$25,273,174	\$1,845,144	\$2,812,836	\$ 932,532
Survivors' Benefit Fund beneficiaries ...	<u>2,203</u>	<u>3,445,606</u>	<u>231,576</u>	<u>389,807</u>	<u>116,456</u>
Total Allowances on June 30, 1975	<u>20,349</u>	<u>\$28,718,780</u>	<u>\$2,076,720</u>	<u>\$3,202,643</u>	<u>\$1,048,988</u>

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:	
Receiving allowances	E
Entitled to deferred allowances	F

Liability related to present active and inactive members \$1,006,855,564

The \$1,006,855,564 of liability related to the active and inactive members of the system compares with \$907,854,141 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	29,628	68,452	98,080
Salaries	\$168,687,110	\$207,002,096	\$375,689,206
Present value of 1% of future salaries	13,449,173	18,415,702	31,864,875
Number of inactive members:			
(a) Eligible for pensions	2,388	2,668	5,056
(b) Eligible for refunds only.	21,150	33,885	55,035

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 \$ 147,831

This is the Investment in General Fixed Assets.

Total liabilities \$1,409,234,627

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, 1975 and those that will be related to subsequent service, based on the benefits in effect on that date, summarized in Schedule I.

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

PART II - RATES OF CONTRIBUTIONS

In connection with the 1975 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 16.92% of salary, with the breakdown shown in the table below:

Superannuation retirement benefit	9.92%
Disability retirement benefit38
Survivor benefit	1.10
Refund of contributions	3.68
Health care	1.66
Retirant death benefit	<u>.18</u>
Total normal contribution rate	<u>16.92%</u>

In order to determine what portion of the future asset item of \$824,862,229 will be funded by the total normal contribution rate of 16.92% of salary, we have determined that the present value of 1% of the present members' future salaries is \$31,864,875. The present value of future normal contributions is, therefore, 16.92 times \$31,864,875, or \$539,153,685. This leaves a deficiency of \$285,708,544 to be funded by the remainder of the future contributions. The corresponding figure a year earlier was \$222,635,908, which means that the total system deficiency increased by \$63,072,636.

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 16.92%, we are left with a balance of 3.58% available for funding the deficiency. The question to be answered is over how long a period will this rate of 3.58% be required in order to fund the deficiency of \$285,708,544.

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>
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
1975	382,000,000	11.6

These rates, of course, which have averaged over 11% annually during the past ten years, are increases for all members, and not just for new entrants. For the latter group only we continue to observe substantial increases in payroll, and, while this rate of increase has been slowing down, there still appears to be a continuing increase from this source. We have made our calculations on three different bases at substantially lower rates than those listed above, as follows:

1. Assuming that payrolls will continue at the 1974-1975 level of approximately \$382,000,000.
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 20.50% of payroll, of which 16.92% is on account of the normal cost and 3.58% 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 ..	Never	28.1 years	21.9 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 21.9 years to 28.1 years, depending on the assumptions as to future payroll increases of 5% and 3% respectively, and never if the future payroll remains level. These periods are higher than the corresponding periods determined in the valuation as of June 30, 1974.

PART III - SUMMARY

This valuation reveals a substantial expansion of the retirement system due to the continued increases in membership and payroll.

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 26.2 years to 28.1 years going from 1974 (after correcting for 1476 appropriations assumed but not made) to 1975.

The balance in the Employers' Trust Fund has increased in the past year from \$116,078,265, to \$152,998,543 and is approximately 85% of the balance of \$180,574,679 in the Employees' Savings Fund. A portion of this large increase was due to a change in accounting practice when the balance in the Interest Reserve Fund was transferred to the Employees' Trust Fund. This means that, on the average, the System has a reserve of \$1,483 in addition to the employees' personal account, for each of the 103,136 out of the 158,171 active and inactive members entitled to pensions in the future. It is important, therefore, to continue to build up this reserve. Consequently, we recommend that, unless changes are made by 1975-1976 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, 1975 - MEN

Age	Straight Life		Options		Total	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
51	-	\$ -	1	\$ 9,651	1	\$ 9,651
52	-	-	-	-	-	-
53	-	-	2	14,810	2	14,810
54	-	-	-	-	-	-
55	3	9,229	2	7,471	5	16,700
56	6	20,339	3	12,200	9	32,539
57	5	24,616	5	26,515	10	51,131
58	6	31,040	15	47,978	21	79,018
59	10	24,520	8	25,752	18	50,272
60	13	24,661	21	37,652	34	62,313
61	47	90,330	64	98,623	111	188,953
62	66	115,376	80	151,682	146	267,058
63	110	204,386	129	246,694	239	451,080
64	103	168,420	135	281,941	238	450,361
65	155	261,953	146	283,320	301	545,273
66	201	369,245	210	429,294	411	798,539
67	223	389,785	217	493,975	440	883,760
68	217	375,383	200	403,219	417	778,602
69	258	466,761	194	389,670	452	856,431
70	222	397,496	186	372,693	408	770,189
71	226	397,427	161	306,086	387	703,513
72	267	443,290	161	364,229	428	807,519
73	197	335,365	138	275,543	335	610,908
74	166	271,701	97	184,147	263	455,848
75	161	287,042	100	238,139	261	525,181
76	171	313,575	101	214,385	272	527,960
77	157	295,367	73	151,731	230	447,098
78	157	353,308	66	148,352	223	501,660
79	145	280,787	55	116,195	200	396,982
80	120	249,138	66	139,951	186	389,089
81	128	253,022	34	73,169	162	326,191
82	125	243,006	25	50,929	150	293,935
83	113	248,307	28	53,872	141	302,179
84	83	181,482	29	51,398	112	232,880
85	74	166,025	22	48,046	96	214,071
86	55	120,754	13	26,865	68	147,619
87	48	108,607	15	26,919	63	135,526
88	40	71,611	15	31,406	55	103,017
89	30	68,242	13	26,677	43	94,919
90	27	52,581	1	892	28	53,473
91	19	39,106	6	12,911	25	52,017
92	12	30,996	3	7,110	15	38,106
93	10	19,921	1	3,514	11	23,435
94	5	11,001	-	-	5	11,001
95	3	9,563	-	-	3	9,563
96	2	4,873	-	-	2	4,873
97	-	-	-	-	-	-
98	3	9,766	-	-	3	9,766
99	-	-	-	-	-	-
100	1	1,609	1	1,207	2	2,816
Total	<u>4,190</u>	<u>\$7,841,012</u>	<u>2,842</u>	<u>\$5,886,813</u>	<u>7,032</u>	<u>\$13,727,825</u>

SUPERANNUATION RETIRANTS - JUNE 30, 1975 - WOMEN

Age	Straight Life		Options		Total	
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance
51	2	\$ 6,700	-	\$ -	2	\$ 6,700
52	1	4,446	-	-	1	4,446
53	-	-	1	6,757	1	6,757
54	1	7,439	-	-	1	7,439
55	2	7,322	2	7,049	4	14,371
56	3	15,880	2	5,891	5	21,771
57	7	35,223	5	11,923	12	47,146
58	9	35,957	3	10,303	12	46,260
59	13	45,101	8	37,580	21	82,681
60	66	113,618	28	32,732	94	146,350
61	237	263,961	74	84,603	311	348,564
62	300	353,774	90	95,691	390	449,465
63	333	393,984	119	125,494	452	519,478
64	364	451,141	117	124,829	481	575,970
65	452	587,952	132	160,869	584	748,821
66	468	604,850	100	111,027	568	715,877
67	479	641,273	95	127,159	574	768,432
68	439	616,176	76	88,412	515	704,588
69	462	645,642	65	111,835	527	757,477
70	418	645,884	38	53,043	456	698,927
71	400	614,203	39	87,481	439	701,684
72	395	581,713	26	41,629	421	623,342
73	359	547,288	34	73,424	393	620,712
74	281	423,209	24	38,216	305	461,425
75	288	468,533	23	41,053	311	509,586
76	236	398,346	13	20,538	249	418,884
77	255	427,690	6	13,503	261	441,193
78	219	375,388	12	18,932	231	394,320
79	201	369,702	8	15,427	209	385,129
80	203	324,315	6	9,899	209	334,214
81	189	305,549	3	4,325	192	309,874
82	151	266,528	2	1,925	153	268,453
83	132	247,693	6	7,390	138	255,083
84	108	218,885	5	9,364	113	228,249
85	73	149,633	2	2,773	75	152,406
86	70	132,734	4	6,398	74	139,132
87	63	120,830	3	7,161	66	127,991
88	43	97,328	-	-	43	97,328
89	43	103,861	1	3,269	44	107,130
90	24	56,503	-	-	24	56,503
91	12	35,158	1	1,283	13	36,441
92	10	20,340	-	-	10	20,340
93	8	19,061	-	-	8	19,061
94	8	19,179	1	2,125	9	21,304
95	3	7,605	-	-	3	7,605
96	4	6,028	-	-	4	6,028
97	1	4,507	-	-	1	4,507
Total	<u>7,835</u>	<u>\$11,818,132</u>	<u>1,174</u>	<u>\$1,601,312</u>	<u>9,009</u>	<u>\$13,419,444</u>

SCHEDULE B

BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES - JUNE 30, 1975

Age	Optional Life Pensions				Optional Term Certain Pensions		
	Men		Women		Year of Expiry	Number	Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance			
37	-	\$ -	1	\$ 294			
38	-	-	-	-			
39	-	-	-	-			
40	-	-	-	-			
41	-	-	-	-	75	2	\$ 2,613
42	-	-	-	-			
43	-	-	-	-			
44	-	-	1	942			
45	-	-	1	1,161			
46	-	-	-	-	76	12	24,047
47	-	-	-	-			
48	-	-	1	656			
49	-	-	2	678			
50	-	-	-	-			
51	-	-	2	1,432	77	12	14,407
52	-	-	2	1,980			
53	-	-	4	8,011			
54	-	-	2	2,194			
55	-	-	-	-			
56	-	-	4	4,345	78	14	28,191
57	-	-	2	2,486			
58	-	-	7	6,360			
59	-	-	12	15,440			
60	-	-	8	13,513			
61	-	-	6	6,700	79	9	23,444
62	-	-	15	17,741			
63	2	1,921	15	17,674			
64	2	1,884	22	33,814			
65	4	2,812	18	19,408			
66	-	-	25	23,837	80	14	14,200
67	2	2,843	27	42,698			
68	5	5,379	19	31,868			
69	2	1,243	32	43,827			
70	2	1,237	32	45,363			
71	4	3,651	31	45,847	81	7	16,489
72	2	2,198	41	51,609			
73	2	1,818	34	45,119			
74	2	3,259	38	64,932			
75	2	8,264	7	9,366			
76	3	2,627	25	41,128	82	11	14,589
77	4	5,134	39	59,701			
78	3	4,061	37	62,836			
79	3	2,930	29	55,064			
80	3	4,379	40	68,588			
81	2	2,109	22	38,959	83	14	23,780
82	-	-	31	54,422			
83	-	-	29	48,475			
84	1	1,772	24	41,521			
85	-	-	20	34,130			
86	2	1,965	15	28,762	84	18	30,306
87	1	3,910	14	23,879			
88	-	-	16	31,476			
89	2	5,204	11	26,861			
90	-	-	10	18,747			
91	-	-	6	7,627	85	5	7,082
92	-	-	1	1,792			
93	-	-	2	5,597			
94	-	-	2	4,482			
95	1	4,005	2	3,130			
96	-	-	1	3,090			
Total	<u>56</u>	<u>\$74,605</u>	<u>787</u>	<u>\$1,219,562</u>		<u>118</u>	<u>\$199,148</u>

DISABILITY RETIRANTS - JUNE 30, 1975

Age	M E N		W O M E N	
	Number	Annual Allowance	Number	Annual Allowance
32	1	\$ 880	-	\$ -
33	1	4,958	-	-
34	1	2,310	-	-
35	-	-	1	3,260
36	1	3,017	-	-
37	1	1,732	-	-
38	3	9,665	-	-
39	-	-	5	10,787
40	2	5,734	1	1,945
41	3	16,537	1	1,577
42	-	-	-	-
43	3	12,609	2	3,590
44	4	19,979	2	5,686
45	6	17,120	6	9,866
46	10	34,738	5	12,368
47	7	19,841	13	23,432
48	17	44,393	7	10,697
49	9	26,989	17	29,871
50	7	14,832	14	22,242
51	14	31,348	15	25,517
52	26	74,502	15	26,724
53	21	61,278	20	36,739
54	32	68,528	16	28,813
55	22	45,877	20	31,369
56	32	90,012	25	38,195
57	20	61,850	31	48,700
58	34	73,965	40	63,076
59	44	98,162	38	54,370
60	43	91,850	42	58,987
61	46	86,047	35	54,639
62	23	38,179	30	47,928
63	34	51,725	22	33,847
64	25	39,308	17	24,493
65	17	27,612	17	25,237
66	13	27,162	15	24,010
67	17	36,919	20	27,586
68	10	16,011	9	12,641
69	9	14,866	14	23,019
70	7	16,516	9	15,277
71	7	12,196	8	12,752
72	7	11,624	6	9,781
73	2	3,448	2	2,622
74	3	4,248	-	-
75	3	4,105	3	4,030
76	2	3,320	2	3,203
77	1	2,059	1	1,256
78	-	-	1	1,504
79	2	5,911	3	11,866
80	-	-	2	5,638
Total	<u>592</u>	<u>\$1,333,962</u>	<u>552</u>	<u>\$889,140</u>

SCHEDULE D

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - MEN

<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>
16	1	\$ 1,764	-	\$ -
24	-	-	1	2,832
30	1	2,832	-	-
37	1	2,513	2	5,273
42	-	-	2	5,130
43	-	-	2	5,064
45	1	1,759	5	11,319
46	-	-	3	8,640
47	-	-	1	2,232
48	-	-	7	15,357
49	-	-	4	7,582
50	-	-	3	6,113
51	-	-	3	3,052
52	1	1,272	4	7,161
53	2	2,785	6	12,269
54	1	1,272	4	9,498
55	1	1,687	6	12,078
56	-	-	2	4,467
57	2	2,848	5	10,805
58	-	-	6	11,492
59	1	1,272	3	7,253
60	2	2,544	-	-
61	4	5,154	1	1,169
62	7	8,186	1	2,232
63	6	8,731	1	2,832
64	3	3,696	1	2,832
65	9	10,459	-	-
66	6	6,841	1	1,303
67	4	7,242	-	-
68	12	15,423	-	-
69	12	15,545	-	-
70	9	10,356	-	-
71	3	4,114	-	-
72	8	11,477	-	-
73	8	12,712	-	-
74	8	11,504	-	-
75	6	7,055	-	-
76	8	12,361	-	-
77	4	5,940	-	-
78	3	5,317	-	-
79	2	4,083	-	-
80	3	4,913	-	-
81	6	10,052	-	-
84	2	2,982	-	-
85	5	8,038	-	-
86	2	2,244	-	-
88	1	987	-	-
112	1	1,702	-	-
Total	<u>156</u>	<u>\$219,662</u>	<u>74</u>	<u>\$157,985</u>

SCHEDULE E(1)

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

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>
16	1	\$ 1,169	-	\$ -
20	2	2,561	-	-
21	1	2,269	-	-
24	2	3,609	1	2,798
26	-	-	1	2,832
27	1	1,644	-	-
28	-	-	2	6,481
29	-	-	1	2,878
30	-	-	1	2,832
31	-	-	-	-
32	-	-	1	3,993
33	-	-	1	3,061
34	-	-	-	-
35	-	-	2	6,089
36	1	2,832	1	4,129
37	-	-	4	17,183
38	2	3,105	4	13,192
39	-	-	4	14,480
40	-	-	3	8,611
41	-	-	4	12,158
42	-	-	5	13,414
43	-	-	5	12,795
44	-	-	4	14,728
45	-	-	8	30,054
46	3	10,162	13	43,881
47	2	864	7	28,117
48	2	3,104	9	25,027
49	2	5,937	13	45,266
50	4	13,660	5	12,744
51	11	22,251	11	33,514
52	6	8,421	9	25,625
53	15	24,761	17	50,598
54	13	25,971	23	72,800
55	14	27,388	13	36,037
56	19	39,176	11	33,907
57	24	40,896	25	68,414
58	25	42,864	2	5,998
59	26	52,821	5	14,028
60	34	66,028	4	10,007
61	54	108,921	5	13,085
62	55	94,116	6	17,549
63	60	90,794	-	-
64	55	82,635	-	-

SCHEDULE E(2)

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

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	66	\$ 100,528	-	\$ -
66	66	113,566	-	-
67	69	111,860	1	2,832
68	75	121,322	-	-
69	65	119,084	-	-
70	62	103,041	-	-
71	50	97,590	-	-
72	63	119,277	1	4,625
73	49	97,460	-	-
74	37	65,080	-	-
75	36	63,549	-	-
76	29	67,774	-	-
77	36	68,558	-	-
78	32	68,455	-	-
79	28	57,879	-	-
80	24	58,131	-	-
81	22	51,540	-	-
82	11	29,043	-	-
83	15	33,353	-	-
84	13	28,208	-	-
85	10	19,174	-	-
86	9	18,104	-	-
87	9	15,533	-	-
88	5	10,541	-	-
89	5	8,600	-	-
90	1	1,530	-	-
91	2	3,573	-	-
92	2	3,402	-	-
Total	<u>1,325</u>	<u>\$2,433,714</u>	<u>232</u>	<u>\$715,762</u>

SCHEDULE E(2)
(concluded)

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - CHILDREN WITH NO ELIGIBLE PARENT

AGE OF YOUNGEST CHILD	NUMBER OF CHILDREN AGE																						ANNUAL ALLOWANCE		
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>		TOTAL	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4				5	-	-	1	-	1	1	1	-	1	1	1	-	-	-	-	-	-	-	-	12	10,240
5					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6						3	-	-	-	-	-	-	1	1	-	1	1	-	-	-	-	-	-	7	6,142
7							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8								3	-	-	2	-	1	-	-	-	-	1	-	-	-	-	-	7	7,559
9									5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	8	10,037
10										1	-	1	-	1	-	-	-	-	-	-	-	-	-	3	2,592
11											1	-	-	1	1	-	1	-	-	-	-	-	-	4	1,900
12												5	-	-	-	-	2	-	2	-	-	-	-	9	12,257
13													9	2	-	1	1	3	-	-	1	-	-	17	20,973
14														9	-	1	1	1	1	-	-	-	-	13	19,446
15															8	4	-	2	-	-	-	-	-	14	18,484
16																6	-	1	2	-	-	1	10	11,758	
17																	3	-	-	-	-	-	3	4,419	
18																		9	-	1	-	-	10	14,743	
19																			3	-	1	-	4	4,618	
20																				5	-	-	5	8,113	
21																						5	-	5	7,865
Total	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>	<u>-</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>2</u>	<u>7</u>	<u>6</u>	<u>12</u>	<u>15</u>	<u>10</u>	<u>13</u>	<u>9</u>	<u>17</u>	<u>8</u>	<u>6</u>	<u>7</u>	<u>1</u>	<u>131</u>	<u>\$161,146</u>	

SCHEDULE E(3)

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - INCOMPETENTS

<u>INCOMPETENT SPOUSE</u>			<u>INCOMPETENT CHILD</u>			<u>SPOUSE WITH INCOMPETENT CHILD</u>		
<u>Age</u>	<u>Number</u>	<u>Annual Allowance</u>	<u>Age of Incompetent</u>	<u>Number</u>	<u>Annual Allowance</u>	<u>Age of Spouse</u>	<u>Number</u>	<u>Annual Allowance</u>
52	1	\$ 1,188	15	1	\$ 2,644	49	1	\$ 2,583
53	1	1,584	18	1	2,491	52	1	1,900
56	2	2,718	25	1	1,900	54	1	3,090
58	1	1,152	27	1	1,598	56	3	8,758
59	1	1,152	38	2	3,105	58	1	2,232
60	3	4,440	44	1	1,759	59	1	2,543
61	3	3,494	51	1	1,874	60	2	5,339
62	2	2,633	54	1	1,874	61	4	14,705
						62	3	9,479
						63	2	5,733
						69	2	6,115
						70	2	4,921
						71	1	3,421
						73	1	2,988
						85	1	3,086
Total	<u>14</u>	<u>\$18,361</u>		<u>9</u>	<u>\$17,245</u>		<u>26</u>	<u>\$76,893</u>

SCHEDULE E(4)

SURVIVORS' BENEFIT FUND - JUNE 30, 1975

BENEFICIARIES NOW ENTITLED TO DEFERRED ALLOWANCE ONLY

	<u>DEFERRED</u>		<u>DEFERRED</u>		<u>DEFERRED</u>	
	<u>TO AGE 65</u>		<u>TO AGE 62</u>		<u>TO AGE 50</u>	
18			1	\$ 2,332		
19			1	1,204		
21			1	1,152		
40			-	-		
41			-	-		
42			1	1,872		
43			-	-		
44			1	2,232		
45			2	4,055		
46			4	5,395		
47			4	7,772	1	\$ 1,524
48			1	2,271		
49			4	7,377		
50			9	16,576		
51			11	18,763		
52			8	15,648	1	1,152
53			3	6,741		
54			8	12,842	1	1,152
55			13	22,418		
56			21	34,127	1	1,152
57			21	33,531		
58			21	34,502		
59			18	28,747		
60			20	33,223		
61			29	43,580		
62			13	18,770	1	1,536
63	6	\$ 7,624	1	972		
64	3	3,204	2	3,940		
65	3	4,139	-	-		
96	-	-	1	1,152		
Total	<u>12</u>	<u>\$ 14,967</u>	<u>219</u>	<u>\$361,194</u>	<u>5</u>	<u>\$ 6,516</u>

SCHEDULE F

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1975

AGE	MEN		WOMEN	
	NUMBER	SALARIES	NUMBER	SALARIES
17	21	\$ 14,388	13	\$ 5,598
18	62	54,070	97	60,225
19	280	506,896	322	581,862
20	459	1,160,639	484	1,016,917
21	504	1,360,582	577	1,409,754
22	536	1,722,726	724	1,803,147
23	637	2,005,470	783	1,895,314
24	651	2,194,603	761	2,024,912
25	601	2,293,500	701	1,892,395
26	607	2,369,376	734	2,272,815
27	601	2,408,888	749	1,932,828
28	587	2,400,788	883	2,161,342
29	516	2,107,981	889	2,139,106
30	398	1,658,893	852	1,842,809
31	423	1,903,371	1,052	2,214,147
32	459	2,041,121	1,307	2,796,693
33	480	2,190,720	1,579	3,569,365
34	471	2,079,612	1,665	3,621,276
35	464	2,142,998	1,792	4,150,668
36	484	2,453,438	1,849	4,417,915
37	490	2,577,328	2,005	4,987,988
38	513	2,518,589	2,122	5,461,780
39	486	2,800,316	2,105	5,402,223
40	553	2,912,412	2,188	5,710,502
41	517	2,957,669	2,044	5,694,494
42	547	3,065,230	2,043	5,826,166
43	507	2,981,198	2,107	6,163,578
44	541	3,330,316	2,036	6,116,473
45	646	3,750,072	2,141	6,579,638
46	620	3,917,092	2,102	6,575,599
47	588	3,652,366	2,177	6,872,796
48	694	4,599,305	2,129	7,167,980
49	645	4,119,950	2,021	6,847,138
50	695	4,584,533	1,916	6,359,522
51	756	5,168,568	2,084	7,382,388
52	760	5,667,693	1,933	6,720,231
53	733	5,305,857	1,987	7,520,344
54	740	5,310,916	2,015	7,575,428
55	601	5,806,696	1,794	6,770,126
56	712	5,142,561	1,537	5,765,575
57	765	5,668,965	1,635	6,346,430
58	737	5,213,312	1,395	5,329,934
59	754	5,678,708	1,239	4,813,162

CONTRIBUTING ACTIVE MEMBERS - JUNE 30, 1975

-CONTINUED-

AGE	MEN		-WOMEN-	
	<u>NUMBER</u>	<u>SALARIES</u>	<u>NUMBER</u>	<u>SALARIES</u>
60	798	\$ 5,912,062	1,287	\$ 5,007,408
61	771	5,547,454	1,031	3,878,155
62	728	5,369,948	865	3,223,264
63	675	4,667,309	700	2,537,772
64	581	4,056,914	513	1,902,084
65	521	3,484,463	400	1,623,724
66	398	2,292,683	296	999,088
67	266	1,576,873	215	701,117
68	233	1,294,720	141	480,271
69	161	990,769	111	408,807
70	138	714,485	100	308,278
71	102	363,041	50	125,062
72	53	130,243	18	31,606
73	42	146,742	15	23,206
74	26	60,416	5	5,959
75	24	96,876	25	101,460
76	8	29,086	4	1,921
77	15	44,472	2	8,494
78	9	16,524		
79	5	6,512	3	3,564
80	3	7,143		
81	1	73	1	6,640
82	3	4,894	1	5,370
83	1	1,140		
84	3	5,616		
85	2	1,140	1	243
TOTAL	<u>29,628</u>	<u>\$168,687,110</u>	<u>68,452</u>	<u>\$207,002,096</u>

INACTIVE MEMBERS - JUNE 30, 1975

ELIGIBLE FOR FUTURE ALLOWANCE

<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>	<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>
25	-	4	60	87	97
26	-	2	61	70	69
27	1	5	62	70	46
28	4	4	63	47	43
29	4	3	64	38	34
30	6	10	65	33	21
31	4	12	66	21	15
32	14	11	67	17	7
33	11	13	68	8	15
34	19	16	69	9	5
35	13	23	70	9	6
36	21	25	71	4	5
37	35	15	72	3	2
38	26	28	73	4	1
39	34	32	74	3	3
40	44	33	75	3	-
41	67	49	76	-	-
42	56	48	77	-	-
43	61	50	78	1	-
44	51	54	79	1	-
45	70	54	80	-	-
46	65	60	81	1	1
47	108	82	82	-	1
48	78	85	83	1	-
49	103	81	84	1	-
50	128	115	85	-	-
51	102	121	86	-	-
52	95	128	87	1	-
53	93	133	88	-	-
54	98	134	89	-	-
55	105	156	Totals	<u>2,388</u>	<u>2,668</u>
56	112	151			
57	104	176			
58	113	205			
59	111	179			

SCHEDULE H(1)

INACTIVE MEMBERS - JUNE 30, 1975

NOT ELIGIBLE FOR FUTURE ALLOWANCE

<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>	<u>AGE</u>	<u>MEN</u>	<u>WOMEN</u>
15&Under	6	15	55	317	719
16	1	-	56	279	640
17	1	1	57	329	599
18	11	3	58	289	533
19	31	28	59	254	499
20	94	91	60	252	470
21	170	174	61	227	429
22	235	364	62	202	357
23	423	664	63	233	298
24	587	921	64	179	229
25	681	997	65	169	223
26	771	1,085	66	136	182
27	851	1,143	67	105	153
28	819	1,305	68	92	108
29	710	950	69	83	95
30	571	695	70	77	101
31	574	692	71	58	70
32	624	711	72	58	54
33	590	796	73	62	44
34	544	733	74	45	36
35	524	799	75	60	67
36	551	807	76	23	30
37	482	871	77	20	22
38	472	866	78	13	16
39	495	863	79	19	9
40	465	904	80	18	15
41	446	898	81	11	12
42	467	802	82	11	9
43	479	864	83	7	9
44	476	817	84	10	7
45	491	879	85	7	1
46	506	808	86	8	6
47	448	819	87	8	2
48	479	795	88	2	4
49	440	805	89	2	-
50	431	808	90	1	2
51	406	831	91	2	-
52	411	792	93	1	2
53	363	696	94	1	-
54	352	741	97	1	-
			98	1	-
			Total	<u>21,150</u>	<u>33,885</u>

SCHEDULE H(2)

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

Summary of the Benefit Provisions of the Retirement System
as of June 30, 1975

The School Employees Retirement System of Ohio makes provision for retirement, disability, death, survivor and health care benefits to all non-certificated employees of the public school system. The major provisions of the System may be summarized as follows:

I. Service Retirement

A. Eligibility

- (1) Attainment of age 60 and completion of 5 or more years of service; or
- (2) Attainment of age 55 and completion of 25 or more years of service; or
- (3) Completion of 32 or more years of service.

B. Annual Allowance

- (1) Greater of 2% of the average annual compensation during the 3 years (whether or not consecutive) of highest compensation or $\$86$ times total service. Annuity is reduced unless member has 32 years of service or has attained age 65. Maximum allowance is 90% of the final average compensation, or
- (2) An annuity with a reserve equal to twice the member's accumulated contributions plus $\$180$ if member had at least ten years of service on October 1, 1956, if larger than (1).

C. Optional forms of annuity

Option 1 - A joint-life annuity payable during the lifetime of the member, with the designated beneficiary to continue to receive 100% thereof if living at the death of the member.

Option 2 - A joint-life annuity payable during the lifetime of the member, with the designated beneficiary to receive a lesser annuity if living at the death of the member.

Option 3 - A life annuity payable during the lifetime of the member, with a guarantee that at least an elected number of monthly payments will be paid in any event.

Option 4 - Any other benefit arrangement approved by the Board and certified by the actuary to be an actuarially equivalent benefit.

SCHEDULE I

Summary of the Benefit Provisions of the Retirement System
as of June 30, 1975

(continued)

II. Disability Retirement

A. Eligibility

- (1) Completion of 5 or more years of service and less than 60 years of age, and
- (2) Determination by a physician that member is mentally or physically incapable of performing his duty.

B. Annual Allowance

- (1) An annuity with a reserve equal to the member's accumulated contributions plus
- (2) The difference between (1) and the greater of 2% of the average compensation during the 3 years of highest compensation or \$86 times total service plus years and months from date of disability to age 60. Maximum allowance is 75% of final average salary.

III. Death Benefit

Upon the death of a retirant receiving a service or disability allowance a lump sum payment of \$500 is paid.

IV. Survivor Benefit

- A. If member was eligible for service retirement, surviving spouse or other sole dependent beneficiary may elect to receive the allowance that would have been payable had the member retired on date of death and elected Option 1.
- B. If member had completed at least 1½ years of service with at least ¼ year of contributing service within the 2½ years prior to death or was on disability retirement at date of death survivors may elect to receive an allowance depending on number of eligible survivors as follows:

<u>Number</u>	<u>Benefit as Percent of Final Average Salary</u>	<u>Minimum Benefit</u>
1	25%	\$1,152*
2	40%	2,232
3	50%	2,832
4	55%	2,832
5 or more	60%	2,832

*If recipient is spouse and member had 10 or more years of service minimum is \$1,272.

SCHEDULE I
(continued)

Summary of the Benefit Provisions of the Retirement System
as of June 30, 1975

(continued)

Eligible survivors are:

- (1) Spouse (as long as not remarried) age 62 or age 50 if member had 10 or more years of service or any age if caring for dependent child or adjudged mentally or physically incompetent
- (2) Unmarried child under 18 or 22 if attending school
- (3) Parent age 65 or over who received at least one-half of his support from the member in the year prior to death.

C. Beneficiary may elect to receive the member's accumulated contributions instead of A or B.

V. Cost-of-Living Adjustment

Effective 36 months after receiving or eligible to receive an allowance, such allowance will be increased by 1½% of the basic allowance in any year in which the Consumer Price Index has increased at least 1½%.

VI. Minimum Payments

If the total benefits paid are less than the member's accumulated contributions, the difference will be paid to the member's beneficiary.

VII. Member's Contribution

Member contributes 8% of his compensation.

VIII. Health Care

Each benefit recipient is provided comprehensive health insurance which, in effect, supplements medicare benefits if the recipient is covered.

SCHEDULE I
(concluded)

ACTUARIAL ASSUMPTIONS - JUNE 30, 1975

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 speci-
men 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 J

