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OHIO RETIREMENT STUDY
COMMISSION

ANNUAL ACTUARIAL VALUATION
RETIRANTS AND BENEFICIARIES
June 30, 1971
OHIO
PUBLIC EMPLOYEES RETIREMENT SYSTEM

GABRIEL ROEDER, SMITH & COMPANY
CONSULTING ACTUARIES

1971 1972 1973 1974
1975 1976 1977 1978
1979 1980 1981 1982

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March 10, 1972

The Retirement Board
State of Ohio
Public Employees Retirement System
Columbus, Ohio

Ladies and Gentlemen:

Submitted in this report are the results of the annual actuarial valuation of the Retirement System's liabilities for retirement allowances being paid retirants and beneficiaries as of June 30, 1971.

The extensive statistical data required to make the valuation was furnished by your Executive Director and his Staff in February, using computer equipment.

The interest rate used in making the valuation was 4.5% per annum, compounded annually. This is an increase over last year's 4.0%.

The mortality table used in making the valuation was the 1960 Group Annuity Mortality Table, set back no years for men and set back 5 years for women (please see Appendix Schedule 17). This assumption is unchanged from a year ago.

COMMENT

Based upon the results of the June 30, 1971 valuation, the mortality table in use appears to be a reasonable measure of mortality being experienced among retirants and beneficiaries. There follows the computed changes in the "Ratio of Ledger Balance to Liabilities" in each retired life fund.

	Ratio of			Report Schedule
	<u>Ledger Balance to Liabilities</u>			
	<u>1971</u>	<u>1970</u>	<u>Change</u>	
Annuity and Pension Reserve	104.5%	103.7%	+0.8%	1
Survivor Benefit: State	100.7	105.4	-4.7	5
: Local Government	101.9	105.5	-3.6	11

The recommended reserve transfers, as of July 1, 1971, on page 27 will fully adjust the retired life reserves for (i) the new interest rate and (ii) the 1.5% escalator provision.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

R G Roeder

Richard G. Roeder

KS:mu

ANNUITY AND PENSION RESERVE FUND

Retirants and beneficiaries receiving benefits from the Annuity and Pension Reserve Fund as of June 30, 1971 totaled 33,714, involving monthly retirement allowances of \$5,101,389.

Included in this number were 133 retirants now reemployed whose monthly retirement allowances of \$18,432 have been suspended for their periods of reemployment.

Cost of living pension increments being paid to present retirants and beneficiaries totaled \$410,338 monthly.

The ledger balance in the Annuity and Pension Reserve Fund was reported to be \$602,029,238.47 (including unexpended cost of living balance of \$562,145.38).

The computed liabilities of the Annuity and Pension Reserve Fund totaled \$615,660,278, which amount represents the lump sum present value of future retirement allowance payments from this fund to present retirants and beneficiaries.

Schedule 1.

Annuity and Pension Reserve Fund
Ledger Balances and Computed Liabilities
Comparative Statement

<u>June 30</u>	<u>Ledger Balance</u>	<u>Computed Liabilities</u>	<u>Ratio of Ledger Balance to Liabilities</u>
1967	\$404,203,452	\$395,769,176	102.1%
1968	422,204,031	418,204,284@	101.0
1969	504,861,398	495,545,808@	101.9
1970	531,887,158	512,846,088@	103.7
1971	602,029,238	576,225,932*	104.5
AFTER-SUGGESTED TRANSFERS } 1971	641,463,584	615,660,278	104.2

@ Includes liabilities for '57 and '59 COLA that were not included prior to 1968.

* Based on 4% rate of interest and level benefits.

Schedule 2.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retiree Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
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SUPERANNUATION RETIREMENT

Straight Life Allowance - Benefit Terminating at Death

Men	10,849	26.1%	65.3%	8.6%	100.0%	\$1,666,133
Women	<u>10,785</u>	20.3	71.0	8.7	100.0	<u>1,437,526</u>
Totals	21,634					3,103,659

Option 1 Allowance - Joint and Survivor Benefit

Men	2,044	25.0	68.7	6.3	100.0	253,480
Women	<u>150</u>	19.5	71.2	9.3	100.0	<u>15,607</u>
Totals	2,194					269,087

Option 2 Allowance - Modified Joint and Survivor Benefit

Men	3,226	23.2	71.6	5.2	100.0	744,134
Women	<u>115</u>	18.3	74.2	7.5	100.0	<u>19,554</u>
Totals	3,341					763,688

Option 3 Allowance - Life Benefit With Guaranteed Periods 0 to 5 Years

Men	494	24.7	67.8	7.5	100.0	90,666
Women	<u>78</u>	16.2	71.1	12.7	100.0	<u>11,377</u>
Totals	572					102,043

Option 3 Allowance - Life Benefit With Guaranteed Periods 6 to 10 Years

Men	852	23.7	69.1	7.2	100.0	151,883
Women	<u>90</u>	17.3	72.9	9.8	100.0	<u>12,810</u>
Totals	942					164,693

(Schedule 2 continued on Page 5)

Schedule 2. - continued

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
Option 3 Allowance - Life Benefit With Guaranteed Periods 11 to 15 Years						
Men	414	22.8%	73.0%	4.2%	100.0%	\$ 87,302
Women	<u>37</u>	17.8	73.6	8.6	100.0	<u>5,108</u>
Totals	451					92,410
Option 3 Allowance - Life Benefit With Guaranteed Periods 16 to 21 Years						
Men	24	15.2	78.2	6.6	100.0	7,098
Women	<u>24</u>					<u>7,098</u>
Totals	24					7,098
Option 3 Allowance - Special Joint and Survivor Benefit						
Men	21	16.6	76.7	6.7	100.0	9,651
Women	<u>21</u>					<u>9,651</u>
Totals	21					9,651
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 1, 2 or 3 - Life Benefit						
Men	27	16.0	66.9	17.1	100.0	2,302
Women	<u>2,465</u>	20.7	63.9	15.4	100.0	<u>243,532</u>
Totals	2,492					245,834
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 3 - Guaranteed Period Only						
M-W	405	23.6	68.2	8.2	100.0	67,882

(Schedule 2 concluded on Page 6)

Schedule 2. - concluded

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
Total for Superannuation Allowances Being Paid						
Men	17,951	25.0%	67.7%	7.3%	100.0%	\$3,012,649
Women	13,720	20.3	70.1	9.6	100.0	1,745,514
M-W	405	23.6	68.2	8.2	100.0	67,882
Totals	32,076					4,826,045

DISABILITY RETIREMENT

Straight Life Allowance - Benefit Terminating at Death

Men	1,028	14.4	80.2	5.4	100.0	188,408
Women	610	12.5	80.6	6.9	100.0	86,936
Totals	1,638					275,344

TOTAL BENEFITS BEING PAID FROM ANNUITY AND PENSION RESERVE FUND

Men	18,979	24.4	68.4	7.2	100.0	3,201,057
Women	14,330	19.9	70.6	9.5	100.0	1,832,450
M-W	405	23.6	68.2	8.2	100.0	67,882
Totals	33,714					\$5,101,389

Schedule 3.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Current Monthly Total \$ By Attained Ages

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
30-34	1	\$ 83	5	\$ 1,483	6	\$ 1,566
35-39			18	4,746	18	4,746
40			12	3,577	12	3,577
41			7	1,746	7	1,746
42	1	41	9	2,219	10	2,260
43	1	148	13	2,554	14	2,702
44			16	3,948	16	3,948
45	1	61	19	4,122	20	4,183
46	2	225	18	4,339	20	4,614
47	4	297	25	5,683	29	5,980
48			31	7,148	31	7,148
49	5	267	28	6,305	33	6,572
50	2	119	40	7,707	42	7,826
51	1	35	51	10,670	52	10,705
52	5	508	34	6,687	39	7,195
53	6	308	67	13,989	73	14,297
54	12	1,455	63	12,774	75	14,229
55	13	2,137	70	12,914	83	15,051
56	19	3,784	64	10,872	83	14,656
57	38	6,857	71	12,772	109	19,629
58	58	12,161	106	17,780	164	29,941
59	91	21,095	121	18,764	212	39,859
60	139	25,329	122	19,149	261	44,478
61	407	62,876	116	16,101	523	78,977
62	544	94,999	96	13,357	640	108,356
63	837	134,789	68	8,910	905	143,699
64	994	156,294	70	8,900	1,064	165,194

(Schedule 3 continued on Page 8)

Schedule 3. - continued

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Current Monthly Total \$ By Attained Ages

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
65	1,160	\$ 182,902	68	\$ 8,733	1,228	\$ 191,635
66	1,443	232,891	68	8,954	1,511	241,845
67	1,555	240,215	36	4,131	1,591	244,346
68	1,673	260,801	36	4,817	1,709	265,618
69	1,657	255,320	28	3,476	1,685	258,796
70	1,681	260,342	24	2,880	1,705	263,222
71	1,906	286,169	10	1,702	1,916	287,871
72	1,650	265,473	5	849	1,655	266,322
73	1,847	284,025	1	180	1,848	284,205
74	1,621	243,110	1	185	1,622	243,295
75	1,641	240,295			1,641	240,295
76	1,495	220,266	1	171	1,496	220,437
77	1,368	197,843			1,368	197,843
78	1,196	172,693			1,196	172,693
79	1,113	156,732			1,113	156,732
80	995	145,217			995	145,217
81	817	114,601			817	114,601
82	698	95,331			698	95,331
83	622	78,900			622	78,900
84	518	67,202			518	67,202
85	465	60,472			465	60,472
86	338	41,342			338	41,342
87	298	36,568			298	36,568
88	220	29,819			220	29,819
89	142	18,962			142	18,962
90	132	17,158			132	17,158
91	76	9,355			76	9,355
92	66	10,143			66	10,143
93	45	4,398			45	4,398
94	23	3,334			23	3,334

(Schedule 3 concluded on Page 9)

Schedule 3. - concluded

Annuity and Pension Reserve Fund

Retirants and Beneficiaries June 30, 1971

Current Monthly Total \$ By Attained Ages

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
95	16	\$ 1,588		\$	16	\$ 1,588
96	4	357			4	357
97	6	350			6	350
98	2	63			2	63
99	1	58			1	58
Period Certain	<u>405</u>	<u>67,882</u>			<u>405</u>	<u>67,882</u>
Totals	32,076	\$4,826,045	1,638	\$275,344	33,714	\$5,101,389

Schedule 4.

Annuity and Pension Reserve Fund

Liabilities for Retirants and Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid

<u>Group</u>	<u>Liabilities for</u>				<u>Current Total \$</u>
	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	
<u>SUPERANNUATION RETIREMENT</u>					
Men	24.4%	61.1%	14.5%	100.0%	\$160,904,640
Women	18.7	64.9	16.4	100.0	<u>181,840,488</u>
Totals					<u>342,745,128</u>
Option 1					
Men	22.4	72.1	5.5	100.0	40,991,282
Women	17.8	74.9	7.3	100.0	<u>2,456,524</u>
Totals					<u>43,447,806</u>
Option 2					
Men	20.9	75.1	4.0	100.0	98,796,650
Women	16.5	77.4	6.1	100.0	<u>2,888,568</u>
Totals					<u>101,685,218</u>
Option 3 - Life Benefit With Guaranteed Period					
Men	21.9	73.3	4.8	100.0	38,987,558
Women	8.8	76.1	15.1	100.0	<u>3,889,611</u>
Totals					<u>42,877,169</u>
Option 3 - Special Joint and Survivor Benefit					
Men	15.1	79.8	5.1	100.0	1,165,193
Women					
Totals					

(Schedule 4 concluded on Page 11)

Schedule 4. - concluded

Annuity and Pension Reserve Fund

Liabilities for Retirants and Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid

<u>Group</u>	<u>Liabilities for</u>				<u>Current Total \$</u>
	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	
Survivor Beneficiary of Deceased Superannuation Retirant Life Benefit					
Men	14.1%	69.9%	16.0%	100.0%	\$ 289,253
Women	19.3	68.4	12.3	100.0	<u>29,594,460</u>
Totals					<u>29,883,713</u>

Survivor Beneficiary of Deceased Superannuation Retirant Guaranteed Period Only					
M-W	25.7	67.6	6.7	100.0	3,422,119

Total for Superannuation Allowances Being Paid					
Men	22.8	68.0	9.2	100.0	341,134,576
Women	18.7	65.8	15.5	100.0	220,669,651
M-W	25.7	67.6	6.7	100.0	<u>3,442,119</u>
Totals					<u>565,226,346</u>

DISABILITY RETIREMENT

Straight Life					
Men	12.0	83.7	4.3	100.0	33,694,292
Women	10.5	84.0	5.5	100.0	<u>16,739,640</u>
Totals					<u>50,433,932</u>

TOTAL LIABILITIES FOR ANNUITY AND PENSION RESERVE FUND

Men	21.9	69.5	8.6	100.0	374,828,868
Women	18.1	67.1	14.8	100.0	237,409,291
M-W	25.7	67.6	6.7	100.0	<u>3,422,119</u>
Totals					<u>\$615,660,278</u>

Schedule 5.

STATE DIVISION

Survivor Benefit Fund

Ledger Balances and Computed Liabilities

Comparative Statement

	June 30		
	1971	1970	1969
S-1 (Joint and Survivor) Benefits Being Paid:			
Ledger Balance	\$12,681,941*	\$10,958,206	\$10,954,204
Computed Liabilities	14,069,880#	11,794,548#	11,307,552#
Ratio of Ledger Balance to Liabilities	90.1%	92.9%	96.9%
S-2 (Fixed Amount) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Ledger Balance	\$26,041,361*	\$22,161,705	\$21,120,894
Computed Liabilities	24,391,164#	19,639,092#	19,009,692#
Ratio of Ledger Balance to Liabilities	106.8%	112.8%	111.1%
S-1 & S-2 Combined Benefits Being Paid:			
Ledger Balance	\$38,723,302	\$33,119,911	\$32,075,098
Computed Liabilities	38,461,044#	31,433,640#	30,317,244#
Ratio of Ledger Balance to Liabilities	100.7%	105.4%	105.8%
Total Survivor Benefit Fund:			
Ledger Balance	\$50,223,261*	\$44,228,152	\$41,444,578
Computed Liabilities Incurred:			
Benefits Being Paid	38,461,044	31,433,640	30,317,244
Deferred Cases	4,411,536	4,191,972	4,069,872
Total	\$42,872,580#	\$35,625,612#	\$34,387,116#
Ratio of Balance to Liabilities	117.1%	124.1%	120.5%
Reserve for Active Members	\$ 7,350,681	\$ 8,602,540	\$ 7,057,462

Includes 1965 and 1968 Increases.

* After recommended transfers.

Schedule 6.

STATE DIVISION

Survivor Benefit Fund

Survivor Benefit Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation						
Men	21	13.8%	77.9%	8.3%	100.0%	\$ 2,816
Women	590	21.7	70.5	7.8	100.0	91,512
Totals	<u>611</u>					<u>94,328</u>

Survivor Benefit to Beneficiary of Deceased Member
Fixed Benefit Amount

Widower - no child	38		93.8	6.2	100.0	3,840
Parent - male	<u>1</u>		100.0		100.0	96
Sub-totals - male	39					<u>3,936</u>
Widow - no child	939		91.9	8.1	100.0	97,159
Widow - child	338		96.1	3.9	100.0	74,175
Parent - female	<u>11</u>		90.7	9.3	100.0	1,087
Sub-totals - female	1,288					<u>172,421</u>
Child only	<u>115</u>		93.1	6.9	100.0	<u>17,469</u>
Totals	1,442					\$193,826

Total Benefits Being Paid from Survivor Benefit Fund

Men	60					\$ 6,752
Women	1,878					263,933
Children	<u>115</u>					<u>17,469</u>
Totals	2,053					\$288,154

Schedule 7.

STATE DIVISION

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries June 30, 1971

Tabulated by Type of Benefit to be Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Deferred Allowances</u>
Fixed Benefit Amounts		
Widowers		
Deferred to age 65	25	\$ 2,405
Widows		
Deferred to age 50	9	960
Deferred to age 62	300	28,399
Deferred to age 65	39	2,583
Totals	<u>348</u>	<u>31,942</u>
Totals	<u>373</u>	<u>\$34,347</u>

Schedule 8.

STATE DIVISION

Survivor Benefit Fund

Beneficiaries June 30, 1971

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>	<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
1	1	\$ 96	40	10	\$ 2,268
2	2	256	41	9	2,135
4	1	216	42	13	3,115
			43	10	2,229
5	1	162	44	10	2,064
6	3	546			
7	3	533	45	14	3,048
8	6	1,156	46	15	4,367
9	9	1,805	47	19	3,934
			48	24	5,117
10	3	548	49	17	3,562
11	9	1,881			
12	6	802	50	23	4,926
13	15	2,860	51	27	5,193
14	8	1,217	52	26	3,844
			53	26	4,641
15	13	1,742	54	25	3,545
16	9	1,084			
17	8	796	55	28	4,557
18	9	890	56	45	7,050
19	3	296	57	45	6,733
			58	42	6,604
20	2	190	59	32	4,812
21	2	160			
24	2	472	60	48	7,451
			61	45	6,864
26	1	186	62	62	8,366
28	2	266	63	100	13,094
29	1	234	64	100	12,301
30	1	100	65	91	11,240
31	1	236	66	100	14,390
32	3	678	67	87	10,328
33	2	481	68	92	9,741
34	5	893	69	92	12,522
35	5	1,224	70	68	7,760
36	4	618	71	81	10,062
37	1	236	72	60	7,436
38	5	1,250	73	57	6,616
39	8	1,899	74	35	3,806

(Schedule 8 concluded on Page 16)

Schedule 8. - concluded

STATE DIVISION

Survivor Benefit Fund

Beneficiaries June 30, 1971

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
75	53	\$ 7,114
76	44	5,221
77	34	3,959
78	37	3,317
79	28	4,263
80	25	2,518
81	18	1,898
82	16	1,701
83	13	1,532
84	11	915
85	11	1,074
86	10	1,072
87	6	529
88	3	297
89	6	489
90	4	321
91	1	102
92	1	102
Totals	2,053	\$288,154

Schedule 9.

STATE DIVISION

Survivor Benefit Fund

Deferred Beneficiaries June 30, 1971

Tabulated by Attained Ages and Deferment Ages

Attained Ages	Deferred to age 50		Deferred to age 62		Deferred to age 65		Totals	
	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances
26		\$		\$	1	\$ 96	1	\$ 96
27					1	100	1	100
33					1	96	1	96
40			1	96	1	96	2	192
41			1	90			1	90
43			1	96			1	96
44	1	106	5	476			6	582
45			1	91	1	76	2	167
46	2	206	4	374	1	76	7	656
47	1	106	6	566			7	672
48	3	318	5	460	1	51	9	829
49	2	224	4	369	2	172	8	765
50			9	859	1	96	10	955
51			9	866	4	404	13	1,270
52			12	1,141	3	247	15	1,388
53			7	652	2	172	9	824
54			16	1,528	3	243	19	1,771
55			14	1,322			14	1,322
56			26	2,446	5	419	31	2,865
57			24	2,254	3	178	27	2,432
58			30	2,864	6	446	36	3,310
59			34	3,200	3	270	37	3,470
60			38	3,612	2	151	40	3,763
61			37	3,518	9	602	46	4,120
62			15	1,429	4	279	19	1,708
63			1	90	3	153	4	243
64					2	125	2	125
65					5	440	5	440
Totals	9	960	300	\$28,399	64	\$4,988	373	\$34,347

Schedule 10.

STATE DIVISION

Survivor Benefit Fund

Liabilities for Beneficiaries June 30, 1971
Tabulated by Type of Benefit Being Paid and To Be Paid

<u>Group</u>	<u>Liabilities for</u>				
	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
<u>LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u> (Including Cases Previously Paid But Now in Blackout Period)					
Joint and Survivor Computation					
Men	12.2%	72.0%	15.8%	100.0%	\$ 287,208
Women	19.5	62.9	17.6	100.0	<u>13,782,672</u>
Total Liabilities for Joint and Survivor Benefits Being Paid					14,069,880
Fixed Benefit Amount					
Widower - no child		87.7	12.3	100.0	363,300
Parent - male		94.6	5.4	100.0	<u>7,164</u>
Sub-totals - male					370,464
Widow - no child		82.7	17.3	100.0	14,201,184
Widow - with children		85.8	14.2	100.0	8,744,160
Parents - female		84.2	15.8	100.0	<u>87,216</u>
Sub-totals - female					23,032,560
Child only		92.9	7.1	100.0	988,140
Total Liabilities for Fixed Benefits					<u>24,391,164</u>
Total Liabilities for Survivor Benefits Being Paid					<u>38,461,044</u>
<u>LIABILITIES FOR DEFERRED SURVIVOR BENEFITS</u> (No Monthly Payment Being Paid or Previously Paid)					
Fixed Benefit Amount					
Widower - deferred to age 65		91.9	8.1	100.0	178,308
Widow - deferred to age 50		86.3	13.7	100.0	189,000
- deferred to age 62		89.0	11.0	100.0	3,750,840
- deferred to age 65		87.5	12.5	100.0	<u>293,388</u>
- Sub-totals					4,233,228
Total Liabilities for Deferred Benefits		88.9	11.1	100.0	<u>4,411,536</u>
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND					<u>\$42,872,580</u>

Schedule 11.

LOCAL GOVERNMENT

Survivor Benefit Fund

Ledger Balances and Computed Liabilities

Comparative Statement

	June 30		
	1971	1970	1969
S-1 (Joint and Survivor) Benefits Being Paid:			
Ledger Balance	\$21,241,606*	\$18,373,432	\$18,168,010
Computed Liabilities	23,212,224#	20,056,992#	18,886,488#
Ratio of Ledger Balance to Liabilities	91.5%	91.6%	96.2%
S-2 (Fixed Amount) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Ledger Balance	\$46,803,192*	\$40,272,786	\$38,389,164
Computed Liabilities	43,560,132#	35,528,460#	35,189,940#
Ratio of Ledger Balance to Liabilities	107.4%	113.4%	109.1%
S-1 & S-2 Combined Benefits Being Paid:			
Ledger Balance	\$68,044,798	\$58,646,218	\$56,557,174
Computed Liabilities	66,772,356#	55,585,452#	54,076,428#
Ratio of Ledger Balance to Liabilities	101.9%	105.5%	104.6%
Total Survivor Benefit Fund:			
Ledger Balance	\$84,939,429*	\$73,929,685	\$68,547,947
Computed Liabilities Incurred:			
Benefits Being Paid	66,772,356	55,585,452	54,076,428
Deferred Cases	6,888,552	6,627,636	6,692,172
Total	\$73,660,908#	\$62,213,088#	\$60,768,600#
Ratio of Balance to Liabilities	115.3%	118.8%	112.8%
Reserve for Active Members	\$11,278,521	\$11,716,597	\$ 7,779,347

Includes 1965 and 1968 Increases.

* After recommended transfers.

Schedule 12.

LOCAL GOVERNMENT

Survivor Benefit Fund

Survivor Benefit Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	<u>Current Total %</u>	<u>Current Total \$</u>
Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation						
Men	26	19.2%	71.6%	9.2%	100.0%	\$ 2,967
Women	<u>1,019</u>	22.9	69.6	7.5	100.0	<u>157,471</u>
Totals	<u>1,045</u>					<u>\$160,438</u>

Survivor Benefit to Beneficiary of Deceased Member
Fixed Benefit Amounts

Widower - no child	52		93.8%	6.2%	100.0%	5,010
Parent - male	<u>1</u>		82.4	17.6	100.0	<u>182</u>
Sub-totals - male	53					<u>5,192</u>
Widow - no child	1,711		92.0	8.0	100.0	173,934
Widow - child	631		96.3	3.7	100.0	140,749
Parents - female	<u>20</u>		92.6	7.4	100.0	<u>1,995</u>
Sub-totals - female	<u>2,362</u>					<u>316,678</u>
Child only	218		93.6	6.4	100.0	32,819
Totals	<u>2,633</u>					<u>\$354,689</u>

Total Benefits Being Paid from Survivor Benefit Fund

Men	79					
Women	3,381					\$ 8,159
Children	<u>218</u>					<u>474,149</u>
Totals	<u>3,678</u>					<u>32,819</u>
						<u>\$515,127</u>

Schedule 13.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries June 30, 1971

Tabulated by Type of Benefit to be Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Deferred Allowances</u>
Fixed Benefit Amounts		
Widowers		
Deferred to age 65	43	\$ 4,185
Widows		
Deferred to age 50	8	836
Deferred to age 62	455	42,784
Deferred to age 65	<u>93</u>	<u>6,154</u>
Totals	556	<u>49,774</u>
	<hr/>	<hr/>
Totals	599	\$53,959

Schedule 14.

LOCAL GOVERNMENT

Survivor Benefit Fund

Beneficiaries June 30, 1971

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>	<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
4	1	\$ 96	35	7	\$ 1,626
			36	7	1,726
5	12	2,102	37	17	4,145
6	8	1,287	38	9	2,257
7	10	1,799	39	14	2,957
8	4	648			
9	8	1,554	40	17	4,223
			41	17	4,610
10	12	2,321	42	18	4,536
11	17	3,229	43	21	4,543
12	18	3,134	44	20	4,766
13	20	3,181			
14	18	2,706	45	32	7,137
			46	28	5,909
15	13	1,692	47	36	8,210
16	18	2,497	48	36	7,975
17	23	2,465	49	38	7,933
18	13	1,254			
19	6	759	50	41	8,255
			51	43	8,233
20	5	706	52	52	9,113
21	22	203	53	46	8,858
23	11	323	54	44	6,522
24	3	413			
			55	52	8,537
26	2	347	56	51	8,516
27	3	652	57	67	9,931
28	4	834	58	66	9,699
29	4	870	59	77	10,127
30	3	608	60	78	9,745
31	7	1,782	61	79	11,705
32	4	933	62	109	13,846
33	7	1,847	63	143	17,118
34	6	1,425	64	139	17,515

(Schedule 14 concluded on Page 23)

Schedule 14. - concluded

LOCAL GOVERNMENT

Survivor Benefit Fund

Beneficiaries June 30, 1971

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
65	153	\$ 17,955
66	148	17,552
67	163	21,213
68	148	17,629
69	132	16,197
70	127	14,849
71	132	17,300
72	124	15,774
73	123	15,134
74	110	13,337
75	100	12,644
76	82	9,501
77	84	9,495
78	83	10,358
79	68	7,847
80	52	4,919
81	39	4,381
82	31	3,419
83	23	2,594
84	27	2,882
85	20	2,263
86	15	1,446
87	13	1,476
88	10	1,247
89	10	900
90	3	257
91	2	183
92	1	117
93	2	187
94	<u>2</u>	<u>131</u>
Totals	3,678	\$515,127

Schedule 15.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Beneficiaries June 30, 1971

Tabulated by Attained Ages and Deferment Ages

Attained Ages	Deferred to Age 50		Deferred to Age 62		Deferred to age 65		Totals	
	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances	No.	Monthly Allowances
31		\$		\$	1	\$ 96	1	\$ 96
38					1	96	1	96
39			1	91	1	96	2	187
41					2	192	2	192
42			1	96	1	96	2	192
43					2	172	2	172
44			3	272	3	288	6	560
45			5	458			5	458
46	1	106	5	464	1	96	7	666
47			6	553	1	76	7	629
48	2	212	5	460			7	672
49	5	518	10	897	4	319	19	1,734
50			16	1,515	2	172	18	1,687
51			9	831	9	698	18	1,529
52			15	1,385	5	370	20	1,755
53			22	2,054	3	223	25	2,277
54			25	2,326	4	253	29	2,579
55			30	2,834	5	349	35	3,183
56			41	3,856	6	491	47	4,347
57			30	2,885	9	673	39	3,558
58			48	4,538	11	750	59	5,288
59			51	4,851	9	637	60	5,488
60			48	4,496	6	431	54	4,927
61			44	4,183	11	847	55	5,030
62			37	3,451	9	609	46	4,060
63			2	192	9	718	11	910
64			1	96	12	832	13	928
65					9	759	9	759
Totals	8	\$836	455	\$42,784	136	\$10,339	599	\$53,959

LOCAL GOVERNMENT

Survivor Benefit Fund

Liabilities for Beneficiaries June 30, 1971

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	Liabilities for				Current Total %	Current Total \$
	Normal Annuities	Initial Pensions	Post-Retire. Increases	Current Total %		
<u>LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u> (Including Cases Previously Paid But Now in Blackout Period)						
Joint and Survivor Computation						
Men	18.2%	64.2%	17.6%	100.0%	\$	352,080
Women	20.6	62.2	17.2	100.0		<u>22,860,144</u>
Total Liabilities for Joint and Survivor Benefits Being Paid						<u>23,212,224</u>
Fixed Benefit Amount						
Widower - no child		87.4	12.6	100.0		479,064
Parent - male		77.9	22.1	100.0		<u>11,136</u>
Sub-totals - male						<u>490,200</u>
Widow - no child		82.9	17.1	100.0		24,421,044
Widow - child		84.0	16.0	100.0		16,519,188
Parents - female		86.5	13.5	100.0		<u>168,108</u>
Sub-totals - female						<u>41,108,340</u>
Child only		91.9	8.1	100.0		1,961,592
Total Liabilities for Fixed Benefits						<u>43,560,132</u>
Total Liabilities for Survivor Benefits Being Paid						<u>66,772,356</u>
<u>LIABILITIES FOR DEFERRED SURVIVOR BENEFITS</u> (No Monthly Payment Being Paid or Previously Paid)						
Fixed Benefit Amount						
Widower - Deferred to age 65		91.9	8.1	100.0		339,372
Widow - deferred to age 50		86.3	13.7	100.0		173,016
- deferred to age 62		89.0	11.0	100.0		5,675,268
- deferred to age 65		87.4	12.6	100.0		<u>700,896</u>
- Sub-totals						<u>6,549,180</u>
Total Liabilities for Deferred Benefits		88.9	11.1	100.0		<u>6,888,552</u>
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND						<u>\$73,660,908</u>

APPENDIX

Schedule 17.

Single Life Retirement Values

<u>Sample Attained Ages</u>	<u>Present Value of \$1 Monthly For Life Increasing 1.5% Annually (1st Increase After 3 Years)</u>		<u>Future Life Expectancy (Years)</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
	40	\$241.17	\$258.21	35.48
45	221.89	241.17	30.85	35.48
50	201.07	221.89	26.44	30.85
55	179.14	201.07	22.30	26.44
60	156.06	179.14	18.43	22.30
65	131.91	156.06	14.80	18.43
70	108.22	131.91	11.58	14.80
75	85.81	108.22	8.79	11.58
80	66.21	85.81	6.54	8.79
85	51.11	66.21	4.89	6.54

Recommended Transfers From Employer Accumulation Fund To Cover
Change In Assumed Interest Rate and 1.5% Escalator Provision

Transfer To	Amounts to Be Transferred AS OF JULY 1, 1971		
	Change In Interest Assumption	1.5% Escalator Provision	Totals
STATE DIVISION			
Annuity & Pension Reserve Fund			
SR <i>SERVICE</i>	\$(6,734,335)	\$19,632,968	\$12,898,633
DR <i>DISABILITY</i>	(965,858)	2,796,350	1,830,492
Total A & PR	(7,700,193)	22,429,318	14,729,125
Survivor Benefit Fund			
Employer	(285,564)	478,656	193,092
S-1	(544,980)	1,595,004	1,050,024
S-2	(1,033,188)	2,535,636	1,502,448
Total SBF	(1,863,732)	4,609,296	2,745,564
Totals	(9,563,925)	27,038,614	17,474,689
LOCAL GOVERNMENT DIVISION			
Annuity & Pension Reserve Fund			
SR	(11,598,881)	33,808,726	22,209,845
DR	(1,316,686)	3,812,062	2,495,376
Total A & PR	(12,915,567)	37,620,788	24,705,221
Survivor Benefit Fund			
Employer	(441,804)	744,276	302,472
S-1	(877,784)	2,569,392	1,691,608
S-2	(1,813,260)	4,348,788	2,535,528
Total SBF	(3,132,848)	7,662,456	4,529,608
Totals	(16,048,415)	45,283,244	29,234,829
TOTAL TRANSFER FROM EMPLOYER ACCUMULATION FUND	\$(25,612,340)	\$72,321,858	\$46,709,518

a & p

June-30, 1971 - Bal = 602,029,238

Transfer To from
Employer T.F

S = 140,429,125
L = 24,705,221

TOTAL - A & P. Reserve = 641,463,584

Liability

= 615,660,278

= 25,803,306

Surplus over 100% }
Reserve Requirement }

or 104.2%

$\frac{1}{2}\%$ Interest assumption
increase

Pays 35.4% of
Benefit cost of $1\frac{1}{2}\%$ Escalator.