

PERS/Annual Actuarial
Valuations, PB #7

ANNUAL ACTUARIAL VALUATION
RETIRANTS AND BENEFICIARIES
DECEMBER 31, 1980
OHIO
PUBLIC EMPLOYEES RETIREMENT SYSTEM

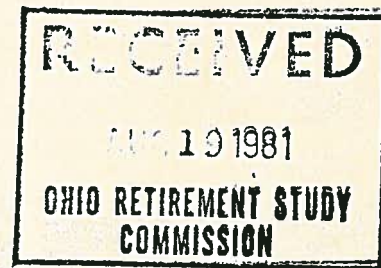


TABLE OF CONTENTS

	<u>Pages</u>
Introduction	1
Comments on Valuation Results	2-3
Annuity and Pension Reserve Fund:	
Summary	4
Detail	5-9
Survivor Benefit Fund:	
State Division: Detail	10-14
Summary	15
Local Government: Detail	16-20
Summary	21
Sheriffs & Deputies: Detail	22-24
Summary	25
Recommended Transfers	26
Appendix:	
Single Life Retirement Values	27

July 24, 1981

The Retirement Board

Public Employees Retirement System of Ohio

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 December 31, 1980.

The statistical data required to make the valuation was furnished on magnetic tape by your Executive Director and his Staff. Data was examined for reasonableness, but was not otherwise audited by the actuary.

The interest rate used in making the valuation was 6.5% per annum, compounded annually. This assumption is unchanged from a year ago.

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 21). This assumption is unchanged from a year ago.

COMMENTS

Assets available for financing benefit promises to people currently being paid retirement allowances are held in retired life reserves. There are two retired life reserves within each division -- the Annuity and Pension Reserve from which superannuation and disability allowances are paid and the Survivors Benefit Fund from which death before retirement allowances are paid.

Retirant and beneficiary liabilities are the present values of benefits likely to be paid retirants and beneficiaries currently on the rolls and deferred survivor beneficiaries whose benefits have been determined, but will not begin until a future date. If an amount equal to the retired life liabilities is credited each year with interest at the rate assumed in the valuation and if retirants and beneficiaries live and die in accordance with the mortality assumptions, then this amount together with interest credited thereon will just be sufficient to pay the allowances for the remaining lifetimes of the retirants and beneficiaries included in the valuation.

Based upon the results of the December 31, 1980 valuation, the mortality table in use continues to be a reasonable measure of mortality being experienced among retirants and beneficiaries. This is evidenced by there being little change in the "Ratio of Ledger Assets to Liabilities" in the Annuity and Pension Reserve Fund, as follows:

Ratio of		
<u>Ledger Assets to Liabilities</u>		
<u>12/80</u>	<u>12/79</u>	<u>Change</u>
102.2%	102.6%	-0.4%

Contributions for survivor benefits. The contributions to the Survivor Benefit Fund have been more than enough to cover the liabilities for deaths experienced. This condition is indicated by the SBF being more than 100% funded.

The SBF - State Division is 149.3% funded (page 15) and the SBF - Local Government Division is 150.0% funded (page 21).


Accordingly, the computed employer contribution rates for future survivors have been adjusted downward as follows:

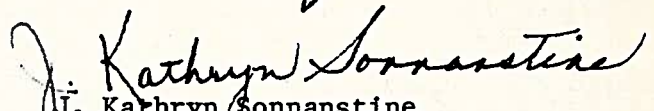
<u>Division</u>	<u>Employer SBF Rate</u>	
	<u>Computed</u>	<u>Adjusted</u>
State	1.40%	1.01%
Local Government (except SD)	1.52	1.08

The recommended reserve transfers, as of January 1, 1981, on page 26 will adjust the retired life reserves for the payment of health insurance premiums and medicare reimbursements during the 12 month period ended December 31, 1980.

Respectfully submitted,

GABRIEL ROEDER, SMITH & COMPANY


Norman L. Jones


J. Kathryn Sonnanstine

JKS:mld

ANNUITY AND PENSION

RESERVE FUND

Schedule 1.

Annuity and Pension Reserve Fund

Monthly Allowances, Reported Assets and Actuarial Liabilities

Comparative Statement

<u>Valuation Date</u>	<u>Monthly Allowances</u>	<u>Reported Assets*</u>	<u>Actuarial Liabilities</u>	<u>Ratio of Assets to Liabilities</u>
June 30, 1971	\$ 5,101,389	\$ 602,029,238	\$ 576,225,932	104.5%
June 30, 1972	6,166,135	768,611,054	741,156,768	103.7
June 30, 1973	6,890,582	870,691,809	831,421,128	104.7
June 30, 1974	7,638,687	984,326,148	932,720,292	105.5
June 30, 1975	9,618,849	1,162,379,396	1,110,646,704	104.7
June 30, 1976	10,788,319	1,293,638,273	1,253,181,067	103.2
June 30, 1977	12,513,683	1,512,742,566	1,478,069,130	102.3
June 30, 1978	14,100,877	1,724,474,899	1,698,455,444	101.5
June 30, 1979	15,871,851	2,006,938,603	1,972,905,274	101.7
December 31, 1979	17,248,595	2,209,455,444	2,154,388,804	102.6
December 31, 1980	19,233,199	2,476,909,176	2,424,287,690	102.2

* Including recommended transfers.

Schedule 2.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1980

Type of Benefit, Monthly Amount and Actuarial Liabilities

Group	Number	% of Current Total \$			Current Total \$	Actuarial Liabilities
		Member Annuities	Initial Pensions	Post-Retire. Pension Increases		
SUPERANNUATION RETIREMENT						
Straight Life Allowance - Benefit Terminating at Death						
Men	14,842	25.7%	57.8%	16.5%	\$4,440,818	\$ 441,685,711
Women	21,387	21.4	60.6	18.0	5,446,566	656,120,640
Totals	36,229				9,887,384	1,097,806,351
Option 1 Allowance - Joint and Survivor Benefit						
Men	5,844	26.4	64.5	9.1	1,670,200	276,409,535
Women	648	24.3	66.3	9.4	162,059	25,833,525
Totals	6,492				1,832,259	302,243,060
Option 2 Allowance - Modified Joint and Survivor Benefit						
Men	7,292	24.5	65.2	10.3	3,232,257	445,259,278
Women	495	23.1	67.9	9.0	167,293	25,342,288
Totals	7,787				3,399,550	470,601,566
Option 3 Allowance - Life Benefit With Guaranteed Periods 0 to 5 Years						
Men	442	22.4	58.6	19.0	160,974	16,050,979
Women	88	17.5	52.8	29.7	19,799	2,072,268
Totals	530				180,773	18,123,247
Option 3 Allowance - Life Benefit With Guaranteed Periods 6 to 10 Years						
Men	867	22.9	58.3	18.8	285,355	27,716,884
Women	134	16.9	58.5	24.6	38,339	4,536,888
Totals	1,001				\$ 323,694	\$ 32,253,772

(Schedule 2 continued on page 7)

Schedule 2. - continued

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1980

Type of Benefit, Monthly Amount and Actuarial Liabilities

<u>% of Current Total \$</u>						
<u>Group</u>	<u>Number</u>	<u>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire.</u>	<u>Current Total \$</u>	<u>Actuarial Liabilities</u>
				<u>Pension Increases</u>		
Option 3 Allowance - Life Benefit With Guaranteed Periods 11 to 15 Years						
Men	796	22.1%	65.2%	12.7%	\$ 342,005	\$ 42,685,368
Women	88	19.7	65.2	15.1	28,859	4,018,716
Totals	884				370,864	46,704,084
Option 3 Allowance - Life Benefit With Guaranteed Periods 16 to 20 Years						
Men	20	17.7	56.3	26.0	8,668	603,228
Women	3	16.8	70.9	12.3	1,227	170,976
Totals	23				9,895	774,204
Option 3 Allowance - Special Joint and Survivor Benefit						
Men	17	17.4	65.2	17.4	16,019	1,791,204
Women	none				none	none
Totals	17				16,019	1,791,204
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 1, 2 or 3 - Life Benefit						
Men	93	20.3	57.3	22.4	19,097	2,078,772
Women	5,463	19.2	50.2	30.6	1,041,575	111,610,140
Totals	5,556				1,060,672	113,688,912
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 3 - Guaranteed Period Only						
M-W	483	22.7	59.1	18.2	\$ 147,310	\$ 7,249,212

(Schedule 2 concluded on page 8)

Schedule 2. - concluded

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1980

Type of Benefit, Monthly Amount and Actuarial Liabilities

<u>Group</u>	<u>Number</u>	<u>% of Current Total \$</u>			<u>Current Total \$</u>	<u>Actuarial Liabilities</u>
		<u>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>		
Total for Superannuation Allowances Being Paid						
Men	30,213	25.2%	61.5%	13.3%	\$10,175,393	\$1,254,280,959
Women	28,306	21.2	59.3	19.5	6,905,717	829,705,441
M-W	483	22.7	59.1	18.2	147,310	7,249,212
Totals	59,002				17,228,420	2,091,235,612

DISABILITY RETIREMENT

Straight Life Allowance - Benefit Terminating at Death

Men	3,340	14.6	75.5	9.9	1,465,436	239,320,972
Women	1,889	12.9	74.3	12.8	539,343	93,731,106
Totals	5,229				2,004,779	333,052,078

TOTAL BENEFITS BEING PAID FROM ANNUITY AND PENSION RESERVE FUND

Men	33,553	23.8	63.3	12.9	11,640,829	1,493,601,931
Women	30,195	20.6	60.4	19.0	7,445,060	923,436,547
M-W	483	22.7	59.1	18.2	147,310	7,249,212
Totals	64,231				\$19,233,199	\$2,424,287,690

Schedule 3.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1980

Current Monthly Total \$ By Attained Ages

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
20-24	1	\$ 198		\$	1	\$ 198
25-29			13	8,330	13	8,330
30-34	2	321	68	42,196	70	42,517
35-39	5	564	110	69,523	115	70,087
40-44	9	2,657	222	130,556	231	133,213
45-49	29	13,295	400	203,961	429	217,256
50-54	389	280,227	764	357,160	1,153	637,387
55-59	1,387	970,634	1,371	545,138	2,758	1,515,772
60-64	7,445	2,599,433	1,376	443,096	8,821	3,042,529
65-69	15,024	4,321,211	575	133,531	15,608	4,454,742
70-74	14,766	4,044,462	224	46,887	14,990	4,091,349
75-79	10,004	2,558,789	98	22,133	10,102	2,580,922
80-84	5,876	1,408,952	8	2,268	5,884	1,411,220
85-89	2,666	651,757			2,666	651,757
90-94	778	191,732			778	191,732
95	41	9,924			41	9,924
96	41	10,602			41	10,602
97	22	6,812			22	6,812
98	17	4,275			17	4,275
99	6	1,766			6	1,766
100	11	3,499			11	3,499
Period Certain	483	147,310			483	147,310
Totals	59,002	\$17,228,420	5,229	\$2,004,779	64,231	\$19,233,199

SURVIVOR BENEFIT FUND

STATE DIVISION

Schedule 4.

STATE DIVISION

Survivor Benefit Fund

Survivor Benefit Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and Monthly Amount

Group	Number	% of Current Total \$			Current Total \$
		Normal Annuities	Initial Pensions	Post-Retire. Increases	
S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation					
Men	50	15.7%	68.9%	15.4%	\$ 11,238
Women	806	18.7	55.9	25.4	238,597
Totals	856				\$249,835

S-2 - Survivor Benefit to Beneficiary of Deceased Member
Fixed Rate Amount

Widower - no child	112		90.7	9.3	\$ 18,799
Parent - male	1		63.2	36.8	152
Subtotals - male	113				18,951
Widow - no child	1,807		78.1	21.9	333,581
Widow - child	353		89.3	10.7	147,313
Parent - female	4		62.1	37.9	741
Subtotals - female	2,164				481,635
Child only	192		84.3	15.7	39,655
Totals	2,469				\$540,241

Total Benefits Being Paid from Survivor Benefit Fund

Men	163	\$ 30,189
Women	2,970	720,232
Children	192	39,655
Totals	3,325	\$790,076

Schedule 5.

STATE DIVISION

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries December 31, 1980

Tabulated by Type of Benefit to be Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Deferred Allowances</u>
Fixed Rate Amounts		
Widowers		
Deferred to age 62	16	\$ 2,568
Deferred to age 65	<u>20</u>	<u>2,700</u>
Totals	36	5,268
Widows		
Deferred to age 50	13	3,164
Deferred to age 62	301	49,591
Deferred to age 65	<u>18</u>	<u>1,740</u>
Totals	<u>332</u>	<u>54,495</u>
Totals	368	\$59,763

Schedule 6.

STATE DIVISION

Survivor Benefit Fund

Beneficiaries December 31, 1980

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
0-4	18	\$ 5,658
5-9	63	16,069
10-14	185	45,319
15-19	351	84,998
20-24	95	25,783
25-29	13	2,946
30-34	6	1,198
35-39	11	3,324
40-44	11	3,077
45-49	15	3,523
50-54	106	29,448
55-59	240	64,697
60-64	506	108,945
65-69	662	133,950
70-74	576	115,423
75-79	371	77,046
80-84	192	43,937
85-89	86	20,343
90	2	465
91	5	1,263
92	6	1,262
93	4	662
95	1	334
96	1	296
98	<u>1</u>	<u>110</u>
Totals	3,527*	\$790,076

* Number count is greater than the number count shown on page 10 because all children in a family are tabulated. Page 10 number counts indicate number of families receiving.

Schedule 7.

STATE DIVISION

Survivor Benefit Fund

Deferred Beneficiaries December 31, 1980

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
Under 20		\$	1	\$ 191		\$	1	\$ 191
20-24					1	191	1	191
25-29			2	370			2	370
30-34			1	165	1	133	2	298
35-39					2	294	2	294
40-44	4	1,093	9	1,639	3	317	16	3,049
45			2	249			2	249
46	3	819	2	264			5	1,083
47			6	1,902			6	1,902
48	2	287	5	743	1	96	8	1,126
49	4	965	7	967	2	245	13	2,177
50			11	1,920			11	1,920
51			8	1,991			8	1,991
52			8	1,232			8	1,232
53			15	2,396			15	2,396
54			21	3,252	3	345	24	3,597
55			18	2,696	1	96	19	2,792
56			22	3,616			22	3,616
57			35	5,928	2	160	37	6,088
58			25	4,025	3	320	28	4,345
59			29	4,199	2	160	31	4,359
60			42	6,618	5	915	47	7,533
61			42	7,107	4	388	46	7,495
62			3	401	4	400	7	801
63					2	160	2	160
64			1	96			1	96
65			2	192	2	220	4	412
Totals	13	\$3,164	317	\$52,159	38	\$4,440	368	\$59,763

Schedule 8.

STATE DIVISION

Survivor Benefit Fund

Actuarial Liabilities for Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	<u>% of Current Total \$</u>			Current Total \$
	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	
<u>ACTUARIAL LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u> <u>(Including Cases Previously Paid But Now in Blackout Period)</u> Joint and Survivor Computation				
Men	14.2%	59.7%	26.1%	\$ 1,168,608
Women	16.7	49.1	34.2	<u>30,023,676</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				31,192,284

	<u>Fixed Rate Amount</u>			
Widower - no child		77.9	22.1	2,215,032
Parent - male		59.2	40.8	<u>6,828</u>
Sub-totals - male				2,221,860
Widow - no child		67.7	32.3	44,020,164
Widow/widower with children		78.6	21.4	15,157,044
Parent - female		57.3	42.7	<u>45,240</u>
Subtotals - female				59,222,448
Child only		73.7	26.3	2,117,676
Total Liabilities for Fixed Rate Amounts				<u>63,561,984</u>
Total Liabilities for Survivor Benefits Being Paid				\$ 94,754,268

ACTUARIAL LIABILITIES FOR DEFERRED SURVIVOR BENEFITS
(No Monthly Payment Being Paid or Previously Paid)

	<u>Fixed Rate Amount</u>			
Widower - deferred to age 62				\$ 276,180
- deferred to age 65				<u>168,552</u>
- Subtotals				444,732
Widow - deferred to age 50				521,280
- deferred to age 62				5,466,528
- deferred to age 65				<u>163,596</u>
- Subtotals				6,151,404
Total Liabilities for Deferred Benefits				<u>6,596,136</u>
TOTAL LIABILITIES SURVIVOR BENEFIT FUND				\$101,350,404

Schedule 9.

STATE DIVISION

Survivor Benefit Fund

Reported Assets and Actuarial Liabilities

Comparative Statement

	Valuation Date		
	12-31-80	12-31-79	6-30-79
S-1 (Joint and Survivor) Benefits Being Paid:			
Reported Assets	\$ 26,684,153*	\$ 27,257,200*	\$ 26,620,183*
Actuarial Liabilities	31,192,284	29,115,408	27,991,284
Ratio of Assets to Liabilities	85.6%	93.6%	95.1%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Reported Assets	\$ 60,220,192*	\$ 61,616,795*	\$ 56,621,523*
Actuarial Liabilities	63,561,984	58,221,468	55,334,724
Ratio of Assets to Liabilities	94.7%	105.8%	102.3%
S-1 & S-2 Combined Benefits Being Paid:			
Reported Assets	\$ 86,904,345	\$ 88,873,995	\$ 83,241,706
Actuarial Liabilities	94,754,268	87,336,876	83,326,008
Ratio of Assets to Liabilities	91.7%	101.8%	99.9%
Total Survivor Benefit Fund			
Reported Assets	\$151,274,622*	\$133,701,152*	\$122,321,621*
Actuarial Liabilities			
Benefits Being Paid	94,754,268	87,336,876	83,326,008
Deferred Cases	6,596,136	5,790,816	5,611,536
Totals	\$101,350,404	\$ 93,127,692	\$ 88,937,544
RATIO OF ASSETS TO LIABILITIES	149.3%	143.6%	137.5%
Reserve for Active Members	49.3%	43.6%	37.5%

* After recommended transfers.

SURVIVOR BENEFIT FUND

LOCAL GOVERNMENT DIVISION

Schedule 10.

LOCAL GOVERNMENT

Survivor Benefit Fund

Survivor Benefit Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and Monthly Amount

Group	Number	% of Current Total \$			Current Total \$
		Normal Annuities	Initial Pensions	Post-Retire. Increases	
Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation					
Men	61	19.7%	63.6%	16.7%	\$ 12,791
Women	1,415	19.0	58.3	22.7	420,295
Totals	1,476				433,086

Survivor Benefit to Beneficiary of Deceased Member
Fixed Rate Amounts

Widower - no child	149		88.0	12.0	22,735
Parent - male	none				none
Subtotals - male	149				22,735
Widow - no child	3,301		77.8	22.2	581,431
Widow - child	791		88.7	11.3	317,873
Parent - female	8		60.5	39.5	1,402
Subtotals - female	4,100				900,706
Child only	322		82.6	17.4	67,155
Totals	4,571				990,596

Total Benefits Being Paid from Survivor Benefit Fund

Men	210	35,526
Women	5,515	1,321,001
Children	322	67,155
Totals	6,047	\$1,423,682

Schedule 11.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries December 31, 1980

Tabulated by Type of Benefit to be Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>Deferred Allowances</u>
Fixed Rate Amounts		
Widowers		
Deferred to age 62	19	\$ 2,808
Deferred to age 65	30	3,597
Totals	49	6,405
Widows		
Deferred to age 50	35	10,149
Deferred to age 62	527	89,939
Deferred to age 65	43	3,990
Totals	605	104,078
Totals	654	\$110,483

Schedule 12.

LOCAL GOVERNMENT

Survivor Benefit Fund

Beneficiaries December 31, 1980

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
0-4	42	\$ 15,256
5-9	152	42,146
10-14	434	108,775
15-19	762	158,931
20-24	185	44,324
25-29	16	4,317
30-34	13	4,052
35-39	10	2,781
40-44	13	5,240
45-49	30	11,660
50-54	186	50,941
55-59	456	125,117
60-64	862	185,456
65-69	1,146	213,818
70-74	935	180,197
75-79	676	134,106
80-84	405	86,546
85-89	200	40,644
90	12	2,318
91	6	1,616
92	7	2,100
93	5	924
94	2	316
95	1	146
96	1	343
97	2	593
98	2	339
100	<u>3</u>	<u>680</u>
Totals	6,564*	\$1,423,682

* Number count is greater than the number count shown on page 16 because all children in a family are tabulated. Page 16 number counts indicate number of families receiving.

Schedule 13.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Beneficiaries December 31, 1980

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
30-34		\$	1	\$ 229		\$	1	\$ 229
35-39	1	314	2	372			3	686
40-44	5	1,650	17	3,187	2	306	24	5,143
45	3	1,292	7	1,355			10	2,647
46	5	2,106	7	1,338			12	3,444
47	7	1,491	7	847	1	132	15	2,470
48	2	604	11	2,661	5	609	18	3,874
49	9	2,119	12	2,591			21	4,710
50	2	390	7	1,741	1	145	10	2,276
51	1	183	16	3,119	1	129	18	3,431
52			23	4,476	3	330	26	4,806
53			23	3,897	5	590	28	4,487
54			31	5,387	1	102	32	5,489
55			36	5,668	1	96	37	5,764
56			49	8,417			49	8,417
57			36	6,418	2	211	38	6,629
58			56	8,476	4	510	60	8,986
59			65	10,956	4	361	69	11,317
60			60	9,986	9	904	69	10,890
61			66	9,911	7	646	73	10,557
62			8	1,139	7	660	15	1,799
63			2	192	8	703	10	895
64			2	192	7	673	9	865
65					2	192	2	192
66			1	96	2	192	3	288
68					1	96	1	96
72			1	96			1	96
Totals	35	\$10,149	546	\$92,747	73	\$7,587	654	\$110,483

Schedule 14.

LOCAL GOVERNMENT

Survivor Benefit Fund

Liabilities for Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	% of Current Total \$			Current Total \$
	Normal Annuities	Initial Pensions	Post-Retire. Increases	
ACTUARIAL LIABILITIES FOR SURVIVOR BENEFITS BEING PAID (Including Cases Previously Paid But Now in Blackout Period)				
Joint and Survivor Computation				
Men	17.7%	54.9%	27.4%	\$ 1,351,092
Women	16.5	51.0	32.5	<u>54,277,848</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				\$ 55,628,940
<u>Fixed Rate Amount</u>				
Widower - no child		77.1	22.9	\$ 2,522,292
Parent - male				<u>none</u>
Subtotals - male				2,522,292
Widow - no child		67.7	32.3	75,637,968
Widow - with children		78.5	21.5	33,598,476
Parent - female		58.3	41.7	<u>85,500</u>
Subtotals - female				109,321,944
Child only		75.2	24.8	<u>3,078,504</u>
Total Liabilities for Fixed Rate Amounts				114,922,740
Total Liabilities for Survivor Benefits Being Paid				\$170,551,680
ACTUARIAL LIABILITIES FOR DEFERRED SURVIVOR BENEFITS (No Monthly Payment Being Paid or Previously Paid)				
<u>Fixed Rate Amount</u>				
Widower - deferred to age 62				\$ 249,732
- deferred to age 65				<u>226,524</u>
- Subtotals				476,256
Widow - deferred to age 50				1,665,408
- deferred to age 62				9,906,072
- deferred to age 65				<u>456,684</u>
- Subtotals				12,028,164
Total Liabilities for Deferred Benefits				<u>12,504,420</u>
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND				\$183,056,100

Schedule 15.

LOCAL GOVERNMENT

Survivor Benefit Fund

Reported Assets and Actuarial Liabilities

Comparative Statement

	Valuation Date		
	12-31-80	12-31-79	6-30-79
S-1 (Joint and Survivor) Benefits Being Paid:			
Reported Assets	\$ 46,102,564*	\$ 46,707,159*	\$ 44,974,007*
Actuarial Liabilities	55,628,940	49,833,972	46,833,144
Ratio of Assets to Liabilities	82.9%	93.7%	96.0%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Reported Assets	\$105,953,719*	\$108,628,889*	\$ 99,669,668*
Actuarial Liabilities	114,922,740	105,383,472	99,622,416
Ratio of Assets to Liabilities	92.2%	103.1%	100.1%
S-1 & S-2 Combined Benefits Being Paid:			
Reported Assets	\$152,056,283	\$155,336,048	\$144,643,675
Actuarial Liabilities	170,551,680	155,217,444	146,455,560
Ratio of Assets to Liabilities	89.2%	100.1%	98.8%
Total Survivor Benefit Fund:			
Reported Assets	\$274,537,625*	\$246,178,973*	\$232,874,731*
Actuarial Liabilities			
Benefits Being Paid	170,551,680	155,217,444	146,455,560
Deferred Cases	12,504,420	10,558,728	9,777,456
Totals	\$183,056,100	\$165,776,172	\$156,233,016
RATIO OF ASSETS TO LIABILITIES	150.0%	148.5%	149.1%
Reserve for Active Members	50.0%	48.5%	49.1%

* After recommended transfers.

SURVIVOR BENEFIT FUND

SHERIFFS & DEPUTIES

Schedule 16.

SHERIFFS & DEPUTIES

Survivor Benefit Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and Monthly Amount

<u>Group</u>	<u>Number</u>	<u>% of Current Total \$</u>			<u>Current Total \$</u>
		<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	
Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation					
Men	-	-- %	-- %	-- %	\$ none
Women	4	24.0	70.0	6.0	1,975
Totals	4				\$1,975

Survivor Benefit to Beneficiary of Deceased Member
Fixed Rate Amount

Widower - no child	-		--	--	\$ none
Parent - male	<u>-</u>		--	--	none
Subtotals - male	-				none
Widow - no child	5		97.1	2.9	1,327
Widow - with children	7		96.0	4.0	3,225
Parent - female	<u>-</u>		--	--	none
Subtotals - female	12				<u>4,552</u>
Child only	1		97.2	2.8	356
Totals	<u>13</u>				<u>\$4,908</u>

Total Benefits Being Paid from Survivor Benefit Fund

Men	none	\$ none
Women	16	6,527
Children	<u>1</u>	<u>356</u>
Totals	17	\$6,883

Schedule 17.

SHERIFFS & DEPUTIES

Survivor Benefit Fund

Beneficiaries December 31, 1980

Tabulated by Attained Ages

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
5-9	3	\$1,013
10-14	6	1,211
15-19	4	1,357
50-54	2	760
55-59	3	1,282
60-64	1	381
65-69	1	267
70-74	<u>2</u>	<u>612</u>
Totals	22*	\$6,883

* Number count is greater than the number count shown on page 22 because all children in a family are tabulated. Page 22 number counts indicate number of families receiving.

Schedule 18.

SHERIFFS & DEPUTIES

Liabilities for Beneficiaries December 31, 1980

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	% of Current Total \$			Current Total \$
	Normal Annuities	Initial Pensions	Post-Retire. Increases	
ACTUARIAL LIABILITIES FOR SURVIVOR BENEFITS BEING PAID (Including Cases Previously Paid But Now in Blackout Period)				
Joint and Survivor Computation				
Men	— %	— %	— %	\$ none
Women	18.8	56.1	25.1	<u>342,300</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				\$342,300
<u>Fixed Rate Amount</u>				
Widower - no child		—	—	\$ none
Parent - male		—	—	<u>none</u>
Subtotals - male				none
Widow - no child		78.5	21.5	199,512
Widow - with children		83.5	16.5	302,868
Parent - female		—	—	<u>none</u>
Subtotals - female				502,380
Child only		87.3	12.7	2,559
Total Liabilities for Fixed Rate Amounts				<u>504,939</u>
Total Liabilities for Survivor Benefits Being Paid				<u>\$847,239</u>
ACTUARIAL LIABILITIES FOR DEFERRED SURVIVOR BENEFITS (No Monthly Payment Being Paid or Previously Paid)				
<u>Fixed Rate Amount</u>				
Total Liabilities for Deferred Benefits				\$ none
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND				<u>\$847,239</u>

Schedule 19.

SHERIFFS & DEPUTIES

Survivor Benefit Fund

Reported Assets and Actuarial Liabilities

Comparative Statement

	Valuation Date	
	12-31-80	12-31-79
S-1 (Joint and Survivor) Benefits Being Paid:		
Reported Assets	\$ 254,557*	\$ 257,082*
Actuarial Liabilities	342,300	302,472
Ratio of Assets to Liabilities	74.4%	85.0%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:		
Reported Assets	97,475*	103,001*
Actuarial Liabilities	504,939	282,864
Ratio of Assets to Liabilities	19.3%	36.4%
S-1 & S-2 Combined Benefits Being Paid:		
Reported Assets	352,032	514,164
Actuarial Liabilities	847,239	585,336
Ratio of Assets to Liabilities	41.6	87.8%
Total Survivor Benefit Fund		
Reported Assets	3,560,270*	3,141,895*
Actuarial Liabilities Incurred:		
Benefits Being Paid	847,239	585,336
Deferred Cases	none	25,284
Totals	\$ 847,239	\$ 610,620
RATIO OF ASSETS TO LIABILITIES	420.2%	514.5%
Reserve for Active Members	320.2%	414.5%

* After recommended transfers.

**RECOMMENDATIONS FOR
RESERVE TRANSFERS**

Schedule 20.

Recommended Transfers From Employer Accumulation Fund

To Cover

Health Insurance Premiums & Medicare Reimbursements

During 1980

Transfer To	Amounts to be Transferred from EAF As of January 1, 1981		
	Med. Reimburse.	Health Insurance	Totals
A & PR Fund			
State Division			
SR	\$1,794,851	\$10,765,876	\$12,560,727
DR	53,051	2,013,861	2,066,912
Totals	1,847,902	12,779,737	14,627,639
Local Government			
SR	3,020,897	17,811,825	20,832,722
DR	62,800	2,793,043	2,855,843
Totals	3,083,697	20,604,868	23,688,565
Sheriffs & Deputies			
SR	1,349	47,785	49,134
DR	none	19,714	19,714
Totals	1,349	67,499	68,848
TOTAL TO A & PR	4,932,948	33,452,104	38,385,052
Survivor Benefit Fund			
State Division			
Employer	none	none	none
S-1	48,926	442,008	490,934
S-2	109,381	1,396,189	1,505,570
Totals	158,307	1,838,197	1,996,504
Local Government			
Employer	none	none	none
S-1	89,454	809,614	899,068
S-2	214,037	2,673,593	2,887,630
Totals	303,491	3,483,207	3,786,698
Sheriffs & Deputies			
Employer	none	none	none
S-1	10	4,632	4,642
S-2	110	9,213	9,323
Totals	120	13,845	13,965
TOTAL TO SBF	461,918	5,335,249	5,797,167
TOTAL TRANSFER FROM EM- PLOYER ACCUMULATION FUND	<u>\$5,394,866</u>	<u>\$38,787,353</u>	<u>\$44,182,219</u>

APPENDIX

APPENDIX

Schedule 21.

Single Life Retirement Values

Sample Attained Ages	Present Value of \$1 Monthly For Life Increasing 3.0% Annually (1st Increase After 1 Year)		Future Life Expectancy (Years)		Expected Total Lifetime	
	Men	Women	Men	Women	Men	Women
40	\$216.90	\$229.09	35.48	40.21	75.48	80.21
45	202.35	216.90	30.85	35.48	75.85	80.48
50	185.93	202.35	26.44	30.85	76.44	80.85
55	167.95	185.93	22.30	26.44	77.30	81.44
60	148.26	167.95	18.43	22.30	78.43	82.30
65	126.89	148.26	14.80	18.43	79.80	83.43
70	105.26	126.89	11.58	14.80	81.58	84.80
75	84.24	105.26	8.79	11.58	83.79	86.58
80	65.47	84.24	6.54	8.79	86.54	88.79
85	50.80	65.47	4.89	6.54	89.89	91.54

Sample Attained Ages	Portion of Age 60 Lives Still Alive		\$1,000 Benefit Increasing 3% Annually
	Men	Women	
60	100%	100%	\$1,000
65	92	95	1,150
70	80	87	1,300
75	64	76	1,450
80	45	61	1,600
85	25	42	1,750