

ANNUAL ACTUARIAL VALUATIONS  
ACTIVE MEMBERS & INACTIVE MEMBERS  
December 31, 1979

OHIO  
PUBLIC EMPLOYEES RETIREMENT SYSTEM

**RECEIVED**

AUG 22 1980

**OHIO RETIREMENT STUDY  
COMMISSION**

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August 5, 1980

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 valuations as of December 31, 1979 of the Retirement System's liabilities for retirement allowances to be paid members, based upon Chapter 145 of the Code as last amended in 1979.

The voluminous member statistical data required to make the valuations was furnished by your Executive Director and his Staff, together with pertinent data on financial operations. This data is not audited by the actuary.

The financial assumptions used in making the valuations are summarized in the Appendix of this report. The assumptions were last revised for these valuations based upon the results of the 5 year investigation decrement experience covering years 1971 through 1975. The assumptions are established by the Retirement Board after consulting with the actuary.

Your attention is directed particularly to the Comment (page 3) and the Comparative Statements (pages ST9, ST10, LG9, LG10, SD9, SD10) and the Financial Principles (pages 5-9).

Liabilities Covering Retirants and Beneficiaries. The December 31 annual valuations of retired lives receiving monthly benefits indicates the liabilities for future benefit payments to these people. These liabilities are covered in separate reports.

COMMENTS

The December 31, 1979 actuarial valuations of members indicate the following about the previously established employer contribution rates:

- (1) The employer rates are sufficient to fully fund the costs of benefit commitments being made to members for their service currently being rendered.
- (2) After satisfying current cost requirements, the remainder of the employer rates are sufficient to fund over a reasonable period of future years the unfunded portion of liabilities for service already rendered. Pages ST10, LG10, and SD10 provide detail on the years of such future funding.

While the amortization years are of reasonable length, they are noticeably longer than they were a decade ago. The shorter the amortization years, the stronger the financing program, and vice-versa.

Contributions for survivor benefits. Based upon experience within the Survivor Benefit Fund, the employer contribution rates for survivor benefits have been adjusted:

<u>Division</u>	<u>Employer SBF Rate</u>	
	<u>12/31/1979</u>	<u>12/31/1978</u>
State	1.04%	1.34%
Local Government (except SD)	1.06	1.38

As shown by the December 31, 1979 actuarial valuations of retirants and beneficiaries, the SBF-State Division was 143.6% funded, and the SBF-Local Government Division was 148.5% funded.

Overall Condition. Based upon these December 31, 1979 valuations of members it is our opinion that the Public Employees Retirement System of Ohio continues in sound condition in accordance with actuarial principles of level-cost financing.

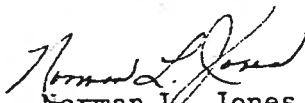
Health care premiums have risen faster than the inflation rate, resulting in further strain on financial balance.

Inflation continues to be the most threatening force to PERS stability (and every other public or private pension plan). For retired people, the purchasing power of their monthly benefit is reduced. Liabilities for non-retired members increase because member pay levels are increased. These inflation impairments have been covered only partially by the added investment return available from our inflated economy.

For the mathematics of level cost financing to work, the investment return rate must be more than the inflation rate. This has not been possible in recent years, because of the disturbances in the investment market places caused by inflation. The destructiveness of inflation is immense. Inflation is the enemy over which PERS has no direct control.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

  
Norman L. Jones

  
Richard G. Roeder

JKS:mh

Schedule 1.

Active Members in Valuation

Group Averages - Comparative Statement

Valuation Group	Dec. 31	No. of Active Members	Group Averages*			
			Attained Age	Accrued Service Yrs.	Annual Payroll Average	Increase
STATE	1970	73,202	41.8 yrs.	6.4 yrs.	\$ 6,913	6.8%
	1971	73,664	41.7	6.6	7,068	2.2
	1972	78,660	40.9	6.1	8,303	17.5
	1973	80,775	41.0	6.1	8,203	(1.2)
	1974	83,910	40.4	6.1	9,531	16.2
	1975	83,220	40.6	6.5	9,441	(0.9)
	1976	84,640	40.4	6.8	10,975	16.2
	1977	91,817	38.3	6.7	10,893	(0.7)
	1978	94,176	37.9	7.1	12,097	11.1
	1979	92,110	39.4	7.3	13,278	9.8
LOCAL GOV'T#	1970	118,717	43.3	7.0	7,111	11.7
	1971	118,044	43.3	7.0	7,289	2.5
	1972	125,145	42.6	6.6	7,534	3.4
	1973	132,278	42.4	6.4	7,701	2.2
	1974	140,388	41.6	6.2	8,641	12.2
	1975	149,557	40.8	6.1	8,771	1.5
	1976	153,785	40.6	6.2	9,068	3.4
	1977	177,034	38.2	5.8	9,388	3.5
	1978	177,825	38.1	6.5	10,563	12.5
	1979	166,536	40.3	7.0	11,714	11.0
LOCAL GOV'T: SHERIFFS & DEPUTIES	1975	2,111	35.0	4.9	10,467	-
	1976	2,214	34.9	5.2	10,033	(4.1)
	1977	2,537	33.8	5.4	12,694	26.5
	1978	2,699	34.2	6.4	14,127	11.3
	1979	2,867	35.9	6.6	15,085	6.8

\* These group averages are not used in the valuations; they are computed and shown because of their general interest.

# Includes Sheriffs & Deputies before 1975.

Financial Principles and Operational Requirements

Promises Made, and To Be Paid For. As each year is completed, PERS in effect hands an "IOU" to each member then acquiring a year of service credit --- the "IOU" says: "The Public Employees Retirement System of Ohio owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related key financial questions are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service?

Or the future taxpayers, who happen to be in Ohio at the time the IOU becomes a cash demand, years and often decades later?

The law governing PERS financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, the employer contribution rate will remain approximately level from generation to generation --- our children and our grandchildren will contribute the same percents of active payroll we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then relentlessly grow much greater over decades of time --- consume now, and let your children face your financial pollution after you retire.)

An inevitable byproduct of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. Invested assets are a byproduct and not the objective. Investment income becomes in effect the 3rd contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

contribution rates must total at least the following:

Current Cost (the cost of members' service being rendered this year)

... plus ...

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between: liabilities for service already rendered; and the accrued assets of PERS).

Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from the employee data and asset data furnished him, the actuary determines the contribution rates to support the benefits, by means of an actuarial valuation and a funding method.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In making an actuarial valuation assumptions must be made as to what the above rates will be, for the next year and for decades in the future. The assumptions are established by the Retirement Board after receiving the advice of the actuary.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions or the skill of the actuary and the millions of calculations he made. The future can be predicted with considerable but not 100% precision.

PERS copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continuing adjustments in financial position.



**% OF  
ACTIVE  
MEMBER  
PAYS**

**START**

**CASH BENEFITS**

**LEVEL CONTRIBUTIONS**

**50±**

**YEARS OF TIME**

INVESTMENT  
INCOME

EMPLOYER  
CONTRIBUTIONS

MEMBER  
CONTRIBUTIONS

**CASH BENEFITS LINE.** This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added (and happens regardless of the financing method being followed).

**LEVEL CONTRIBUTION LINE.** Determining the level contribution line requires detailed assumptions concerning experience in future decades, including:

- Rate of withdrawal of active members (turnover);
- Rates of mortality;
- Rates of disability;
- Ages at actual retirement;
- Rates of pay increase;
- Investment income;
- Change in active member group size.

## THE ACTUARIAL VALUATION PROCESS

The actuarial valuation is the mathematical process by which the contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. Covered people data, furnished by plan administrator, including:

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

B. + Asset data (cash & investments), furnished by plan administrator

C. + Assumptions concerning future financial experiences in various risk areas, which assumptions are established by the Retirement Board after consulting with the actuary

D. + The funding method for employer contributions (the long-term, planned pattern for employer contributions)

E. + Mathematically combining the assumptions, the funding method, and the data

F. = Determination of:

Plan Financial Position

and/or New Employer Contribution Rate

Almost every pension plan (public or private) has "unfunded accrued liabilities", so whatever they are, they aren't rare. Since the term is not part of everyday conversation, it needs some definition.

"Accrued liabilities" are the present value \$ of plan promises to pay benefits in the future based upon service already rendered - - - a liability has been established ("accrued") because the service has been rendered, but the resulting monthly cash benefit may not be payable until years in the future. Accrued liabilities \$ are the result of complex mathematical calculations, which are made annually by the plan's actuary (which is the name given to the specialist who makes such calculations).

If "accrued liabilities" at any time exceed the plan's accrued assets (cash & investments), the difference is "unfunded accrued liabilities". This is the common condition. If the plan's assets equalled the plan's "accrued liabilities", the plan would be termed "fully funded". This is a rare condition.

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Each time a plan adds a new benefit which applies to service already rendered, an "accrued liability" is created, which is also an "unfunded accrued liability" because the plan can't print instant cash to cover the accrued liability. Payment for such unfunded accrued liabilities is spread over a period of years, commonly in the 25-60 year range.

Unfunded accrued liabilities can occur in another way: if actual financial experience is less favorable than assumed financial experience, the difference is added to unfunded accrued liabilities. In plans where plan benefits are directly related to an employee's pay near time of retirement (a common plan provision) rather than his average pay throughout his working career, unfunded accrued liabilities have been increasing in recent years because unexpected rates of pay increase have created additional accrued liabilities which could not be matched by reasonable investment results. Some of these unexpected pay increases are the direct result of inflation, which is a very destructive force on financial stability.

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The existence of unfunded accrued liabilities is not bad, then (any more than a mortgage on your house is "bad"), but the changes from year to year in amount of unfunded accrued liabilities are important - - - "bad" or "good" or somewhere in between.

Nor are unfunded accrued liabilities a bill payable immediately (your food costs are payable immediately), but it is important that policy-makers prevent the amount from becoming unreasonably high and it is vital that your plan have a sound method for making payments toward them so that they are controlled.

The existence of large amounts of unfunded accrued liabilities indicates that total contributions in past years were less than level - - - an almost certain history if retired life liabilities are not fully funded now.

PERS Ohio

Benefits and Conditions Evaluated

Age and service retirement. A member who (i) has attained age 60 years and has 5 or more years of total service credit, or (ii) has attained age 55 years and has 25 or more years of total service credit, or (iii) has 30 or more years of total service credit, may retire with an age and service retirement allowance.

Final average salary ("FAS") means the average of the annual earnings for the 3 highest calendar years of compensation.

Age and service allowance. A retiring member's age and service allowance is equal to total Ohio service credit times the greater of \$86, or 2.0% of FAS. The allowance is then adjusted by factors based on attained age or years of service as determined in the following schedule:

<u>Attained Birthday</u>	OR	<u>Years of Total Service Credit</u>	<u>Percentage of Base Amount</u>
58		25	75%
59		26	80
60		27	85
61			88
		28	90
62			91
63			94
		29	95
64			97
65		30 or more	100

Maximum allowance is 90% of FAS.

Sheriffs & Deputies. A sheriff-deputy who has attained age 52 and has 25 or more years of credited service may retire with an age and service allowance equal to 2.5% of FAS.

times the first 20 years of service credit, plus 1.5% of FAS times service credit in excess of 20 years. Maximum allowance is 66% of FAS.

Health insurance premiums. Health insurance premiums are paid on behalf of retired persons being paid a monthly allowance from PERS. For valuation purposes it was assumed that the premium is \$100.07 monthly prior to age 65 and \$29.21 monthly after age 65. Premiums are assumed to increase 4.5% annually in future years.

Medicare premiums. Medicare part B premiums are paid for those eligible, upon proof of coverage. For valuation purposes it was assumed that the premium is \$9.60 monthly. Premiums are assumed to increase 4.5% annually in future years.

Disability retirement. Upon becoming permanently disabled, after completion of at least 5 years of total service credit, but before attaining age 60, a member will receive a disability allowance computed in the same manner as a 100% age and service allowance, based upon the service the member would have had if he remained in employment to age 60. Maximum allowance is 75% of FAS, minimum allowance is 30% of FAS.

Death while eligible to retire. If a member dies in service after becoming eligible to retire with an age and service allowance and leaving a surviving spouse or other sole dependent beneficiary, the survivor receives the same amount that would have been paid had the member retired the last day of the month of death and elected the 100% joint and survivor form of payment.

Survivor (death-in-service) allowances. Upon the death of a member with at least 1½ years of Ohio service credit and with at least ¼ year of Ohio contributing service credit within the 2½ years prior to the date of death, the following allowances are payable:

(a) Spouse: A monthly allowance, commencing at age 62, or age 50 if the deceased member had 10 or more years of Ohio service credit, or regardless of age if caring for a dependent child or if mentally or physically incompetent. Allowance equals 25% of the deceased member's FAS. Minimum monthly allowance is \$96, or \$106 if deceased member had 10 or more years of Ohio service credit. Allowance terminates upon remarriage.

(b) Spouse's child-care allowance: An allowance of 40% of FAS is payable to the spouse of a deceased member while caring for 1 dependent child, with a minimum monthly allowance of \$186. Allowance is 50% of FAS if 2 dependent children, or 55% of FAS if 3 dependent children, or 60% of FAS if 4 or more dependent children. Minimum monthly allowance is \$236 for 2 or more children. A dependent child is defined to be an unmarried child under the age of 18, or 22 if attending an approved school.

(c) Children's allowances: A monthly allowance payable to each child of the deceased member who is unmarried and under the age of 18, or 22 if attending an approved school. Allowances equal 25% of the deceased member's FAS for 1 child, an equal share of 40% of FAS if there are 2 children, an equal share of 50% of FAS if there are 3 children, an equal share of 55% of FAS if there are 4 children, or an equal share of 60% of final average salary if there are 5 or more children. Minimum monthly allowance is \$96 for 1 child, \$186 for 2 children, and \$236 for 3 or more children.

(d) Dependent parent's allowance: A monthly allowance is payable to a dependent parent aged 65 or more (earlier if mentally or physically incompetent) who received at least one-half support from the member during the 12 month period immediately preceding the member's death. Allowance equals 25% of FAS for 1 parent with a minimum monthly allowance of \$96, and 40% of FAS shared equally for 2 parents with minimum monthly allowances totaling \$186.

Post-retirement increases. Each July after June 30, 1971 or the annual anniversary established 12 months after the initial date of retirement, each allowance is recomputed to be equal to the initial allowance increased by 3.0% for each completed year of retirement. The maximum recomputed allowance equals the initial allowance adjusted for increases in the Consumers Price Index. The minimum recomputed allowance equals the initial allowance.

Deferred benefits. If a member with at least 5 calendar years of contributing service credit leaves service before being eligible for an immediate monthly allowance and does not withdraw any part of his accumulated contributions, he will be entitled to a deferred allowance at age 60. The amount of the allowance to be based on his credited service and final average salary at time of leaving service.

Member contributions. Each member contributes 8.5% of his pay, by payroll deductions. The maximum statutory rate is 10%.

Refund of members accumulated contributions. In the event a member leaves service before any monthly benefits are payable on his behalf, his accumulated contributions are refunded.

Employer contributions. Each employer contributes the remainder amounts necessary to finance PERS benefits. Employer contributions are expressed as percents of member covered payroll. The maximum statutory rate is 14%, except for sheriffs and deputies.

STATE DIVISION



STATE DIVISION

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State Division active members included in the valuation totaled 92,110, involving an annual payroll totaling \$1,223,078,303.

STATE DIVISION

Active Members in Valuation December 31, 1979

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<u>Groups</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Payroll</u>
Men	42,910	\$ 644,351,230	\$15,016
Women	<u>49,200</u>	<u>578,727,073</u>	11,763
Totals	92,110	\$1,223,078,303	\$13,278

Also included in the State Division valuation were 4,217 inactive members eligible for deferred retirement allowances.

Schedule ST-1.

STATE DIVISION

MEN Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service								Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total	
Under 20	342							342	\$ 2,638,600
20-24	4,445	151						4,596	46,231,858
25-29	5,218	1,643	108					6,969	88,242,548
30-34	3,183	2,337	892	34				6,446	96,161,918
35-39	1,435	1,225	951	382	26			4,019	65,755,340
40-44	1,009	752	715	474	278	42		3,270	54,961,164
45-49	876	627	671	465	388	259	25	3,311	56,934,133
50-54	872	794	815	460	456	356	306	4,059	70,659,224
55-59	844	828	884	523	417	303	588	4,387	73,879,139
60	117	144	147	124	72	39	145	788	12,809,225
61	128	149	169	96	72	50	126	790	12,923,093
62	99	150	189	115	79	34	117	783	12,699,714
63	88	128	122	69	63	36	116	622	9,920,406
64	84	119	134	92	59	28	99	615	9,471,302
65	65	85	118	78	52	32	87	517	8,376,018
66	55	80	85	53	38	21	63	395	6,225,040
67	36	62	57	42	20	15	47	279	4,289,475
68	27	39	61	35	18	8	44	232	3,679,850
69	24	46	48	28	23	10	26	205	3,261,720
70	14	21	37	20	14	12	29	147	2,640,731
71	5	9	13	8	4	2	6	47	973,322
72	4	1	6		1	3	5	20	351,180
73	7	3	5	2	2	3	8	30	523,732
74	3	1	1		1	2	2	10	256,162
75 & Over	5	5	9	4	3	3	2	31	486,336
Totals	18,985	9,399	6,237	3,104	2,086	1,258	1,841	42,910	\$644,351,230

Average age: 40.9 years.

Average service: 8.6 years.

Schedule ST-2.

STATE DIVISION

WOMEN Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service							Total	Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	583							583	\$ 4,861,827
20-24	6,822	270						7,092	71,360,829
25-29	7,085	2,206	171					9,462	109,910,703
30-34	4,109	1,933	869	36				6,947	83,462,719
35-39	2,571	1,188	709	212	16			4,696	56,470,631
40-44	2,104	1,120	680	257	149	18		4,328	52,457,336
45-49	1,597	1,088	785	273	179	109	23	4,054	50,033,811
50-54	1,385	1,032	1,041	431	250	143	121	4,403	54,273,958
55-59	917	869	1,124	563	356	160	205	4,194	52,460,595
60	115	129	194	102	81	28	55	704	8,796,954
61	78	90	166	75	68	33	48	558	7,073,264
62	58	100	148	90	55	34	33	518	6,520,006
63	33	71	113	61	51	19	36	384	4,950,207
64	21	60	114	56	41	27	28	347	4,329,257
65	14	45	90	47	41	19	30	286	3,655,251
66	13	37	49	36	24	15	20	194	2,377,396
67	6	19	41	32	24	6	13	141	1,785,597
68	9	14	27	12	22	6	12	102	1,340,131
69	7	13	19	15	16	12	10	92	1,130,979
70	7	4	14	10	8	5	9	57	699,335
71	2	2	10	3	2	3	3	25	362,464
72	3	1	4	3	1	2		14	160,949
73	3				2	1	1	7	86,885
74	1	1		1		2		5	76,793
75 & Over	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>			<u>1</u>	<u>7</u>	<u>89,196</u>
Totals	27,544	10,294	6,369	2,317	1,386	642	648	49,200	\$578,727,073

Average age: 38.1 years.

Average service: 6.1 years.

Schedule ST-3.

STATE DIVISION

TOTAL Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service								Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total	
Under 20	925							925	\$ 7,500,427
20-24	11,267	421						11,688	117,592,687
25-29	12,303	3,849	279					16,431	198,153,251
30-34	7,292	4,270	1,761	70				13,393	179,624,637
35-39	4,006	2,413	1,660	594	42			8,715	122,225,971
40-44	3,113	1,872	1,395	731	427	60		7,598	107,418,500
45-49	2,473	1,715	1,456	738	567	368	48	7,365	106,967,944
50-54	2,257	1,826	1,856	891	706	499	427	8,462	124,933,182
55-59	1,761	1,697	2,008	1,086	773	463	793	8,581	126,339,734
60	232	273	341	226	153	67	200	1,492	21,606,179
61	206	239	335	171	140	83	174	1,348	19,996,357
62	157	250	337	205	134	68	150	1,301	19,219,720
63	121	199	235	130	114	55	152	1,006	14,870,613
64	105	179	248	148	100	55	127	962	13,800,559
65	79	130	208	125	93	51	117	803	12,031,269
66	68	117	134	89	62	36	83	589	8,602,436
67	42	81	98	74	44	21	60	420	6,075,072
68	36	53	88	47	40	14	56	334	5,019,981
69	31	59	67	43	39	22	36	297	4,392,699
70	21	25	51	30	22	17	38	204	3,340,066
71	7	11	23	11	6	5	9	72	1,335,786
72	7	2	10	3	2	5	5	34	512,129
73	10	3	5	2	4	4	9	37	610,617
74	4	2	1	1	1	4	2	15	332,955
75 & Over	6	7	10	6	3	3	3	38	575,532
Totals	46,529	19,693	12,606	5,421	3,472	1,900	2,489	92,110	\$1,223,078,303

Average age: 39.4 years.

Average service: 7.3 years.

Schedule ST-4.

STATE DIVISION

Employees Savings Fund and Employer Accumulation Fund

Liabilities December 31, 1979

<u>Present Value, December 31, 1979, of</u>	<u>Member Financed Liabilities</u>	<u>Employer Financed Liabilities</u>	<u>Total Liabilities</u>
Accrued portions of retirement allowances, health insurance and medicare premiums to be paid present active members, based on service rendered before valuation date	\$354,727,226	\$2,018,255,079	\$2,372,982,305
Deferred retirement allowances likely to be paid present inactive members	14,964,562	56,651,629	71,616,191
Probable refunds of members' accumulated contributions standing to their credit as of valuation date	<u>85,584,056</u>		<u>85,584,056</u>
TOTAL ACCRUED LIABILITIES	\$455,275,844	\$2,074,906,708	\$2,530,182,552
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Prospective portions of retirement allowances, health insurance and medicare premiums to be paid present active members, based on service likely to be rendered after valuation date	\$806,434,541	\$ 462,854,519	\$1,269,289,060
Disability allowances likely to be paid present active members who become totally and permanently disabled		111,177,593	111,177,593
Probable refunds of contributions likely to be made after valuation date by present active members	<u>177,950,400</u>		<u>177,950,400</u>
TOTAL PROSPECTIVE LIABILITIES	\$984,384,941	\$ 574,032,112	\$1,558,417,053

STATE DIVISION

Employees Savings Fund and Employer Accumulation Fund

The State Division's balances, at December 31, 1979, in the Employees Savings Fund and Employer Accumulation Fund were reported to your actuary to be \$828,884,036 as follows:

	<u>Fund Balances</u>	<u>Average Per Active Member</u>
Employees Savings Fund	\$455,275,844	\$4,943
Employer Accumulation Fund*	<u>373,608,192</u>	<u>4,056</u>
Total for the two Funds	\$828,884,036	\$8,999

In financing the State Division liabilities, the above fund balances were applied to the accrued liabilities for members.

\* After transfers recommended in the December 31, 1979 annual valuation of retirants and beneficiaries.

STATE DIVISION

Method of Financing the State Division Member Liabilities

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Prospective age & service retirement allowances liabilities, \$1,269,289,060, were financed over the members' periods of prospective service.

Liabilities for probable refunds of future contributions to be made by present active members, \$177,950,400, were financed over the members' periods of prospective service.

The contributions for disability retirement allowances to be paid present active members who become disabled were determined on a one year term cost basis. The liabilities, \$111,177,593, were computed by applying the cost to the present value of active members' future salaries.

Accrued liabilities for members, \$2,530,182,552, less applicable fund balances, \$828,884,036, resulted in unfunded accrued liabilities of \$1,701,298,516, which were amortized over a period of years sufficient to produce the total Employer Contribution Rate of 13.71% of payroll. The amortization period for the active member portion was computed to be 41 years (next whole year).

- - - - -

The contributions for survivor benefits to be paid the beneficiaries of present active members resulting from death-in-service were determined on a one year term cost basis. The adequacy of the contributions to the Survivor Benefit Fund is measured as part of the annual actuarial valuation of retirants and beneficiaries each December 31.

Schedule ST-5.

STATE DIVISION

COMPUTED EMPLOYER CONTRIBUTION RATE

Expressed as Percents of Active Member Payroll

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<u>Contributions for</u>	<u>Contributions Expressed as Percents of Payroll</u>	
	<u>Health &amp; Medicare Premiums</u>	<u>Total</u>
Current Cost:		
Age & service allowances		11.30%
Disability allowances		0.96
Survivor benefits (SB Fund)		<u>1.04</u>
Total		13.30
Member current contributions:		8.50
(Future refunds)		<u>(3.91)</u>
Available for annuities		4.59
Employer Current Cost	1.27%	8.71
Unfunded Accrued Liabilities:		
(41 year amortization)	<u>0.91*</u>	<u>5.00</u>
COMPUTED EMPLOYER CONTRIBUTIONS	2.18%	<u>13.71%</u>

\* Based on approximate allocation of EAF between health and medicare premiums and other benefits.



Schedule ST-6.

STATE DIVISION

Comparative Statement

Dec. 31	Active Members in Valuation			Employer Contributions as % of Payroll		
	No.	Total	Annual Payroll Average	Total Current Cost	For Unfunded Accrued	Total
1969	69,965	\$ 452,732	\$ 6,471	6.39%	3.61%	10.00%
1969*	-	-	-	7.64	2.36	10.00
1970	73,202	506,039	6,913	7.57	2.43	10.00
1971#	73,664	520,700	7,068	7.88	2.52	10.40
1972	78,660	653,123	8,303	7.78	2.62	10.40
1972*	-	-	-	9.11	2.19	11.30
1973	80,775	662,616	8,203	9.28	2.02	11.30
1973#	-	-	-	9.85	2.15	12.00
1974	83,910	799,771	9,531	9.71	2.29	12.00
1975	83,220	785,683	9,441	9.65	2.35	12.00
1975*	-	-	-	9.24	4.47	13.71
1976	84,640	928,904	10,975	9.33	4.38	13.71
1976	Revised assumptions	-	-	9.43	4.28	13.71
1977	91,817	1,000,168	10,893	9.19	4.52	13.71
1978	94,176	1,139,222	12,097	9.18	4.53	13.71
1978*	-	-	-	9.06	4.65	13.71
1979	92,110	1,223,078	13,278	8.71	5.00	13.71

(\$1,000s)

\* Includes benefit increases and revised actuarial assumptions.

# Includes benefit increases.

## STATE DIVISION

## Development of Unfunded Accrued Liabilities

## Comparative Statement

Dec. 31	Active Payroll		Active Accrued Liabilities			Amort. Years	UNFUNDED / PAYROLL
	Total	(Average)	Computed Total	Reported Assets	Unfund.		
--- \$ in millions ---							
1970	\$ 506	\$( 6,913)	\$ 506	\$313	\$ 193	19	.38
1971	521	( 7,069)	547	343	204	18	.39
1971	After benefit increase		573	343	230	24	.44
1972	653	( 8,303)	644	375	269	19	.41
1972*	-	-	687	375	312	28	.48
1973	663	( 8,203)	722	448	274	26	.41
1973	After benefit increase		747	448	299	27	.45
1974	800	( 9,531)	888	501	387	27	.48
1975	786	( 9,441)	942	549	393	27	.50
1975*	-	-	1,424	549	875	35	1.11
1976	929	(10,975)	1,770	619	1,151	42	1.24
1976	Revised assumptions		1,700	619	1,081	40	1.16
1977	1,000	(10,893)	1,872	711	1,161	37	1.16
1978	1,139	(12,097)	2,191	812	1,379	39	1.21
1978*	-	-	2,221	812	1,409	39	1.24
1979	1,223	(13,278)	2,530	829	1,701	41	1.39

\* Includes benefit increases and revised actuarial assumptions.

When inflation and/or collective bargaining causes pay raise amounts above amounts attributable to job promotion and/or longevity, then final average salary increases in proportion, with corresponding increases in liabilities. Because invested assets have not produced a real rate of return (a return rate more than the inflation rate), the unfunded accrued liabilities are also directly hurt by across-the-board pay raises, leading ultimately to employer contribution rate increases.

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While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

LOCAL GOVERNMENT DIVISION  
(Excluding Sheriffs & Deputies)

## STATE DIVISION

## Development of Unfunded Accrued Liabilities

## Comparative Statement

Dec. 31	Active Payroll		Active Accrued Liabilities			Amort. Years	UNFUNDED / PAYROLL
	Total	(Average)	Computed Total	Reported Assets	Unfund.		
--- \$ in millions ---							
1970	\$ 506	\$( 6,913)	\$ 506	\$313	\$ 193	19	.38
1971	521	( 7,069)	547	343	204	18	.39
1971	After benefit increase		573	343	230	24	.44
1972	653	( 8,303)	644	375	269	19	.41
1972*	-	-	687	375	312	28	.48
1973	663	( 8,203)	722	448	274	26	.41
1973	After benefit increase		747	448	299	27	.45
1974	800	( 9,531)	888	501	387	27	.48
1975	786	( 9,441)	942	549	393	27	.50
1975*	-	-	1,424	549	875	35	1.11
1976	929	(10,975)	1,770	619	1,151	42	1.24
1976	Revised assumptions		1,700	619	1,081	40	1.16
1977	1,000	(10,893)	1,872	711	1,161	37	1.16
1978	1,139	(12,097)	2,191	812	1,379	39	1.21
1978*	-	-	2,221	812	1,409	39	1.24
1979	1,223	(13,278)	2,530	829	1,701	41	1.39

Includes benefit increases and revised actuarial assumptions.

When inflation and/or collective bargaining causes pay raise amounts above amounts attributable to job promotion and/or longevity, then final average salary increases in proportion, with corresponding increases in liabilities. Because invested assets have not produced a real rate of return (a return rate more than the inflation rate), the unfunded accrued liabilities are also directly hurt by across-the-board pay raises, leading ultimately to employer contribution rate increases.

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While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

LOCAL GOVERNMENT DIVISION  
(Excluding Sheriffs & Deputies)

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Local Government Division active members included in the valuation totaled 166,536  
involving an annual payroll totaling \$1,950,832,530.

Included in the Local Government Division are Cleveland Transit and Shaker Heights  
Transit.

LOCAL GOVERNMENT DIVISION  
(Excluding Sheriffs & Deputies)

Active Members in Valuation December 31, 1979

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<u>Groups</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Payroll</u>
Men	89,670	\$1,167,561,130	\$13,021
Women	76,866	783,271,400	10,190
Totals	166,536	\$1,950,832,530	11,714

Also included in the Local Government Division were 7,045 inactive members eligible  
for deferred retirement allowances.

Schedule LG-1.

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

MEN Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service							Total	Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	1,014	2						1,016	\$ 5,816,933
20-24	8,200	479	1					8,680	79,157,526
25-29	9,970	3,525	223					13,718	167,755,295
30-34	6,653	4,167	1,435	63				12,318	168,838,258
35-39	3,960	2,249	1,552	592	59			8,412	115,620,627
40-44	2,949	1,854	1,431	967	633	71		7,905	109,357,193
45-49	2,448	1,735	1,281	950	811	463	35	7,723	110,917,485
50-54	2,453	1,910	1,533	1,077	860	690	436	8,959	130,617,874
55-59	2,146	1,896	1,482	1,084	880	580	902	8,970	130,709,140
60	367	363	292	203	182	104	186	1,697	24,607,572
61	323	311	258	188	130	114	177	1,501	21,002,457
62	250	328	269	222	165	74	165	1,473	20,448,715
63	237	310	254	182	133	92	139	1,347	17,989,282
64	192	247	198	177	112	71	122	1,119	14,813,514
65	170	226	169	131	97	54	117	964	12,667,301
66	136	165	132	89	86	42	74	724	8,504,923
67	126	156	95	63	62	34	70	606	6,960,614
68	110	89	90	56	42	17	54	458	4,881,781
69	104	90	68	52	30	35	45	424	4,357,096
70	72	100	46	48	32	12	31	341	3,010,855
71	55	65	40	27	33	13	30	263	2,419,240
72	35	61	48	23	16	10	24	217	1,731,763
73	32	46	27	18	7	10	25	165	1,170,635
74	33	45	21	12	10	6	18	145	1,077,770
75 & Over	119	164	95	59	32	15	41	525	3,127,281
Totals	42,154	20,583	11,040	6,283	4,412	2,507	2,691	89,670	\$1,167,561,130

Average age: 41.6 years.

Average service: 8.0 years.

Schedule LG-2.

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

WOMEN Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service								Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total	
Under 20	1,417							1,417	\$ 8,370,825
20-24	10,288	589						10,877	92,742,579
25-29	9,774	3,333	186					13,293	138,583,525
30-34	6,053	2,665	1,089	54				9,861	106,215,783
35-39	4,504	1,709	795	316	34			7,358	76,339,337
40-44	3,656	1,873	908	305	173	30		6,945	71,224,161
45-49	3,044	2,020	1,090	332	210	143	18	6,857	72,448,673
50-54	2,549	2,020	1,437	567	306	183	158	7,220	76,768,239
55-59	1,765	1,784	1,515	778	452	207	310	6,811	74,143,792
60	260	254	272	147	103	44	66	1,146	12,324,787
61	189	242	232	136	73	35	60	967	10,375,160
62	160	237	209	101	97	51	65	920	10,117,825
63	86	177	172	111	65	36	69	716	8,002,849
64	77	142	127	97	63	37	64	607	6,621,079
65	58	102	112	89	56	29	43	489	5,357,842
66	49	71	90	61	25	15	32	343	3,642,189
67	31	50	53	41	28	19	19	241	2,459,520
68	26	39	34	29	30	8	17	183	1,729,982
69	20	24	38	31	21	10	17	161	1,696,815
70	23	24	30	15	19	11	15	137	1,283,986
71	8	14	12	3	7	8	9	61	569,251
72	6	12	12	11	9	3	3	56	573,684
73	8	8	7	12	14	4	5	58	516,228
74	6	5	6	5	2	3	5	32	240,795
75 & Over	13	18	14	18	16	16	15	110	922,494
Totals	44,070	17,412	8,440	3,259	1,803	892	990	76,866	\$783,271,400

Average age: 38.8 years.

Average service: 5.8 years.

Schedule LG-3.

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

TOTAL Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service							Total	Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	2,431	2						2,433	\$ 14,187,758
20-24	18,488	1,068	1					19,557	171,900,105
25-29	19,744	6,858	409					27,011	306,338,820
30-34	12,706	6,832	2,524	117				22,179	275,054,041
35-39	8,464	3,958	2,347	908	93			15,770	191,959,964
40-44	6,605	3,727	2,339	1,272	806	101		14,850	180,581,354
45-49	5,492	3,755	2,371	1,282	1,021	606	53	14,580	183,366,158
50-54	5,002	3,930	2,970	1,644	1,166	873	594	16,179	207,386,113
55-59	3,911	3,680	2,997	1,862	1,332	787	1,212	15,781	204,852,932
60	627	617	564	350	285	148	252	2,843	36,932,359
61	512	553	490	324	203	149	237	2,468	31,377,617
62	410	565	478	323	262	125	230	2,393	30,566,540
63	323	487	426	293	198	128	208	2,063	25,992,131
64	269	389	325	274	175	108	186	1,726	21,434,593
65	228	328	281	220	153	83	160	1,453	18,025,143
66	185	236	222	150	111	57	106	1,067	12,147,112
67	157	206	148	104	90	53	89	847	9,420,134
68	136	128	124	85	72	25	71	641	6,611,763
69	124	114	106	83	51	45	62	585	6,053,911
70	95	124	76	63	51	23	46	478	4,294,841
71	63	79	52	30	40	21	39	324	2,988,491
72	41	73	60	34	25	13	27	273	2,305,447
73	40	54	34	30	21	14	30	223	1,686,863
74	39	50	27	17	12	9	23	177	1,318,565
75 & Over	132	182	109	77	48	31	56	635	4,049,775
Totals	86,224	37,995	19,480	9,542	6,215	3,399	3,681	166,536	\$1,950,832,530

Average age: 40.3 years.

Average service: 7.0 years.



Schedule LG-4.

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

Employees Savings Fund and Employer Accumulation Fund

Liabilities December 31, 1979

<u>Present Value, December 31, 1979, of</u>	<u>Member Financed Liabilities</u>	<u>Employer Financed Liabilities</u>	<u>Total Liabilities</u>
Accrued portions of retirement allowances, health insurance and medicare premiums to be paid present active members based on service rendered before valuation date	\$ 598,411,721	\$3,110,579,670	\$3,708,991,391
Deferred retirement allowances likely to be paid present inactive members	19,977,674	84,707,780	104,685,454
Probable refunds of member's accumulated contributions standing to their credit as of valuation date	<u>133,503,087</u>		<u>133,503,087</u>
<b>TOTAL ACCRUED LIABILITIES</b>	<b>\$ 751,892,482</b>	<b>\$3,195,287,450</b>	<b>\$3,947,179,932</b>
- - - - -			
Prospective portions of retirement allowances, health insurance and medicare premiums to be paid present active members based on service likely to be rendered after valuation date	\$1,355,649,277	\$ 889,675,384	\$2,245,324,661
Disability allowances likely to be paid present active members who become totally and permanently disabled		200,056,205	200,056,205
Probable refunds on contributions likely to be made after valuation date by present active members	<u>295,299,989</u>		<u>295,299,989</u>
<b>TOTAL PROSPECTIVE LIABILITIES</b>	<b>\$1,650,949,266</b>	<b>\$1,089,731,589</b>	<b>\$2,740,680,855</b>

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

Employees Savings Fund and Employer Accumulation Fund

The Local Government Division's balances, at December 31, 1979, in the Employees Savings Fund and Employer Accumulation Fund were reported to your actuary to be \$1,215,563,575 distributed as follows:

	<u>Fund Balances</u>	<u>Average Per Active Member</u>
Employees Savings Fund	\$ 751,892,482	\$4,515
Employer Accumulation Fund*	<u>463,671,093</u>	<u>2,784</u>
Total for the two Funds	\$1,215,563,575	\$7,299

In financing the Local Government Division Liabilities, the above fund balances were applied to the accrued liabilities for members.

\* After transfers recommended in the December 31, 1979 annual valuation of retirants and beneficiaries.

LOCAL GOVERNMENT DIVISION  
(Excluding Sheriffs & Deputies)

Method of Financing the Local Government Division Member Liabilities

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Prospective age & service retirement allowance liabilities, \$2,245,324,661, were financed over the members' periods of prospective service.

Liabilities for probable refunds of future contributions to be made by present active members, \$295,299,989, were financed over the members' periods of prospective service.

The contributions for disability retirement allowances to be paid present active members who become disabled were determined on a one year term cost basis. The liabilities, \$200,056,205, were computed by applying the cost to the present value of active members' future salaries.

Accrued liabilities for members, \$3,947,179,932, less applicable fund balances, \$1,215,563,575, resulted in unfunded accrued liabilities of \$2,731,616,357, which were amortized over a period of years sufficient to produce the total Employer Contribution Rate of 13.95% of payroll. The amortization period for the active member portion was computed to be 48 years (next whole year).

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The contributions for survivor benefits to be paid the beneficiaries of present active members resulting from death-in-service were determined on a one year term cost basis. The adequacy of the contributions to the Survivor Benefit Fund is measured as part of the annual actuarial valuation of retirants and beneficiaries each December 31.

Schedule LG-5.

LOCAL GOVERNMENT DIVISION

(Excluding Sheriffs & Deputies)

COMPUTED EMPLOYER CONTRIBUTION RATE

Expressed as Percents of Active Member Payroll

Contributions for	Contributions Expressed as Percents of Payroll	
	Health & Medicare Premiums	Total
Current Cost:		
Age & service allowances	%	12.18%
Disability allowances		1.03
Survivor benefits (SB Fund)		1.06
Total		<u>14.27</u>
Member current contributions:		8.50
(Future refunds)		<u>3.61</u>
Available for annuities		4.89
Employer Current Cost	1.65	9.38
Unfunded Accrued Liabilities:		
(48 year amortization)	<u>0.92*</u>	<u>4.57</u>
COMPUTED EMPLOYER CONTRIBUTIONS	2.57%	<u>13.95%</u>

\* Based on approximate allocation of EAF between health and medicare premiums and other benefits.



## LOCAL GOVERNMENT DIVISION

## Development of Unfunded Accrued Liabilities

## Comparative Statement#

Dec. 31	Active Payroll		Active Accrued Liabilities				UNFUNDED / PAYROLL
	Total	(Average)	Computed Total	Accrued Assets	Unfund	Amort Years	
--- \$ in millions ---							
1970	\$ 844	\$( 7,111)	\$ 847	\$ 546	\$ 301	22	.36
1971	860	( 7,289)	914	583	331	22	.38
1971	After benefit increases		957	583	374	26	.43
1972	920	( 7,354)	950	591	359	22	.39
1972*	-	-	1,065	591	474	30	.52
1973	1,019	( 7,701)	1,164	684	480	32	.47
1973	After benefit increases		1,205	684	521	33	.51
1974	1,213	( 8,641)	1,401	734	667	34	.55
1975	1,332	( 8,771)	1,551	811	740	34	.56
1975*	-	-	2,334	811	1,523	35	1.14
1976	1,394	( 9,068)	2,581	907	1,674	43	1.20
1976	Revised assumptions		2,405	907	1,498	42	1.07
1977	1,662	( 9,388)	2,848	986	1,862	42	1.12
1978	1,878	(10,563)	3,330	1,156	2,174	47	1.16
1978*	-	-	3,372	1,156	2,216	44	1.18
1979	1,951	(11,714)	3,947	1,215	2,732	48	1.40

\* Includes benefit increases and revised actuarial assumptions.

# Includes Sheriffs & Deputies prior to 1975.

When inflation and/or collective bargaining causes pay raise amounts above amounts attributable to job promotion and/or longevity, then final average salary increases in proportion, with corresponding increases in liabilities. Because invested assets have not produced a real rate of return (a return rate more than the inflation rate), the unfunded accrued liabilities are also directly hurt by across-the-board pay raises, leading ultimately to employer contribution rate increases.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

**SHERIFFS & DEPUTIES**

**Local Government Division**

SHERIFFS & DEPUTIES

Local Government Division

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Sheriff-Deputy active members included in the valuation totaled 2,867, involving an annual payroll totaling \$43,249,089.

SHERIFFS & DEPUTIES

Local Government Division

Active Members in Valuation December 31, 1979

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<u>Groups</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Payroll</u>
Men	2,694	\$41,050,566	\$15,238
Women	173	2,198,523	12,708
Totals	2,867	\$43,249,089	\$15,085

Also included were 41 Sheriff-Deputy inactive members eligible for deferred retirement allowances.



Schedule LGSD-1.

SHERIFFS & DEPUTIES

Local Government Division

Men Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service							Total	Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
Under 20	6							6	\$ 58,365
20-24	239	9						248	3,060,592
25-29	456	209	1					666	9,568,377
30-34	240	285	58	1				584	9,102,110
35-39	139	135	86	19	2			381	6,005,385
40-44	80	73	65	39	6			263	4,296,395
45-49	51	42	44	31	13	8		189	3,174,420
50-54	33	42	34	18	19	9	9	164	2,659,558
55-59	28	13	16	13	18	6	8	102	1,623,629
60	5	1	1	4	1		1	13	194,560
61	2	1		4	2	2	2	13	240,117
62	3	2	2	2	2		3	14	234,983
63	3	5	2	1	1	2	1	15	256,501
64			1	1		1	2	5	92,370
65	4	1	2					7	98,339
66	1	1	1	1	1			5	79,783
67	3		2		1		1	7	91,346
68				1			1	2	29,120
69		1			1	1		3	40,521
70							1	1	22,633
72			1			1		2	37,457
73						1		1	14,568
74		1						1	13,979
75		1		1				2	55,458
Totals	1,293	822	316	136	67	31	29	2,694	\$41,050,566

Average age: 35.8 years.

Average service: 6.6 years.

Schedule LGSD-2.

SHERIFFS & DEPUTIES

Local Government Division

Women Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service							Total	Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up		
20-24	18	2						20	\$ 191,704
25-29	25	5						30	382,257
30-34	16	7	5					28	414,138
35-39	17	7	1	1				26	339,516
40-44	10	6	2	1		1		20	249,241
45-49	4	5	4	3	1			17	211,782
50-54	3	2	3	2	1	2		13	146,193
55-59	1	1	2	4		2		10	128,239
61				1				1	13,173
62				1				1	10,521
63				1				1	16,596
64				1				1	17,342
67	1					1		2	28,876
71						1		1	24,271
72						1		1	10,088
73						1		1	14,586
Totals	95	35	17	15	2	9		173	\$2,198,523

Average age: 38.1 years.

Average service: 6.9 years.

Schedule LGSD-3.

SHERIFFS & DEPUTIES

Local Government Division

TOTAL Active Members in Valuation December 31, 1979

By Attained Age Groups & Accrued Service Groups

Attained Ages	Number at Indicated Years of Accrued Service								Annual Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total	
Under 20	6							6	\$ 58,365
20-24	257	11						268	3,252,296
25-29	481	214	1					696	9,950,634
30-34	256	292	63	1				612	9,516,248
35-39	156	142	87	20	2			407	6,344,901
40-44	90	79	67	40	6	1		283	4,545,636
45-49	55	47	48	34	14	8		206	3,386,202
50-54	36	44	37	20	20	11	9	177	2,805,751
55-59	29	14	18	17	18	8	8	112	1,751,868
60	5	1	1	4	1		1	13	194,560
61	2	1		5	2	2	2	14	253,290
62	3	2	2	3	2		3	15	245,504
63	3	5	2	2	1	2	1	16	273,097
64			1	2		1	2	6	109,712
65	4	1	2					7	98,339
66	1	1	1	1	1			5	79,783
67	4		2		1	1	1	9	120,222
68				1			1	2	29,120
69		1			1	1		3	40,521
70							1	1	22,633
71						1		1	24,271
72			1			2		3	47,545
73						2		2	29,154
74		1						1	13,979
75		1		1				2	55,458
Totals	1,388	857	333	151	69	40	29	2,867	\$43,249,089

Average age: 35.9 years.

Average service: 6.6 years.

Schedule LGSD-4.

SHERIFFS & DEPUTIES

Local Government Division

Employees Savings Fund and Employer Accumulation Fund

Liabilities December 31, 1979

<u>Present Value, December 31, 1979, of</u>	<u>Member Financed Liabilities</u>	<u>Employer Financed Liabilities</u>	<u>Total Liabilities</u>
Accrued portions of retirement allowances, health insurance and medicare premiums to be paid present active members based on service rendered before valuation date	\$ 6,029,317	\$63,466,874	\$ 69,496,191
Deferred retirement allowances likely to be paid present inactive members	123,875	448,542	572,417
Probable refunds of member's accumulated contributions standing to their credit as of valuation date	<u>2,868,757</u>		<u>2,868,757</u>
TOTAL ACCRUED LIABILITIES	\$ 9,021,949	\$63,915,416	\$ 72,937,365
-----			
Prospective portions of retirement allowances, health insurance and medicare premiums to be paid present active members based on service likely to be rendered after valuation date	\$42,337,057	\$57,044,533	\$ 99,381,590
Disability allowances likely to be paid present active members who become totally and permanently disabled		8,887,757	8,887,757
Probable refunds on contributions likely to be made after valuation date by present active members	<u>7,364,216</u>		<u>7,364,216</u>
TOTAL PROSPECTIVE LIABILITIES	\$49,701,273	\$65,932,290	\$115,633,563

SHERIFFS & DEPUTIES

Local Government Division

Employees Savings Fund and Employer Accumulation Fund

The Sheriffs & Deputies fund balances, at December 31, 1979, in the Employees Savings Fund and Employer Accumulation Fund were reported to your actuary to be \$29,696,647 distributed as follows:

	<u>Fund Balances</u>	<u>Average Per Active Member</u>
Employees Savings Fund	\$ 9,021,949	\$ 3,147
Employer Accumulation Fund*	<u>20,674,698</u>	<u>7,211</u>
Total for the two Funds	\$29,696,647	\$10,358

In financing the Sheriffs & Deputies liabilities, the above fund balances were applied to the accrued liabilities for members.

\* After transfers recommended in the December 31, 1979 annual valuation of retirants and beneficiaries.

SHERIFFS & DEPUTIES

Local Government Division

Method of Financing the Sheriffs & Deputies Member Liabilities

---

Prospective age & service retirement allowance liabilities, \$99,381,590, were financed over the members' periods of prospective service.

Liabilities for probable refunds of future contributions to be made by present active members, \$7,364,216, were financed over the members' periods of prospective service.

The contributions for disability retirement allowances to be paid present active members who become disabled were determined on a one year term cost basis. The liabilities, \$8,887,757, were computed by applying the cost to the present value of active members' future salaries.

Accrued liabilities for members, \$72,937,365, less applicable fund balances, \$29,696,647, resulted in unfunded accrued liabilities of \$43,240,718, which were amortized over a period of years sufficient to produce the total Employer Contribution Rate of 18.10% of payroll. The amortization period for the active member portion was computed to be 38 years (next whole year).

- - - - -

The contributions for survivor benefits to be paid the beneficiaries of present active members resulting from death-in-service were determined on a one year term cost basis. The adequacy of the contributions to the Survivor Benefit Fund is measured as part of the annual actuarial valuation of retirants and beneficiaries each December 31.







Schedule LGSD-7.

SHERIFFS & DEPUTIES

Local Government Division

Development of Unfunded Accrued Liabilities

Comparative Statement

Dec. 31	Active Payroll		Active Accrued Liabilities			UNFUNDED / PAYROLL
	Total	(Average)	Computed Total	Accrued Assets	Unfund Years	
--- \$ in millions ---						
1975	\$22	\$(10,467)	\$22	\$ -	\$22	.99
1976	22	(10,033)	33	6	27	1.20
1977	32	(12,694)	44	12	32	.99
1978	38	(14,127)	61	21	40	1.05
1978*	-	-	60	21	39	1.03
1979	43	(15,085)	73	30	43	1.00

\* Includes benefit increases and revised actuarial assumptions.

When inflation and/or collective bargaining causes pay raise amounts above amounts attributable to job promotion and/or longevity, then final average salary increases in proportion, with corresponding increases in liabilities. Because invested assets have not produced a real rate of return (a return rate more than the inflation rate), the unfunded accrued liabilities are also directly hurt by across-the-board pay raises, leading ultimately to employer contribution rate increases.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent an debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength. And vice-versa.

APPENDIX

APPENDIX

SUMMARY OF FINANCIAL ASSUMPTIONS FOR ACTUARIAL VALUATIONS

Modifications Last Made as of 12-31-1978

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The interest rate (i.e., future investment return rate) used in making the valuation was 6.5 percent per annum, compounded annually. This assumption was revised for the December 31, 1978 actuarial valuation.

The mortality table, for post-retirement mortality, used in evaluating annuities to be paid was the 1960 Group Annuity Mortality Table, set back no years for men and set back 5 years for women. Related values are shown in Schedule A-1.

The probabilities of age and service retirement are shown in Schedule A-2. This assumption was revised for the December 31, 1976 actuarial valuation.

The probabilities of withdrawal from service, disability and death-in-service, together with the salary scales, are shown for sample ages in Schedules A-3 and A-4. These assumptions, except for the salary scales, were revised for the December 31, 1976 actuarial valuation. The salary scale assumption was revised for the December 31, 1978 actuarial valuation. For disability retirement, impaired longevity was recognized by basing benefit values on an adjusted age mid-way between attained age and normal retirement age. For other withdrawal it was assumed that 80% of members terminating after age 40 with 5 or more years of service would leave their contributions on deposit and be paid a benefit beginning at age 60.

The entry age normal cost method of valuation was used in determining age and service allowance liabilities and current cost.

In amortizing unfunded accrued liabilities, total active member payroll was assumed to increase 4.5% yearly, which is the base portion of the individual salary increase assumption.

Schedule A-1.

Single Life Retirement Values

Sample Attained Ages	Present Value of \$1		Future Life	
	Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$144.88	\$154.61	26.44	30.85
55	133.73	144.88	22.30	26.44
60	120.89	133.73	18.43	22.31
65	106.11	120.89	14.80	18.43
70	90.35	106.11	11.58	14.81
75	74.20	90.35	8.79	11.58
80	59.05	74.21	6.54	8.80

Schedule A-2.

Probabilities of Age and Service Retirement

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year		
	State & Local Government		Sheriffs & Deputies
	Men	Women	
52	12%	12%	20%
53	12	12	20
54	12	12	20
55	12	12	20
56	12	12	20
57	12	12	20
58	12	12	20
59	12	12	20
60	10	12	20
61	10	12	20
62	15	20	20
63	13	18	20
64	13	18	20
65	40	40	20
66	35	35	20
67	100	100	100

A member other than a Sheriff-Deputy was assumed to be eligible for retirement after attaining age 52 with 30 years of service, or, after attaining age 60 with 5 or more years of service.

A Sheriff-Deputy member was assumed to be eligible for retirement after attaining age 52 with 25 years of service, or, after attaining age 60 with 5 or more years of service.

Schedule A-3.

STATE

Separations From Active Employment Before Age & Service Retirement

& Salary Scale

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year				Disability		Salary Increase Assumptions For An Individual Employee		
		Death Men	Death Women	Withdrawal Men	Withdrawal Women	Men	Women	Merit & Longevity	Base (Economy)	Increase Next Year
0				30.00%	30.00%					
1				25.00	25.00					
2				20.00	20.00					
3				15.00	15.00					
4				12.00	12.00					
5 & Over		0.07%	0.06%	10.00	12.68	0.10%	0.10%	3.2%	4.5%	7.7%
25		0.09	0.07	8.09	10.92	0.07	0.06	2.8	4.5	7.3
30		0.12	0.09	5.59	8.29	0.12	0.08	2.5	4.5	7.0
35		0.18	0.12	3.85	6.05	0.28	0.20	2.2	4.5	6.7
40		0.32	0.18	2.71	4.21	0.51	0.41	1.7	4.5	6.2
45		0.58	0.32	2.02	2.80	0.81	0.69	1.2	4.5	5.7
50		0.93	0.58	1.62	1.83	1.13	1.02	0.7	4.5	5.2
55		1.39	0.93	1.36	1.31	1.44	1.39	0.2	4.5	4.7
60										

Schedule A-4.

LOCAL GOVERNMENT

Separations From Active Employment Before Age & Service Retirement  
& Salary Scale

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year										Salary Increase Assumptions For An Individual Employee						
		Death		Sheriffs & Deputies		Others		Disability		Merit & Longevity	Base (Economy)	Increase Next Year						
		Men	Women	Men	Women	Men	Women	Men	Women									
0						25.00%												
1						20.00												
2						14.00												
3						9.00												
4						8.00												
5 & Over		0.07%	0.06%	5.00%	8.22	10.12	0.10%	0.10%	0.10%	3.2%	4.5%	7.7%						
25		0.09	0.07	5.00	7.32	9.28	0.07	0.06	2.8	4.5	7.3							
30		0.12	0.09	5.00	5.89	7.87	0.12	0.08	2.5	4.5	7.0							
35		0.18	0.12	5.00	4.58	6.49	0.28	0.20	2.2	4.5	6.7							
40		0.32	0.18	2.50	3.44	5.19	0.51	0.41	1.7	4.5	6.2							
45		0.58	0.32	1.00	2.51	4.02	0.81	0.69	1.2	4.5	5.7							
50		0.93	0.58	1.00	1.84	3.01	1.13	1.02	0.7	4.5	5.2							
55		1.93	0.93	1.00	1.49	2.24	1.44	1.39	0.2	4.5	4.7							
60																		

ANNUAL ACTUARIAL VALUATION  
RETIRANTS AND BENEFICIARIES  
DECEMBER 31, 1979  
OHIO  
PUBLIC EMPLOYEES RETIREMENT SYSTEM



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OHIO RETIREMENT STUDY  
COMMISSION

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August 8, 1980

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, 1979.

The extensive 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 audited by the actuary.

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

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

COMMENT

Based upon the results of the December 31, 1979 valuation, the mortality table in use continues to be a reasonable measure of mortality being experienced among retirants and beneficiaries. There follows the computed changes in the "Ratio of Ledger Assets to Liabilities" in each retired life fund.

	Ratio of Ledger Assets to Liabilities			Report Schedule
	<u>12/79</u>	<u>6/79</u>	<u>Change</u>	
Annuity and Pension Reserve	102.6%	101.7%	+0.9%	1
Survivor Benefit: State	101.8	99.9	+1.9	5
Local Government	100.1	98.8	+1.3	11

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 143.6% funded (page 11) and the SBF - Local Government Division is 148.5% funded (page 17).

Accordingly, the employer contribution rates have been adjusted as follows:

<u>Division</u>	<u>Employer SBF Rate</u>	
	<u>12/31/79</u>	<u>12/31/78</u>
State	1.04%	1.34%
Local Government (except SD)	1.06	1.38

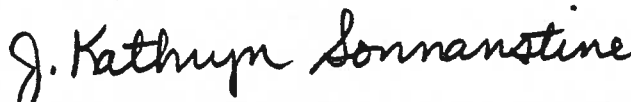
The recommended reserve transfers, as of January 1, 1980, on page 30 will adjust the retired life reserves for the H.B. 204 benefit increases not previously recognized, the payment of health insurance premiums and medicare reimbursements during the 6 month period ended December 31, 1979.

Previous valuations were made as of June 30 each year. Active member valuations have traditionally been as of December 31. The difference in valuation dates was originally due to data gathering and data processing limitations that no longer exist. The date of this and future retired life valuations will be December 31 so that all plan financial information is available as of year end.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

  
Norman L. Jones

  
J. Kathryn Sonnanstine

JKS:mh

ANNUITY AND PENSION

RESERVE FUND

ANNUITY AND PENSION RESERVE FUND

Retirants and beneficiaries receiving benefits from the Annuity and Pension Reserve Fund as of December 31, 1979 totaled 60,887, involving current monthly retirement allowances of \$17,248,595.

Included in this number were 93 retirants now reemployed whose monthly retirement allowances of \$22,307 have been suspended for their periods of reemployment.

Post-retirement pension increases, not included in base pension amount, being paid to present retirants and beneficiaries totaled \$1,217,948 monthly; these amounts are included in the above current total.

The ledger balance in the Annuity and Pension Reserve Fund was reported to be \$2,209,455,444 (including unexpected cost-of-living balance of \$369,633) net of all adjusting transfers made following December 31.

The computed liabilities of the Annuity and Pension Reserve Fund totaled \$2,154,388,804, which amount represents the lump sum present value of future retirement allowance payments from this fund to present retirants and beneficiaries. Computed liabilities do not include an allowance for health insurance premiums and medicare reimbursements. These items are provided for by annual transfers from the Employer Accumulation Fund equal to actual disbursements during the preceding year.

Schedule 1.

Annuity and Pension Reserve Fund

Monthly Allowances, Reported Assets and Computed Liabilities

Comparative Statement

---

<u>Valuation Date</u>	<u>Monthly Allowances</u>	<u>Reported Assets</u>	<u>Computed 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

\* Includes recommended transfers.

Schedule 2.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1979

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>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>	
<u>SUPERANNUATION RETIREMENT</u>					
Straight Life Allowance - Benefit Terminating at Death					
Men	14,486	25.4%	58.3%	16.3%	\$4,139,906
Women	<u>20,361</u>	21.0	61.0	18.0	<u>4,935,884</u>
Totals	<u>34,847</u>				<u>9,075,790</u>
Option 1 Allowance - Joint and Survivor Benefit					
Men	5,314	26.1	65.2	8.7	1,406,257
Women	<u>549</u>	23.5	67.1	9.4	<u>130,922</u>
Totals	<u>5,863</u>				<u>1,537,179</u>
Option 2 Allowance - Modified Joint and Survivor Benefit					
Men	6,809	24.3	66.0	9.7	2,836,827
Women	<u>424</u>	22.5	68.8	8.7	<u>136,760</u>
Totals	<u>7,233</u>				<u>2,973,587</u>
Option 3 Allowance - Life Benefit With Guaranteed Periods 0 to 5 Years					
Men	460	22.3	59.0	18.7	158,636
Women	<u>92</u>	16.5	53.6	29.9	<u>21,122</u>
Totals	<u>552</u>				<u>179,758</u>
Option 3 Allowance - Life Benefit With Guaranteed Periods 6 to 10 Years					
Men	907	22.9	59.1	18.0	284,579
Women	<u>129</u>	16.2	58.7	25.1	<u>34,548</u>
Totals	<u>1,036</u>				<u>\$ 319,127</u>

(Schedule 2 continued on page 6)

Schedule 2. - continued

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1979

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>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>	
Option 3 Allowance - Life Benefit With Guaranteed Periods 11 to 15 Years					
Men	798	22.2%	66.6%	11.2%	\$ 330,005
Women	80	19.0	65.6	15.4	24,802
Totals	878				354,807
Option 3 Allowance - Life Benefit With Guaranteed Periods 16 to 20 Years					
Men	21	18.5	57.8	23.7	8,639
Women	3	17.3	72.9	9.8	1,194
Totals	24				9,833
Option 3 Allowance - Special Joint and Survivor Benefit					
Men	19	17.1	64.6	18.3	16,058
Women	1	25.2	74.8	—	1,229
Totals	20				17,287
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 1, 2 or 3 - Life Benefit					
Men	93	20.0	56.1	23.9	18,153
Women	5,056	18.7	49.7	31.6	921,603
Totals	5,149				939,756
Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 3 - Guaranteed Period Only					
M-W	475	22.8	58.8	18.4	\$ 132,139

(Schedule 2 concluded on page 7)



Schedule 2. - concluded

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1979

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>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>	
Total for Superannuation Allowances Being Paid					
Men	28,907	24.9%	62.1%	13.0%	\$ 9,199,060
Women	26,695	20.7	59.6	19.7	6,208,064
M-W	475	22.8	58.8	18.4	132,139
Totals	<u>56,077</u>				<u>15,539,263</u>

DISABILITY RETIREMENT

Straight Life Allowance - Benefit Terminating at Death

Men	3,076	14.4	76.4	9.2	1,245,350
Women	<u>1,734</u>	12.8	74.7	12.5	463,982
Totals	<u>4,810</u>				<u>1,709,332</u>

TOTAL BENEFITS BEING PAID FROM ANNUITY AND PENSION RESERVE FUND

Men	31,983	23.6	63.8	12.6	10,444,410
Women	28,429	20.1	60.6	19.3	6,672,046
M-W	475	22.8	58.8	18.4	132,139
Totals	<u>60,887</u>				<u>\$17,248,595</u>

Schedule 3.

Annuity and Pension Reserve Fund

Retirants and Beneficiaries December 31, 1979

Current Monthly Total \$ By Attained Ages

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
20-24	1	\$ 192		\$	1	\$ 192
25-29			12	6,915	12	6,915
30-34	1	57	55	32,243	56	32,300
35-39	2	120	98	55,562	100	55,682
40-44	10	1,998	206	112,788	216	114,786
45-49	31	15,645	368	173,078	399	188,723
50-54	380	251,076	728	310,524	1,108	561,600
55-59	1,279	833,671	1,288	482,586	2,567	1,316,257
60-64	6,943	2,235,402	1,265	363,317	8,208	2,598,719
65-69	14,390	3,872,590	512	112,631	14,902	3,985,221
70-74	14,291	3,800,055	196	40,829	14,487	3,840,884
75-79	9,467	2,310,679	78	17,652	9,545	2,328,331
80-84	5,508	1,292,834	4	1,207	5,512	1,294,041
85-89	2,471	591,382			2,471	591,382
90-94	701	167,609			701	167,609
95	53	13,344			53	13,344
96	29	7,962			29	7,962
97	19	4,520			19	4,520
98	8	2,758			8	2,758
99	7	2,353			7	2,353
100	11	2,877			11	2,877
Period Certain	475	132,139			475	132,139
Totals	56,077	\$15,539,263	4,810	\$1,709,332	60,887	\$17,248,595

Schedule 4.

Annuity and Pension Reserve Fund

Liabilities for Retirants and Beneficiaries December 31, 1979

Tabulated by Type of Benefit Being Paid

<u>Group</u>	<u>% of Current Total \$</u>			<u>Current Total \$</u>
	<u>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>	
<u>SUPERANNUATION RETIREMENT</u>				
Men	22.4%	53.2%	24.4%	\$405,043,911
Women	18.3	53.7	28.0	<u>589,785,309</u>
Total				<u>994,829,220</u>
Option 1				
Men	21.1	54.0	24.9	227,852,786
Women	19.3	55.7	25.0	<u>20,866,057</u>
Total				<u>248,718,843</u>
Option 2				
Men	20.2	56.0	23.8	384,569,146
Women	18.6	57.2	24.2	<u>20,710,144</u>
Total				<u>405,279,290</u>
Option 3 - Life Benefit With Guaranteed Period				
Men	19.1	54.3	26.6	101,048,964
Women	14.9	52.2	32.9	<u>11,010,687</u>
Total				<u>112,059,651</u>
Option 3 - Special Joint and Survivor Benefit				
Men	15.5	57.4	27.1	1,722,436
Women	20.5	61.0	18.5	<u>186,673</u>
Total				<u>\$ 1,909,109</u>

(Schedule 4 concluded on page 10)

Schedule 4. - concluded

Annuity and Pension Reserve Fund

Liabilities for Retirants and Beneficiaries December 31, 1979

Tabulated by Type of Benefit Being Paid

<u>Group</u>	<u>% of Current Total \$</u>			<u>Current Total \$</u>
	<u>Member Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Pension Increases</u>	
Survivor Beneficiary of Deceased Superannuation Retirant Life Benefit				
Men	17.6%	47.7%	34.7%	\$ 1,937,352
Women	17.1	45.0	37.9	<u>98,291,160</u>
Total				100,228,512

Survivor Beneficiary of Deceased Superannuation Retirant  
Guaranteed Period Only

M-W	22.2	56.9	20.9	6,625,596
-----	------	------	------	-----------

Total for Superannuation Allowances Being Paid

Men	21.1	54.4	24.5	1,122,174,595
Women	18.2	52.7	29.1	740,850,030
M-W	22.2	56.9	20.9	<u>6,625,596</u>
Total				1,869,650,221

DISABILITY RETIREMENT

Straight Life

Men	11.2	62.4	26.4	204,011,324
Women	10.0	60.7	29.3	<u>80,727,259</u>
Total				284,738,583

TOTAL LIABILITIES FOR ANNUITY AND PENSION RESERVE FUND

Men	19.5	55.6	24.9	1,326,185,919
Women	17.4	53.4	29.2	821,577,289
M-W	22.2	56.9	20.9	<u>6,625,596</u>
Total				\$2,154,388,804

SURVIVOR BENEFIT FUND

STATE DIVISION

Schedule 5.

STATE DIVISION

Survivor Benefit Fund

Reported Assets and Computed Liabilities

Comparative Statement

	Valuation Date		
	12-31-79	6-30-79	6-30-78
S-1 (Joint and Survivor) Benefits Being Paid:			
Reported Assets	\$ 27,257,200*	\$ 26,620,183*	\$ 22,280,050*
Computed Liabilities	29,115,408	27,991,284	25,514,424
Ratio of Assets to Liabilities	93.6%	95.1%	87.3%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Reported Assets	\$ 61,616,795*	\$ 56,621,523*	\$ 53,043,465*
Computed Liabilities	58,221,468	55,334,724	50,567,952
Ratio of Assets to Liabilities	105.8%	102.3%	104.9%
S-1 & S-2 Combined Benefits Being Paid:			
Reported Assets	\$ 88,873,995	\$ 83,241,706	\$ 75,323,515
Computed Liabilities	87,336,876	83,326,008	76,082,376
Ratio of Assets to Liabilities	101.8%	99.9%	99.0%
Total Survivor Benefit Fund			
Reported Assets	\$133,701,152*	\$122,321,621*	\$105,268,337*
Computed Liabilities Incurred:			
Benefits Being Paid	87,336,876	83,326,008	76,082,376
Deferred Cases	5,790,816	5,611,536	5,966,844
Totals	\$ 93,127,692	\$ 88,937,544	\$ 82,049,220
RATIO OF ASSETS TO LIABILITIES	143.6%	137.5%	128.3%
Reserve for Active Members	43.6%	37.5%	28.3%

\* After recommended transfers. The distribution of health insurance premiums between S-1 and S-2 was estimated in determining fund balances.

Schedule 6.

STATE DIVISION

Survivor Benefit Fund

Survivor Benefit Beneficiaries December 31, 1979

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	49	16.0%	67.2%	16.8%	\$ 10,783
Women	786	18.5	55.8	25.7	<u>221,631</u>
Totals	<u>835</u>				\$232,414

Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount					
Widower - no child	93		90.5	9.5	\$ 14,870
Parent - male	1		64.9	35.1	<u>148</u>
Subtotals - male	<u>94</u>				15,018
Widow - no child	1,722		77.9	22.1	304,490
Widow - child	353		89.8	10.2	138,755
Parent - female	4		63.8	36.2	<u>721</u>
Subtotals - female	<u>2,079</u>				443,966
Child only	182		83.6	16.4	36,130
Totals	<u>2,355</u>				\$495,114

Total Benefits Being Paid from Survivor Benefit Fund

Men	143				\$ 25,801
Women	2,865				665,597
Children	<u>182</u>				<u>36,130</u>
Totals	3,190	<i>- families receiving</i>			\$727,528

Schedule 7.

STATE DIVISION

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries December 31, 1979  
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	14	\$ 2,072
Deferred to age 65	<u>23</u>	<u>3,117</u>
Totals	37	5,189
Widows		
Deferred to age 50	15	3,319
Deferred to age 62	302	45,052
Deferred to age 65	<u>23</u>	<u>2,104</u>
Totals	<u>340</u>	<u>50,475</u>
Totals	377	\$55,664



Schedule 8.

STATE DIVISION

Survivor Benefit Fund

Beneficiaries December 31, 1979

Tabulated by Attained Ages

---

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
0-4	11	\$ 3,582
5-9	67	16,339
10-14	205	50,649
15-19	347	76,804
20-24	89	19,166
25-29	12	3,089
30-34	5	870
35-39	10	2,280
40-44	10	2,566
45-49	13	3,010
50-54	103	26,950
55-59	215	53,602
60-64	499	104,677
65-69	651	122,342
70-74	556	112,100
75-79	347	69,841
80-84	167	37,169
85-89	74	16,954
90	6	1,449
91	9	1,958
92	4	646
93	1	145
94	1	326
95	2	436
97	1	107
100	<u>1</u>	<u>471</u>
Totals	3,406*	\$727,528

\* Number count is greater than the number count shown on page 12 because all children in a family are tabulated. Page 12 number counts indicate number of families receiving.

Schedule 9.

STATE DIVISION

Survivor Benefit Fund

Deferred Beneficiaries December 31, 1979

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
20-24		\$	1	\$ 177		\$	1	\$ 177
30-34					2	236	2	236
35-39					1	179	1	179
40-44	3	817	9	1,206	3	299	15	2,322
45	3	722	2	264			5	986
46			5	1,724			5	1,724
47	2	287	4	551	1	96	7	934
48	3	551	6	737	2	241	11	1,529
49	4	942	9	1,184			13	2,126
50			5	907			5	907
51			6	827			6	827
52			12	1,646			12	1,646
53			17	2,348	3	341	20	2,689
54			16	2,230	1	96	17	2,326
55			21	3,295			21	3,295
56			33	5,349	2	160	35	5,509
57			22	3,145	4	420	26	3,565
58			25	3,351	2	160	27	3,511
59			37	5,112	5	897	42	6,009
60			36	5,479	4	388	40	5,867
61			39	6,184	5	710	44	6,894
62			7	985	2	160	9	1,145
63			2	231			2	231
64			2	192	5	514	7	706
65					3	260	3	260
66					1	64	1	64
Totals	15	\$3,319	316	\$47,124	46	\$5,221	377	\$55,664

## Schedule 10.

## STATE DIVISION

## Survivor Benefit Fund

Liabilities for Beneficiaries December 31, 1979

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	% of Current Total \$			Current Total \$
	Normal Annuities	Initial Pensions	Post-Retire. Increases	
<u>LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u> (Including Cases Previously Paid But Now in Blackout Period)				
Joint and Survivor Computation				
Men	14.4%	58.4%	27.2%	\$ 1,107,552
Women	16.4	48.9	34.7	<u>28,007,856</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				29,115,408
<u>Fixed Rate Amount</u>				
Widower - no child		78.1	21.9	1,715,568
Parent - male		60.5	39.5	<u>6,924</u>
Sub-totals - male				1,722,492
Widow - no child		67.5	32.5	40,186,224
Widow - with children		78.7	21.3	14,393,424
Parent - female		58.5	41.5	<u>46,128</u>
Subtotals - female				54,625,776
Child only		73.6	26.4	<u>1,873,200</u>
Total Liabilities for Fixed Rate Amounts				<u>58,221,468</u>
Total Liabilities for Survivor Benefits Being Paid				\$87,336,876
<u>LIABILITIES FOR DEFERRED SURVIVOR BENEFITS</u> (No Monthly Payment Being Paid or Previously Paid)				
<u>Fixed Rate Amount</u>				
Widower - deferred to age 62				\$ 204,156
- deferred to age 65				<u>188,256</u>
- Subtotals				392,412
Widow - deferred to age 50				515,268
- deferred to age 62				4,677,528
- deferred to age 65				<u>205,608</u>
- Subtotals				5,398,404
Total Liabilities for Deferred Benefits				<u>5,790,816</u>
TOTAL LIABILITIES SURVIVOR BENEFIT FUND				<u>\$93,127,692</u>

SURVIVOR BENEFIT FUND  
LOCAL GOVERNMENT DIVISION

Schedule 11.

LOCAL GOVERNMENT

Survivor Benefit Fund

Reported Assets and Computed Liabilities

Comparative Statement

	Valuation Date		
	<u>12-31-79</u>	<u>6-30-79</u>	<u>6-30-78</u>
S-1 (Joint and Survivor) Benefits Being Paid:			
Reported Assets	\$ 46,707,159*	\$ 44,974,007*	\$ 38,840,152*
Computed Liabilities	49,833,972	46,833,144	43,207,968
Ratio of Assets to Liabilities	93.7%	96.0%	89.9%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:			
Reported Assets	\$108,628,889*	\$ 99,669,668*	\$ 92,711,017*
Computed Liabilities	105,383,472	99,622,416	89,623,572
Ratio of Assets to Liabilities	103.1%	100.1%	103.4%
S-1 & S-2 Combined Benefits Being Paid:			
Reported Assets	\$155,336,048	\$144,643,675	\$131,551,169
Computed Liabilities	155,217,444	146,455,560	132,831,540
Ratio of Assets to Liabilities	100.1%	98.8%	99.0%
Total Survivor Benefit Fund:			
Reported Assets	\$246,178,973*	\$232,874,731*	\$195,880,769*
Computed Liabilities Incurred:			
Benefits Being Paid	155,217,444	146,455,560	132,831,540
Deferred Cases	10,558,728	9,777,456	9,682,212
Totals	\$165,776,172	\$156,233,016	\$142,513,752
RATIO OF ASSETS TO LIABILITIES	148.5%	149.1%	137.4%
Reserve for Active Members	48.5%	49.1%	37.4%

\* After recommended transfers. The distribution of health insurance premiums between S-1 and S-2 was estimated in determining fund balances.

Schedule 12.

LOCAL GOVERNMENT

Survivor Benefit Fund

Survivor Benefit Beneficiaries December 31, 1979

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	55	18.9%	62.9%	18.2%	\$ 10,223
Women	<u>1,369</u>	18.6	57.3	24.1	<u>381,657</u>
Totals	<u>1,424</u>				<u>391,880</u>

Survivor Benefit to Beneficiary of Deceased Member  
Fixed Rate Amounts

Widower - no child	133		86.7	13.3	19,167
Parent - male	--				none
Subtotals - male	<u>133</u>				<u>19,167</u>
Widow - no child	3,113		77.4	22.6	523,748
Widow - child	785		89.1	11.9	303,436
Parent - female	8		62.2	37.8	<u>1,363</u>
Subtotals - female	<u>3,906</u>				<u>828,547</u>
Child only	307		82.2	17.8	61,613
Totals	<u>4,346</u>				<u>909,327</u>

Total Benefits Being Paid from Survivor Benefit Fund

Men	188	29,390
Women	5,275	1,210,204
Children	<u>307</u>	<u>61,613</u>
Totals	5,770	\$1,301,207

Schedule 13.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries December 31, 1979

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	\$ 2,483
Deferred to age 65	<u>35</u>	<u>4,119</u>
Totals	54	6,602
Widows		
Deferred to age 50	30	6,761
Deferred to age 62	535	82,111
Deferred to age 65	<u>47</u>	<u>4,264</u>
Totals	<u>612</u>	<u>93,136</u>
Totals	666	\$99,738

Schedule 14.

LOCAL GOVERNMENT

Survivor Benefit Fund

Beneficiaries December 31, 1979

Tabulated by Attained Ages

---

<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
0-4	34	\$ 11,844
5-9	157	41,534
10-14	436	97,708
15-19	772	160,341
20-24	164	37,804
25-29	16	4,795
30-34	13	4,093
35-39	11	3,035
40-44	15	5,383
45-49	25	8,760
50-54	179	50,506
55-59	434	106,449
60-64	791	155,033
65-69	1,118	196,451
70-74	868	161,967
75-79	657	130,395
80-84	381	78,275
85-89	183	36,718
90	9	2,324
91	8	2,220
92	7	1,421
93	5	1,194
94	1	143
95	3	903
96	2	578
97	4	902
100	<u>2</u>	<u>431</u>
Totals	6,294*	\$1,301,207

\* Number count is greater than the number count shown on page 18 because all children in a family are tabulated. Page 18 number counts indicate number of families receiving.



Schedule 15.

LOCAL GOVERNMENT

Survivor Benefit Fund

Deferred Beneficiaries December 31, 1979

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			4	712	1	110	5	822
40-44	3	812	15	2,380	1	258	19	3,450
45	1	232	6	1,044			7	1,276
46	7	1,491	7	847	1	132	15	2,470
47			10	2,514	5	600	15	3,114
48	6	1,588	8	1,242			14	2,830
49	12	2,453	3	359	1	141	16	2,953
50	1	185	14	2,268	1	129	16	2,582
51			16	2,303	3	328	19	2,631
52			20	2,914	5	583	25	3,497
53			28	4,614	1	102	29	4,716
54			30	4,149	1	96	31	4,245
55			40	5,951			40	5,951
56			34	5,778	2	209	36	5,987
57			48	6,759	4	504	52	7,263
58			60	8,776	4	361	64	9,137
59			62	10,101	9	904	71	11,005
60			62	8,874	7	646	69	9,520
61			70	10,948	7	660	77	11,608
62			9	1,067	9	797	18	1,864
63			2	192	9	832	11	1,024
64			1	125	6	544	7	669
65			1	96	4	351	5	447
66			1	160			1	160
67					1	96	1	96
68			1	96			1	96
71			1	96			1	96
Totals	30	\$6,761	554	\$84,594	82	\$8,383	666	\$99,738

## Schedule 16.

## LOCAL GOVERNMENT

## Survivor Benefit Fund

Liabilities for Beneficiaries December 31, 1979

Tabulated by Type of Benefit Being Paid and To Be Paid

Group	% of Current Total \$			Current Total \$
	Normal Annuities	Initial Pensions	Post-Retire. Increases	
<u>LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u> (Including Cases Previously Paid But Now in Blackout Period)				
Joint and Survivor Computation				
Men	17.0%	54.1%	28.9%	\$ 1,037,412
Women	16.2	50.3	33.5	<u>48,796,560</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				\$ 49,833,972
<u>Fixed Rate Amount</u>				
Widower - no child		76.5	23.5	\$ 2,122,056
Parent - male				none
Subtotals - male				<u>2,122,056</u>
Widow - no child		67.2	32.8	67,908,972
Widow - with children				32,422,284
Parent - female		59.6	40.4	<u>86,892</u>
Subtotals - female				<u>100,418,148</u>
Child only		75.4	24.6	<u>2,843,268</u>
Total Liabilities for Fixed Rate Amounts				<u>105,383,472</u>
Total Liabilities for Survivor Benefits Being Paid				\$155,217,444
<u>LIABILITIES FOR DEFERRED SURVIVOR BENEFITS</u> (No Monthly Payment Being Paid or Previously Paid)				
<u>Fixed Rate Amount</u>				
Widower - deferred to age 62				\$ 220,728
- deferred to age 65				<u>247,596</u>
- Subtotals				<u>468,324</u>
Widow - deferred to age 50				1,119,660
- deferred to age 62				8,538,732
- deferred to age 65				<u>432,012</u>
- Subtotals				<u>10,090,404</u>
Total Liabilities for Deferred Benefits				<u>10,558,728</u>
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND				\$165,776,172

**SURVIVOR BENEFIT FUND**

**SHERIFFS & DEPUTIES  
Local Government Division**

Schedule 17.

SHERIFFS & DEPUTIES

Local Government Division

Survivor Benefit Fund

Reported Assets and Computed Liabilities

Comparative Statement

	<u>Valuation Date</u> <u>12-31-79</u>
S-1 (Joint and Survivor) Benefits Being Paid:	
Reported Assets	\$ 257,082*
Computed Liabilities	302,472
Ratio of Assets to Liabilities	85.0%
S-2 (Fixed Rate) Benefits Being Paid - Exclusive of Deferred Cases Where No Monthly Payment Has Been Made:	
Reported Assets	103,001*
Computed Liabilities	282,864
Ratio of Assets to Liabilities	36.4%
S-1 & S-2 Combined Benefits Being Paid:	
Reported Assets	514,164
Computed Liabilities	585,336
Ratio of Assets to Liabilities	87.8%
Total Survivor Benefit Fund	
Reported Assets	3,141,895*
Computed Liabilities Incurred:	
Benefits Being Paid	585,336
Deferred Cases	25,284
Totals	\$ 610,620
RATIO OF ASSETS TO LIABILITIES	514.5%
Reserve for Active Members	

\* After recommended transfers. The distribution of health insurance premiums between S-1 and S-2 was estimated in determining fund balances.

Schedule 18.

SHERIFFS & DEPUTIES

Local Government Division

Survivor Benefit Beneficiaries December 31, 1979

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	-	-- %	-- %	-- %	\$ none
Women	<u>3</u>	23.3	72.8	3.9	<u>1,661</u>
Totals	<u>3</u>				\$1,661

Survivor Benefit to Beneficiary of Deceased Member  
Fixed Rate Amount

Widower - no child	-		--	--	none
Parent - male	-		--	--	<u>none</u>
Subtotals - male	-				none
Widow - no child	3		100.0	--	\$ 803
Widow - with children	5		97.6	2.4	2,204
Parent - female	-		--	--	<u>none</u>
Subtotals - female	<u>8</u>				<u>3,007</u>
Child only	-		--	--	none
Totals	8				\$3,007

Total Benefits Being Paid from Survivor Benefit Fund

Men					
Women	11				\$4,668
Children	—				—
Totals	11	<i># of families</i>			\$4,668

Schedule 19.

SHERIFFS & DEPUTIES

Local Government Division

Survivor Benefit Fund

Deferred Survivor Benefit Beneficiaries December 31, 1979

Tabulated by Type of Benefit to be Paid and Monthly Amount

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<u>Group</u>	<u>Number</u>	<u>Deferred Allowances</u>
Fixed Rate Amounts		
Widows		
Deferred to age 62	<u>1</u>	<u>\$448</u>
Totals	1	\$448

Schedule 20.

SHERIFFS & DEPUTIES

Local Government Division

Survivor Benefit Fund

Beneficiaries December 31, 1979

Tabulated by Attained Ages

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<u>Attained Ages</u>	<u>No.</u>	<u>Monthly Allowances</u>
0-4	1	\$ 187
5-9	1	187
10-14	2	436
15-19	4	1,052
20-24	1	342
50-54	1	546
55-59	2	954
60-64	1	370
65-69	1	134
70-74	<u>1</u>	<u>460</u>
Totals	15*	\$4,668

\* Number count is greater than the number count shown on page 24 because all children in a family are tabulated. Page 24 number counts indicate number of families receiving.

Schedule 21.

SHERIFFS & DEPUTIES

Local Government Division

Survivor Benefit Fund

Deferred Beneficiaries December 31, 1979

Tabulated by Attained Ages and Deferment Ages

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<u>Attained</u> <u>Ages</u>	<u>Deferred to Age 62</u>	
	<u>No.</u>	<u>Monthly</u> <u>Allowances</u>
49	1	\$448



Schedule 22.

SHERIFFS & DEPUTIES

Local Government Division

Liabilities for Beneficiaries December 31, 1979

Tabulated by Type of Benefit Being Paid and To Be Paid

<u>Group</u>	<u>% of Current Total \$</u>			<u>Current Total \$</u>
	<u>Normal Annuities</u>	<u>Initial Pensions</u>	<u>Post-Retire. Increases</u>	
<u>LIABILITIES FOR SURVIVOR BENEFITS BEING PAID</u>				
<u>(Including Cases Previously Paid But Now in Blackout Period)</u>				
<u>Joint and Survivor Computation</u>				
Men	-- %	-- %	-- %	\$ none
Women	18.1	57.5	24.4	<u>302,472</u>
Total Liabilities for Joint and Survivor Benefits Being Paid				\$302,472
	<u>Fixed Rate Amount</u>			
Widower - no child		--	--	none
Parent - male		--	--	<u>none</u>
Subtotals - male				none
Widow - no child		82.5	17.5	\$106,452
Widow - with children		84.7	15.3	176,412
Parent - female		--	--	<u>none</u>
Subtotals - female				<u>282,864</u>
Child only		--	--	none
Total Liabilities for Fixed Rate Amounts				<u>282,864</u>
Total Liabilities for Survivor Benefits Being Paid				\$585,336
<u>LIABILITIES FOR DEFERRED SURVIVOR BENEFITS</u>				
<u>(No Monthly Payment Being Paid or Previously Paid)</u>				
<u>Fixed Rate Amount</u>				
Widow - deferred to age 62				\$ 25,284
Total Liabilities for Deferred Benefits				<u>25,284</u>
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND				<u>\$610,620</u>

**APPENDIX**

APPENDIX

Schedule 23.

Single Life Retirement Values

<u>Sample Attained Ages</u>	<u>Present Value of \$1 Monthly For Life Increasing 3.0% Annually (1st Increase After 1 Year)</u>		<u>Future Life Expectancy (Years)</u>		<u>Expected Total Lifetime</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
	40	\$216.90	\$229.09	35.48	40.21	75.48
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

<u>Sample Attained Ages</u>	<u>Portion of Age 60 Lives Still Alive</u>		<u>\$1,000 Benefit Increasing 3% Annually</u>
	<u>Men</u>	<u>Women</u>	
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

Recommended Transfers From Employer Accumulation Fund

To Cover the Net Effect Of

H.B. 204 Increase

Health Insurance Premiums - Medicare Reimbursements

Transfer To	Amounts to be Transferred from EAF As of January 1, 1980		
	H.B. 204	Health Care #	Totals
<b>A &amp; PR Fund</b>			
State Division			
SR	\$10,787,664	\$	\$15,313,877
DR	1,396,788		3,348,720
Totals	<u>12,184,452</u>	<u>6,478,145</u>	<u>18,662,597</u>
<b>Local Government</b>			
SR	18,295,008		
DR	1,951,932		
Totals	<u>20,246,940</u>	<u>10,572,063</u>	<u>30,819,003</u>
<b>Sheriffs &amp; Deputies</b>			
SR			
DR			
Totals	<u>none</u>	<u>24,722</u>	<u>24,722</u>
<b>TOTAL TO A &amp; PR</b>	<b>\$32,431,392</b>	<b>\$17,074,930</b>	<b>\$49,506,322</b>
<b>Survivor Benefit Fund</b>			
State Division			
Employer	\$ none	\$ none	\$ none
S-1	1,403,820	236,887*	1,640,707
S-2	121,572	685,728*	807,300
Totals	<u>1,525,392</u>	<u>922,615</u>	<u>2,448,007</u>
<b>Local Government</b>			
Employer	none	none	none
S-1	2,354,640	408,115*	2,762,755
S-2	271,104	1,359,756*	1,630,860
Totals	<u>2,625,744</u>	<u>1,767,871</u>	<u>4,393,615</u>
<b>Sheriffs &amp; Deputies</b>			
Employer		none	none
S-1		1,524	1,524
S-2		3,265	3,265
Totals	<u>none</u>	<u>4,789</u>	<u>4,789</u>
<b>TOTAL TO SBF</b>	<b>\$ 4,151,136</b>	<b>\$ 2,695,275</b>	<b>\$ 6,846,411</b>
<b>TOTAL TRANSFER FROM EM- PLOYER ACCUMULATION FUND</b>	<b><u>\$36,582,528</u></b>	<b><u>\$19,770,205</u></b>	<b><u>\$56,352,733</u></b>

\* Approximated based on reported amounts for January, 1980.

# Includes Health Insurance Premiums and Medicare Reimbursements.