

State of Rhode Island and Providence Plantations



ANNUAL REPORT OF THE RETIREMENT BOARD

June 30, 1983

HON. ANTHONY J. SOLOMON
General Treasurer

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND
Annual Report

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James F. Maloney House Fiscal Advisor		
John P. Callaghan State Employees Representative		
Senator Donald Harvey, Designee of Senate Finance Committee		
Kenneth Pappas, Designee of President - R.I. League of Cities and Towns		
Marcia E. Kossick Teacher Representative		
Dr. William P. Robinson, Designee of Director of Administration		
Anthony Trubell Teacher Representative		
Representative Robert S. Turner, House Finance Committee		
Richard L. Wiegley, Designee of State Budget Director		

Report
of the
Board

ANTHONY J. SOLOMON
GENERAL TREASURER



State of Rhode Island and Providence Plantations
TREASURY DEPARTMENT
OFFICE OF THE GENERAL TREASURER
PROVIDENCE

November 30, 1983

The Honorable J. Joseph Garryah
Governor, State of Rhode Island
and Providence Plantations
State House
Providence, Rhode Island 02903

Dear Governor Garryah:

I take pleasure in submitting herewith for transmittal to the General Assembly, the Forty-seventh Annual Report of the Retirement Board of the Employees' Retirement System of the State of Rhode Island covering the fiscal year ended June 30, 1983.

Respectfully submitted,


ANTHONY J. SOLOMON
General Treasurer



REPORT OF THE RETIREMENT BOARD

The Forty-seventh Annual Report of the Retirement Board covering the fiscal year ended June 30, 1983.

The report covers in detail through the exhibits, schedules and statistics, the operations for the year and its condition as of June 30th, together with the Actuary's valuation and recommendations.

FINANCIAL FACTS

Total Reserves at the end of the year were 17.3% or \$94,068,069 higher than the previous year, for a total of \$637,286,992.

Revenues from all sources for the year amounted to \$71,887,836 for State Employees and \$81,291,037 for Public School Teachers. Expenditures for the year amounted to \$27,506,558 and \$31,603,344 for State Employees and Teachers, respectively.

Chart (A) depicts the sources of Revenue and Expenditures.

Income from investments for the year amounted to \$34,544,160 including a capital gain of \$1,555,356. This represents 35.67% of the total revenues. This income is equal to a return of 8.4% and is compared to the return of previous years in Chart (B).

Pension benefits which represent the major expenditure item, amounted to \$21,780,753 for State Employees and Legislators, and \$24,292,078 for Teachers and Teachers' Survivors. Added to this was the Cost-of-Living Adjustment, which amounted to \$1,967,459 for State Employees, and \$5,457,932 for Teachers. A comparative chart of the Cost-of-Living Adjustment graphically depicts the facts in this regard and the trend thereof in Chart (C), which covers the last ten (10) years.

UNFUNDED ACCRUED LIABILITY

This item is thoroughly covered in the Actuary's Report section.

The unfunded (accrued) liability for the State Employees was \$415,265,306 and \$668,659,506 for Teachers.

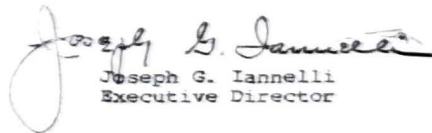
CONCLUDING COMMENT

Consistent with prior years, a normal increase in benefits was provided. In keeping with established procedures, an actuarial valuation was made which illustrates current operational results and the financial condition of the system at the end of the fiscal year. The results of operations were satisfactory.

Service to participating members is always paramount in the operation and conduct of our staff. To this end, we have held numerous pre-retirement educational courses in the past year. Evaluations made by the attendees indicate that valuable insights regarding retirement were made. We shall continue to conduct pre-retirement seminars to make our members aware of the benefits available for retirement purposes.

A sincere thanks is extended to the officials of our State government and members of the administrative staff for their cooperation and dedicated service rendered during the year.

Retirement Board of the
Employees' Retirement System of the
State of Rhode Island


Joseph G. Iannelli
Executive Director

Financial Statements

COMPARATIVE FINANCIAL BALANCE SHEET

	1952	1951
ASSETS		
Cash	\$ 2,400,140	\$ 3,740,104
Cash	—	25
Accrued Interest Receivable	9,500,500	8,148,400
Investments (At market value less value for bonds and cost of stock)	400,205,252	500,205,252
	409,705,752	508,903,714
	405,205	—
LIABILITIES & RESERVES		
Current Liabilities		
Unclaimed Reserves	—	200,000
Members' Contribution Reserves		
State Employees	40,000,000	40,000,000
Teachers	127,470,000	125,000,000
Teachers' Survivors	5,000,000	5,000,000
Total Member Reserves	172,470,000	170,000,000
General Reserves		
State Employees	20,000,000	20,000,000
Teachers	150,000,000	150,000,000
Teachers' Survivors	20,000,000	20,000,000
Certain State Employees	2,000	2,000
Certain Teachers	2,400	2,400
Total General Reserves	172,402,000	170,004,400
TOTAL LIABILITIES AND	\$ 172,402,000	\$ 170,004,400

STATEMENTS OF REVENUES AND EXPENDITURES
YEAR ENDED - JUNE 30, 1953

REVENUES

Member Contributions	
State Employees	\$ 15,603,000
Teachers	26,870
Teachers' Survivors	18,028,000
Int. Income	22,400
State Contributions	85,886
State Employees	\$ 18,000,000
Teachers	26,125,000
Teachers' Survivors	17,145,000
Members' Contributions	7,800
Teachers	10,000,000
Teachers' Survivors	24,000
Investment Income	49,000,000
Dividends	4,100,000
Interest	10,000,000
State Employees	49,000,000
Teachers	14,100,000
Teachers' Survivors	10,000,000
Other Income	24,000
Members' Contributions	13,000
Teachers	1,000
Teachers' Survivors	3,000
Investment Income	18,000
Dividends	1,000
Interest	24,000
Other Income	24,000
Members' Contributions	1,000
Teachers	1,000
Teachers' Survivors	1,000
Investment Income	1,000
Dividends	1,000
Interest	1,000
Other Income	1,000
Total Revenues	\$ 153,126,500

EXPENDITURES

General Expenses	
State Employees	24,047,100
Teachers	604,804
Teachers' Survivors	29,225,072
Certain State Employees	497,604
Certain Teachers	8,600
Certain Teachers' Survivors	24,000
Certain State Employees	704,131
Certain Teachers	29,200
Certain Teachers' Survivors	312,404
State Employees	2,007,131
Teachers	3,222,378
Teachers' Survivors	312,000
Investment Income	25,783
Dividends	180,604
Interest	224
Other Income	—
Members' Contributions	—
Teachers	17,600
Teachers' Survivors	—
Investment Income	17,600
Dividends	—
Interest	—
Other Income	—
Total Expenditures	\$ 153,126,500

ANALYSIS OF REVENUES & EXPENDITURES
FISCAL YEAR ENDED - JUNE 30, 1983

<u>REVENUES</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>	<u>TOTAL</u>
Member Contributions	\$15,444,544	21.48	\$18,552,453	22.82	\$33,996,997
State Contributions	28,130,363	39.13	17,148,324	21.10	45,278,687
Municipal Contributions			19,134,677	23.54	19,134,677
Investment Earnings	28,172,059	39.19	26,372,101	32.44	54,544,160
Miscellaneous	140,568	00.20	83,482	00.10	224,050
<u>TOTAL REVENUES</u>	<u>\$71,887,534</u>	<u>100.00</u>	<u>\$81,291,037</u>	<u>100.00</u>	<u>\$153,178,571</u>
 <u>EXPENDITURES</u>					
Pensions	\$21,780,753	30.30	\$24,292,078	29.88	\$ 46,072,831
Cost-of-Living Adjust.	2,967,459	4.13	5,457,932	6.71	8,425,391
Death Benefits	733,331	1.02	312,454	0.39	1,045,785
Refunds-Contributions	2,007,355	2.79	1,541,480	1.90	3,548,835
Miscellaneous	17,660	0.02			17,660
<u>TOTAL EXPENDITURES</u>	<u>\$27,506,558</u>	<u>38.26</u>	<u>\$31,603,944</u>	<u>38.88</u>	<u>\$59,110,502</u>
 EXCESS REVENUES OVER EXPENDITURES -- TO RESERVES	 \$44,380,976	 61.74	 \$49,687,093	 61.12	 \$94,068,069

DISTRIBUTION OF EXCESS REVENUE

<u>Unclaimed Benefits</u>	\$ 17,331
<u>Members' Reserves</u>	
State	13,417,021
Teachers	16,806,585
Survivors	410,795
<u>General Reserves</u>	
State	30,947,874
Teachers	30,051,453
Survivors	2,415,860
Certain Employees	1,150
<u>T O T A L --</u>	<u>\$94,068,069</u>

ANALYSIS OF INVESTMENT INCOME
FISCAL YEAR ENDED JUNE 30, 1983

Investment Income - Interest		\$ 43,581,039
 <u>ADD:</u>		
Accrued Interest June 30, 1983	\$9,565,689	
Accrued Interest July 1, 1983	8,758,967	
	\$ 806,722	
Discounts Amortized	814,719	
Total Additions		<u>1,621,441</u>
T O T A L --		\$ 45,202,480
 <u>LESS:</u>		
Accrued Interest Purchased	\$2,179,365	
Premiums Amortized	163,137	
Total Deductions		<u>\$ 2,342,502</u>
Net Interest Earned		\$42,859,978
Dividends		10,130,940
		<u>52,990,918</u>
 TOTAL EARNED ON INVESTMENTS		\$52,990,918
 CAPITAL GAIN		<u>1,553,250</u>
INVESTMENT INCOME		\$54,544,168
Less Postage --		<u>8</u>
NET INVESTMENT INCOME --		<u>\$54,544,160</u>

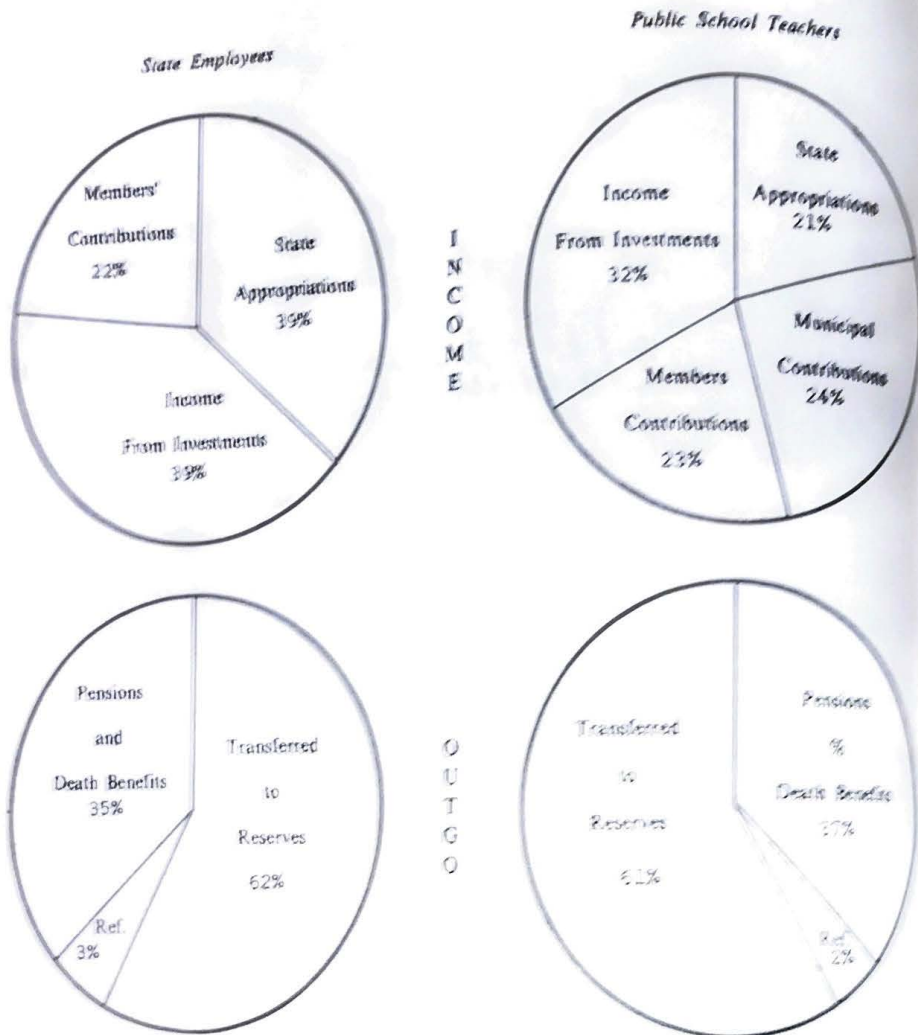
DISTRIBUTION OF INVESTMENT INCOME
FISCAL YEAR ENDED -- JUNE 30, 1983

	<u>EMPLOYEES</u>	<u>TEACHERS</u>	<u>TEACHERS'</u> <u>SURVIVORS</u>	<u>TOTAL</u>
<u>MEMBER RESERVES</u>				
Balance July 1, 1983	\$82,628,251	113,536,024	6,287,524	202,451,799
Balance June 30, 1983	92,361,077	127,472,311	6,686,410	226,519,798
<u>GENERAL RESERVES</u>				
Balance July 1, 1982	199,973,352	122,238,642	18,466,479	340,678,473
Balance June 30, 1983	206,442,436	131,196,676	18,477,941	356,117,053
T O T A L --	<u>581,405,116</u>	<u>494,443,653</u>	<u>49,918,354</u>	<u>1,125,767,123</u>
AVERAGE	290,702,558	247,221,827	24,959,177	562,883,562
PERCENT	51.65	43.92	4.43	100.00
DISTRIBUTION	28,172,059	23,955,795	2,416,306	54,544,160

Highlights

CHART A

SOURCES OF REVENUE AND HOW EXPENDED



Ref. Denotes Refunds

CHART 'B'
INVESTMENT RATE OF RETURN

YEAR	RATE OF RETURN
1983	9.6%
1982	10.2
1981	9.3
1980	8.5
1979	7.4
1978	6.7
1977	6.6
1976	6.5
1975	6.3
1974	5.8
1973	5.4
1972	5.3
1971	5.3
1970	5.0

CHART 'C'
COST-OF-LIVING ADJUSTMENT

YEAR	STATE EMPLOYEES PENSION BENEFITS	COST OF LIVING ADJUSTMENT	TEACHERS PENSION BENEFITS	COST OF LIVING ADJUSTMENT
72-73	\$ 5,782,110	411,796	11,413,852	923,868
73-74	6,685,643	502,378	12,778,668	1,119,746
74-75	8,118,371	612,196	14,076,602	1,367,603
75-76	9,635,536	748,731	15,216,413	1,647,312
76-77	11,045,772	906,030	16,279,438	1,948,642
77-78	12,638,920	1,097,430	17,382,026	2,269,569
78-79	14,007,233	1,317,011	18,986,600	2,698,815
79-80	15,743,067	1,563,271	20,653,181	3,128,123
80-81	16,738,846	2,049,888	20,962,025	4,036,193
81-82	18,718,665	2,575,727	22,409,596	5,005,960
82-83	21,105,380	2,941,778	23,767,139	5,457,932

CHART 'D'
COMPARATIVE PERTINENT FINANCIAL
FACTS FOR
STATE EMPLOYEES AND TEACHER MEMBERS

FISCAL YEAR ENDED JUNE 30	EXCESS REVENUES OVER EXPENDITURES				INVESTMENT EARNINGS	
	State Emp.	%	Teachers	%	State Emp.	Teachers
1971	7,984,606	58	7,089,543	40	4,062,592	3,359,023
1972	8,782,514	56	7,479,578	39	4,463,637	3,708,529
1973	8,825,489	51	8,539,937	38	5,140,631	4,309,059
1974	10,237,173	52	9,264,517	37	6,159,198	5,215,129
1975	12,210,282	53	10,587,575	38	7,065,233	6,006,428
1976	13,679,596	52	11,404,410	39	8,361,655	7,102,844
1977	15,604,153	52	16,654,090	46	9,370,122	8,056,179
1978	18,913,113	54	20,608,794	49	10,596,621	9,364,238
1979	16,192,484	46	16,004,751	41	13,001,764	11,694,352
1980	26,262,892	57	23,016,169	47	16,866,504	15,206,410
1981	31,480,978	59	31,151,555	53	20,782,136	18,833,087
1982	40,162,709	61	39,532,861	57	25,290,552	23,195,936
1983	44,380,976	62	49,687,094	61	28,172,059	26,372,102

*Report
of the
Actuary*

EMPLOYEES' RETIREMENT SYSTEM
OF THE STATE OF RHODE ISLAND

Actuarial Valuation as of
June 30, 1983

January 23, 1984

Board of Trustees
Retirement Board of Employees'
Retirement System
State of Rhode Island
198 Dyer Street
Providence, RI 02903

Dear Members of the Board:

We are pleased to submit herewith our Actuarial Valuation of the Employees' Retirement System of the State of Rhode Island as of June 30, 1983.

Our report analyzes the actuarial status of the System, and projects the cost requirements for the Board to certify to the Legislature.

We received a great deal of help from State employees in obtaining the information which forms the basis of this report. Most important, Mr. Joseph G. Iannelli, Executive Director; Mr. John F. Sullivan, Assistant Director; and Mr. Carlo Mencucci, Principal Accountant, were available whenever needed to answer any questions and provide any information requested. Indeed, the material they provided on their own initiative anticipated many of our needs.

For convenience, this report is divided into the following sections:

- I. SUMMARY
 - II. EMPLOYEE DATA
 - III. RETIREE DATA
 - IV. RETIREMENT FUND
 - V. ACTUARIAL ASSUMPTIONS AND COST METHOD
 - VI. RESULTS OF VALUATION
- APPENDIX

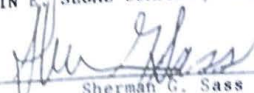
Appended to this report is our actuarial certificate detailing the cost factors, assumptions, and plan of benefits used for the valuation.

We will be pleased to meet with you to discuss this report at your convenience.

Sincerely,

MARTIN E. SEGAL COMPANY, INCORPORATED

By


Sherman G. Sass
Senior Vice President

By


Joseph C. Demty, A.S.A., M.A.A.A
Actuary

/tlwj

1. SUMMARY

Benefit Provisions

The Employees' Retirement System of the State of Rhode Island covers most State employees. Legislators and elected officials may become members on an optional basis. State college teachers may elect coverage under the T.L.A.A. program. State employees contribute 6* per cent of their annual earnings and Teachers contribute 7* per cent.

The System provides unreduced benefits of 1.7 per cent of earnings for the first ten years of service; 1.9 per cent for the next ten years; and 2.4 per cent per year of service over 20 years up to a maximum of 80 per cent of earnings for all years of service. Such benefits are available to members at least age 55 with 30 years of service or age 60 with 10 years of service, or after 35 years at any age. State correctional officers may retire at age 50 if they have 20 years of service, at 2 per cent for each year of service. Benefits are based on the average of the highest three consecutive years' earnings. After the third anniversary of retirement, "cost-of-living increases" amounting to 3 per cent per year of the original award are provided, independent of actual changes in the Consumer Price Index. Beginning January 1, 1981, the cost-of-living increases are computed at the rate of 3 per cent compounded annually.

The Plan also provides non-service-connected disability and vested benefits after five and ten years of service, respectively; service-connected disability pensions with no minimum service requirement; widow's benefits for service-connected death; and certain lump sum death benefits.

More detail can be found in the actuarial certificate following this report.

*These rates are scheduled to increase by 0.5 per cent on July 1, 1985.

Employee Data

We received data on 15,748 active State Employees and 9,971 Teachers as of June 30, 1983 who were participating in the System. On the average, the State Employees were age 44 and had 9 1/2 years of service; Teachers were age 41 1/2 with 34 years of service.

Retiree Data

We received data on 4,341 State Employee pensioners and 351 beneficiaries as of June 30, 1983. The pensioners' average monthly benefit was \$405. There were 4,097 retired Teachers and 104 beneficiaries; the average monthly benefit was \$825 for the pensioners. The benefit amounts include an adjustment for the cost-of-living provision. Of all the pensioners on the rolls, 6 per cent had retired in the year ended June 30, 1983.

Retirement Fund

As of June 30, 1983, the assets of the Retirement Fund, including Teachers Services Reserves, amounted to \$537 million. These assets are available as an offset to the actuarial liabilities for future benefits.

Actuarial Valuation

Our valuation was prepared as of June 30, 1983. Our calculations were based on reasonable assumptions as to expected future experience and are the same as those used in our previous actuarial valuation. We used the "entry age normal cost" method, which spreads the cost of each employee's projected pension as a level percentage of his earnings from date of hire to assumed retirement.

The employer normal cost for State Employees is \$11.9 million. This represents 5.0 per cent of the reported payroll of participating State Employees as of June 30, 1983. The employer normal cost for Teachers is \$10.3 million or 4.1 per cent of reported participating payroll.

For State Employees, the actuarial accrued liability (representing the cost of the benefits allocated to years before July 1, 1983) is \$242 million, of which \$283 million represents the liability to those already receiving pensions. The unfunded actuarial accrued liability at the end of the year is \$405 million. For Teachers, the actuarial accrued liability is \$551 million, of which \$307 million is for those receiving pensions. The unfunded actuarial accrued liability stands at \$668 million.

The value of the System's vested benefits is \$1.34 billion. Thus, the assets are short of this amount by \$735 million (excluding assets of the Teachers Services program).

By the fiscal year 1984-85, the State's statutory funding schedule, as amended effective July 1, 1984, calls for a contribution of 100 per cent of the State's normal cost and 85 per cent of the interest on the unfunded actuarial accrued liability. This amounts to 14.8 per cent of the reported payroll of \$785 million for State Employees and 13.7 per cent for Teachers is paid for by the municipalities. According to the statute as amended, the percentages of normal cost and interest on the unfunded liability required to be contributed are scheduled to increase until fiscal 1990-91 and that in later years the full normal cost and amortization of unfunded liabilities will be required.

11. EMPLOYEE DATA

We received data on 15,748 State Employees and 9,971 Teachers participating in the System on June 30, 1983. The data included age, service, sex, and salary for each participant. The average salary of the participants was \$16,400 for State Employees (see Note below), and \$25,300 for Teachers. The data included 276 Correctional Officers and 144 Legislators.

Tables 1A and 1B give detailed age, service and average salary data on State Employees and Teachers, respectively. In preparing these tables, we assumed an annual salary of \$10,000 for the State Employees for whom earnings were missing, and a \$15,000 annual salary was imputed for Teachers with unknown compensation.

Tables 2A and 2B summarize certain basic statistics on active State Employees and Teachers and compare them to those of the previous year. During the year, average salary for State Employees increased by 5.3 per cent while Teachers' average salary increased by 10.9 per cent (see Note below). Aggregate payroll increased by 5.4 per cent for State Employees and by 7.7 per cent for Teachers.

Overall, the data was in good condition. We recommend that the Board continue its practice of storing all basic participant information on computer files.

Note: The salaries reported for State Employees were as of June 30, 1983 and for Teachers as of July 1, 1983. This is consistent with the salaries used in the last valuation.

Table 1A
Number and Average Salaries of Employees in Active Service
as of June 30, 1983 by Age and by Years of Service

STATE EMPLOYEES		Years of Service											
Age	Total	Under 20	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 and over	Unknown
Total	15,748	\$16,400	\$11,400	\$12,700	\$14,200	\$16,200	\$17,700	\$17,700	\$17,300	\$15,300	\$14,333	\$17,500	4,700
0 - 4	5,004	\$14,200	\$11,400	\$12,900	\$14,100	\$15,000	\$15,300	\$15,300	\$14,700	\$14,000	\$15,200	8,800	900
5 - 9	4,533	\$16,100	85	\$12,900	14,100	17,000	18,100	17,300	16,700	15,900	15,000	15,300	6,600
10 - 14	3,184	\$16,700	86	--	\$13,800	16,600	20,000	327	425	16,100	14,900	14,200	14,200
15 - 19	1,655	\$18,700	43	--	--	\$16,000	18,800	170	196	19,300	17,200	18,100	--
20 - 24	776	\$20,600	17	--	--	--	\$16,800	122	151	21,500	20,500	18,800	20,900
25 - 29	437	\$21,800	10	--	--	--	\$18,600	60	106	21,500	23,300	22,200	--
30 - 34	218	\$22,900	--	--	--	--	--	18	53	20,100	24,100	27,500	--
35 and over	121	\$24,000	--	--	--	--	--	--	8	\$20,300	24,500	25,600	--
Total	9,971	\$13,100	--	--	\$11,600	--	11,700	13,100	--	25,300	27,800	30,800	19,000

Table 1B
Number and Average Salaries of Employees in Active Service as of June 30, 1961 by Age and by Years of Service

Age	Years of Service												
	Total	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over	Unknown
Total	8,821	828,600	19,900	19,900	19,900	19,900	19,900	19,900	19,900	19,900	19,900	19,900	19,900
0-4	1,005	819,500	94	823,300	125	868	868	868	868	868	868	868	868
5-9	1,412	821,500	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
10-14	1,628	820,100	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
15-19	1,801	820,300	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
20-24	2,024	821,300	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
25-29	2,203	820,400	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
30-34	2,318	820,500	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
35-39	2,418	820,600	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
40-44	2,502	820,700	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
45-49	2,572	820,800	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
50-54	2,618	820,900	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
55-59	2,648	821,000	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
60-64	2,668	821,100	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
65 and over	2,688	821,200	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300
Unknown	2,708	821,300	1	823,300	1	823,300	823,300	823,300	823,300	823,300	823,300	823,300	823,300

Table 3A

Statistical Data on Active Duty Employees as of June 30, 1961 and 1960

	June 30, 1961	June 30, 1960
Number of active employees	15,704	15,704
Total annual salary	\$100,000,000	\$100,000,000
Average annual salary	\$6,368	\$6,368
Average age	34	34
Average years of service	9.00	9.00
Number eligible for service retirement	1,400	1,400
Number vested but not eligible to receive	4,000	4,000

See note in text re salary data.
SOURCE: BUREAU OF THE ARMY.

III. RETIRED DATA

Table 2B
Statistical Data on Active Teachers
on June 30, 1983 and 1982

	June 30, 1983	June 30, 1982
Number of covered employees	9,971	10,132
Total annual salary	\$252,176,400	\$231,063,000
Average annual salary	\$ 25,300	\$ 22,800
Average age	41 1/2	41
Average years of service	14	13
Number eligible for service retirement	606	599
Number vested but not eligible to retire	6,441	5,481

See note in text on salary data.

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The data on retired members and beneficiaries included age, sex, monthly benefit, retirement date, option, and type of pension.

The following are significant statistics on the retired group:

	State Employees	Teachers
Beneficiaries:		
Number	6,961	2,967
Average age	70 1/2	72 1/2
Average monthly benefit	\$415	\$325
Beneficiaries:		
Number	321	106
Average age	76	76
Average monthly benefit	\$387	\$291

Table 3A gives distributions of the 366 new State Employee pensions in the current year by type of pension and amount. Table 6A does the same for age retirement. Tables 3B and 4B are similar for the 166 new Teacher pensions.

Tables 5A and 5B give distributions for all pensions in force at the end of the fiscal year by type and amount. Tables 6A and 6B do the same by age.

Overall, the data on retirees was quite good. A minor problem, which has no impact on cost, is that some beneficiaries may not be classified as such and therefore they would be treated as pensioners.

The data on terminated employees with vested rights to a deferred benefit did not include enough information to calculate the total cost for them. We did, however, again this year, include a cost equal to their accumulated employee contributions. We again recommend that information regarding terminated vested employees be maintained by the System so that it can be incorporated in future valuations and reflected in the costs.

RHODE ISLANDERS

Monthly amount	Type of pension		
	Total	Service	Ordinary Disability
100 - 149	1	1	--
150 - 199	3	2	1
200 - 299	2	1	1
300 - 349	1	--	1
350 - 399	5	4	1
400 - 449	9	8	1
450 - 499	6	6	--
500 - 599	13	12	1
600 - 699	10	9	1
700 - 799	12	10	2
800 - 899	17	16	1
900 - 999	12	12	--
1,000 - 1,099	21	18	3
1,100 - 1,199	13	13	--
1,200 - 1,299	9	8	1
1,300 - 1,399	13	13	--
1,400 - 1,499	6	6	--
1,500 - 1,999	11	10	1
2,000 - 2,499	2	2	--
Total	166	151	8

TEACHERS

Pensions Awarded in the Year Ended June 30, 1983
by Type and by Monthly Amount

Table 38

RHODE ISLANDERS

Monthly amount	Type of pension			
	Total	Service	Ordinary Disability	Accidental Disability
80	10	8	1	1
100 - 149	19	14	2	3
150 - 199	18	13	3	2
200 - 299	27	22	3	2
300 - 349	14	12	1	1
350 - 399	38	32	3	3
400 - 449	54	47	4	3
450 - 499	58	52	3	3
500 - 599	74	67	4	3
600 - 699	100	87	6	7
700 - 799	120	107	7	6
800 - 899	150	137	8	5
900 - 999	170	157	9	4
1,000 - 1,099	200	187	10	3
1,100 - 1,199	220	207	11	4
1,200 - 1,299	240	227	12	1
1,300 - 1,399	260	247	13	1
1,400 - 1,499	280	267	14	1
1,500 - 1,999	320	307	16	5
2,000 - 2,499	380	367	19	3
Total	380	329	32	8

STATE EMPLOYEES

Pensions Awarded in the Year Ended June 30, 1983
by Type and by Monthly Amount

Table 3A

Age on effective date	Total	Type of pension		
		Service	Ordinary Disability	Beneficiary
35 - 39	1	1	1	1
40 - 44	1	1	1	1
45 - 49	2	2	1	1
50	2	2	1	1
51	1	1	1	1
52	1	1	1	1
53	1	1	1	1
54	1	1	1	1
55	10	8	1	1
56	4	4	2	1
57	9	6	2	1
58	3	2	1	1
59	7	7	1	1
60	36	36	1	1
61	14	14	1	1
62	21	21	1	1
63	10	10	1	1
64	9	9	1	1
65	13	13	1	1
66	3	3	1	1
67	7	6	1	1
68	5	5	1	1
69	4	4	1	1
70 and over	3	2	1	1
Total	166	151	8	7

TEACHERS
Pensions Awarded in the Year Ended June 30, 1983
by Type and by Age on Effective Date

Table 4B

Age on effective date	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Legislator Beneficiary
30 - 34	1	1	1	1	1
35 - 39	3	3	1	1	1
40 - 49	2	2	1	1	1
51	4	4	2	1	1
52	2	2	1	1	1
53	2	2	1	1	1
54	3	3	1	1	1
55	13	4	6	2	1
56	10	7	2	1	1
57	4	4	2	1	1
58	8	4	2	1	1
59	6	1	4	1	1
60	46	46	1	1	1
61	25	22	2	1	1
62	60	57	1	1	1
63	21	20	1	1	1
64	20	20	1	1	1
65	46	45	1	1	1
66	26	26	1	1	1
67	13	12	1	1	1
68	13	13	1	1	1
69	7	7	1	1	1
70 and over	27	27	1	1	1
Total	360	309	32	3	8

STATE EMPLOYEES
Pensions Awarded in the Year Ended June 30, 1983
by Type and by Age on Effective Date

Table 4A

Monthly amount	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Beneficiary
Under \$50	1	1	--	--	--
\$ 50 - 99	7	7	--	--	--
100 - 149	19	17	--	--	
150 - 199	41	35	2	2	
200 - 249	56	52	2	2	
250 - 299	70	62	6	2	
300 - 349	96	72	10	14	
350 - 399	101	88	6	7	
400 - 449	118	99	13	6	
450 - 499	97	78	6	13	
500 - 599	235	206	13	15	
600 - 699	267	246	13	8	
700 - 799	422	404	--	9	
800 - 899	342	330	5	6	
900 - 999	329	318	5	5	
1,000 - 1,099	291	277	5	3	
1,100 - 1,199	201	197	--	2	
1,200 - 1,299	117	111	--	4	
1,300 - 1,399	112	112	--	--	
1,400 - 1,499	55	54	--	1	
1,500 - 1,999	80	79	--	1	
2,000 - 2,499	10	10	--	--	
2,500 - 2,999	3	3	--	--	
3,000 - 3,499	1	1	--	--	
Total	3,071	2,859	95	106	

Table 5B
Pensions in Payment Status on June 30, 1983
by Type and by Monthly Amount
TEACHERS

Monthly amount	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Legislator
Under \$50	40	30	--	6	4
\$ 50 - 99	308	251	22	12	23
100 - 149	671	585	43	--	35
150 - 199	711	582	92	6	31
200 - 249	600	444	89	9	39
250 - 299	464	360	41	3	37
300 - 349	361	277	28	4	29
350 - 399	283	230	21	4	29
400 - 449	239	190	12	4	19
450 - 499	244	192	12	10	24
500 - 599	327	237	13	10	36
600 - 699	236	196	15	8	31
700 - 799	171	151	6	4	17
800 - 899	128	107	3	5	10
900 - 999	82	77	1	--	13
1,000 - 1,099	81	75	1	--	4
1,100 - 1,199	74	70	1	1	4
1,200 - 1,299	61	55	--	--	3
1,300 - 1,399	51	47	1	1	6
1,400 - 1,499	33	32	--	--	2
1,500 - 1,999	90	90	--	--	1
2,000 - 2,499	24	24	--	--	--
2,500 - 2,999	10	10	--	--	--
3,000 - 3,499	3	3	--	--	--
Total	5,292	4,315	401	95	351

Table 5A
Pensions in Payment Status on June 30, 1983
by Type and by Monthly Amount
STATE EMPLOYEES

Age on June 30, 1983	Type of pension			
	Total	Service	Ordinary Disability	Accidental Disability
25 - 29	39	3	2	--
30 - 34	46	6	3	1
35 - 39	46	1	4	1
40 - 44	49	8	6	1
45 - 49	56	16	9	1
50 - 54	59	95	18	1
55 - 59	64	421	21	3
60 - 64	69	597	15	6
65 - 69	76	729	707	9
70 - 74	79	645	613	6
75 - 79	86	306	288	3
80 - 84	89	171	158	4
85 - 89	96	61	53	1
90 - 94	99	12	11	--
95 - 99	106	2	1	--
100 - 104	106	1	1	--
105 - 109	106	1	1	--
Total	3,071	2,659	95	13
Age on June 30, 1983	Total	Beneficiary	Beneficiary	Beneficiary
				106

Table 6B
 Teachers
 Pensioners in Payment Status on June 30, 1983
 by Type and by Age

Age on June 30, 1983	Type of pension			
	Total	Service	Ordinary Disability	Accidental Disability
25 - 29	1	--	--	1
30 - 34	7	4	2	--
35 - 39	13	1	6	3
40 - 44	12	--	7	5
45 - 49	26	--	15	6
50 - 54	67	8	39	10
55 - 59	197	71	73	20
60 - 64	762	582	105	17
65 - 69	1,452	1,275	86	11
70 - 74	1,317	1,159	67	16
75 - 79	796	702	16	3
80 - 84	429	366	3	1
85 - 89	169	115	--	6
90 - 94	53	35	--	2
95 - 99	8	4	--	--
100 - 104	3	3	--	--
Total	5,292	4,315	401	95
Age on June 30, 1983	Total	Beneficiary	Beneficiary	Beneficiary
				130

Table 6A
 State Employees
 Pensioners in Payment Status on June 30, 1983
 by Type and by Age

IV. RETIREMENT FUND

The State maintains the Employees' Retirement Fund. The Retirement Board provided us with financial statements as of June 30, 1983.

The Fund receives all member and employer contributions. The assets are invested by the State Investment Commission, with the income being added to the Fund and available for reinvestment.

Payments from the Fund are primarily for refunds of employee contributions, lump sum death benefits, and pension payments. Contribution refunds occur when an employee terminates employment and elects to take a refund, or when he dies after retirement without having received payments from the Fund equal to his total contributions.

Table 7 gives a summary of income and expenditures for the years ended June 30, 1983 and 1982.

At June 30, 1983 assets totalled approximately \$637 million. Table 8 shows the composition of the assets and compares them to those of the previous year. About 71 per cent of the Fund was invested in fixed income securities such as bonds and notes.

The financial statements indicate that 51 per cent of the assets relate to State Employees, 44 per cent are for Teachers, and 4 per cent relate to Teachers Survivors benefits. There is also a small unallocated reserve for unclaimed benefits. Table 9 shows the allocation of assets in detail for 1983 and 1982.

Table 7

Summary Statement of Income and Expenses
For the Years Ended June 30, 1983 and 1982

	1983	1982
Employer contributions	\$64,413,364	\$57,216,108
Member contributions	33,996,997	29,071,481
Total contributions	\$98,410,361	\$86,287,588
Less: Administration expenses	8	5
Net contribution income	\$98,410,353	\$86,287,583
Net miscellaneous items	206,390	145,699
Investment income:		
Dividends	\$10,130,940	\$ 8,108,168
Interest	42,859,978	39,935,687
Capital gains and losses	1,553,250	442,649
Net investment income	54,544,169	48,486,504
Total income available for benefit payments	\$153,160,911	\$134,919,787
Benefits payments:		
Pension benefits	\$54,498,222	\$49,850,309
Death benefits	1,045,785	1,138,648
Contribution refunds	3,548,835	4,235,260
Total benefit payments	59,092,842	55,224,217
Excess of income over expenses	\$94,068,070	\$79,695,570

Note: Detail figures may not add to totals shown because of rounding.

Table B
Assets as of June 30, 1983 and 1982

	1983	1982
Cash	\$ 2,805,161	\$ 1,261,336
Accounts receivable	9,565,690	8,738,967
Investments:		
government bonds	225,255,816	819,827,588
corporate bonds	117,603,000	128,668,333
common and preferred stocks	177,085,632	139,923,167
collateral of deposits and repurchase agreements	66,335,203	31,968,553
commercial paper	69,661,958	62,896,516
miscellaneous	350,000	--
Class business premiums and discounts	(5,805,946)	(5,863,315)
Total assets	617,286,992	533,198,620

Note: Detail figures may not add to totals shown because of rounding.

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Table C
Allocation of Assets by Plan
as of June 30, 1983 and 1982

	1983	1982
State Employees:		
Employer reserve	8236,616,695	9189,973,353
Member reserve	92,361,072	89,628,251
Total State Employees reserve	8328,977,767	8279,601,604
Teachers:		
Employer reserve	8155,159,671	9189,838,668
Member reserve	127,672,311	113,336,026
Total teacher reserve	8282,831,982	9323,174,694
Teachers buydown:		
Employer reserve	820,006,868	816,666,879
Member reserve	5,666,610	6,287,225
Total teachers buydown reserve	825,673,478	822,954,104
Unallocated:		
Unfunded benefit reserve	105,980	88,650
Total assets	967,286,992	853,218,922

Note: Detail figures may not add to totals shown because of rounding.

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V. ACTUARIAL ASSUMPTIONS AND COST METHOD

The actual cost of a pension plan consists of the benefit payments and administrative expenses less any investment earnings. An actuarial cost method aims to budget this cost so as to establish a reasonable relationship between employer pension contributions and the employee services that give rise to the pension obligation. The result is an employer contribution which anticipates future payments. A fund accumulates which earns investment income, thus reducing the ultimate cost.

Calculating the appropriate contribution requires that projections, and therefore assumptions, be made as to future experience. Some items, such as mortality rates, can be predicted fairly accurately. Others, such as future salary increases are, of course, subject to considerable variation. It will be useful to identify the assumptions used, particularly since broad questions of fiscal policy are implicit in certain of the assumptions. These assumptions are the same as those used in the June 30, 1982 study.

Mortality Rates

We assumed that mortality rates would conform with the 1971 Group Annuity Mortality Table. This is the most commonly used table of pension plan mortality, and we believe it is a reasonable basis for estimating experience under the System. Table 10 gives some life expectancies determined from this table.

Salary Projections

The System provides benefits that are based on the three highest consecutive years' salary for each employee. To assume that each employee's salary will be the same in the three years before retirement as it is today would seriously understate the System's cost. Accordingly, we use a salary projection to anticipate future increases in earnings.

Additionally, it is appropriate to compute pension normal costs which are level as a percentage of payroll rather than level as a dollar amount, and a salary projection is also used for this purpose. If the cost were calculated as a level dollar amount for an individual, the cost might be a high per cent of his pay when he is young and a lower per cent of his higher salary at a later age. By the use of a salary projection, the contribution for an individual, all other things remaining the same, tends to stay at the same percentage over the years.

How to project future salaries is a major policy question. To what extent should one seek to anticipate, through present contributions, the full impact on pension costs of future salary changes?

For purposes of our cost determination, we have made a moderate allowance for general salary increases in the future. We also reflect salary increases as the result of longevity and promotions. The scale has relatively greater increases at the younger ages to correspond with the State's salary schedules. The salary scale factors are:

<u>Age</u>	<u>Present Salary as a % of Age 65 Salary</u>	<u>Annual Increases (Rate %)</u>
20	17.45	4.84
25	22.07	4.75
30	27.76	4.59
35	34.62	4.39
40	42.68	4.08
45	51.76	3.72
50	61.77	3.45
55	72.98	3.33
60	86.08	3.16

As will appear, the problem of salary projection has a parallel in the question of choosing an assumption as to future investment yield and the two are somewhat interrelated.

Termination Rates

In any employee group, many employees will terminate and receive less than full benefits. Employees terminating with less than ten years of active service, for example, receive only a refund of their contributions. The termination assumption anticipates the release of State and Town funds that may have been accumulated for such people, thus resulting in a reduced ongoing cost.

We assumed that terminations each year from all causes would be as follows:

<u>State Employees (Rate %)</u>				
<u>Age</u>	<u>Death*</u>	<u>Disability</u>	<u>Withdrawal</u>	<u>Total*</u>
20	.05	.06	21.20	21.31
25	.06	.09	15.80	15.95
30	.08	.11	11.60	11.79
35	.11	.15	8.40	8.66
40	.16	.22	6.20	6.58
45	.29	.36	4.20	4.85
50	.53	.61	2.60	3.73
55	.85	1.01	--	1.86
60	1.31	--	--	1.31

15% of the above disability rates are service-connected.

<u>Teachers (Rate %)</u>				
<u>Age</u>	<u>Death*</u>	<u>Disability</u>	<u>Withdrawal</u>	<u>Total*</u>
20	.05	.06	12.39	12.50
25	.06	.09	9.70	9.85
30	.08	.11	7.50	7.69
35	.11	.15	5.66	5.92
40	.16	.22	4.14	4.52
45	.29	.36	2.75	3.41
50	.53	.61	1.35	2.49
55	.85	1.01	--	1.86
60	1.31	--	--	1.31

15% of the above disability rates are service-connected.

*Rates shown are for men; rates for women are slightly lower.

Note: Detail figures may not add to totals shown because of rounding.

Retirement Ages

The System provides unreduced benefits as early as age 55 for general employees and age 50 for State Correctional Officers. We have assumed State Employees will retire at age 64, or upon the completion of ten years of service if later. Teacher retirements are assumed to occur when the teacher has attained age 63 and has completed ten or more years of service. In any case where the employee already meets these assumed conditions of age and service, it is assumed that he or she will retire immediately.

Post-Retirement Increases

Following the third anniversary of retirement, cost-of-living increases are regularly provided to pensioners. Our calculations assumed 3 per cent annual benefit increases as provided by Statute. Cost-of-living increases are now "compounded" from year to year. With this valuation we took into account the adjustment effective January 1, 1984.

Investment Return

Investment return has a major effect on the ultimate cost of a retirement system. In general, if a system is actuarially funded (so that it has a reserve which is earning substantial investment income, a yield of 6 per cent - in contrast to a 5 per cent yield - could reduce annual costs by 16-20 per cent.

An assumption must be made concerning future yields. It must be a rate that will be valid for the long-run, that is, not only for money invested today or next year, but also for money invested 40 or more years from now.

We select an investment return assumption of 6 1/2 per cent per year for our calculation. This assumption takes account of probable moderate long-term inflation but is not tied directly to the higher rates currently available.

Actuarial Cost Method

We have used the "entry age normal" actuarial cost method. This method spreads the cost of the benefits to be provided to an individual as a level percentage of his pay from his date of employment to his assumed date of retirement. The normal cost for the entire system is equal to the sum of the normal costs for all participants. In a rough sense, it can be visualized as the cost of benefits earned during the current year.

The accrued actuarial liability represents the amount by which the future normal costs fall short of meeting the cost of future benefit payments. It can also be viewed, roughly, as the value of benefits accrued for service prior to the valuation date.

Overall Actuarial Basis

We believe that our assumptions, taken as a whole, are reasonable. To the extent that actual experience is better or worse than assumed, actuarial gains or losses will develop, with corresponding decreases or increases in future costs.

Missing Data

It was necessary to make certain "non-actuarial" assumptions where data was missing or incomplete. In all cases, we assumed such individuals had the same characteristics as other participants, taking into account the known characteristics (e.g. male members age 37 with unknown services were assumed to have the same service distribution as male members age 37 with known service).

Table 16

Expected Number of Years of Life Remaining at Specified Ages

Age	Male	Female
55	22.7	28.8
56	21.9	28.0
57	21.1	27.2
58	20.3	26.4
59	19.5	25.6
60	18.8	24.8
61	18.0	24.0
62	17.2	23.2
63	16.5	22.4
64	15.8	21.6
65	15.0	20.8
66	14.4	20.0
67	13.8	19.2
68	13.1	18.4
69	12.5	17.6
70	11.9	16.8
71	11.3	16.0
72	10.8	15.2
73	10.3	14.4
74	9.7	13.6
75	9.2	12.7

1971 Group Annuity Mortality Table.

RHODE ISLAND BRS

VI. RESULTS OF VALUATION

State Employees

The costs for State Employees as of June 30, 1983 developed as follows:

Item	Amount	% of Payroll
(1) Participating payroll	\$258,062,900	--
(2) Employer normal cost	12,884,300	5.0%
(3) Unfunded actuarial liability	415,265,300	--
(4) Interest on unfunded actuarial liability	25,344,900	9.8
(5) Total annual cost payable July 1, 1983--Interest only = (2) + (4)	38,229,200	14.8
(6) Total annual cost payable monthly = (5) plus 1/2 year interest -- Interest only	39,471,600	15.3

The funding statute calls for the State to contribute 100 per cent of the projected normal cost plus 95 per cent of the interest on the unfunded actuarial accrued liability (as of June 30, 1983) for the 1984-85 fiscal year. Based on this requirement and a projected participating payroll of \$275,400,000, the 1984-85 employer contribution "rate per cent" for State Employees is 14.2 per cent of payroll, developed below.

Item	Amount	% of Projected Payroll
(7) Projected 1984-85 participating payroll	\$275,400,000	--
(8) 1984-85 employer normal cost = 5.0% x (7)	13,770,000	5.0%
(9) Required contribution payable July 1, 1984 = 1.00 x (8) + .95 x (4)	37,847,700	13.7
(10) Required contribution payable monthly = (9) plus interest adjustment	39,077,800	14.2

The calculations as completed determine the employer contribution to be paid into the retirement fund at the beginning of each year with interest earnings starting from that date. In fact, the money is deposited monthly. Thus, about half a year's interest is lost, and the contribution must be increased to reflect this. Line 6 and 10, on the previous page include this adjustment.

The "full cost" of the System's benefits (Line 6) is 15.3 per cent of payroll, exactly the same as for the previous year.

Teachers

The cost for Teachers as of June 30, 1983 developed as follows:

Item	Amount	% of Payroll
(1) Participating payroll	\$252,176,400	--
(2) Employer normal cost	10,275,000	4.1%
(3) Unfunded actuarial liability	668,059,500	--
(4) Interest on unfunded actuarial liability	40,773,700	16.2
(5) Total annual cost payable July 1, 1983--Interest only = (2) + (4)	51,048,700	20.2
(6) Total annual cost payable monthly = (5) plus 1/2 year interest -- Interest only	52,707,800	20.9

Note: Detail figures may not add to totals shown because of rounding.

Applying the funding statute to the Teachers' costs and a projected participating payroll of \$276,000,000 gives a contribution "rate per cent" requirement for fiscal 1984-85 of 18.7 per cent. Half of this rate (9.35%), is payable by the State and half by the municipalities. The "rate per cent" is developed below:

Item	Amount	% of Participating Payroll
(7) Projected 1984-85 participating payroll	\$276,000,000	--
(8) 1984-85 employer normal cost = 4.0745% x (7)	11,245,600	4.1%
(9) Required contribution payable July 1, 1984 = 1.00 x (8) + .95 x (4)	49,980,600	18.1
(10) Required contribution payable monthly = (9) plus interest adjustment	51,605,000	18.7

The calculations as completed assume that the employer contributions will be paid into the retirement fund at the beginning of each fiscal year and will start to earn interest from that date. In fact, the money will be deposited monthly. Thus, about a half a year's interest is lost, and the contribution must be increased to reflect this. Lines 6 and 10, above, include this adjustment.

The "full cost", measured by line 6 above, is 29.9 per cent of payroll. This compares to 28.4 per cent for the previous year.

We believe that the funding program set forth in the state statute is a reasonable basis for funding the Rhode Island Teachers Retirement System. If the statutory funding program is followed without change, the system will be fully funded -- that is, the assets will equal the actuarial liability on June 30, 1983. In the interim, the assets are projected to be sufficient at all times to meet the cash requirements for projected benefit payments.

Teacher Salaries

Because data on dependents of teachers is not available, it is not possible to do a complete analysis of the teachers' retirement system. However, the following information is available: The total number of teachers in the state is approximately 10,000. The average salary is \$27,000 per year. The total number of dependents is approximately 30,000. The total cost of the system is approximately \$100 million per year. The total assets are approximately \$1 billion. The total liabilities are approximately \$1 billion. The total value of the system is approximately \$1 billion.

Value of Vested Benefits

In private pension plans, it is customary for the actuary to provide the "value of vested benefits". This figure is used by accountants in preparing financial statements, both as a disclosure item and as a factor in determining the provision for pension expense, in accordance with Opinion No. 2 of the Accounting Principles Board of the American Institute of Certified Public Accountants, "Accounting for the Cost of Pension Plans". While we recognize that the total cost may not be covered by this Opinion, a brief discussion of this subject may be helpful.

The "value of vested benefits" represents the single sum value under the plan's investment income and mortality assumptions of all benefits to present and former employees which do not have future employment by the employee as a required condition for their receipt. Thus, it includes the present value of an immediate or deferred pension for all pensioners, beneficiaries, and active participants with at least ten years of service. For active employees with less than ten years of service and inactive vested employees, only the accumulated employer contributions are included.

For the Employees' Retirement System, the value of vested benefits as of June 30, 1983 is as follows:

	<u>State Employees</u>	<u>Teachers</u>
Active members	1,552,466,600	1,391,766,800
Inactive members	4,169,180	5,244,400
Retired members	262,767,100	365,766,300
Total value of vested benefits	1,819,399,880	1,762,777,500
Assets	1,819,399,880	1,762,777,500
Included value of vested benefits	1,819,399,880	1,762,777,500

Overall Status of System

Legislation in January, 1979 effectively returned the System to its former statutory funding schedule beginning with the 1979-80 fiscal year. (Actually, the accelerated funding provided for by the General Assembly in 1978 was never used as the basis for determining contributions as the effective date was deferred for one year to July 1, 1979, by which date the further provision of the law superseded it.)

Under the funding law as amended, the Employers will not begin to pay the full normal cost and an amortization payment until the fiscal year beginning July 1, 1986. Thus, for fiscal 1984-85, as reported earlier, the employer cost is 100 per cent of the normal cost and 95 per cent of the interest payment on the unfunded actuarial accrued liability. The scheduled percentages are:

Fiscal year beginning on July 1	Normal cost	Interest on unfunded liability
1984	100%	95%
1985 and thereafter	100%	100%

As the funding law currently exists, beginning with the fiscal year starting July 1, 1986, the voluntary contribution will comprise the normal cost, amortization of the June 30, 1985 unfunded liability based on the sum-of-the-digits method over 30 years, and interest on the unfunded actuarial accrued liability.

APPENDIX
MUNICIPAL FORM EMPLOYER STATEMENT OF COSTS AND THEIR PARTICIPATION IN TEACHERS' RETIREMENT SYSTEM AND PROVISIONS OF FINANCIAL STATEMENTS AND REPORTS, MUNICIPAL BOND REGISTRATION STATEMENTS, ETC.

The (city) (town) of _____ provides retirement benefits to its public school teachers through its participation in the Rhode Island Retirement System, a statutory, mandatory, state-wide, multi-employer retirement system, which first covered Rhode Island teachers on July 1, 1949. This System is administered as a unified state-wide system by the State Retirement Board, the composition of which is set forth in the pertinent state statute. The assets are held in the custody of the State Treasurer as an undivided single fund.

The actuarial costs of the retirement benefits are partially funded by employee contributions of 7 per cent of pay (increasing to 7 1/2 per cent July 1, 1985). The net employer actuarial costs are determined annually by the actuary and as provided by statute are certified by the Retirement Board to the Department of Administration as a rate per cent of payroll, payable one half by the State of Rhode Island and one half by the (city) (town). The statute provides for increasing graduated percentages of the annual normal cost and interest on the unfunded liability until the year beginning July 1, 1986 when the full normal cost and amortization payments on a 30-year schedule are required. For the year beginning July 1, 1984, 100 per cent of the normal cost and 95 per cent of the interest on the unfunded liability are the required levels of actuarial funding.

Actuarial valuations prepared by Martin E. Segal Company, applying the entry age normal cost method, assuming a 10% per cent interest return on invested assets and applying assumed rates of salary progression, allowance for post-retirement increases and other actuarial assumptions—all as set forth in the published annual reports of the Retirement Board—reveal the following comparative highlights of the last three years for the Teachers' System as a whole:

Year Ending July 31,

	1991	1992	1993
Active participants	14,893	15,022	15,000
Retirees and beneficiaries	2,808	2,804	2,800
Inactive participants	2,494	2,274	2,200
Liability for accrued benefits	\$228,277,306	\$234,279,306	\$245,855,306
Net assets	\$22,352,306	\$27,274,306	\$28,880,306

Year Ended June 30,

	1990	1991	1992
Employer contributions	\$22,881,896	\$21,203,306	\$22,279,306
Contributor contributions	14,814,000	14,112,800	13,858,800
Total contributions	\$37,695,896	\$35,316,106	\$36,138,106
Net income investment income	18,100	17,200	18,200
Investment income	14,315,800	13,300,000	13,800,000
Total income available for benefit payments	\$52,011,696	\$52,633,306	\$50,156,306
Benefit payments	\$19,498,200	\$19,800,000	\$19,844,200
Excess of income over expenses	\$32,513,496	\$32,833,306	\$30,312,106

Note: Total figures may not add to totals shown because of rounding.

Actuarial assets and liabilities, as shown in the summary presentation, are determined in the aggregate for the Teachers System. Accordingly, employer contributions are first determined in the aggregate for all participating employers in this multi-employer system, and then expressed as a rate per cent of the aggregate benefit liability, and the half of this rate per cent is then promulgated to each participating employer as the actuarial asset factor to be applied to its benefit liability. The remaining one-half of the employer cost is contributed by the Teacher. Employer contributions by "A," "B" and "C" for each of the last three years (together with the amount for the current year, based on the promulgated rate per cent of 3.10 per cent) are as follows:

Year Ending June 30,

	1990	1991	1992 (Actual)
Participating employer			
1990 rate per cent			

This report is the Teachers Retirement System Report of the Board of Trustees, independent auditors attesting to the accuracy thereof dated on January 25, 1994.

The following year for funding purposes on June 30, the actual condition of a reasonable basis for funding for the State of Tennessee Teachers Retirement System. If the projected funding program is to meet without change the System will be fully funded--that is, the assets will equal the amount of liability on June 30, 1994. In the event the assets are projected to be sufficient at all times to meet the cash requirements for projected benefit payments.

According to the statutory funding schedule, the contributions required each year of the plan shall be _____ and the State, will increase as the System moves toward the funding of the full actuarial cost. However, because the actuarial funding method of the accumulation of reserves that are invested, the required contributions will be significantly less than would be required if the System were on a pay-as-you-go basis.

January 23, 1984

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

CERTIFICATE OF ACTUARIAL VALUATION

This is to certify that we have prepared an actuarial valuation of the plan as of June 30, 1983.

This certificate contains the following attached exhibits:

EXHIBIT I - Actuarial Cost for Year Beginning July 1, 1983

A. State Employees

B. Teachers

EXHIBIT II - Actuarial Assumptions and Cost Method

EXHIBIT III - Summary of Plan Provisions

To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate (except as noted in Exhibit I) and in my opinion the assumptions used in the aggregate (a) are reasonably related to the experience of the plan and to reasonable expectations and (b) represent my best estimate of anticipated experience under the plan.

MARTIN E. SEGAL COMPANY, INCORPORATED

By: Joseph C. Demy
Joseph C. Demy, A.S.A., M.A.A.A.
Actuary

EXHIBIT I

ACTUARIAL COST FOR YEAR BEGINNING JULY 1, 1983

A. STATE EMPLOYEES

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- a. 15,748 active participants (including 6,181 fully vested) with total annual salaries of \$258,062,900
- b. 1,614 inactive participants
- c. 5,292 pensioners (including 351 beneficiaries of deceased pensioners and active employees)

The cost factors as of the valuation date are as follows:

1. Total normal cost	\$ 28,368,100
2. Projected employee contributions	15,483,800
3. Employer normal cost	12,884,300
4. Actuarial liability - total	742,240,900
Active employees	\$455,344,700
Inactive employees	4,149,100
Pensioners (including beneficiaries of deceased pensioners and active employees)	282,747,100
5. Assets	326,975,600
6. Unfunded actuarial liability	415,265,300
Liability for accrued vested benefits:	\$639,362,800

Note: Included are 84 active employees unknown as to age, service, or both. Status of beneficiaries was unclear. The liability included for inactive employees is the sum of their accumulated contributions.

Line
5 ÷ 4 *44.05%*

EXHIBIT C

ACTUARIAL COST FOR YEAR BEGINNING JULY 1, 1980

PL. TEACHERS

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- a. 9,971 active participants (including 7,047 fully vested) with total annual salaries of \$252,076,400
- b. 1,435 inactive participants
- c. 3,071 pensioners (including 10% beneficiaries of deceased pensioners and active employees)

The cost factors as of the valuation date are as follows:

1. Total normal cost	\$ 17,817,200
2. Projected employee contributions	17,817,200
3. Employer normal cost	10,177,200
4. Actuarial liability - total	\$28,204,200
Active employees	\$20,408,800
Inactive employees	3,499,400
Pensioners (including beneficiaries of deceased pensioners and active employees)	4,300,000
5. Assets	\$2,224,350
6. Unfunded actuarial liability	\$26,079,850
Liability for accrued vested benefits	\$26,079,850

Note Included are 257 active employees shown as 100% vested in both. Status of beneficiaries was unknown. The liability included for inactive employees is the sum of their accumulated contributions.

EXHIBIT D
ACTUARIAL ASSUMPTIONS AND COST METHOD

Mortality rates -- 1971 Group Annuity Mortality Table

Disability mortality before age 65 -- Age 65 mortality under stipulated table

Termination rates before retirement:

State Employees (Rate 1)

Age	Death	Disability	Withdrawal	Total
20	.05	.06	11200	11266
25	.06	.09	15300	15366
30	.08	.11	11500	11579
35	.11	.15	8040	8056
40	.16	.22	6020	6058
45	.29	.39	4200	4087
50	.53	.61	1600	3073
55	.85	1.00	---	1286
60	1.31	---	---	1230

50% of the above disability rates are service-connected.

Teachers (Rate 1)

Age	Death	Disability	Withdrawal	Total
20	.055	.065	11199	11259
25	.065	.095	9970	9995
30	.085	.115	7350	7369
35	.115	.155	5660	5630
40	.165	.225	4144	4232
45	.295	.395	2775	3041
50	.535	.615	1135	2249
55	.855	1.001	---	1286
60	1.31	---	---	1230

50% of the above disability rates are service-connected.

*Rates shown for men; rates for women are slightly lower.

Note: Detail rates may not add to totals shown due to rounding.

Salary scale:

Age	Present salary as a % of salary at 65	Annual increase (Rate %)
20	17.45	4.84
25	22.07	4.75
30	27.76	4.59
35	34.62	4.39
40	42.68	4.08
45	51.76	3.72
50	61.77	3.45
55	72.98	3.33
60	86.08	3.16

Includes allowance for inflation of 3% per year.

Unknown characteristics of employees: Same as those exhibited by employees with known characteristics. Unknown salary is assumed to be \$10,000 for State Employees and \$15,000 for Teachers.

Retirement age -- State Employees: 64, or completion of service requirement if later. Teachers: 63, or completion of service requirement if later.

Post-retirement increases -- 3% compounded annually

Percent married -- Social Security awards during 1972

Net investment return -- 6 1/2%

Valuation of assets -- At amortized book value for bonds and at cost for stocks

Actuarial cost method -- Entry age normal cost

EXHIBIT III

SUMMARY OF PLAN PROVISIONS

Service pension

	General Employees	Correctional Officers	Legislators
Age requirement:	60 or 55	None or 50	55 or None
Service requirement:	10 yrs. 30 yrs.	35 yrs. 20 yrs.	8 yrs. 20 yrs.

Amount: 1.7% of final average salary up to 10 years of service plus 1.9% per year for the next 10 years of service plus 2.4% for each additional year of service to a maximum of 80%. Final average salary is defined as the average of compensation earned during the highest 3 consecutive years prior to termination. Correctional officers receive 2% of final average salary per year of service. Legislators receive \$300 per year of service to a maximum of \$6,000. Retirement is mandatory at age 70 except for elected officials. For correctional officers, mandatory retirement is the later of age 55 and the completion of 20 years of service.

Early retirement

Age requirement: None
Service requirement: 30 years
Amount: Regular pension accrued, reduced by 6% for each year of age less than 55.

Disability

Non-occupational:

Age requirement: None
Service requirement: 5 years
Amount: Regular pension based on service accrued and final average salary at disability, payable immediately. The minimum retirement percentage is 17%, regardless of service.

Occupational:

Age requirement: None
Service requirement: None
Amount: 66 2/3% of final salary, payable immediately

Vesting

Age requirement: None
Service requirement: 10 years
Amount: Regular pension accrued, payable at age 60.

Pre-retirement death benefits

Lump sum benefit:

Age requirement: None
Service requirement: None
Amount: (a) \$400 per year of service to a maximum of \$8,000
and with a minimum of \$2,000.
(b) Refund of employee contribution

Spouses' benefit (applicable only if elected by employee):

Age requirement: 60 50 Legislators: None
or
Service requirement: 10 yrs. 20 yrs. 8 yrs.

Amount: Benefit employee would have received had he retired the day before he died and elected the joint and survivor option.

Occupational death benefit:

Age requirement: None
Service requirement: None
Amount: (a) 50% of salary to spouse or children under age 18,
less workmen's compensation
(b) Refund of employee contributions.

Post-retirement death benefit

Lump sum benefit:

(a) 100% of employee contributions, less benefits paid.
(b) Pre-retirement death benefit, reduced 2% per year of retirement, but not less than \$2,000.

Employee contribution rates:

Date	State Employees	Teachers	Legislators
Prior to 7/1/75	5%	6%	5%
7/1/75 - 6/30/82	5 1/2%	6 1/2%	5%
7/1/82 - 6/30/85	5%	7%	5%
7/1/85 and later	5 1/2%	7 1/2%	5%

Available options:

Joint and survivor with 50% or 100% continued to the beneficiary after the death of the employee

Post-retirement cost-of-living increases:

3% of current amount, compounded, to pensioners and beneficiaries following the third anniversary of retirement.

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Investments

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INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>UNITED STATES OF AMERICA</u>			
U. S. Treasury Bonds	8.375	8-15-00	5,000,000
" " "	8.000	8-15-01	1,000,000
" " "	13.375	8-15-01	6,500,000
" " "	11.625	11-15-02	2,500,000
" " "	10.750	5-15-03	3,000,000
" " "	8.250	5-15-05	3,600,000
" " "	9.125	5-15-09	3,600,000
" " "	10.000	5-15-10	19,300,000
" " "	13.875	5-15-11	8,000,000
" " "	14.000	11-15-11	2,500,000
TOTAL - U. S. TREASURY			<u>\$238,207,900</u>

GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

Note - Pool #5158	7-1/4	1-15-04	308,619.60
Note - Pool #4877	7-3/4	5-15-04	321,612.71
Note - Pool #3807	7-3/4	6-15-04	675,784.95
Note - Pool #0683	7-1/4	5-15-05	678,091.89
Note - Pool #7298	7-3/4	5-15-05	688,222.11
Note - Pool #8005	8-1/2	2-15-06	1,314,384.36
Note - Pool #12180	7-1/2	6-15-06	544,967.68
Note - Pool #12158	7-1/2	6-15-06	1,588,929.17
Note - Pool #12978	8.00	9-15-06	299,630.55
Note - Pool #13268	8.00	11-15-06	605,105.18
Note - Pool #15089	8.00	1-15-07	529,458.28
TOTAL - GOVERNMENT NATIONAL MORTGAGE ASSOCIATION			<u>\$7,758,815.62</u>

FEDERAL NATIONAL MORTGAGE ASSOCIATION

Note	7.95	7-15-06	1,000,000.00
Note	7.50	8-15-07	200,000.00
Note	7.25	12-15-07	1,200,000.00
			<u>\$2,400,000.00</u>

FEDERAL HOME LOAN

Note	7.50	5-25-07	300,000.00
			<u>\$300,000.00</u>

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT</u>			
BONDS	5-3/8%	4-01-92	\$ 500,000.00
BONDS	7-3/4	8-01-87	1,550,550.50
TOTAL - INTERNATIONAL BANK FOR RECONSTRUCTION & DEVELOPMENT			<u>\$2,050,550.50</u>

CERTIFICATES OF DEPOSIT

Heritage Loan	8.0	7-15-88	100,000.00
Greenwood Credit Union	8.45	7-18-88	100,000.00
Worship Bank of Delaware	8.45	7-19-88	1,500,067.26
Manufacturers Hanover	8.55	7-19-88	1,500,000.00
Citizens Bank	8-3/8	7-25-88	600,000.00
Home Loan Investment Assoc., R. I. C.V.L. Corp. Credit Union	8-3/8	7-25-88	200,000.00
Citizens Bank	8.25	7-29-88	1,500,000.00
R. I. Federal Savings	8.25	7-29-88	1,500,000.00
State Street Bank	8.25	7-29-88	2,500,000.00
Citizens Trust	8.25%	8-9-88	1,578,536.28
Wig. Hanover	8.45	8-15-88	1,500,000.00
Chase Manhattan	8.45	8-15-88	1,200,000.00
Shawmut Bank	8.25	8-15-88	1,700,000.00
Citizens Trust	8.25	8-15-88	1,700,000.00
Citizens Trust Co., R. I. State Employees' Credit Union	8-3/8	8-31-88	2,000,000.00
Worshiper Institution for Savings	8.75	7-16-88	300,000.00
Citizens Bank	8-5/8	7-18-88	300,000.00
Peoples Trust	9.50	7-29-88	700,000.00
R. I. Federal Savings	8.85	7-29-88	1,700,000.00
Marquena Credit Union	8.25	7-29-88	300,000.00
Citizens Bank	8-5/8	7-29-88	500,000.00
R. I. S. S. Credit Union	9.00	8-1-88	300,000.00
R. I. S. S. Credit Union	9.00	8-1-88	300,000.00
Peoples Bank	9.125	8-1-88	300,000.00
Citizens Bank	9.00	8-1-88	2,000,000.00
Worshiper Institution for Savings	8.90	8-12-88	500,000.00
Old State Bank	8-3/8	8-30-88	1,000,000.00
R. I. Federal Savings	9.50	8-30-88	1,000,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>CERTIFICATES OF DEPOSIT</u>			
Citizens Bank	8-7/8	8-30-83	854,485.60
Citizens Bank	8-7/8	8-31-83	1,000,000.00
R. I. Federal Savings	9.00	9-12-83	500,000.00
R. I. Hospital Trust			
National Bank	9.25	9-13-83	5,000,000.00
Woonsocket Institution			
for Savings	9.15	9-13-83	300,000.00
Old Stone Bank	9.50	9-30-83	5,000,000.00
Fleet National Bank	11.375	8-9-83	2,000,000.00
TOTAL - CERTIFICATES OF DEPOSIT			<u>\$40,732,883.12</u>

COMMERCIAL PAPER

Lehman Bros.	8-3/4	7-19-83	978,125.00
First Boston Corp.	8-1/2	7-19-83	978,750.00
Chase Manhattan	8.60	7-19-83	1,000,000.00
Merrill Lynch	8.50	7-19-83	1,000,000.00
Kenney Branisel	8.40	7-19-83	979,000.00
Goldman Sachs	8-5/8	7-19-83	2,000,000.00
Kenney Branisel	8-1/4	7-29-83	980,062.50
First Boston Corp.	8.30	7-29-83	979,941.67
Goldman Sachs	8-3/8	7-29-83	2,500,000.00
Kenney Branisel	8-1/4	8-2-83	979,375.00
Merrill Lynch	8.30	8-4-83	1,500,000.00
First Boston Corp.	8.20	8-8-83	979,272.22
Goldman Sachs	8.40	8-8-83	3,000,000.00
Goldman Sachs	8.40	8-15-83	2,500,000.00
A. G. Becher	8.60	8-16-83	978,022.22
Merrill Lynch	8.30	8-16-83	978,788.89
First Boston Corp.	8.30	8-16-83	978,788.89
Kenney Branisel	8.30	8-16-83	978,788.89
Merrill Lynch	8.45	8-31-83	975,354.17
A. G. Becher	8-5/8	8-31-83	974,843.75
Goldman Sachs	8-3/8	8-31-83	1,000,000.00
Goldman Sachs	8-3/8	8-31-83	1,000,000.00
Merrill Lynch	8-3/4	7-29-83	985,659.72
First Boston Corp.	8-3/4	7-29-83	985,659.72
Goldman Sachs	8-3/4	7-29-83	1,000,000.00
Merrill Lynch	9.40	8-1-83	991,644.44
Kenney Branisel	9.40	8-1-83	991,777.78
Lehman Bros.	9.15	8-1-83	1,487,800.00
Goldman Sachs	9.30	8-1-83	1,487,600.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>COMMERCIAL PAPER</u>			
Old Stone Bank	9.375	8-1-83	1,000,000.00
Kenney Branisel	8.75	8-30-83	979,340.28
A. G. Becher	9.05	8-30-83	978,631.94
Merrill Lynch	8.85	8-30-83	1,500,000.00
Goldman Sachs	8.85	8-30-83	2,500,000.00
Fleet National Bank	9-1/8	8-30-83	1,000,000.00
A. G. Becher	9-1/8	9-13-83	980,736.11
Merrill Lynch	9-1/4	9-13-83	1,000,000.00
Kenney Branisel	9.10	9-27-83	977,250.00
Goldman Sachs	9.15	9-27-83	1,000,000.00
First Boston Corp.	9.20	9-28-83	976,744.44
TOTAL - COMMERCIAL PAPER			<u>\$49,041,957.63</u>

RAILROADS

Atchison, Topeka & Santa Fe Railway-General Mortgage	4.00	7-01-95	100,000.00
TOTAL - RAILROADS			<u>\$ 100,000.00</u>

MISCELLANEOUS

Limited Partnership			
Narragansett First Fund			200,000.00
State of Israel Bond	7.50	6-1-95	150,000.00
TOTAL - MISCELLANEOUS			<u>\$ 350,000.00</u>

REPURCHASE AGREEMENTS

Citizens Bank	8.50	7-1-83	4,600,000.00
Carolan & Co.	9.50	9-1-83	1,002,320.00
TOTAL - REPURCHASE AGREEMENTS			<u>\$5,602,320.00</u>

INVESTMENTS OWNED

DESCRIPTION	INTEREST	MATURITY	CARRYING VALUE
PUBLIC UTILITIES			
American Tel. & Tel. Co.-			
Debentures	4-3/8	4-01-85	175,000.00
Debentures	4-3/4	11-01-92	800,000.00
American Tel. & Tel.	4-3/8	2-01-94	250,000.00
Debentures	5-1/2	1-01-97	250,000.00
Debentures	4-3/4	6-01-98	100,000.00
Debentures	5-1/8	4-01-01	200,000.00
Debentures	8.80	5-15-05	2,000,000.00
American Tel. & Tel.	8-5/8	2-01-07	2,000,000.00
American Tel. & Tel.	7-5/8	9-01-01	1,000,000.00
Baltimore Gas & Electric			
Rail Tel. Co. of Pa.-			
Debentures	4-3/4	5-01-01	200,000.00
Blackstone Valley Elec. Co.	6-1/2	6-01-97	100,000.00
Brockton Edison	8-3/8	9-01-03	500,000.00
Carolina Power & Light Co.	5-1/8	4-01-96	250,000.00
Central Illinois Light Co.	4.00	7-01-88	100,000.00
Chesapeake Potomac Tel.	8-5/8	4-01-09	500,000.00
Chesapeake Potomac Tel.	7-1/4	5-01-09	500,000.00
Chesapeake Potomac Tel.	8-3/4	3-01-10	500,000.00
Cincinnati Gas & Electric	4-1/8	5-01-87	250,000.00
Columbia Gas System, Inc.-			
Debentures	4-7/8	10-01-90	150,000.00
Commonwealth Edison-			
Sinking Fund Debentures	6-1/4	2-01-98	850,000.00
Sinking Fund Debentures	6-3/4	7-01-98	400,000.00
Sinking Fund Debentures	6-3/8	10-01-98	500,000.00
Sinking Fund Debentures	8.00	10-15-03	1,000,000.00
Connecticut Light & Power Co.-			
First Refunding Mortgage	4-7/8	2-01-90	100,000.00
Connecticut Light	8-7/8	10-01-00	500,000.00
Consolidated Edison Co.-			
First Refunding Mortgage	4-5/8	12-01-93	300,000.00
First Refunding Mortgage	4-1/4	10-01-85	300,000.00
First Refunding Mortgage	5.00	10-01-87	225,000.00
First Refunding Mortgage	4.00	6-01-88	100,000.00
Consolidated Natural Gas Co.-			
Debentures	9.00	7-01-95	472,000.00
Consumers' Power Co.-			
First Mortgage	4-5/8	8-01-91	250,000.00
First Mortgage	4-5/8	8-01-89	250,000.00
First Mortgage	7-1/2	11-01-01	500,000.00
Dayton Power & Light Co.-			
Dayton Power & Light Co.	8-1/4	10-01-99	500,000.00
First Mortgage	8.00	11-01-03	1,000,000.00
Delaware Power & Light Co.	3-7/8	6-01-88	250,000.00
Delmarva Power	7.00	11-01-98	250,000.00
Duke Power Co.-			
First Refunding Mortgage	4-1/2	2-01-92	100,000.00

INVESTMENTS OWNED

DESCRIPTION	INTEREST	MATURITY	CARRYING VALUE
PUBLIC UTILITIES			
Duke Power Co.-			
Duke Power	4-1/2	2-01-92	300,000.00
Duke Power	7.00	2-01-99	500,000.00
Duke Power	8-1/2	3-01-00	1,000,000.00
Duke Power	8-3/8	10-01-06	1,000,000.00
Duquesne Light Co.	7-1/4	1-01-03	1,000,000.00
Florida Power & Light Co.-			
First Mortgage	4-5/8	3-01-95	100,000.00
Florida Power & Light Co.	5.00	12-01-95	500,000.00
Florida Power & Light Co.	11.30	5-11-10	2,000,000.00
Florida Power Corp.	7-3/8	6-01-02	1,000,000.00
First Mortgage	4-7/8	11-01-95	250,000.00
First Mortgage	7.00	12-01-98	250,000.00
Florida Power	7-5/8	1-10-01	250,000.00
General Telephone			
of California-			
First Mortgage	5.00	12-01-95	100,000.00
Debentures	5-3/4	3-01-92	200,000.00
Debentures	7-1/8	12-01-98	500,000.00
General Telephone of Ohio	10-1/4	12-01-04	1,000,000.00
Hartford Electric	9-1/4	5-01-00	500,000.00
Hartford Electric	7-5/8	12-01-01	500,000.00
Illinois Bell Telephone Co.-			
First Mortgage	4-1/4	3-01-88	100,000.00
First Mortgage	4-3/8	3-01-94	100,000.00
First Mortgage	6.00	7-01-98	250,000.00
First Mortgage	8.00	6-01-05	500,000.00
Iowa Electric	7-7/8	12-01-00	500,000.00
Iowa Power & Light Co.	4-5/8	1-01-91	200,000.00
Kansas City Power	7-1/8	2-01-99	500,000.00
Kentucky Utilities Co.	9-1/8	4-01-04	1,400,000.00
Louisiana Power & Light	7-1/2	11-01-02	500,000.00
Madison Gas & Electric	9-3/4	5-01-04	1,000,000.00
Metropolitan Edison	6-7/8	10-01-92	295,000.00
Michigan Bell Telephone Co.-			
Debentures	6-3/8	2-01-05	500,000.00
Debentures	4-5/8	8-01-96	175,000.00
Michigan Bell Telephone	8-5/8	2-01-10	500,000.00
Mountain State Tel. & Tel.	8.00	10-01-09	1,000,000.00
Barragansett Electric Co.-			
First Mortgage	3-1/2	3-01-86	200,000.00
New Bedford Gas (Commonwealth)	8-1/8	12-01-95	367,000.00
New England Power	4.00	6-01-88	200,000.00
New England Power	7-5/8	7-01-02	1,000,000.00
New England Power	8-5/8	8-01-03	1,000,000.00

INVESTMENTS OWNED

DESCRIPTION	INTEREST	MATURITY	CARRYING VALUE
New England Tel. & Tel.	8-00	11-15-03	500,000.00
New England Tel. & Tel.	7-3/8	10-15-07	700,000.00
New Jersey Bell Tel. Co.	4-7/8	11-01-00	100,000.00
New Jersey Power & Light Co.	5-00	10-01-90	100,000.00
New Orleans Public Service	5-00	6-01-91	300,000.00
New York Telephone Co.-			
Refunding Mortgage	3-00	10-15-89	110,000.00
Refunding Mortgage	4-1/8	7-01-93	125,000.00
Refunding Mortgage	4-7/8	1-01-06	250,000.00
Refunding Mortgage	7-1/2	3-01-09	500,000.00
Niagara Mohawk Power Co.-			
General Mortgage	3-7/8	6-01-88	300,000.00
General Mortgage	4-3/4	4-01-90	200,000.00
Northern Illinois Gas Co.	5-00	6-01-84	151,000.00
Northern Illinois Gas Co.	8-00	7-01-98	1,000,000.00
Northern States Power Co.-			
First Mortgage	4-00	7-01-88	100,000.00
First Mortgage	6-3/4	5-01-98	500,000.00
Northwest Bell	7-00	1-01-09	500,000.00
Northwestern Bell Tel.	6-1/4	1-01-07	500,000.00
Northwestern Bell Tel.	8-1/8	3-15-17	500,000.00
Oklahoma Gas & Electric Co.			
First Mortgage	3-7/8	6-01-88	200,000.00
First Mortgage	5-1/8	1-01-97	250,000.00
Pacific Gas & Electric Co.-			
First & Ref. Mortgage	4-1/2	6-01-93	200,000.00
First & Ref. Mortgage	4-5/8	6-01-97	150,000.00
First & Ref. Mortgage	5-3/8	6-01-98	250,000.00
Pacific Tel. & Tel.	4-3/8	8-15-88	300,000.00
Debentures	8-3/8	2-01-17	25,000.00
Debentures	4-5/8	5-01-00	215,000.00
Pennsylvania Electric Co.-			
Pennsylvania Electric Co.	7-7/8	12-01-01	1,000,000.00
First Mortgage	3-1/8	3-01-84	100,000.00
Pennsylvania Power	8-1/4	12-01-06	600,000.00
Potomac Electric Power Co.	8-3/8	1-15-09	1,500,000.00
Public Service Co. of			
Colorado-			
First Mortgage	4-3/8	5-01-07	100,000.00
First Mortgage	4-1/2	10-01-91	300,000.00
Public Service Ind.	7-5/8	1-01-91	1,000,000.00
Public Service Electric			
and Gas Co.-			
Debentures	5-3/4	5-01-91	300,000.00
First Ref. Mortgage	4-3/4	9-01-95	250,000.00
First Ref. Mortgage	5-1/8	6-01-02	300,000.00
Southern Bell Tel. & Tel.	8-1/4	4-15-16	2,000,000.00
Southern Bell Tel. & Tel.	8-1/8	5-01-17	1,700,000.00

INVESTMENTS OWNED

DESCRIPTION	INTEREST	MATURITY	CARRYING VALUE
Southern California Edison Co.			
Southern California Edison	7-1/4	7-01-84	1,000,000.00
First Mortgage	8-1/8	10-15-94	700,000.00
First Ref. Mortgage	4-3/8	9-01-85	100,000.00
First Ref. Mortgage	5-1/4	5-15-91	250,000.00
First Ref. Mortgage	6-3/8	2-15-93	400,000.00
Southern California Edison	8-00	9-16-96	400,000.00
South Central Bell Tel.	8-1/2	11-01-01	500,000.00
Southern New England Tel.	8-1/8	5-01-88	500,000.00
Southeastern Bell Tel. Co.-			
Southwestern Bell	8-3/4	8-01-07	1,000,000.00
Debentures	6-3/4	6-01-88	250,000.00
Southwest Bell Telephone	8-1/4	9-01-05	750,000.00
Southwest Bell Telephone	6-7/8	2-01-11	500,000.00
Southern Bell Tel. & Tel.	8-00	2-15-14	2,000,000.00
Southeastern Bell Tel.	8-1/4	3-01-14	2,000,000.00
Southeastern Bell Tel.	9-1/4	1-15-15	2,000,000.00
Tampa Electric Co.	4-1/4	7-01-88	150,000.00
Tennessee Valley Authority	8-1/4	10-15-94	500,000.00
Tennessee Valley Authority	7-3/4	7-01-98	1,000,000.00
Tennessee Valley Authority	7-7/8	10-01-98	3,000,000.00
Union Light, Heat, and Power Co.	5-00	7-01-89	200,000.00
Utah Power & Light Co.	4-7/8	9-01-90	100,000.00
Virginia Elec. & Power Co.-			
First Ref. Mortgage	3-7/8	6-01-88	200,000.00
First Ref. Mortgage	4-5/8	9-01-90	150,000.00
Virginia Electric	7-3/8	3-01-01	500,000.00
Washington Gas & Light Co.	4-7/8	5-01-86	100,000.00
West Penn Power Co.-			
First Mortgage	4-7/8	12-01-95	275,000.00
West Penn Power	9-5/8	6-01-00	500,000.00
Western Union Telegraph Co.	5-1/4	2-01-87	250,000.00
West Texas Utilities	7-1/4	7-01-91	250,000.00
Wisconsin Power & Light Co.	8-00	1-01-00	1,000,000.00
Wisconsin Public Service Corp.	3-1/4	10-01-84	100,000.00
Wisconsin Telephone Co.	7-1/4	5-15-99	500,000.00
TOTAL - PUBLIC UTILITIES			\$76,810,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>BANKS</u>			
American Savings & Loan of California	9.50	6-30-85	250,000.00
R. I. Hospital Trust Co.	8.00	8-31-84	3,500,000.00
Citicorp	8-1/8	7-01-07	500,000.00
J. P. Morgan Co.	8.00	3-15-86	2,000,000.00
Philadelphia National Bank	5-1/2	3-01-92	200,000.00
Columbus National Bank	8.50	2-23-87	300,000.00
Industrial National Bank	8.25	1-01-96	100,000.00
Beneficial Corp.	7.50	11-01-96	500,000.00
Household Finance	12.00	4-15-87	2,000,000.00
Fleet National Bank	10.50	11-01-07	950,000.00

INDUSTRIAL AND MISCELLANEOUS

American Brands, Inc.	8-1/8	3-01-85	1,000,000.00
American Can Co.- Debentures	4-3/4	7-15-90	100,000.00
American Cyanamid Co.	8-3/8	3-15-06	2,500,000.00
Avco Corp.	7-1/2	11-30-93	250,000.00
Beneficial Finance Co.- Debentures	4-3/4	5-15-93	100,000.00
Citicorp.	8.45	2-15-07	500,000.00
Bethlehem Steel Corp.	8.45	3-01-05	600,000.00
Commercial Credit Corp.- Debentures	4-7/8	9-15-87	150,000.00
Chrysler Corp.	10.35	6-1-90	2,000,000.00
Chrysler Corp.	10.35	6-1-90	1,000,000.00
Chrysler Corp.	10.35	6-1-90	1,000,000.00
Dow Chemical Co.	7-3/4	7-15-99	500,000.00
Dow Chemical Co.	8-7/8	5-01-00	849,000.00
Dow Chemical Co.	8-1/2	1-15-06	2,500,000.00
Dupont E. I. DeNemours	8-4/5	11-15-04	2,000,000.00
Exxon Corp.	6.50	7-15-90	350,000.00
Exxon Corp.	6.00	11-01-97	1,000,000.00
Ford Motor Credit Co.	9.00	2-01-84	1,000,000.00
Ford Motor Credit Co.	9.50	1-15-85	1,000,000.00
General Motors Acceptance Corp.- Debentures	4-7/8	12-01-87	750,000.00
General Motors Acceptance	7.3	7-15-85	500,000.00
General Motors Acceptance	4.5	11-01-85	2,040,000.00
General Motors Acceptance	7-1/8	9-01-92	500,000.00
General Motors Acceptance	8-1/8	10-15-96	1,000,000.00
General Motors Acceptance	8-1/4	11-15-06	400,000.00
Gulf Oil Corp.	5.35	6-15-91	250,000.00
Gulf Oil Corp.	8-1/2	11-15-95	500,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>INDUSTRIAL AND MISCELLANEOUS</u>			
Household Finance Corp.- Household Finance Debentures	7-1/4 4-7/8	1-01-90 9-15-93	200,000.00 150,000.00
Mobile Oil Co.	8.50	6-15-01	173,200.00
Monsanto Chemical Co.	8-3/4	5-15-08	1,000,000.00
Northwest Bancorporation	4-3/4	10-15-90	250,000.00
Phillips Petroleum Co.	11.25	5-1-13	1,000,000.00
Pittsburg Plate Glass	9.00	6-15-95	500,000.00
Scott Paper Co.	8-7/8	6-01-00	808,000.00
U. S. Steel Holding Co.	12.50	3-1-94	1,772,800.00
<u>TOTAL - BANKS, INDUSTRIAL AND MISCELLANEOUS</u>			<u>\$40,493,000.00</u>

INVESTMENTS OWNED

<u>COMMON STOCKS</u>	<u>NO. OF SHARES</u>	<u>COST</u>
<u>BANKS AND HOLDING COMPANIES</u>		
Bank of America	160,000	\$ 3,026,523.94
Citicorp	20,000	510,995.36
Fleet Financial	86,285	1,109,319.25
J. P. Morgan	45,000	2,072,807.28
Old Stone Bank	8,000	104,291.00
R. I. Hospital Trust National	41,784	606,369.93
First Interstate Bancorp.	30,000	608,071.78
TOTAL - BANKS & HOLDING COMPANIES		<u>\$ 8,038,378.54</u>
<u>CHEMICALS AND DRUGS</u>		
American Home	145,000	4,535,804.46
Bristol Myers	154,000	3,374,277.46
Dow Chemical Corp.	220,000	5,764,885.49
Johnson and Johnson	100,000	4,499,176.76
Monsanto Co.	60,000	3,325,705.42
Pfizer (Chas.) Co.	180,000	3,854,590.68
Sterling Drug Co.	100,000	2,188,514.84
<u>CONSTRUCTION MATERIAL & EQUIPMENT</u>		
Caterpillar Tractor	115,000	5,527,847.06
Deere Corp.	180,000	5,603,842.93
Parker Drilling	100,000	1,360,990.46
U. S. Gypsum Co.	70,000	2,416,645.95
<u>ELECTRONICS</u>		
Burroughs Corporation	50,000	2,387,956.90
Emerson Electric Corp.	55,000	1,931,022.76
International Business Machines	117,000	7,239,446.62
NCR Corp.	50,000	2,711,761.58
Raytheon Corp.	100,000	4,144,882.57
Texas Instruments	20,000	1,981,111.70
Union Electric Corp.	80,000	847,325.00
Motorola, Inc.	10,000	1,102,210.96
Wang Laboratories	5,000	202,819.14
<u>FOOD</u>		
Beatrice Foods Co.	190,000	4,003,676.32
General Foods	40,000	1,231,143.67
McDonalds Corp.	80,000	3,405,208.63
Pepsico, Inc.	105,000	3,199,931.03

INVESTMENTS OWNED

<u>COMMON STOCKS</u>	<u>NO. OF SHARES</u>	<u>COST</u>
<u>RAILROADS</u>		
Union Pacific Corp.	70,000	2,419,018.19
<u>MISCELLANEOUS</u>		
Boeing Corp.	100,000	3,044,371.07
A. T. Cross Corp.	190,000	3,921,183.29
Foxboro Co.	70,000	1,458,324.28
General Motors Corp.	84,100	4,642,354.02
Halliburton Co.	140,000	5,323,354.67
Schlumberger	130,000	5,340,080.77
Square 'D'	140,000	3,510,349.68
Xerox	135,000	6,086,761.62
Dayton-Hudson	35,000	2,269,258.37
<u>PETROLEUM</u>		
Atlantic Richfield Co.	135,180	5,929,013.31
Exxon Corporation	165,000	4,406,410.99
Getty Oil Co.	70,000	4,165,968.27
Mobil Oil	160,000	3,190,529.03
Standard Oil of California	145,000	4,587,775.59
Standard Oil of Indiana	90,000	2,721,679.07
<u>PAPER AND PAPER PRODUCTS</u>		
Kimberly Clark Corp.	90,000	4,687,878.90
<u>RETAIL STORES</u>		
Federated Stores	30,000	1,067,773.95
K Mart	90,000	2,169,784.27
<u>PUBLIC UTILITIES</u>		
American Tel. & Tel.	92,623	5,064,263.78
Florida Power and Light	27,000	927,935.93
Florida Progress Corp.	84,000	1,371,004.32
Gulf States Utilities	40,000	593,282.47

INVESTMENTS OWNED

<u>COMMON STOCKS</u>	<u>NO. OF SHARES</u>	<u>COST</u>
<u>PUBLIC UTILITIES</u>		
Fanhandle E. Pipeline	190,000	4,827,421.37
Public Service of Indiana	110,000	2,540,321.93
Texas Gas Corp.	148,100	3,581,978.23
Texas Utilities	63,000	<u>1,378,985.58</u>
TOTAL -- COMMON STOCKS		<u>\$168,067,841.34</u>
 <u>PREFERRED STOCKS</u>		
Union Pacific	23,050	<u>\$ 1,879,214.64</u>