

State of Rhode Island and Providence Plantations



ANNUAL REPORT
OF THE
RETIREMENT BOARD

JUNE 30, 1982

HON. ANTHONY J. SOLOMON
General Treasurer

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

Annual Report

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Representative Robert S. Tucker, <i>Designee of House Finance Chairman</i>		
Ronald L. Wrigley, <i>Designee of State Budget Director</i>		

Joseph G. Iannelli, Executive 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, 1982

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

Dear Governor Garrahy:

I take pleasure in submitting herewith for transmittal to the General Assembly, the Forty-sixth Annual Report of the Retirement Board of the Employees' Retirement System of the State of Rhode Island covering the fiscal year ended June 30, 1982.

Respectfully submitted

Anthony J. Solomon
General Treasurer

REPORT OF THE RETIREMENT BOARD

Forty-sixth Annual Report of the Retirement Board covering the fiscal year ended June 30, 1982.

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

FINANCIAL FACTS

Total Reserves at the end of the year were 17.19% or \$79,695,570 higher than the previous year, for a total of \$543,218,922.

Revenues from all sources for the year amounted to \$65,399,930 for State Employees and \$69,558,732 for Public School Teachers. Expenditures for the year amounted to \$25,237,221 and \$30,025,871 for State Employees and Teachers, respectively.

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

Income from investments for the year amounted to \$48,486,488, including a capital gain of \$442,649. This represents 35.93% of the total revenues. This income is equal to a return of 10.2% and is compared to the return of previous years in Chart (B).

Pension benefits, which represent the major expenditure item, amounted to \$19,381,038 for State Employees and Legislators, and \$22,878,882 for Teachers and Teachers' Survivors. Added to this was the Cost-of-Living Adjustment, which amounted to \$2,584,429 for State Employees, and \$5,005,960 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 five (5) years.

UNFUNDED ACCRUED LIABILITY

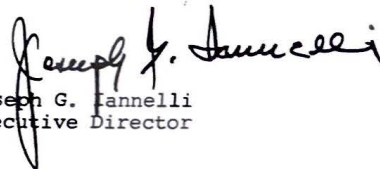
This item is thoroughly covered in the Actuary's Report section. However, it is pointed out that the rate of funding, otherwise referred to as the 'Security Ratio' at June 30, 1982, was 41.76% for State Employees and 28.00% for Teachers. The unfunded (accrued) liability for the State Employees was \$394,178,000 and \$606,263,400 for Teachers.

CONCLUDING COMMENT

Consistent with prior years, a normal increase in reserves was recorded. 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.

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

ANALYSIS OF REVENUES & EXPENDITURES
FISCAL YEAR ENDED - JUNE 30, 1982

REVENUES	STATE EMPLOYEES		TEACHERS		TOTAL
	Amount	%	Amount	%	
Member Contributions	\$14,121,030	21.59	\$14,950,450	21.49	\$29,071,480
State Contributions	25,866,607	39.55	14,732,603	21.18	40,599,210
Municipal Contributions	--	--	16,616,898	23.89	16,616,898
Investment Earnings	25,290,552	38.67	23,195,936	33.35	48,486,488
Miscellaneous	121,741	0.19	62,845	0.09	184,586
TOTAL REVENUES	\$65,399,930	100.00	\$69,558,732	100.00	\$134,958,662
<u>EXPENDITURES</u>					
Pensions	\$19,381,038	29.64	22,878,882	32.90	42,259,920
Cost-of-Living Adjust.	2,584,429	3.95	5,005,960	7.20	7,590,389
Death Benefits	845,130	1.29	293,518	0.42	1,138,648
Refunds-Contributions	2,403,237	3.67	1,832,022	2.63	4,235,259
Miscellaneous	23,387	0.04	15,489	0.02	38,876
TOTAL EXPENDITURES	\$25,237,221	38.59	\$30,025,871	43.17	\$55,263,092
EXCESS REVENUES OVER EXPENDITURES -- TO RESERVES	\$40,162,709	61.41	\$39,532,861	56.83	\$79,695,570

DISTRIBUTION OF EXCESS REVENUE

<u>Unclaimed Benefits</u>	\$ 12,630
<u>Members' Reserves</u>	
State	11,732,609
Teachers	12,897,342
Survivors	380,876
<u>General Reserves</u>	
State	28,421,132
Teachers	23,962,601
Survivors	2,288,380
TOTAL	\$79,695,570

ANALYSIS OF INVESTMENT INCOME
FISCAL YEAR ENDED JUNE 30, 1982

Investment Income - Interest		\$38,589,152
<u>ADD:</u>		
Accrued Interest June 30, 1982	\$8,758,967	
Accrued Interest July 1, 1981	<u>-6,610,655</u>	
	\$2,148,312	
	<u>741,789</u>	
Total Additions		<u>2,890,101</u>
TOTAL		\$41,479,253
<u>LESS:</u>		
Accrued Interest Purchased	\$1,430,290	
Premiums Amortized	<u>113,276</u>	
Total Deductions		<u>\$ 1,543,566</u>
Net Interest Earned		\$39,935,687
Dividends		8,103,472
Option Sales (Net)		<u>4,696</u>
TOTAL EARNED ON INVESTMENTS		\$48,043,855
CAPITAL GAIN		<u>442,649</u>
TOTAL INVESTMENT INCOME		<u>\$48,486,504</u>

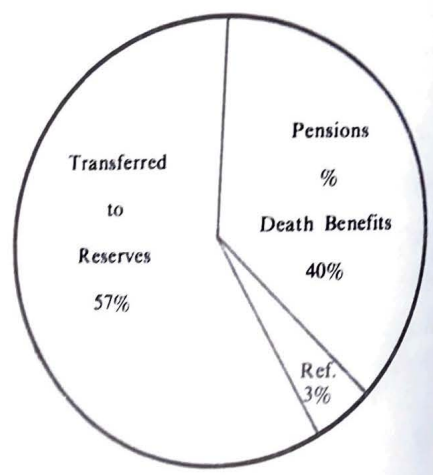
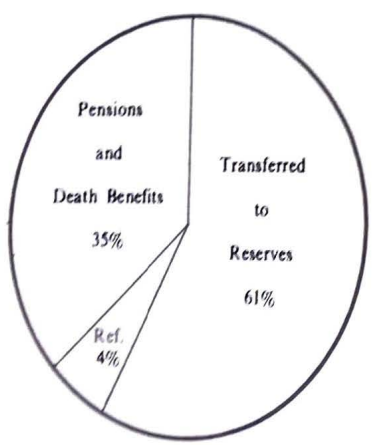
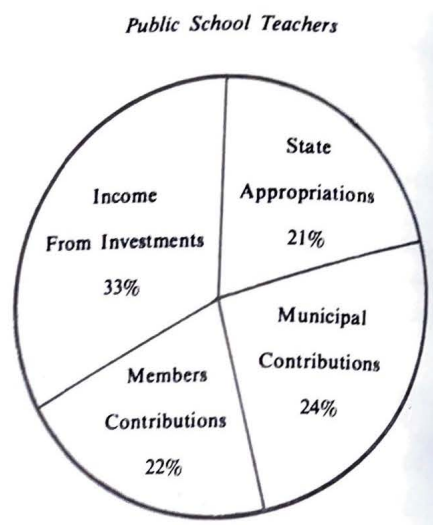
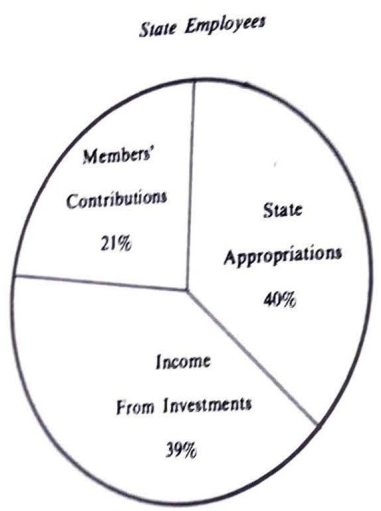
DISTRIBUTION OF INVESTMENT INCOME
FISCAL YEAR ENDED - JUNE 30, 1982

	<u>EMPLOYEES</u>	<u>TEACHERS</u>	<u>TEACHERS'</u> <u>SURVIVORS</u>	<u>TOTAL</u>
<u>MEMBER RESERVES</u>				
Balance July 1, 1981	\$74,855,754	103,586,725	5,923,105	184,365,584
Balance July 1, 1982	82,628,251	113,536,024	6,287,524	202,451,799
<u>GENERAL RESERVES</u>				
Balance July 1, 1981	167,585,727	95,334,380	16,161,641	279,081,748
Balance June 30, 1982	174,682,800	101,297,328	16,211,857	292,191,985
T O T A L	\$499,752,532	413,754,457	44,584,127	958,091,116
AVERAGE	249,876,266	206,877,228	22,292,064	479,045,558
PERCENT	52.16	43.19	4.65	100.00
DISTRIBUTION	25,290,552	20,941,314	2,254,622	48,486,488

Highlights

CHART A

SOURCES OF REVENUE AND HOW EXPENDED



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Ref. Denotes Refunds

CHART 'B'

INVESTMENT RATE OF RETURN

YEAR	RATE OF RETURN
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				TEACHERS			
	PENSION BENEFITS	COST OF LIVING ADJUSTMENT	% C.L. INCR.	% TO PENS. BEN.	PENSION BENEFITS	COST OF LIVING ADJUST	% C.L. INCR.	% TO PENS. BEN.
72-73	\$ 5,782,110	411,796	23.1	7.12	11,413,852	923,868	22.00	8.09
73-74	6,685,643	502,378	22.0	7.51	12,778,668	1,119,746	21.2	8.26
74-75	8,118,371	612,196	21.9	7.54	14,076,602	1,367,603	22.1	9.88
75-76	9,635,536	748,731	22.3	8.19	15,216,413	1,647,312	20.5	11.00
76-77	11,045,772	906,030	21.0	8.60	16,279,438	1,948,642	18.2	12.17
77-78	12,638,920	1,097,430	21.1	9.08	17,382,026	2,269,569	16.4	13.27
78-79	14,007,233	1,317,011	20.0	9.80	18,986,600	2,698,815	18.9	14.48
79-80	15,743,067	1,563,271	18.7	10.32	20,653,181	3,128,123	15.9	15.45
80-81	16,738,846	2,049,888	31.1	12.24	20,962,025	4,036,193	29.0	19.25
81-82	\$18,718,665	2,575,727	25.7	13.76	22,409,596	5,005,960	24.0	22.34

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

Fiscal Year Ended June 30	<u>EXCESS REVENUES OVER EXPENDITURES</u>				<u>INVESTMENT EARNINGS</u>	
	<u>State Emp.</u>	<u>%</u>	<u>Teachers</u>	<u>%</u>	<u>State Emp.</u>	<u>Teachers</u>
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	26,252,892	57	23,016,169	47	16,866,504	15,206,410
1981	31,480,978	59	31,151,555	53	20,782,136	18,833,067
1982	40,162,709	61	39,532,861	57	25,290,552	23,195,936

*Report
of the
Actuary*

EMPLOYEES' RETIREMENT SYSTEM
OF THE STATE OF RHODE ISLAND

Actuarial Valuation as of June 30, 1982

Martin E. Segal Company, Inc.
January, 1983

MARTIN E. SEGAL COMPANY

607 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02116
(617) 262-0550

January 28, 1983

Board of Trustees
Retirement Board of the 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, 1982.

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

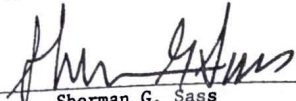
Following the report, we have attached our actuarial certificate detailing the cost factors, assumptions, and plan of benefits used for the valuation.

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. Demy, A.S.A., M.A.A.A.
Actuary

I. 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.I.A.A. program. Effective July 1, 1982, State employees contribute 6* per cent of their annual earnings; 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 15,738 active State Employees and 10,133 Teachers as of June 30, 1982 who were participating in the System. On the average, the State Employees were age 43½ and had 9½ years of service; Teachers were age 41 with 13 years of service.

Retiree Data

We received data on 4,901 State Employee pensioners and 182 beneficiaries as of June 30, 1982. The pensioners' average monthly benefit was \$391. There were 2,934 retired Teachers and 66 beneficiaries; the average monthly benefit was \$790 for the pensioners. The benefit amounts include an adjustment for the cost-of-living provision. Of all the pensioners on the rolls, 7 per cent had retired in the year ended June 30, 1982.

Retirement Fund

As of June 30, 1982, the assets of the Retirement Fund, including Teachers Survivors Reserves, amounted to \$543 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, 1982. 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 \$12.2 million. This represents 5.0 per cent of the reported payroll of participating State Employees as of June 30, 1982. The employer normal cost for Teachers is \$9.0 million or 3.9 per cent of reported participating payroll.

*Please refer to the "Actuarial Assumptions and Methods" section of the report for definitions of these terms.

For State Employees, the actuarial accrued liability* (for benefits earned before July 1, 1982) is \$677 million, of which \$258 million represents the liability to those already receiving pensions. The unfunded actuarial accrued liability at the end of the year is \$394 million. For Teachers, the actuarial accrued liability is \$842 million, of which \$289 million is for those receiving pensions. The unfunded actuarial accrued liability stands at \$606 million.

The value of the System's vested benefits is \$1.20 billion. Thus the assets are short of this amount by \$686 million (excluding assets allocable to the Teachers Survivors program).

For the fiscal year 1983-84, the State's statutory funding schedule, as amended effective July 1, 1979, calls for a contribution of 95 per cent of the State's normal cost and 85 per cent of the interest on the unfunded actuarial accrued liability. This amounts to 12.5 per cent of the projected 1983-84 payroll of \$278 million for State Employees and 16.2 per cent of projected payroll of \$262 million for Teachers. (Half of the cost for Teachers is paid for by the municipalities.) Beginning July 1, 1982 the employee contribution rates increased by ½ per cent. These increases are recognized in the rate per cents above. 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 1985-86 and then in later years the full normal cost and amortization of unfunded liabilities will be required.

*See note on page 2.

II. EMPLOYEE DATA

We received data on 15,738 State Employees and 10,133 Teachers participating in the System on June 30, 1982. The data included age, service, sex and salary for each participant. The average salary of the participants was \$15,600 for State Employees (see Note below), and \$22,800 for Teachers. The data included 287 Correctional Officers and 133 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 7.6 per cent while Teachers' average salary increased by 12.0 per cent (see Note below). Aggregate payroll increased by 2.0 per cent for State Employees and by 4.2 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: Based on inspection of sample data, it was determined that reported salaries represented a higher pay period. Accordingly, for State Employees, we adjusted salaries by ratios determined from the sampling process together with other known information.

Table 1A
Number and Average Salaries of Employees in Active Service
as of June 30, 1982
by Age and by Years of Service
STATE EMPLOYEES

Age	Total	Years of service								
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 and over	Unknown
Total	15,738 \$15,600	5,419 \$13,700	4,579 \$15,200	2,917 \$15,900	1,299 \$18,100	762 \$19,600	388 \$20,800	222 \$21,700	109 \$22,300	43 \$13,000
Under 20	56 \$11,600	56 \$11,600	--	--	--	--	--	--	--	--
20 - 24	933 12,100	823 12,100	109 \$12,100	--	--	--	--	--	--	1 \$12,600
25 - 29	2,006 13,700	1,132 13,700	794 13,700	78 \$13,500	--	--	--	--	--	2 13,900
30 - 34	2,162 15,800	843 14,800	867 16,500	423 16,300	29 \$15,300	--	--	--	--	--
35 - 39	1,784 16,800	639 14,900	566 17,300	419 18,600	141 18,500	15 \$17,500	--	--	--	4 12,900
40 - 44	1,392 16,700	442 14,600	391 16,100	285 17,500	177 20,400	83 19,700	14 \$17,600	--	--	--
45 - 49	1,488 16,200	428 13,700	400 15,500	298 15,900	163 19,600	130 20,700	53 19,900	15 \$19,200	--	1 30,500
50 - 54	1,869 16,000	432 13,400	493 15,000	419 15,100	203 18,600	158 21,000	94 20,600	57 19,500	10 \$18,100	3 22,600
55 - 59	2,127 16,000	367 14,200	517 14,400	530 14,600	292 17,200	192 19,100	124 22,200	72 22,600	32 19,600	1 24,900
60 - 64	1,431 15,900	185 13,900	338 14,200	367 14,400	220 16,300	142 18,400	74 20,500	59 23,300	43 22,700	3 28,300
65 and over	395 16,800	12 13,200	97 13,900	98 14,600	74 17,300	42 18,600	29 19,800	19 21,600	24 26,700	-- --
Unknown	95 4,800	60 2,500	7 6,800	--	--	--	--	--	--	28 9,300

25

Table 1B
 Number and Average Salaries of Employees in Active Service
 as of June 30, 1982
 by Age and by Years of Service

TEACHERS

Age	Total	Years of service								Unknown
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 and over	
Total	10,133 \$22,800	1,339 \$17,500	2,185 \$21,800	3,449 \$23,800	1,429 \$24,300	870 \$25,000	429 \$26,100	231 \$26,500	72 \$25,900	129 \$18,400
Under 20	7 \$23,700	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	7 \$23,700
20 - 24	85 12,900	79 \$12,600	2 \$20,800	-- --	-- --	-- --	-- --	-- --	-- --	4 15,300
25 - 29	765 16,600	502 15,700	242 18,700	1 \$23,500	-- --	-- --	-- --	-- --	-- --	20 14,000
30 - 34	2,477 22,000	301 17,900	1,157 21,800	997 23,400	3 \$22,400	-- --	-- --	-- --	-- --	19 20,300
35 - 39	2,302 23,300	208 19,300	329 22,900	1,386 23,900	360 24,000	3 \$23,300	-- --	-- --	-- --	16 20,600
40 - 44	1,344 23,900	122 20,500	192 22,400	372 24,200	476 24,700	169 25,300	-- --	-- --	-- --	13 21,500
45 - 49	1,017 24,500	50 21,000	109 23,000	234 23,600	217 24,800	311 25,700	95 \$25,600	1 \$21,700	-- --	-- --
50 - 54	964 24,800	34 21,900	74 22,800	250 23,900	146 24,300	173 24,800	198 26,600	78 26,600	11 \$26,100	-- --
55 - 59	715 24,500	20 20,000	58 23,300	133 23,900	142 23,100	129 24,200	86 26,500	112 26,700	31 26,200	4 24,000
60 - 64	308 24,200	4 23,100	9 21,400	51 23,600	70 24,100	73 23,800	44 24,400	32 26,200	24 25,900	1 24,900
65 and over	52 23,900	2 19,300	1 21,400	9 24,300	12 23,200	12 24,100	4 23,700	7 24,200	5 26,200	-- --
Unknown	97 18,500	17 15,700	12 20,800	16 23,400	3 22,400	-- --	2 23,300	1 21,000	1 17,000	45 16,700

RHODE ISLAND ERS

Table 2A
 Statistical Data on Active State Employees
 on June 30, 1982 and 1981

	June 30, 1982	June 30, 1981
Number of covered employees	15,738	16,501
Total annual salary	\$244,813,800	\$240,040,100
Average annual salary	\$15,600	\$14,500
Average age	43½	43
Average years of service	9½	8½
Number eligible for service retirement	1,377	1,330
Number vested but not eligible to retire	4,320	3,945

RHODE ISLAND ERS

See note in text on salary data

Table 2B
 Statistical Data on Active Teachers
 on June 30, 1982 and 1981

	June 30, 1982	June 30, 1981
Number of covered employees	10,133	10,893
Total annual salary	\$231,043,000	\$221,684,500
Average annual salary	\$22,800	\$20,400
Average age	41	40½
Average years of service	13	12½
Number eligible for service retirement	599	659
Number vested but not eligible to retire	5,881	5,733

RHODE ISLAND ERS

III. RETIREE DATA

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:

	<u>State Employees</u>	<u>Teachers</u>
Pensioners:		
Number	4,901	2,934
Average age	70½	72½
Average monthly benefit	\$391	\$790
Beneficiaries:		
Number	182	66
Average age	76	76
Average monthly benefit	\$382	\$602

Table 3A gives distributions of the 430 new State Employee pensions in the current year by type of pension and amount. Table 4A does the same for age at retirement. Tables 3B and 4B are similar for the 170 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.

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.

Table 3A

Pensions Awarded in the Year Ended June 30, 1982
by Type and by Monthly Amount

STATE EMPLOYEES

Monthly amount	Total	Type of pension				
		Service	Ordinary Disability	Accidental Disability	Legislator	Beneficiary
Total	430	386	31	3	5	5
Under \$50						
\$ 50 - 99	1	1	--	--	--	--
100 - 149	16	15	1	--	--	--
150 - 199	22	19	2	1	--	--
200 - 249	58	48	10	--	--	--
	47	38	8	--	1	--
250 - 299	39	35	1	--	2	1
300 - 349	37	34	1	--	1	--
350 - 399	16	13	2	1	1	--
400 - 449	23	21	1	1	--	--
450 - 499	24	23	1	--	--	--
500 - 599	20	17	1	--	--	--
600 - 699	25	23	2	--	--	2
700 - 799	21	20	1	--	--	--
800 - 899	17	16	--	--	--	1
900 - 999	9	9	--	--	--	--
1,000 - 1,099	7	7	--	--	--	--
1,100 - 1,199	8	8	--	--	--	--
1,200 - 1,299	6	6	--	--	--	--
1,300 - 1,399	5	5	--	--	--	--
1,400 - 1,499	8	7	--	--	--	--
1,500 - 1,999	14	14	--	--	--	1
2,000 - 2,499	3	3	--	--	--	--
2,500 - 2,999	3	3	--	--	--	--
3,000 - 3,499	1	1	--	--	--	--

RHODE ISLAND ERS

Table 3B

Pensions Awarded in the Year Ended June 30, 1982
by Type and by Monthly Amount

TEACHERS

Monthly Amount	Total	Type of Pension			
		Service	Ordinary Disability	Accidental Disability	Beneficiary
Total	170	161	7	1	1
100 - 149	1	1	--	--	--
150 - 199	1	1	--	--	--
200 - 249	4	4	--	--	--
250 - 299	3	3	--	--	--
300 - 349	6	6	--	--	--
350 - 399	2	2	--	--	--
400 - 449	3	2	1	--	--
450 - 499	4	4	--	--	--
500 - 599	8	8	--	--	--
600 - 699	13	13	--	--	--
700 - 799	16	15	1	--	--
800 - 899	10	6	3	--	1
900 - 999	19	18	1	--	--
1,000 - 1,099	21	20	1	--	--
1,100 - 1,199	17	17	--	--	--
1,200 - 1,299	11	11	--	--	--
1,300 - 1,399	12	11	--	1	--
1,400 - 1,499	6	6	--	--	--
1,500 - 1,999	8	8	--	--	--
2,000 - 2,499	4	4	--	--	--
3,000 - 3,499	1	1	--	--	--

RHODE ISLAND ERS

Table 4A

Pensions Awarded in the Year Ended June 30, 1982
by Type and by Age on Effective Date

STATE EMPLOYEES

Age on Effective date	Total	Type of pension				
		Service	Ordinary Disability	Accidental Disability	Legislator	Beneficiary
Total	430	386	31	3	5	5
30 - 34	1	--	1	--	--	--
35 - 39	1	--	1	--	--	--
40 - 44	1	--	1	--	--	--
45 - 49	8	--	6	2	--	--
51	2	--	1	--	--	1
52	1	--	1	--	--	--
53	5	2	2	1	--	--
54	4	1	2	--	--	1
55	12	7	--	--	5	--
56	3	3	--	--	--	--
57	7	5	2	--	--	--
58	6	3	3	--	--	--
59	10	4	5	--	--	1
60	47	46	1	--	--	--
61	34	33	1	--	--	--
62	60	58	1	--	--	1
63	43	42	1	--	--	--
64	39	38	1	--	--	--
65	52	51	1	--	--	--
66	23	23	--	--	--	--
67	19	19	--	--	--	--
68	8	8	--	--	--	--
69	19	18	--	--	--	1
70 and over	25	25	--	--	--	--

RHODE ISLAND ERS

Table 4B

Pensions Awarded in the Year Ended June 30, 1982
by Type and by Age on Effective Date

TEACHERS

Age on Effective date	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Beneficiary
Total	170	161	7	1	1
40 - 44	1	--	1	--	--
45 - 49	2	--	1	--	1
53	1	--	1	--	--
54	2	--	2	--	--
55	12	12	--	--	--
56	4	3	1	--	--
57	7	7	--	--	--
58	5	5	--	--	--
59	9	8	1	--	--
60	32	31	--	1	--
61	19	19	--	--	--
62	22	22	--	--	--
63	11	11	--	--	--
64	6	6	--	--	--
65	12	12	--	--	--
66	6	6	--	--	--
67	5	5	--	--	--
68	5	5	--	--	--
69	5	5	--	--	--
70 and over	4	4	--	--	--

RHODE ISLAND ERS

Table 5A

Pensions in Force on June 30, 1982
by Type and by Monthly Amount
STATE EMPLOYEES

Monthly amount	Total	Type of pension				
		Service	Ordinary Disability	Accidental Disability	Legislator	Beneficiary
Total	5,083	4,300	388	88	125	182
Under \$50	53	41	1	9	--	2
\$ 50 - 99	328	284	25	8	--	11
100 - 149	730	668	43	9	--	10
150 - 199	689	571	96	5	--	17
200 - 249	547	429	85	8	6	19
250 - 299	435	350	37	5	20	23
300 - 349	346	287	29	3	11	16
350 - 399	250	203	15	3	14	15
400 - 449	235	195	11	5	12	12
450 - 499	208	163	12	9	12	12
500 - 599	340	264	10	8	38	20
600 - 699	221	186	14	6	7	8
700 - 799	154	135	8	5	2	4
800 - 899	110	101	--	3	1	5
900 - 999	85	78	1	--	2	4
1,000 - 1,099	80	78	--	1	--	1
1,100 - 1,199	60	57	1	--	--	2
1,200 - 1,299	56	55	--	1	--	--
1,300 - 1,399	31	31	--	--	--	--
1,400 - 1,499	36	35	--	--	--	1
1,500 - 1,999	64	64	--	--	--	--
2,000 - 2,499	16	16	--	--	--	--
2,500 - 2,999	8	8	--	--	--	--
3,000 - 3,499	1	1	--	--	--	--

RHODE ISLAND ERS

Table 5B

Pensions in Force on June 30, 1982
by Type and by Monthly Amount
TEACHERS

Monthly amount	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Beneficiary
Total	3,000	2,826	95	13	66
Under \$50	1	1	--	--	--
\$ 50 - 99	8	8	--	--	--
100 - 149	22	22	--	--	--
150 - 199	36	33	1	--	2
200 - 249	62	60	2	--	--
250 - 299	74	64	5	--	5
300 - 349	102	82	12	--	8
350 - 399	109	98	7	--	4
400 - 449	110	95	13	--	2
450 - 499	95	81	8	--	6
500 - 599	252	224	13	1	14
600 - 699	296	284	10	--	2
700 - 799	436	419	8	--	9
800 - 899	338	326	7	1	4
900 - 999	345	334	6	1	4
1,000 - 1,099	259	249	3	6	1
1,100 - 1,199	156	153	--	2	1
1,200 - 1,299	119	115	--	1	3
1,300 - 1,399	75	73	--	1	1
1,400 - 1,499	35	35	--	--	--
1,500 - 1,999	59	59	--	--	--
2,000 - 2,499	8	8	--	--	--
2,500 - 2,999	2	2	--	--	--
3,000 - 3,499	1	1	--	--	--

RHODE ISLAND ERS

Table 6A

Pensions in Force on June 30, 1982
by Type and by Age

STATE EMPLOYEES

Age on June 30, 1982	Total	Type of pension				
		Service	Ordinary Disability	Accidental Disability	Legislator	Beneficiary
Total	5,083	4,300	388	88	125	182
25 - 29	2	--	2	--	--	--
30 - 34	5	--	3	1	--	1
35 - 39	10	--	7	3	--	--
40 - 44	7	--	4	2	1	--
45 - 49	30	1	19	7	1	2
50 - 54	64	8	34	14	3	5
55 - 59	196	75	77	14	19	11
60 - 64	763	611	99	16	24	13
65 - 69	1,404	1,263	80	12	30	19
70 - 74	1,239	1,144	46	15	16	18
75 - 79	765	706	13	3	15	28
80 - 84	395	342	3	1	9	40
85 - 89	147	111	--	--	6	30
90 - 94	43	31	--	--	1	11
95 - 99	10	6	--	--	--	4
100 - 104	3	2	1	--	--	--

RHODE ISLAND ERS

Table 6B

Pensions in Force on June 30, 1982
by Type and by Age

TEACHERS

Age on June 30, 1982	Total	Type of pension			
		Service	Ordinary Disability	Accidental Disability	Beneficiary
Total	3,000	2,826	95	13	66
35 - 39	2	--	1	--	1
40 - 44	7	--	4	2	1
45 - 49	5	--	3	--	2
50 - 54	16	2	11	2	1
55 - 59	89	63	19	1	6
60 - 64	425	396	21	6	2
65 - 69	575	558	11	2	4
70 - 74	750	736	10	--	4
75 - 79	614	593	5	--	16
80 - 84	280	262	4	--	14
85 - 89	166	151	6	--	9
90 - 94	56	52	--	--	4
95 - 99	13	11	--	--	2
100 - 104	2	2	--	--	--

RHODE ISLAND ERS

IV. RETIREMENT FUND

The State maintains the Employees' Retirement Fund. The Retirement Board provided us with financial statements as of June 30, 1982.

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, 1982 and 1981.

At June 30, 1982 assets totalled approximately \$543 million. Table 8 shows the composition of the assets and compares them to those of the previous year. About 72 per cent of the Fund was invested in fixed income securities such as bonds and notes.

The financial statements indicate that 52 per cent of the assets relate to State Employees, 43 per cent are for Teachers, and 5 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 1982 and 1981.

Table 7

Summary Statement of Income and Expenses
For the Years Ended June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
Employer contributions		
Member Contributions	\$57,216,108	\$43,856,481
Total contributions	<u>29,071,481</u>	<u>28,023,891</u>
Less: Administration expenses	5	--
Net contribution income	\$86,287,588	\$71,880,371
Net miscellaneous items	145,699	154,382
Investment income:		
Dividends	\$ 8,108,168	\$71,880,371
Interest	39,935,687	154,382
Capital gains and losses	<u>442,649</u>	<u>1,052,387</u>
Net investment income	48,486,504	39,615,203
Total income available for benefit payments	\$134,919,787	\$111,649,956
Benefits payments:		
Pension benefits	\$49,850,309	\$44,848,637
Death benefits	1,138,648	1,086,856
Contribution refunds	<u>4,235,260</u>	<u>3,071,930</u>
Total benefit payments	<u>55,224,217</u>	<u>49,017,423</u>
Excess of income over expenses	<u>\$79,695,570</u>	<u>\$62,632,533</u>

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

Table 8
Assets as of June 30, 1982 and 1981.

	<u>1982</u>	<u>1981</u>
Cash		
Accrued interest receivable	\$1,261,334	\$ (2,372,007)
Investments	8,758,967	6,610,655
Government bonds	\$195,827,588	\$153,282,442
Corporate bonds	128,448,333	130,536,867
Common and preferred stocks	139,923,147	105,236,539
Certificates of deposit and repurchase agreements	31,948,553	41,900,000
Commercial paper	42,894,516	32,818,686
(Less) Unamortized premiums and discounts	<u>(5,843,515)</u>	<u>(4,489,831)</u>
Total assets	<u>\$543,218,922</u>	<u>\$463,523,352</u>

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

RHODE ISLAND ERS

Table 9
Allocation of Assets by Plan
as of June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
State Employees:		
Employer reserves	\$199,973,353	\$167,585,727
Member reserves	<u>82,628,251</u>	<u>74,855,754</u>
Total State Employees reserves	\$282,601,604	\$242,441,481
Teachers:		
Employer reserves	\$122,238,642	\$ 95,334,380
Member reserves	<u>113,536,024</u>	<u>103,586,726</u>
Total Teacher reserves	235,774,666	198,921,106
Teachers Survivors:		
Employer reserves	\$ 18,466,479	\$ 16,161,641
Member reserves	<u>6,287,524</u>	<u>5,923,105</u>
Total Teachers Survivors reserves	24,754,002	22,084,746
Unallocated:		
Unclaimed benefit reserve	<u>88,650</u>	<u>76,019</u>
Total assets	<u>\$543,218,922</u>	<u>\$463,523,352</u>

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

RHODE ISLAND ERS

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, 1981 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:

Age	Death*	State Employees (Rate %)		Total*
		Disability	Withdrawal	
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.

Teachers (Rate %)

Age	Death*	Disability	Withdrawal	Total*
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 due to 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 percent 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, 1983.

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 selected 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 service were assumed to have the same service distribution as male members age 37 with known service).

Table 10

Expected Number of Years of Life
Remaining at Specified Ages

Age	Male	Female
55	22.7	28.0
56	21.9	27.1
57	21.1	26.2
58	20.3	25.3
59	19.5	24.4
60	18.8	23.5
61	18.0	22.6
62	17.3	21.8
63	16.5	20.9
64	15.8	20.1
65	15.1	19.2
66	14.4	18.4
67	13.8	17.6
68	13.1	16.8
69	12.5	16.0
70	11.9	15.3
71	11.3	14.5
72	10.8	13.8
73	10.3	13.1
74	9.7	12.4
75	9.2	11.7

1971 Group Annuity Mortality Table.

VI. RESULTS OF VALUATION

State Employees

The costs for State Employees as of June 30, 1982 developed as follows:

<u>Item</u>	<u>Amount</u>	<u>% of Payroll</u>
(1) Participating payroll	\$244,813,800	--
(2) Employer normal cost	12,232,700	5.0%
(3) Unfunded actuarial liability	394,178,000	--
(4) Interest on unfunded actuarial liability	24,057,900	9.8
(5) Total annual cost payable July 1, 1982 -- Interest only = (2) + (4)	36,290,600	14.8
(6) Total annual cost payable monthly = (5) plus ½ year interest -- Interest only	37,470,000	15.3

The funding statute calls for the State to contribute 95 per cent of the projected normal cost plus 85 per cent of the interest on the unfunded actuarial accrued liability (as of June 30, 1982) for the 1983-84 fiscal year. Based on this requirement and a projected participating payroll of \$278,000,000, the 1983-84 employer contribution "rate per cent" for State Employees is 12.5 per cent of payroll, developed below.

<u>Item</u>	<u>Amount</u>	<u>% of Projected Payroll</u>
(7) Projected 1983-84 participating payroll	\$278,000,000	--
(8) 1983-84 employer normal cost = 4.9967% x (7)	13,890,800	5.0%
(9) Required contribution payable July 1, 1982 = .95 x (8) + .85 x (4)	33,645,500	12.1
(10) Required contribution payable monthly = (9) plus ½ year interest	34,739,000	12.5

The calculations as completed assume that the employer contribution will be paid into the retirement fund at the beginning of each year, and will start to earn interest 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. Lines 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, slightly less than the 15.6 per cent for the previous year.

Teachers

The costs for Teachers as of June 30, 1982 developed as follows:

<u>Item</u>	<u>Amount</u>	<u>% of Payroll</u>
(1) Participating payroll	\$231,043,000	--
(2) Employer normal cost	9,022,300	3.9%
(3) Unfunded actuarial liability	606,263,400	--
(4) Interest on unfunded actuarial liability	37,002,100	16.0
(5) Total annual cost payable July 1, 1982 -- Interest only = (2) + (4)	46,024,400	19.9
(6) Total annual cost payable monthly (5) plus ½ year interest -- interest only	47,520,200	20.6

Applying the funding statute to the Teachers' costs and a projected participating payroll of \$262,312,500 gives a contribution "rate per cent" requirement for fiscal 1983-84 of 16.2 per cent. Half of this rate (8.1%), is payable by the State and half by the municipalities. The "rate per cent" is developed below:

<u>Item</u>	<u>Amount</u>	<u>% of Participating Payroll</u>
(7) Projected 1983-84 participating payroll	\$262,312,500	--
(8) 1983-84 employer normal cost = 3.9050% x (7)	10,243,300	3.9%
(9) Required contribution payable July 1, 1982 = .95 x (8) + .85 x (4)	41,182,900	15.7
(10) Required contribution payable monthly = (9) plus ½ year interest	42,521,300	16.2

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" is 20.6 per cent of payroll which compares to 21.4 per cent for the previous year.

We believe that the funding program as 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, 2016. In the interim, the assets are projected to be sufficient at all times to meet the cash requirements for projected benefit payments.

Teachers Survivors

Because we do not have data on dependents of teachers, it is not possible to do an analysis of the Teachers Survivor program. However, in the past, we attempted to estimate the actuarial position based on "high cost" assumptions. For example, we assumed 25 per cent of teachers would be unmarried at death in active service, 10 per cent would be married but childless, and 65 per cent would be married with children (two children, one born when the wife was age 23, and the other at 32). On this rough basis, the assets appear to be sufficient to fully cover the actuarial liabilities. The normal cost is estimated to be between \$110 and \$125 per person -- well below the \$192 combined annual employer-employee contribution (each pays 1 per cent of the first \$9,600 of salary).

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. 8 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 State 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 employee contributions are included.

For the Employees' Retirement System, the value of vested benefits as of June 30, 1982 is as follows:

	<u>State Employees</u>	<u>Teachers</u>
Active members	\$318,491,300	\$330,670,100
Inactive members	3,735,900	4,769,300
Retired members	<u>258,170,600</u>	<u>288,739,100</u>
Total value of vested benefits	\$580,397,800	\$624,178,500
Assets	<u>282,601,600</u>	<u>235,774,700</u>
Unfunded value of vested benefits	<u>\$297,796,200</u>	<u>\$388,403,800</u>

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 its effective date was deferred for one year to July 1, 1979, by which date the further revision 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 1983-84,

as reported earlier, the employer cost is 95 per cent of the normal cost and 85 per cent of the interest payment on the unfunded actuarial accrued liability. The scheduled percentages are:

<u>Fiscal year beginning on July 1</u>	<u>Normal cost</u>	<u>Interest on unfunded liability</u>
1983	95%	85%
1984	100%	95%
1985 and thereafter	100%	100%

As the funding law currently exists, beginning with the fiscal year starting July 1, 1986, the statutory 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

MODEL FORM SUMMARY STATEMENT RE CITY AND TOWN PARTICIPATION
IN TEACHERS' RETIREMENT SYSTEM FOR PURPOSES 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, 1983, 95 per cent of the normal cost and 85 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 6 1/2 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 Beginning July 1,		
	<u>1980</u>	<u>1981</u>	<u>1982</u>
Active participants	11,177	10,893	10,133
Pensioners and beneficiaries	2,885	2,928	3,000
Inactive participants*	N.A.	1,496	1,270
Liability for accrued vested benefits	\$532,210,000	\$588,177,100	\$624,178,500
Net Assets	170,242,900	198,921,100	235,774,700

*First included in 1981

	Year Ended June 30,		
	<u>1980</u>	<u>1981</u>	<u>1982</u>
Employer contributions	\$18,858,156	\$23,601,692	\$30,810,280
Member contributions	<u>13,298,198</u>	<u>14,614,575</u>	<u>14,419,664</u>
Total contributions	\$32,156,354	\$38,216,267	\$45,229,944
Net miscellaneous income	51,994	29,122	37,569
Investment income	<u>13,625,215</u>	<u>16,919,653</u>	<u>20,941,314</u>
Total income available for benefit payments	\$45,833,563	\$55,165,043	\$66,208,827
Benefit payments	<u>24,973,191</u>	<u>26,486,814</u>	<u>29,355,267</u>
Excess of income over expenses	<u>\$20,860,372</u>	<u>\$28,678,229</u>	<u>\$36,853,560</u>

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

Actuarial costs 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; are then expressed as a rate per cent of the aggregate participating payroll; and one half this rate per cent is then promulgated to each participating employer as the actuarial cost factor to be applied to its participating payroll (the remaining one half of the employer cost is contributed by the State). Employer contributions by the (city) (town) of _____ for each of the last three years (together with the amount for the current year, based on the promulgated rate percent of 8.1 per cent) are as follows:

	Year Ending June 30,			
	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983 (est.)</u>
Participating payroll				
Employer contributions				

With respect to the Teachers Retirement System, Martin E. Segal Company, independent actuaries advising the Retirement Board have stated on January 1983:

"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, 2016. In the interim 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 (city) (town) of _____ and the State, will increase as the System moves toward the funding of the full annual cost. Ultimately, however, because the actuarial funding results in the accumulation of reserves that are invested, the required appropriation will be significantly less than would be required if this System were on a pay-as-you-go basis.

MARTIN E. SEGAL COMPANY

607 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02116
(617) 262-0550

January 28, 1983

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, 1982.

The certificate contains the following attached exhibits:

EXHIBIT I - Actuarial Cost for Year Beginning July 1, 1982

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

Joseph C. Demty

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

EXHIBIT I

ACTUARIAL COST FOR YEAR BEGINNING JULY 1, 1982

A. STATE EMPLOYEES

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

- a. 15,738 active participants (including 5,697 fully vested) with total annual salaries of \$244,813,800
- b. 1,538 inactive participants
- c. 5,083 pensioners (including 182 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost	\$ 26,921,500
2. Projected employee contributions	14,688,800
3. Employer normal cost	12,232,700
4. Actuarial liability - total	676,779,600
Active employees	\$414,873,100
Inactive employees	3,735,900
Pensioners (including beneficiaries of deceased pensioners and active employees).....	258,170,600
5. Assets	282,601,600
6. Unfunded actuarial liability	394,178,000

Liability for accrued vest benefits: \$580,397,800

Note: Included are 110 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.

EXHIBIT I
 ACTUARIAL COST FOR YEAR BEGINNING JULY 1, 1982

B. TEACHERS

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

- a. 10,133 active participants (including 6,480 fully vested) with total annual salaries of \$231,043,000
- b. 1,270 inactive participants
- c. 3,000 pensioners (including 66 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost	\$ 25,195,300
2. Project employee contributions	16,173,000
3. Employer normal cost	9,022,300
4. Actuarial liability - total	842,038,100
Active employees	\$548,529,700
Inactive employees	4,769,300
Pensioners (including beneficiaries of deceased pensioners and active employees)	288,739,100
5. Assets	235,774,700
6. Unfunded actuarial liability	606,263,400

Liability for accrued vested benefits: \$624,178,500

Note: Included are 181 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.

EXHIBIT II
 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:

<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 due to rounding.

Salary scale:

Age	Present salary as a percent 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 -- 6½%
 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	55	None	50	55	None
	or		or		or	
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 contributions.

Spouse's benefit (applicable only if elected by employee):

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

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 25% per year of retirement, but not less than \$2,000.

Employee contribution rate:

<u>Date</u>	<u>State Employees</u>	<u>Teachers</u>	<u>Legislators</u>
Prior to 7/1/79	5 %	6 %	30%
7/1/79 - 6/30/82	5½	6½	30
7/1/82 - 6/30/85	6	7	30
7/1/85 and later	6½	7½	30

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.

STATEMENT OF INVESTMENTS

PERIOD: (JULY 1, 1981) TO (JULY 31, 1981)

ADD:

ADD:

ADD:

ADD:

ADD:

ADD:

(SEE PAGE 62 FOR DETAILS)

FOR THE YEAR

Investments

1981

1981

1981

1981

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SUMMARY OF INVESTMENTS

<u>OPERATIONS:</u> (July 1, 1981 - June 30, 1982)	
Total Investments - July 1, 1981	\$463,774,534
<u>ADD:</u>	
Purchases During the Year	<u>438,347,884</u>
	\$902,122,418
<u>DEDUCT:</u>	
Redemptions & Sales During the Year	<u>363,080,283</u>
TOTAL INVESTMENTS - June 30, 1982	<u>\$539,042,135</u>

<u>INVESTMENT ACCOUNT: (By Type of Security)</u>		
<u>T Y P E</u>	<u>COST OR PAR</u>	<u>PROPORTION OF TOTAL</u>
U. S. Government	\$183,477,000	34.04%
Government National Mortgage	8,010,588	1.49
Federal National Mortgage	2,440,000	0.45
International Bank for Reconstruction	1,600,000	0.30
Certificates of Deposit	31,948,553	5.93
Commercial Paper	42,894,515	7.96
Federal Home Loan	300,000	0.05
Railroad Bonds	100,000	0.02
Public Utility Bonds	83,110,000	15.42
Industrial Bonds	45,238,333	8.39
Common Stocks	136,113,864	25.25
	3,809,282	0.70
TOTAL - BANK STOCKS	<u>\$ 539,042,135</u>	<u>100.00%</u>

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>UNITED STATES OF AMERICA</u>			
U. S. Treasury Notes	8.125%	8-15-82	\$3,000,000
" " "	7.875	11-15-82	2,000,000
" " "	8.00	2-15-83	1,400,000
" " "	7.00	11-15-83	200,000
" " "	7.25	2-15-84	700,000
" " "	12.125	9-30-84	3,000,000
" " "	8.00	2-15-85	4,600,000
" " "	14.375	5-15-85	2,560,000
" " "	10.375	5-15-85	7,500,000
" " "	11.75	11-15-85	1,000,000
" " "	13.50	2-15-86	4,000,000
" " "	7.875	5-15-86	2,635,000
" " "	8.00	8-15-86	1,600,000
" " "	13.875	11-15-86	6,000,000
" " "	16.125	11-15-86	3,490,000
" " "	9.00	2-15-87	2,000,000
" " "	12.75	2-15-87	4,000,000
" " "	12.00	5-15-87	11,000,000
" " "	7.625	11-15-87	2,150,000
" " "	12.375	1-15-88	5,000,000
" " "	13.25	4-15-88	4,000,000
" " "	8.25	5-15-88	1,487,000
" " "	14.0	7-15-88	500,000
" " "	15.375	10-15-88	300,000
" " "	8.75	11-15-88	1,400,000
" " "	9.25	5-15-89	4,000,000
" " "	10.75	11-15-89	5,000,000
" " "	10.75	8-15-90	3,700,000
" " "	13.00	11-15-90	5,100,000
" " "	14.50	5-15-91	10,000,000
" " "	14.625	2-15-92	3,000,000
" " "	13.75	5-15-92	2,000,000
TOTAL - U. S. TREASURY NOTES			<u>\$108,322,000</u>

U. S. Treasury Bonds	8.25	5-15-92	300,000
" " "	7.25	8-15-92	2,550,000
" " "	6.75	2-15-93	400,000
" " "	7.50	8-15-93	850,000
" " "	8.625	8-15-93	3,830,000
" " "	8.625	11-15-93	3,000,000
" " "	9.00	2-15-94	7,400,000
" " "	8.75	8-15-94	2,000,000
" " "	8.75	11-15-94	7,275,000
" " "	10.125	2-15-95	2,000,000
" " "	10.50	5-15-95	5,100,000
" " "	12.625	5-15-95	7,000,000
" " "	7.00	5-15-98	250,000

DESCRIPTION	INVESTMENTS OWNED		CARRYING VALUE
	INTEREST	MATURITY	
UNITED STATES OF AMERICA			
U. S. Treasury Bonds	8.50 %	5-15-99	\$4,000,000
" " "	7.875	2-15-00	2,500,000
" " "	8.375	8-15-00	5,000,000
" " "	8.00	8-15-01	1,000,000
" " "	13.375	8-15-01	5,500,000
" " "	8.25	5-15-05	3,600,000
" " "	10.00	5-15-10	3,000,000
" " "	13.875	5-15-11	8,000,000
" " "	14.0	11-15-11	2,600,000
			<u>75,155,000</u>
TOTAL - U.S. TREASURY BONDS			\$183,477,000
TOTAL - U. S. TREASURY			

GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

Note Pool #5158	7-1/4	1-15-04	317,329.26
Note Pool #4877	7-3/4	5-15-04	332,385.63
Note Pool #3807	7-3/4	6-15-04	687,703.39
Note Pool #6633	7-1/4	5-15-05	704,063.86
Note Pool #7298	7-3/4	5-15-05	705,409.97
Note Pool #8005	8-1/2	2-15-06	1,360,991.48
Note Pool #12180	7-1/2	4-15-06	594,051.11
Note Pool #12168	7-1/2	6-15-06	1,645,905.93
Note Pool #12978	8.00	9-15-06	307,438.89
Note Pool #13268	8.00	11-15-06	715,326.14
Note Pool #15089	8.00	1-15-07	639,982.03
TOTAL - GOVERNMENT NATIONAL MORTGAGE ASSOCIATION			<u>\$8,010,587.69</u>

FEDERAL NATIONAL MORTGAGE ASSOCIATION

Note	7.95	7-10-86	1,000,000.00
Note	7.00	3-10-92	250,000.00
Note	7.10	12-10-97	<u>1,190,000.00</u>
TOTAL - FEDERAL NATIONAL MORTGAGE ASSOCIATION			\$ 2,440,000.00

FEDERAL HOME LOAN

Note	7.65	5-26-87	300,000.00
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DESCRIPTION	INVESTMENTS OWNED		CARRYING VALUE
	INTEREST	MATURITY	
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT			
Bonds	5-3/8%	4-01-92	\$ 600,000.00
Bonds	7-3/4	8-01-87	<u>1,000,000.00</u>
TOTAL-INTERNATIONAL BANK FOR RECONSTRUCTION & DEVELOPMENT			\$1,600,000.00

CERTIFICATES OF DEPOSIT

Citizens Bank	13.625	7-13-82	500,000.00
Old Stone Bank	14.25	7-13-82	750,000.00
Citizens Bank	14.00	7-13-82	3,500,000.00
Old Colony Newport Nat'l.	13.875	7-13-82	500,000.00
Heritage Loan & Invest.	13.35	7-13-82	100,000.00
Citizens Bank	14.25	7-20-82	250,000.00
Home Loan Investment	15.00	7-21-82	200,000.00
Citizens Bank	13.75	7-30-82	300,000.00
Citizens Bank	14.25	7-30-82	1,000,000.00
Citizens Bank	13.50	8-10-82	1,393,849.39
Marquette Credit Union	13.40	8-16-82	100,000.00
RIHT National Bank	13.875	8-17-82	1,000,000.00
Citizens Bank	13.875	8-17-82	750,000.00
First Federal Savings	13.50	8-17-82	750,000.00
RIHT National Bank	13.875	8-17-82	1,000,000.00
Peoples Savings	13.375	8-31-82	500,000.00
RIHT National Bank	13.125	8-31-82	2,500,000.00
Citizens Bank	13.25	8-31-82	500,000.00
First Federal Savings	14.00	9-3-82	1,000,000.00
Peoples Savings	13.875	9-7-82	250,000.00
Old Stone Bank	13.875	9-7-82	1,000,000.00
Citizens Bank	13.625	9-7-82	554,703.13
Peoples Savings	13.875	9-13-82	300,000.00
R. I. Federal Savings and Loan	14.15	9-13-82	2,200,000.00
R. I. Federal Savings and Loan	14.15	9-13-82	500,000.00
Citizens Bank	14.00	9-13-82	750,000.00
Citizens Bank	15.25	9-14-82	1,500,000.00
Citizens Bank	14.50	9-14-82	500,000.00
Peoples Bank	15.125	9-14-82	400,000.00
Woonsocket Institution for Savings	15.00	9-14-82	500,000.00
R. I. Federal Savings and Loan	15.00	9-14-82	1,000,000.00
R.I.C.C.U.	14.625	9-14-82	100,000.00
Acacia Credit Union	14.625	9-14-82	200,000.00
R.I.S.E.C.U.	14.625	9-14-82	1,000,000.00
First Federal Savings	13.00	9-14-82	

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>CERTIFICATES OF DEPOSIT</u> (Cont'd.)			
First Federal Savings	13.00%	9-16-82	\$1,000,000.00
Citizens Bank	14.625	9-30-82	1,000,000.00
Citizens Bank	14.50	9-30-82	500,000.00
Industrial Nat'l. Bank	11.375	8-19-83	2,000,000.00
TOTAL-CERTIFICATES OF DEPOSIT			\$31,948,552.52

COMMERCIAL PAPER

Citibank	13.65	7-6-82	9,204,013.13
Handy Harmon	14.375	7-13-82	1,000,000.00
Pullman Leasing	14.15	7-13-82	1,941,827.78
Walter Heller	14.375	7-30-82	1,447,890.63
Goodyear Financial	14.00	7-30-82	3,000,000.00
Allis Chalmers	14.00	7-30-82	971,222.22
Walter Heller	14.00	7-30-82	971,222.22
Greyhound Leasing	14.10	7-30-82	971,016.67
Ford Motor Credit Corp.	14.00	8-2-82	1,000,000.00
Jim Walters Corp.	14.875	8-10-82	1,923,972.22
Handy Harmon	13.625	8-10-82	3,000,000.00
Meade Corp.	14.00	8-17-82	2,000,000.00
Allis Chalmers	13.875	8-17-82	964,927.08
Allis Chalmers	13.625	8-17-82	1,456,854.17
Meade Corp.	14.50	8-31-82	1,250,000.00
Merrill Lynch	13.60	9-7-82	1,500,000.00
I.N.A. Finance	13.625	9-7-82	2,000,000.00
Allis Chalmers	13.875	9-7-82	2,895,937.50
Allis Chalmers	13.95	9-8-82	965,125.00
Sperry Finance	14.25	9-13-82	1,000,000.00
Champion International	15.625	9-14-82	1,500,000.00
Montgomery Ward	15.25	9-14-82	967,381.94
Continental Illinois	14.75	9-28-82	963,125.00
TOTAL - COMMERCIAL PAPER			\$42,894,515.56

RAILROADS

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

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>PUBLIC UTILITIES</u>			
Alabama Power Co.- First Mortgage	4-7/8	5-01-89	\$ 195,000.00
Alabama Power Co. First Mortgage	4-7/8	9-01-95	100,000.00
American Tel. & Tel. Co.- Debentures	8-7/8	8-01-03	1,000,000.00
American Tel. & Tel. Debentures	4-3/8	4-01-85	175,000.00
American Tel. & Tel. Debentures	4-3/4	11-01-92	800,000.00
American Tel. & Tel. Debentures	4-3/8	2-01-94	250,000.00
American Tel. & Tel. Debentures	5-1/2	1-01-97	250,000.00
American Tel. & Tel. Debentures	4-3/4	6-01-98	100,000.00
American Tel. & Tel. Debentures	5-1/8	4-01-01	200,000.00
American Tel. & Tel. Debentures	8.80	5-15-05	2,000,000.00
American Tel. & Tel. Debentures	8-5/8	2-01-07	2,000,000.00
Appalachian Elec. Power Co.- First Mortgage	7-1/2	12-01-98	500,000.00
Appalachian Elec. Power Co.- First Mortgage	4.00	5-01-88	100,000.00
Arkansas Power & Light Baltimore Gas & Electric	8.00	6-01-03	1,000,000.00
Bell Tel. Co. of Pa.- Debentures	7-5/8	9-01-01	1,000,000.00
Blackstone Valley Elec. Co. Brockton Edison	4-3/4	5-01-01	200,000.00
Blackstone Valley Elec. Co. Brockton Edison	6-1/2	6-01-97	100,000.00
Brockton Edison Carolina Power & Light Co.	8-3/8	9-01-03	500,000.00
Carolina Power & Light Co. Central Illinois Light Co.	5-1/8	4-01-96	250,000.00
Central Illinois Light Co. Chesapeake Potomac Tel.	4.00	7-01-88	100,000.00
Chesapeake Potomac Tel. Chesapeake Potomac Tel.	8-5/8	4-01-09	500,000.00
Chesapeake Potomac Tel. Chesapeake Potomac Tel.	7-1/4	5-01-09	500,000.00
Chesapeake Potomac Tel. Cincinnati Gas & Electric	8-3/4	3-01-10	500,000.00
Cincinnati Gas & Electric Columbia Gas System, Inc.- Debentures	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
Commonwealth Edison- Sinking Fund Debentures	6-3/4	7-01-98	400,000.00
Commonwealth Edison- Sinking Fund Debentures	6-3/8	10-01-98	500,000.00
Commonwealth Edison- 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 & Power Co.- First Refunding Mortgage	8-7/8	10-01-00	500,000.00
Consolidated Edison Co.- First Refunding Mortgage	4-5/8	12-01-93	300,000.00
Consolidated Edison Co.- First Refunding Mortgage	4-1/4	10-01-86	300,000.00
Consolidated Edison Co.- First Refunding Mortgage	5.00	10-01-87	225,000.00
Consolidated Edison Co.- 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
Consumers' Power Co.- First Mortgage	4-5/8	8-01-89	250,000.00
Consumers' Power Co.- First Mortgage	7-1/2	11-01-01	500,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
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
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
Georgia Power	7-3/8	3-01-01	500,000.00
Gulf State Utilities Co.- First Mortgage	5-1/4	12-01-89	100,000.00
First Mortgage	4-7/8	7-01-90	200,000.00
Gulf State	7-7/8	12-01-00	500,000.00
Hartford Electric	9-1/4	5-01-00	500,000.00
Hartford Electric	7-5/8	12-01-01	500,000.00
Idaho Power Co.	5.00	5-15-89	250,000.00
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
Indiana & Michigan Elec. Co.- Sinking Fund Debentures	5-1/8	6-01-86	100,000.00
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
Kansas Gas & Electric Co.	4-5/8	1-01-91	250,000.00
Kentucky Utilities Co.	9-1/8	4-01-04	1,400,000.00
Louisiana Power & Light	5.00	4-01-90	200,000.00
Louisiana Power & Light	7-1/2	11-01-02	500,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
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
Narragansett Electric Co.- First Mortgage	3-1/2	3-01-86	200,000.00
New Bedford Gas	8-1/8	12-01-95	472,000.00
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
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	200,000.00
New York State Electric and Gas Corp.	4-5/8	5-01-91	200,000.00
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
Ohio Edison Co.- First Mortgage	4-3/4	6-01-91	100,000.00
First Mortgage	4-7/8	11-01-87	100,000.00
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 Power & Light Co.	5.00	10-01-95	100,000.00
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

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
Pennsylvania Electric Co.-	7-7/8%	12-01-01	\$1,000,000.00
Pennsylvania Electric Co.	3-1/8	3-01-84	100,000.00
First Mortgage	8-1/4	12-01-06	600,000.00
Pennsylvania Power			
Philadelphia Electric Co.-	5.00	10-01-89	100,000.00
First Mortgage	8-3/8	1-15-09	1,500,000.00
Potomac Electric Power Co.			
Public Service Co. of			
Colorado-	4-3/8	5-01-87	100,000.00
First Mortgage	4-1/2	10-01-91	200,000.00
First Mortgage	7-5/8	1-01-01	1,000,000.00
Public Service Ind.			
Public Service Electric			
and Gas Co.-			
Debentures	5-3/4	6-01-91	200,000.00
First Ref. Mortgage	4-3/4	9-01-95	250,000.00
First Ref. Mortgage	5-1/8	6-01-89	200,000.00
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
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	5-01-08	500,000.00
Southwestern Bell Tel. Co.-			
Southwestern Bell	8-3/4	8-01-07	1,000,000.00
Debentures	6-3/4	6-01-08	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
Southwestern Bell Tel.	8-1/4	3-01-14	2,000,000.00
Southwestern 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	7.70	10-01-98	3,000,000.00
Union Elec. Co. of Missouri-			
First Mortgage	4-3/8	3-01-88	100,000.00
First Mortgage	7-3/8	5-01-99	500,000.00
The Union Light, Heat, and			
Power Co.	5.00	7-01-89	200,000.00

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
Utah Power & Light Co.			
Virginia Elec. & Power Co.-	4-7/8%	9-01-90	\$ 100,000.00
First Ref. Mortgage			
First Ref. Mortgage	3-7/8	6-01-88	200,000.00
Virginia Electric	4-5/8	9-01-90	150,000.00
Washington Gas & Light Co.	7-3/8	3-01-01	500,000.00
West Penn Power Co.-	4-7/8	5-01-86	100,000.00
First Mortgage			
West Penn Power	4-7/8	12-01-95	275,000.00
Western Union Telegraph Co.	9-5/8	6-01-00	500,000.00
West Texas Utilities	5-1/4	2-01-87	250,000.00
Wisconsin Power & Light Co.	7-1/4	1-01-99	250,000.00
Wisconsin Public Service Corp.	8.00	7-01-01	1,000,000.00
Wisconsin Telephone Co.	3-1/4	10-01-84	100,000.00
	7-1/4	5-15-99	500,000.00
TOTAL - PUBLIC UTILITIES			\$83,110,000.00

BANKS

American Savings & Loan of			
California	9.50	6-30-85	250,000.00
R. I. Hospital Trust	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
Industrial National Bank	11.25	5-15-83	1,000,000.00
Beneficial Corp.	7.50	11-01-96	500,000.00
Houshold Finance	12.00	4-15-87	2,000,000.00

INDUSTRIAL AND MISCELLANEOUS

American Brands, Inc.	8-1/8	3-01-85	1,000,000.00
American Car & Foundry Co.	6-3/4	5-15-83	17,000.00
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

INVESTMENTS OWNED

<u>DESCRIPTION</u>	<u>INTEREST</u>	<u>MATURITY</u>	<u>CARRYING VALUE</u>
<u>INDUSTRIAL AND MISC.</u>			
<u>(Cont'd.)</u>			
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 Co.	7.85	3-01-88	250,000.00
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
Ford Motor Credit Co.	9.45	6-15-85	500,000.00
Ford Motor Credit Corp.	9.875	3-15-04	1,000,000.00
Ford Motor Credit Corp.	9.15	8-01-04	965,000.00
General Motors Acceptance Corp.-			
Debentures	4-7/8	12-01-87	750,000.00
General Motors Acceptance	4-5/8	9-01-82	100,000.00
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
Household Finance Corp.-			
Household Finance	7-1/4	1-01-90	200,000.00
Debentures	4-7/8	9-15-93	150,000.00
Debentures	5.00	7-01-82	250,000.00
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
Pittsburg Plate Glass	9.00	6-15-95	500,000.00
Scott Paper Co.	8-7/8	6-01-00	808,000.00
Sohio B. P. Trans.	8-5/8	2-01-83	300,000.00
Texaco, Inc.	3-5/8	5-01-83	300,000.00
Trailer Train Co.	7-1/8	12-01-82	13,333.00
U. S. Steel Holding Co.	12.50	3-1-94	1,772,800.00
Xerox Corp.	8.20	11-01-82	2,000,000.00
TOTAL - BANKS, INDUSTRIAL AND MISCELLANEOUS			\$45,238,333.00

INVESTMENTS OWNED

<u>COMMON STOCKS</u>	<u>NO. OF SHARES</u>	<u>COST</u>
<u>BANKS AND HOLDING COMPANIES</u>		
Bank of America Citicorp.	50,000	\$ 622,456.39
Industrial National Bank	20,000	510,995.36
J. P. Morgan	66,285	431,281.75
Old Stone Bank	25,000	925,816.66
R. I. Hospital Trust National	8,000	104,291.00
First Interstate Bancorp.	41,784	606,369.93
	30,000	608,071.78
TOTAL - BANKS & HOLDING COMPANIES		\$3,809,282.87
<u>CHEMICALS AND DRUGS</u>		
American Home	110,000	2,959,000.62
Bristol Myers	75,000	2,947,081.29
Dow Chemical Corp.	140,000	3,631,554.94
Johnson & Johnson	20,000	809,250.00
Monsanto Co.	60,000	3,310,679.29
Pfizer (Chas.) Co.	70,000	2,334,551.95
Sterling Drug Co.	90,000	1,965,898.97
<u>CONSTRUCTION MATERIAL & EQUIPMENT</u>		
Caterpillar Tractor	100,000	4,879,362.31
Deere Corp.	140,000	4,450,916.23
Parker Drilling	70,000	1,100,263.63
U. S. Gypsum Co.	65,000	2,165,906.96
<u>ELECTRONICS</u>		
Burroughs Corporation	50,000	2,691,880.43
Emerson Electric Corp.	62,000	2,176,789.26
International Business Machines	100,000	5,492,521.65
NCR Corp.	57,000	3,091,407.98
Raytheon Corp.	90,000	3,691,449.22
Texas Instruments	23,000	2,278,278.50
Union Electric Corp.	80,000	847,325.00
<u>FOOD</u>		
Beatrice Foods Co.	150,000	3,044,631.89
General Foods	40,000	1,231,143.67
McDonalds Corp.	34,000	1,584,492.64
Pepsico, Inc.	55,000	1,326,129.14

INVESTMENTS OWNED

	<u>NO. OF SHARES</u>	<u>COST</u>
<u>COMMON STOCKS</u>		
<u>INSURANCE</u>		
Transamerica Corp.	16,000	\$ 191,829.27
<u>RAILROADS</u>		
Missouri Pacific Corp.	52,000	2,876,348.63
Union Pacific Corp.	25,000	969,850.67
<u>MISCELLANEOUS</u>		
Boeing Corp.	100,000	3,044,371.07
A. T. Cross Corp.	130,000	2,259,866.43
Foxboro Co.	70,000	1,375,372.05
General Motors Corp.	67,100	3,733,706.99
Gillette Co.	43,000	1,267,264.48
Halliburton Co.	100,000	4,025,971.08
Owens-Corning	90,000	2,204,181.74
Schlumberger	85,000	3,446,957.03
Square 'D'	110,000	2,626,110.39
Xerox	95,000	4,602,338.66
<u>PETROLEUM</u>		
Atlantic Richfield Co.	85,180	3,855,497.62
Exxon Corporation	163,000	4,346,936.05
Getty Oil Co.	41,000	2,683,058.62
Mobil Oil	150,000	2,986,672.97
Standard Oil of California	100,000	3,145,392.47
Standard Oil of Indiana	80,000	2,277,027.57
<u>PAPER AND PAPER PRODUCTS</u>		
Kimberly Clark Corp.	70,000	3,350,545.30
<u>RETAIL STORES</u>		
Federated Stores	30,000	1,067,773.95
K Mart	110,000	2,651,959.27
Sears Roebuck Co.	65,000	1,551,607.19

INVESTMENTS OWNED

<u>COMMON STOCKS</u>	<u>NO. OF SHARES</u>	<u>COST</u>
<u>PUBLIC UTILITIES</u>		
American Tel. & Tel.	86,392	\$ 4,697,789.01
Central and Southwest	50,000	908,068.75
Florida Power and Light	27,000	927,935.93
Florida Progress Corp.	84,000	1,371,004.32
Gulf States Utilities	62,000	919,588.67
Panhandle E. Pipeline	126,000	3,040,267.57
Public Service of Indiana	62,000	1,289,008.12
Texas Gas Transmission	127,000	3,030,061.50
Texas Utilities	63,000	1,378,985.58
TOTAL - COMMON STOCKS		\$136,113,864.00