State of Rhode Island and Providence Plantations

ANNUAL REPORT

OF THE

RETIREMENT BOARD

JUNE 30, 1992

HON. NANCY J. MAYER

General Treasurer

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

RETIREMENT BOARD

JUNE 30, 1992

Contents

REPORT OF THE RETIREMENT BOARD

The Fifty-Sixth Annual Report of the Retirement Board for the fiscal year ending June 30, 1992 covers in detail through the exhibits, schedules and statistics, the operations for the year valuation and recommendations.

FINANCIAL FACTS

Total reserves at the end of the year were 11.0 percent or $204,554,596 higher than the previous year, for a total of $2,165,308,100.

Revenues from all sources for the year amounted to $166,046,912 for State Employees and $235,225,955 for Public School Teachers. Expenditures for the year amounted to $94,047,266 and $102,671,005 for State Employees and Teachers, respectively.

Chart (A) on Page 12 depicts the sources of Revenue and Expenditures.

Income from investments for the year amounted to $263,234,667 including a capital gain of $150,068,320. This represents 65.59 percent of the total revenues. This income is equal to a return of 6.00 percent and is compared to the return of previous years in Chart (B), Page 13.

Pension benefits, which represents the major expenditure item, amounted to $75,521,189 for State Employees and Legislators, and $87,995,408 for Teachers and Teachers' Survivors. Added to this was the Cost-of-Living Adjustment, which amounted to $11,273,369 for State Employees, and $12,716,270 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), Page 13, which covers the last eleven 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, 1992 was 62.42 percent for State employees and 56.63 percent for Teachers. The unfunded (accrued) liability for the State Employees was $428,793,000 and $735,319,400 for Teachers.

$1,164,112,400

745,698,000
434,225,000
1,179,923,000

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.

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

COMPARATIVE FINANCIAL BALANCE SHEET

	JUNE 30, 1992	JUNE 30, 1991
ASSETS		
Cash	30,892,132	10,728,825
Accrued Interest Receivable	19,049,569	15,579,662
Investments (At Average Cost)	2,115,366,399	1,934,445,017
	2,165,308,100	1,960,753,504
LIABILITIES & RESERVES		
Current Liabilities		
Unclaimed Benefits	231,679	229,481
Members' Contribution Reserves		
State Employees	208,611,783	189,365,218
Teachers	299,102,622	265,096,192
Teachers' Survivors	10,226,072	9,754,441
TOTAL MEMBER RESERVES	517,940,477	464,215,851
General Reserves		
State Employees	716,501,839	663,781,763
Teachers	875,761,020	784,472,996
Teachers' Survivors	54,870,562	48,048,389
Certain State Employees	2,523	5,024
Certain Teachers	---	---
TOTAL GENERAL RESERVES	1,647,135,944	1,496,308,172
TOTAL LIABILITIES AND RESERVES	2,165,308,100	1,960,753,504

STATEMENT OF REVENUES AND EXPENDITURES

YEAR ENDED - JUNE 30, 1992

Member Contributions		
State Employees	29,198,450	
Legislators	2,577	
Teachers	38,776,364	
Teachers' Survivors	567,959	
Ins. Premiums-Legislators	1,260	68,546,610
State Contributions		
State Employees	20,467,053	
Teachers	---	
State Police	88,555	
Certain State Employees'	5,000	
Supplemental Pay - State	323,487	
Medical Ins.	2,146,096	23,030,191
Municipal Contributions		
Teachers	44,811,846	
Teachers' Survivors	546,094	
Supplemental Pay - Teachers	346,611	45,706,551
Investment Income		
Interest	90,238,234	
Dividends	29,898,970	
Capital Gain or (Loss)	150,068,320	
Misc. Revenue	14,500	
Less: Administrative Expense	6,985,357	263,234,667
Miscellaneous		
Miscellaneous Receipts	7,067	
Employees' Trans. - Municipal	36,466	
Unclaimed Benefits	6,541	
Interest-Service Purchase	704,774	754,848
TOTAL REVENUES --		401,272,867
	EXPENDITURES	
Pension Benefits		
State Employees	83,931,577	
Legislators	2,531,357	
Teachers	98,813,733	
Teachers' Survivors	1,559,686	
Certain State Employees & Teachers	7,500	
Supplemental Pay - State	324,125	
Supplemental Pay - Teachers	338,260	187,506,238
Death Benefits		
State Employees	1,730,416	
Legislators	30,400	
Teachers	837,019	2,597,835.00
Refund of Contributions		
State Employees	37,764,630	
Teachers	1,009,351	
Teachers' Survivors	68,721	
Interest on Refunds-Survivors	35,998	
Municipalities	3,035	4,881,735
Miscellaneous		
Miscellaneous	1,913	
Employee Transfers-Municipal	37,999	
Unclaimed Benefits	4,343	1,732,463
Medical Ins.	1,688,208	
Total Expenditures		196,718,271
Excess Revenues Over Expenditures		204,554,596

ANALYSIS OF REVENUES AND EXPENDITURES
FISCAL YEAR ENDED - JUNE 30, 1992

REVENUES	STATE AMOUNT	%	TEACHERS AMOUNT	%	TEACHERS' SURVIVORS AMOUNT	%	TOTAL
Member Contributions	$29,202,286	17.59	38,776,364	17.14	567,959	06.34	68,546.609
State Contributions	23,030,192	13.87	-- --- ---	-- --	--- ---	-- --	23,030,192
Municipal Contributions	-- --- ---	-- --	45,160,457	19.96	546,093	06.10	45,706,550
Investment Earnings	113,454,142	68.32	141,936,132	62.73	7,844,393	87.56	263,234,667
Miscellaneous	360,292	00.22	394,556	00.17	--- ---	-- --	754,848
TOTAL REVENUES	166,046,912	100.00	226,267,509	100.00	8,958,445	100.00	401,272,866
EXPENDITURES							
Pensions	75,521,190	45.48	86,435,723	38.20	1,559,686	17.41	163,516,599
Cost-of-Living Adjust.	11,273,369	06.79	12,716,269	05.62	--- ---	-- --	23,989,638
Death Benefits	1,760,816	01.06	837,018	00.37	--- ---	-- --	2,597,834
Refunds-Contributions	3,764,629	02.27	1,012,151	00.45	104,956	01.17	4,881,736
Miscellaneous	1,727,261	01.04	5,202	-- --	--- ---	-- --	1,732,463
TOTAL EXPENDITURES	94,047,265	56.64	101,006,363	44.64	1,664,642	18.58	196,718,270
EXCESS REVENUES OVER EXPENDITURES- TO RESERVES	$71,999,647	43.36	125,261,146	55.36	7,293,803	81.42	204,554,596

DISTRIBUTION OF EXCESS REVENUE

Unclaimed Benefits	21.98
Members' Reserves	
State	25,477,469
Teachers	37,770,208
Survivors	499,238
General Reserves	
State	46,521,066
Teachers	87,492,351
Survivors	6,794,566
Certain Employees	(2,500)
TOTAL	204,554,596

ANAYLSIS OF INVESTMENT INCOME

FISCAL YEAR ENDED JUNE 30, 1992

INVESTMENT INCOME - INTEREST		86,768,327
ADD:		
Accrued Interest - June 30, 1992	19,049,569	
LESS:		
Accrued Interest - July 1, 1991	-15,579,662	
Discounts Amortized	3,469,907	
Total Additions --		3,469,907
TOTAL --		90,238,234
LESS:		
Accrued Interest Purchased	-0-	
Premiums Amortized	-0-	
Total Deductions --		-0-
NET INTEREST EARNED		90,238,234
DIVIDENDS		29,898,969
Adj. of Misc. Revenue		14,500
TOTAL EARNED ON INVESTMENTS --		120,151,703
CAPITAL GAIN		150,068,321
INVESTMENT INCOME		270,220,024
LESS: ADMINISTRATIVE EXPENSE		-6,985,357
NET INVESTMENT INCOME		263,234,667

DISTRIBUTION OF INVESTMENT INCOME
FISCAL YEAR ENDED - JUNE 30, 1992

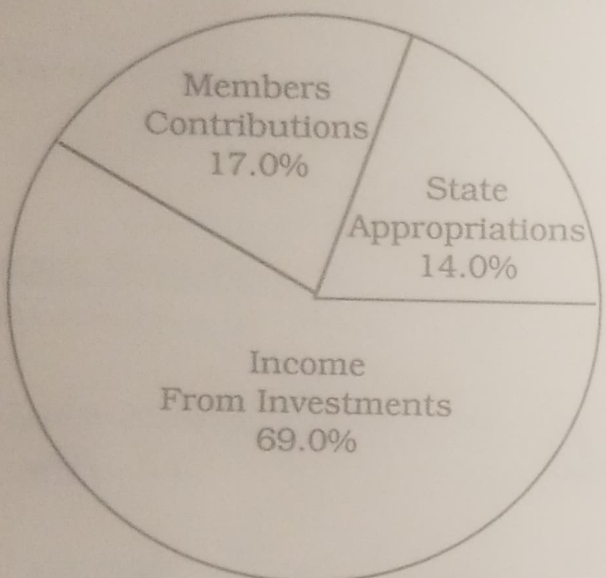
	EMPLOYEES	TEACHERS	TEACHERS' SURVIVORS	TOTAL
MEMBER RESERVES				
Balance July 1, 1991	189,365,218	265,096,192	9,754,440	464,215,850
Balance June 30, 1992	208,611,783	299,102,622	10,226,071	517,940,476
GENERAL RESERVES				
Balance July 1, 1991	663,786,787	784,472,996	48,048,389	1,496,308,172
Balance June 30, 1992	603,050,220	733,824,887	47,026,169	1,383,901,276
TOTAL --	1,664,814,008	2,082,496,697	115,055,069	3,862,365,774
AVERAGE --	832,407,004	1,041,248,348	57,527,534	1,931,182,887
PERCENT --	43.10	53.92	2.98	100.00
DISTRIBUTION --	113,454,142	141,936,132	7,844,393	263,234,667

CHART A

SOURCES OF REVENUE AND HOW EXPENDED

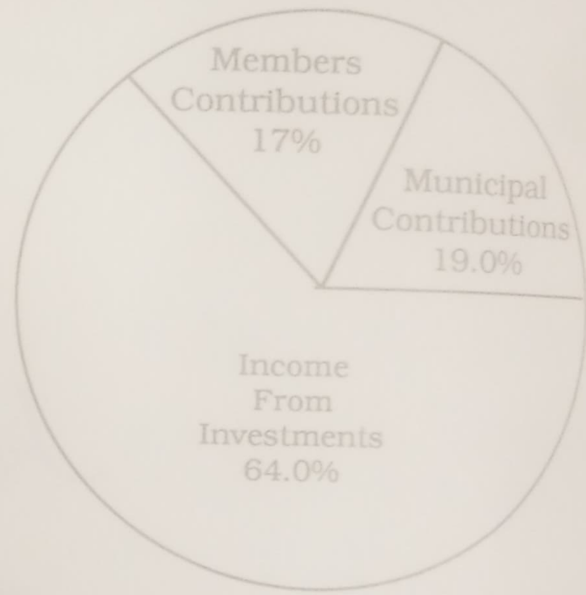
JUNE 30, 1992

State Employees

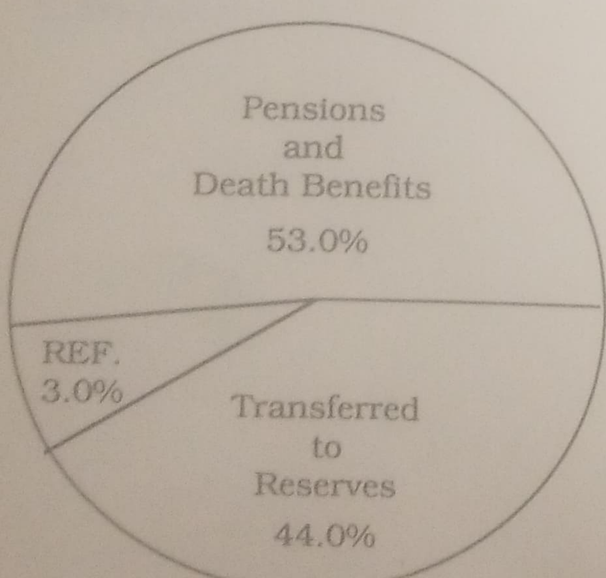


INCOME

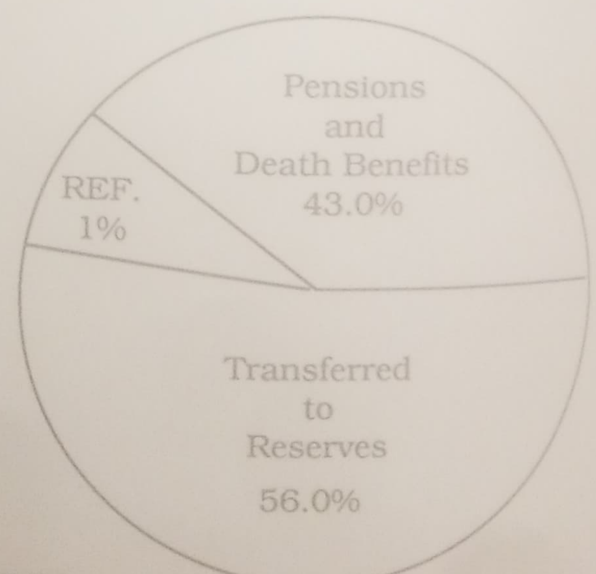
* Public School Teachers



* State Approp. were deferred from Entire 91-92 year



OUTGO



REF. DENOTES REFUNDS

CHART 'B'

INVESTMENT RATE OF RETURN

1982	10.20
1983	9.40
1984	9.30
1985	9.25
1986	8.97
1987	8.13
1988	8.60
1989	8.50
1990	6.70
1991	6.67
1992	6.00

CHART 'C'

	STATE EMPLOYEES		TEACHERS	
YEAR	PENSION BENEFITS	COST OF LIVING ADJUSTMENT	PENSION BENEFITS	COST OF LIVING ADJUSTMENT
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
83-84	26,662,536	3,360,702	24,760,600	5,907,761
84-85	28,161,866	3,844,578	26,590,686	6,366,817
85-86	30,881,152	4,439,144	29,271,627	6,810,574
86-87	38,189,187	5,795,385	36,250,736	8,506,795
87-88	41,854,822	6,575,530	41,179,024	9,155,646
88-89	43,828,710	7,495,723	46,559,574	9,964,341
89-90	58,115,453	8,494,912	52,290,616	10,698,407
90-91	71,527,976	9,511,308	85,529,245	11,583,785
91-92	73,456,983	10,806,219	86,435,712	12,716,270
92-93				

CHART 'D'

COMPARATIVE PERTINENT FINANCIAL FACTS FOR
STATE EMPLOYEES AND TEACHER MEMBERS

FISCAL YR. ENDED JUNE 30	EXCESS REVENUES OVER EXPENDITURES				INVESTMENT EARNINGS	
	STATE EMP.	%	TEACHERS	%	STATE EMP.	TEACHERS
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
1983	44,380,976	62	49,687,094	61	28,172,059	26,372,102
1984	50,424,302	60	56,165,279	63	34,600,836	33,230,640
1985	55,749,619	60	74,606,628	68	35,584,080	35,442,736
1986	72,703,911	64	99,664,271	72	49,391,943	51,634,735
1987	63,099,538	56	98,755,445	68	51,471,884	56,503,538
1988	77,285,688	58	117,219,412	69	64,556,274	74,155,102
1989	127,419,285	69	174,525,803	75	108,331,521	128,717,759
1990	57,314,074	42	117,671,289	61	57,712,475	71,196,337
1991	21,877,319	17	58,984,651	37	58,567,510	74,965,344
1992	71,999,646	43	132,554,950	56	113,454,141	149,780,525

ACTUARIAL VALUATION OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

AS OF JUNE 30, 1992

Prepared by:

William M. Mercer, Incorporated
200 Clarendon Street
Boston, Massachusetts 02116

May, 1993

WILLIAM M. MERCER

May 12, 1993

Retirement Board of Employees' Retirement System
State of Rhode Island
40 Fountain Street - 1st Floor
Providence, RI 02903

Dear Members of the Board:

We are pleased to submit the Actuarial Valuation of the Employees' Retirement System of the State of Rhode Island as of June 30, 1992.

The purpose of the valuation is to determine and analyze the funded status of the System by comparing the value of assets with the value of accrued liabilities and to calculate the contribution requirements for the fiscal year 1993-1994.

We provided preliminary employer contribution rates (letter dated December 11, 1992) based on the financial information and census information available by early December 1992. The final rates, developed in this report, are unchanged. The employer contribution rate for the State Employees' Retirement Plan is 11.32% and the employer contribution rate for the Teachers' Retirement Plan is 16.02%.

Section I of the valuation report discusses the experience of the plan during the 1991-92 fiscal year and provides an analysis of the changes to the contribution rates. The report also provides details of the asset information and census data utilized, the valuation method and actuarial assumptions and our actuarial certification which details the development of the contribution requirements of the System.

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SECTION I - SUMMARY OF VALUATION RESULTS

Contribution Requirements

The contribution requirements for fiscal 1993-94 for the State Employees' Retirement Plan and the Teachers' Retirement Plan are set out below. For comparison the contribution requirements for the previous two fiscal years are also shown.

	Fiscal 1993-94	Fiscal 1992-93	Fiscal 1991-92
State Employees Plan:			
Normal Cost	12.72%	11.59%	13.35%
Unfunded Liability Cost	6.35%	6.53%	6.10%
Total Cost	19.07%	18.12%	19.45%
Less Employee Contribution	7.75%	7.75%	7.75%
Employer Cost	11.32%	10.37%	11.70%
Teachers Plan:			
Normal Cost	14.77%	13.31%	14.37%
Unfunded Liability Cost	9.75%	9.93%	9.23%
Total Cost	24.52%	23.24%	23.60%
Less Employee Contribution	8.50%	8.50%	8.50%
Employer Cost	16.02%	14.74%	15.10%

For fiscal 1993-94, the Teachers' Plan rate is to be paid 40% by the State and 60% by the cities and towns. The overall rate of 16.02% includes the cost of prior fiscal year State contribution deferrals. The deferral represents 0.58% of the rate and is payable by the State, the cities and towns share is therefore 60% of 15.44% or 9.26% and the State will contribute the balance of the 16.02% or 6.76%.

Towns which did not Participate in the 1990 Early Retirement Incentive Program

There were a number of towns which did not participate in the 1990 early retirement incentive program. These were:

Code Number:	2003	Burillville
	2009	East Greenwich
	~~2015~~	~~Jamestown~~
	2018	Little Compton
	2025	North Smithfield
	2022	New Shoreham

As a result the contribution requirement for these towns is reduced by the cost of the early retirement incentive program. The overall contribution requirement for fiscal 1993/94 of the group is 14.27% and as above the State will meet the full cost of prior fiscal year deferrals of 0.58%. The contribution for these towns is therefore 8.21% and the State contributes the balance of 6.06%.

Plan Experience

The employer cost has increased from the current cost for the fiscal year ending June 30, 1993 due to a number of factors:

- Pay increases were assumed to be zero for fiscal 1991-92 only. However, average pay increased by 3.3% for State Employees and 2.9% for Teachers which has caused the liabilities and costs of the System to increase.

- The actuarial value of assets (utilized to calculate the employer contribution) returned 10% for the year versus an expected return of 8% - this leads to a reduction in the employer costs.

- The participant group average age increased by approximately 0.5 years and caused an increase to the employer contribution. (This is because the cost of providing pension benefits for employees increases with age.)

When assessing the relative impact of the above factors it is appropriate to compare year to year changes in the total cost of benefits including employee contributions. When looked at in this manner, the increase from year to year is a smaller proportion of the total cost than the increase in the employer cost net of employee contributions, due to the fact that employee contributions are held constant. Any gains or losses are passed on to the employer's share of the cost.

Funded Status of the System

There are several measures commonly used to describe the funded status of the plan. The following tables summarize two measures which are described below.

Projected Benefits/Actuarial Asset Value

The ratio of assets to the projected benefit liability compares the actuarial value of assets to the value of accrued benefits with projected salary increases to retirement.

The projected benefit ratio remained relatively constant between 1991 and 1992. This is due to the offsetting effect of the larger than expected pay increases versus the better than expected asset return. Note the improvement between 1990 and 1991 for both plans. This reflects the beneficial affect of certain assumption changes partially offset by the deferral of State Contributions and early retirement incentive programs.

	Ratio of Assets to Liabilities		
	June 30, 1992	June 30, 1991	June 30, 1990
State Employees	62.42%	62.56%	60.31%
Teachers	56.63%	56.66%	54.50%

Vested Benefits/Market Value of Assets

The ratio of assets to the vested benefit liability compares the value of vested benefits (basically the value of accrued benefits with no allowance for salary projection for participants with more than ten years of service the value of former employee's benefits and the accumulated value of employee contributions for participants with less than ten years of service) to the market value of assets.

The vested benefit ratio has improved since the last year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. The improvement in the ratio results from the asset return achieved by the market value of assets of 13.5%.

	Ratio of Assets to Liabilities		
	June 30, 1992	June 30, 1991	June 30, 1990
State Employees	80.67%	77.54%	87.39%
Teachers	77.46%	75.47%	91.43%

The Early Retirement Incentive Program of 1989

The incentive program allowed participants with 25 or more years of service (or if over age 60, 10 or more years of service) to retire and receive a 10% enhancement in their benefit service. The program was only available to state employees and approximately 750 state employees took the incentive offered. The cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll, (see Appendix II for a description of the funding method) commencing in fiscal year 1991-92. The cost of the program is 0.66% of payroll.

The Early Retirement Incentive Program of 1990

Unlike the 1989 program, the 1990 program was available to both state employees and teachers. Any participants with 23 or more years of service, could retire and receive a 10% enhancement in their benefit service. In addition, the benefit was based on the final year's salary (rather than a three year average). Approximately 500 state employees and 800 teachers took the 1990 incentive program.

For the State Employees Plan, the cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll, commencing in the fiscal year 1992-93. The cost for the State Employees Plan is 0.64% of payroll.

For the Teachers' Plan, the cost is spread over a 24 year period (see Exhibit III for a description of the funding method) commencing in the fiscal year 1992-93 and is equal to 1.75% of payroll.

Assets of the Retirement System

Section III describes the assets of the retirement system, analyzes the cash flow during the previous fiscal year and shows the proportion of funds invested in each of the major investment categories.

SECTION I - Summary of Valuation (cont'd)

The table below provides a plan year summary of certain key statistics of the performance and transactions of the retirement fund:

	7/1/91 to 6/30/92	7/1/90 to 6/30/91	7/1/89 to 6/30/90
Time-weighted return on market value of assets[1]	13.5%	7.5%	12.3%
Market Value of Assets at end of period	$2,569,300,000	$ 2,316,700,000	$2,222,100,000
Actuarial Value of Assets at end of period	$2,483,700,000	$ 2,316,700,000	$1,962,800,000
Total Contribution	$ 138,000,000	$ 149,700,000	$ 196,600,000
Total Benefit Payments	$ 196,700,000	$ 203,600,000	$ 139,400,000

(1) As prepared by Wilshire Associates

The return achieved by the fund should be compared with the assumed return of 8%.

The actuarial value of assets recognizes one-third of the investment gain in excess of the assumed return of 8%. Hence on an actuarial value of assets the fund returned approximately 10% during fiscal 1992. The remaining two-thirds of the gain will be recognized in costs for fiscal years 1994 and 1995. Spreading investment gains and losses over a three year period helps to reduce volatility in the plan's contribution requirements.

The swing from net income in fiscal year 1989-90 to net outgo (i.e. benefit payments exceeded contributions) in fiscal 1990-91 and 1991-92 resulted from the effect of the early retirement incentives increasing payments and State contribution deferrals reducing income. Approximately a combined $41.3 million was deferred during fiscal 1991-92. Nevertheless, the fund did increase during fiscal 1991-92 after accounting for investment results.

Actuarial Method and Assumptions

Exhibit III describes the actuarial method adopted to calculate the contribution requirement and also the assumptions utilized in the calculation. There were no changes in the method and assumptions as of June 30, 1992 utilized to determine plan costs.

For the June 30, 1991 valuation the Retirement Board approved two changes to the assumptions. Assets were valued at market value and starting July 1, 1991 future investment gains and losses were to be spread over a 3 year period. In addition, the salary scale used to project earnings to retirement date was changed to an annual increase of 4.5% with a one year assumption of no increase for fiscal 1992.

The financial effect of these changes is described in Exhibit I.

Plan Benefit Structure

The plan benefit structure is described in detail in Exhibit IV. There have been no changes to the standard benefit provisions since the June 30, 1991 valuation.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1992, can be summarized as follows:

	State Employees		Teachers	
	June 30, 1992	June 30, 1991	June 30, 1992	June 30, 1991
Number of Covered Employees	14,513	14,590	11,594	11,420
Average Annual Salary	$28,200	$27,300	$38,700	$37,600
Average Age (years)	43.8	43.3	43.6	43.0
Average Service (years)	11.0	10.2	14.9	14.4
Number of Vested Employees	7,236	7,163	7,450	7,101
Number of Employees Eligible for Retirement	1,126	1,150	879	764

The average annual salary for state employees rose slightly from $27,300. This represents an increase of 3.3%, and is down slightly from the 3.8% average increase from June 1990 to June 1991. The average salary for an active teacher increased by 2.9% from $37,600 to $38,700, returning the compensation to the level as of the June 30, 1990 valuation.

The average age for teachers increased from 43.0 years to 43.6 years. Average years of service rose by approximately one-half year as well. When viewed in conjunction with the increases in both the number of teachers eligible for retirement and the number of vested teachers, it is apparent that there are few terminations or retirements at older ages due to the impact of the recent early retirement incentive programs.

The active population for state employees appears to have been similarly impacted by the early retirement incentive programs. Average age and service increased by 0.5 and 0.8 years respectively. The number of employees eligible for retirement under the normal provisions of the plan dropped by 24, from 1,150 to 1,126, but the number of vested employees increased by 73 to 7,236.

Missing data was estimated by using averages for similar employees with available data. For example, a person missing a date of hire, would be given an estimated date of hire based upon his date of birth compared to other similar employees. For active employees missing salaries employee contribution balances and prior salary history were used to calculate estimated salaries. For active state employees there were 41 missing salaries, 23 missing dates of birth, and 43 missing dates of hire. For active teachers there were approximately 2,550 missing salaries, 350 missing dates of hire and 370 missing dates of birth. The greater number of missing figures for teachers can be attributed to the greater difficulty in obtaining their data. In our opinion, in light of the large populations we are dealing with and the reliability of our estimating techniques, the amount of missing data that required estimation does not have a material impact on the results of the valuation.

Tables 1A and 1B provide a distribution of employees by age and service for state employees and teachers, respectively.

Retirees and Beneficiaries

The data provided for analysis of retiree and beneficiary liability included dates of hire and retirement, sex, monthly benefit, type of benefit, and payment option. The more significant statistics for retirees and beneficiaries are summarized as follows:

SECTION II - Employee Data (cont'd)

	State Employees		Teachers	
	June 30, 1992	June 30, 1991	June 30, 1992	June 30, 1991
Pensioners				
Number	7,875	7,851	4,657	4,704
Average Age	70.5	70.0	69.3	68.8
Average Monthly Benefit	$880	$850	$1,715	$1,697
Beneficiaries				
Number	582	565	169	130
Average Age	71.8	72.0	68.6	68.3
Average Monthly Benefit	$650	$616	$847	$782

As for the active employees, data for pensioners remained relatively stable with a slight growth in the number of pensioners for the State Plan and a small decrease in number for the Teachers' Plan. Average benefits grew slightly reflecting the impact of the Cost of Living Adjustments. The figure of 4,657 pensioned teachers includes 17 who are also receiving payments as beneficiaries.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1992 by age and pension type. These tables also indicate total monthly pension payments by age, average payments by age, and total monthly payments by type.

Table 1A - Distribution of State Employees In Active Service

Years of Service and Average Annual Earnings

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	4 10,922									4 10,922
20-24	353 22,029	25 20,760								378 21,945
25-29	830 24,349	333 23,406	22 22,967							1,185 24,058
30-34	642 24,964	678 27,004	367 26,020	60 25,517						1,747 25,997
35-39	552 25,635	495 29,232	549 28,528	543 28,269	76 27,174					2,215 27,854
40-44	469 26,049	476 28,090	443 31,159	618 33,513	353 32,701	22 29,590				2,381 30,364
45-49	415 26,385	439 26,711	393 29,138	469 34,012	403 37,923	99 34,129	6 31,641			2,224 30,994
50-54	264 25,612	349 25,380	323 29,301	309 31,149	220 32,120	93 39,446	29 36,027	4 36,225		1,591 29,310
55-59	179 25,614	248 25,856	260 28,585	275 29,765	230 28,570	61 34,449	33 40,430	7 38,267	2 31,617	1,295 28,535
60-64	98 25,707	200 25,436	221 26,440	240 28,197	166 28,651	47 33,722	23 42,131	9 56,564	4 34,932	1,008 27,952
65-69	25 28,006	62 23,639	97 25,311	75 30,074	48 28,735	19 32,222	12 41,584	3 43,083	6 28,767	347 27,864
70-74	11 16,573	23 21,860	29 20,817	20 31,080	11 22,288	6 25,947	2 58,873	3 31,997	1 27,631	106 24,081
75+	1 4,050	7 8,010	12 10,960	8 23,183	3 29,128				1 35,541	32 15,626
TOTAL Average Pay	3,843 $25,013	3,335 $26,558	2,716 $28,314	2,617 $31,022	1,510 $32,448	347 $35,021	105 $29,567	26 $44,119	14 $31,339	14,513 $28,228

Table 1B - Distribution of Teachers in Active Service

	Years of Service and Average Annual Earnings									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19										0
20-24	112 22,749									112 22,757
25-29	561 25,217	92 27,514	1 27,146							654 25,543
30-34	374 27,799	297 32,906	81 37,722	2 40,116						754 30,916
35-39	574 30,072	330 35,342	373 40,331	230 41,242	10 41,626					1,517 35,512
40-44	550 31,852	399 37,108	384 38,945	928 41,522	1,130 42,556	10 43,090				3,401 39,495
45-49	308 33,588	280 38,137	167 42,828	289 42,701	1,327 43,451	419 44,350	2 41,556			2,792 41,849
50-54	146 35,634	115 39,439	113 42,022	161 42,572	330 43,284	370 44,564	111 46,765	2 43,002		1,348 42,574
55-59	44 35,826	42 44,772	42 42,493	93 43,148	158 43,890	82 45,054	73 46,331	19 43,685	1 43,281	554 43,572
60-64	20 34,526	15 42,309	29 42,242	42 43,358	99 42,576	38 43,955	36 44,736	30 46,415	5 42,511	314 42,905
65-69	1 43,912	8 37,101	9 45,923	20 42,398	48 43,722	14 45,388	6 44,449	6 49,934	14 43,346	126 43,724
70-74		1 40,768	2 38,568	2 42,249	6 40,164	2 48,214	3 48,068	2 44,963	4 48,682	22 44,031
75+										
TOTAL Average Pay	2,690 $29,642	1,579 $35,997	1,201 $40,354	1,767 $41,914	3,108 $43,096	935 $44,490	231 $46,206	59 $45,729	24 $43,655	11,594 $38,734

Table 2A - Distribution of Pensioners - State Employees

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type: Service Retirements	Pension Type: Beneficiaries	Pension Type: Legislator's Pension	Pension Type: Accidental Disabilities	Pension Type: Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
< 30	0	1	0	1	0	2	0.02%
	$ 0	$ 133	$ 0	$ 1,003	$ 0	$ 1,166	$ 583.00
30-39	0	8	0	6	9	23	0.21%
	0	5,294	0	7,129	2,799	15,222	661.83
40-49	68	21	0	10	49	148	2.32%
	128,847	11,080	0	8,574	20,658	169,159	1,142.97
50-54	180	18	6	5	24	233	6.13%
	408,138	17,303	6,087	2,718	13,644	447,890	1,922.27
55-59	290	27	18	11	62	408	10.40%
	687,882	17,501	15,067	5,671	33,874	759,995	1,862.73
60-64	876	52	34	17	99	1,078	16.77%
	1,099,645	41,323	30,107	10,787	43,175	1,225,037	1,136.40
65-69	1,681	90	29	23	97	1,920	22.04%
	1,473,084	55,950	26,887	15,252	38,821	1,609,994	838.54
70-74	1,635	114	31	18	74	1,872	18.83%
	1,230,498	74,344	30,466	10,597	30,084	1,375,989	735.04
75-79	1,241	105	26	8	51	1,431	12.67%
	822,672	58,856	24,249	4,803	14,833	925,413	646.69
80-84	725	71	15	8	30	849	6.80%
	416,787	51,032	15,238	5,292	8,477	496,826	585.19
85-89	293	47	6	1	2	349	2.68%
	163,355	27,042	4,388	802	404	195,991	561.58
90-94	93	23	2	0	0	118	0.96%
	52,918	15,225	2,076	0	0	70,219	595.08
95-99	18	5	2	0	0	25	0.18%
	8,724	3,273	1,245	0	0	13,242	529.68
100+	1	0	0	0	0	1	0.00%
	235	0	0	0	0	235	235.00
Total	7,101	582	169	108	497	8,457	
	$ 6,492,785	$ 378,356	$ 155,810	$ 72,658	$ 206,769	$ 7,306,378	$ 834.00

Table 2B - Distribution of Pensioners - Teachers

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type: Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
< 30	0	3	0	0	3	0.06%
	$ 0	$ 2,326	$ 0	$ 0	$ 2,326	$ 775.33
30-39	2	3	0	1	6	0.12%
	1,430	2,553	0	956	4,939	823.17
40-49	143	7	5	19	174	3.60%
	337,594	4,275	6,766	14,514	363,149	2,087.06
50-54	375	7	1	11	394	8.15%
	1,059,753	5,322	1,443	9,953	1,076,471	2,732.16
55-59	524	16	2	22	564	11.67%
	1,424,314	13,584	2,941	22,085	1,462,924	2,593.84
60-64	702	16	8	24	750	15.52%
	1,420,072	14,463	11,960	22,204	1,468,699	1,958.27
65-69	735	15	3	25	778	16.09%
	1,126,614	12,874	3,144	20,550	1,163,182	1,495.09
70-74	665	12	2	17	696	14.40%
	840,397	8,347	3,019	13,941	865,704	1,243.83
75-79	514	20	2	7	543	11.23%
	630,771	17,235	2,257	4,778	655,041	1,206.34
80-84	519	15	0	5	539	11.15%
	603,790	11,407	0	3,862	619,059	1,148.53
85-89	269	11	0	1	281	5.81%
	288,501	6,726	0	1,068	296,295	1,054.43
90-94	72	5	0	1	78	1.61%
	73,397	2,571	0	615	76,583	981.83
95-99	23	0	0	0	23	0.48%
	25,441	0	0	0	25,441	1,106.13
100+	14	0	0	0	14	0.29%
	5,364	0	0	0	5,364	383.14
Total	4,557	130	23	133	4,843	
	$ 7,837,437	$ 101,683	$ 31,530	$ 114,526	$ 8,085,176	$ 1,672.56

SECTION III - PLAN ASSETS

Market Value of Assets

The Employees' Retirement 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 before completing ten years of service 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 4 shows a summary of income and expenditures for the years ended June 30, 1992 and 1991. Due to a stronger than assumed return on assets, for the plan year ending June 30, 1992, the Employees' Retirement Fund showed a net increase of $204,554,596.

The total market value of assets as of June 30, 1992 was $2,569,295,800. This is divided among the plans as follows:

State Employees	$ 1,092,464,600	42.5%
Teachers	1,399,495,400	54.5%
Teachers' Survivors	77,335,800	3.0%
Total	$ 2,569,295,800	100.0%

Table 5 shows the composition of the investments of the fund.

Table 6 shows the allocation of reserves to the State Employees Plan, Teachers Plan, and Teacher's Survivors Plan as of June 30, 1992 and 1991. The reserve allocations are based on the book value of assets.

Actuarial Value of Assets

As of the June 30, 1991 valuation, a new method to calculate the actuarial value of assets was employed. The new method allows for a three year spread of gains and losses in the Market Value. Table 3 shows the development of the actuarial value of assets. The total Actuarial Value of Assets at June 30, 1992, was $2,483,738,300 and is divided among the plans based on a prorata share of the market value of assets as follows:

State Employees	$ 1,056,085,500	42.5%
Teachers	1,352,892,300	54.5%
Teachers' Survivors	74,760,500	3.0%
Total	$ 2,483,738,300	100.0%

Table 3 - Calculation of Actuarial Asset Value at June 30, 1992

1.	Actuarial Asset Value at June 30, 1991 (equal to market)	$	2,316,654,509
2.	Contributions		
	(a) Employees		68,546,610
	(b) State		23,030,192
	(c) Municipal		45,706,551
	(d) Miscellaneous		754,848
	(e) Total	$	138,038,201
3.	Benefit Payments and Other Disbursements		
	(a) Pension Benefit	$	163,516,599
	(b) Cost of Living Adjustments		23,289,638
	(c) Death Benefits		2,597,835
	(d) Refund of Contributions and other payments		6,614,199
	(e) Total	$	196,718,271
4.	Assumed Return at 8.00%		
	(a) On Assets	$	185,332,361
	(b) On Contributions (assume midyear)		5,521,528
	(c) On Benefit Payments		(7,868,731)
	(d) Total	$	182,985,158
5.	Tentative Actuarial Asset Value on June 30, 1992 [1. + 2.(e) - 3.(e) + 4.(d)]		2,440,959,597
6.	Market Value on June 30, 1992		2,569,295,771
7.	Excess of Market over Tentative Actuarial Asset Value		128,336,174
8.	Prior year adjustments not recognized		0
9.	Current Year Experience		128,336,174
10.	Current Year Adjustment to be recognized (1/3 of Experience)		42,778,725
11.	Deferred Gain or (Loss)		85,557,449
12.	Prior Year Adjustments to be recognized		0
13.	Actuarial Asset Value on June 30, 1992 5. + 10. + 12.	$	2,483,738,322

Table 4 - Summary Statement of Income and Expenses

	1992			1991		
Employer contributions	$ 69,491,591			$ 80,651,984		
Member contributions	68,546,610			69,021,965		
Total contributions		$ 138,038,201			$ 149,673,949	
Investment income:						
Dividends	$ 29,898,970			$ 27,663,856		
Interest	90,238,234			96,283,294		
Capital gains (and losses)	150,068,320			13,895,976		
Other	14,500			1,237,811		
Expenses	(6,985,357)			(4,313,531)		
Net investment income		263,234,667			134,767,406	
Total income available for benefit payments			$ 401,272,868			$ 284,441,355
Benefit payments:						
Pension benefits		$ 187,506,237			$ 181,940,583	
Death benefits		2,597,835			2,254,306	
Contribution refunds and other payments		6,614,199			19,384,496	
Total benefit payments			196,718,271			203,579,385
Excess of income over expenses			$ 204,554,596			$ 80,861,970

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

Table 5 - Composition of Assets as of June 30, 1992

	Market Value	Percent of Holdings
Cash/Short Term Investments Short Term Investment Fund Money Market Instruments	$ 222,664,000	8.7%
Equities - Domestic	1,073,469,000	41.8%
Equities - International	87,415,000	3.4%
Fixed Income - Government	846,451,000	32.9%
Fixed Income - Corporate	81,235,000	3.2%
Fixed Income - In State	31,300,000	1.2%
Real Estate	100,884,000	3.9%
Venture Capital	125,878,000	4.9%
Total Fund Investments	$ 2,569,296,000	100.0%

Table 6 - Allocation of Book Value Assets by Plan - Reserve Values

	1992		1991	
State Employees:				
Employer reserves	$ 716,504,362		$ 663,786,787	
Member reserves	208,611,783		189,365,218	
Total State Employees reserves		$ 925,116,145		$ 853,152,005
Teachers:				
Employer reserves	$ 875,761,020		$ 784,472,996	
Member reserves	299,102,622		265,096,192	
Total Teacher reserves		1,174,863,642		1,049,569,188
Teachers Survivors:				
Employer reserves	$ 54,870,562		$ 48,048,389	
Member reserves	10,226,071		9,754,440	
Total Teachers Survivors reserves		65,096,633		57,802,829
Unallocated:				
Unclaimed benefit reserve		231,679		229,482
Total Book Value of Assets		$ 2,165,308,100		$ 1,960,753,504

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

SECTION IV - RESULTS OF THE VALUATION

The funding statute calls for the contribution requirement to be calculated as the normal cost of the plan plus the total of the amortization payment for each unfunded cost element. The table below shows the development of the contribution requirement for the State Employees' Plan and the Teachers' Plan.

	State Employees' Plan	Teachers' Plan
Normal Cost	12.72%	14.77%
Less Employee Contributions	7.75%	8.50%
Employer Normal Cost	4.97%	6.27%
Unfunded Cost due to:		
Original Unfunded	6.68%	9.76%
1989 Assumption Changes	(0.67%)	0.00%*
1989 Early Retirement Incentive	0.66%	None
1990 Early Retirement Incentive	0.64%	1.75%
1991 Assumption and Method Changes	(1.60%)	(2.34%)
Fiscal 1990-91 Deferral	0.34%	0.30%
Fiscal 1991-92 Deferral	0.30%	0.28%
Total Unfunded	6.35%	9.75%
Total Cost as a percentage of payroll	11.32%	16.02%

* the effect of the 1989 assumption changes in the Teachers Plan was less than the minimum threshold for setting up a separate base, the effect was aggregated with the existing unfunded. See Exhibit III for a description of the amortization method.

The contributions are assumed to be made on a monthly basis. The amounts of the unfunded liabilities in respect of each of the above cost elements together with the length of the remaining amortization period are shown in detail in Exhibit I, parts A3 and B3.

The Teachers' Plan cost is paid 60% by the cities and towns and 40% by the State. However the State will pay the total cost of 0.58% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.26% and a contribution requirement for the State of 6.76%.

As described in Section I, certain towns elected not to participate in the 1990 early retirement incentive program. The contribution requirement for these towns is 8.21% and for the State is 6.06%.

State employees contribute to the System at a rate of 7.75% of pay. The inclusion of the additional 0.25% contribution for retiree medical benefits reduces the State contribution by 0.23% (after allowing for refunds on termination). Consistent with this, it has been assumed that the State's contribution to the separate retiree health fund is 0.23% (in addition to the above contribution requirements).

The State Employee's Plan fiscal 1993-94 contribution requirement of 11.32% compares to the fiscal 1992-93 contribution requirement of 10.37%. The increase in the contribution requirement is discussed in Section I Summary of Valuation Results and a complete development of the fiscal 1993-94 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1993-94 contribution requirement of 16.02% compares to the fiscal 1992-93 contribution requirement of 14.74%. The increase of the contribution requirement is discussed in Section I and a complete development of the contribution for Teachers for fiscal 1992-93 is shown in Exhibit I, parts B1, B2 and B3.

Teacher Survivors Plan

A complete analysis of the finances of the Teacher Survivors Plan is not possible due to lack of sufficient data. However, based on our knowledge of the participant population and the benefits offered, we estimate that the current assets of $77.3 million, together with future contributions and investment income will be sufficient to meet benefit payments as they fall due.

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, 1992.

This certificate contains the following attached exhibits:

Exhibit I -	Actuarial Cost Development of Fiscal Year 1993-94 Contribution Percentage
	A. State Employees
	B. Teachers
EXHIBIT II -	Pension Benefit Obligation, Vested Benefit Liability
EXHIBIT III -	Actuarial Method and Assumptions
EXHIBIT IV -	Summary of Plan Provisions

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and in our opinion each individual assumption used (a) is reasonably related to the experience of the plan and to reasonable expectations and (b) represents our best estimate of anticipated experience under the plan.

Malcolm C. Hodge, F.F.A., A.S.A.
Associate

Barry M. Gilman, F.S.A., M.A.A.A.
Principal

EXHIBIT I - DEVELOPMENT OF CONTRIBUTION PERCENTAGES

A1. State Employees - Development of Normal Cost

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

- 14,513 active participants (including 7,236 fully vested)
- 2,033 inactive participants
- 8,457 pensioners (including 582 beneficiaries of deceased pensioners and active employees)

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

1. Actuarial present value of benefits	
(a) Active employees	$ 1,052,600,400
(b) Inactive employees	28,055,200
(c) Retirees and beneficiaries	866,923,700
(d) Total	$ 1,947,579,300
2. Actuarial value of assets	1,056,085,500
3. Frozen Initial Liability (unfunded liability)	428,793,000
4. Present value of future employee contributions	281,868,900
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	180,831,900
6. Actuarial present value of future compensation	3,637,018,200
7. Employer normal cost percentage (5. ÷ 6.)	4.97%
8. Covered Payroll - Employees under Retirement Age	401,497,500
9. Employer Normal Cost, (7. x 8.)	$ 19,954,400

EXHIBIT I - Development of Contribution Percentages (cont'd)

A2. <u>State Employees - Development of Employer Cost</u>

1.	Total Covered Payroll	$ 418,683,300
2.	Employer Normal Cost	19,954,400
3.	Amortization of Frozen Initial Liability	26,732,100
4.	Projected 1993-94 Covered Payroll	437,524,000
5.	1993-94 Employer Normal Cost ((2. ÷ 1.) x 4.)	20,869,900
6.	Total annual cost if paid on July 1, 1993 (3. + 5.)	47,602,000
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$ 49,506,100
8.	Employer fiscal 1993-94 cost as a percent of payroll (7 ÷ 4)	11.32%

EXHIBIT I - Development of Contribution Percentages (cont'd)

A3. **State Employees - Determination of Frozen Initial Liability**

	Base	Amortization Period	Payment
1. June 30, 1990 bases at July 1, 1990			
(a) Original	$ 445,731,800	25	$ 25,743,500
(b) 1989 Base	(49,393,400)	29	(2,601,600)
(c) 1989 Early Retirement Window	49,134,700	30	2,536,600
(d) Total	$ 445,473,100		$ 25,678,500
2. Bases at July 1, 1991			
(a) Original	$ 453,587,400	24	$ 26,901,800
(b) 1989 Base	(50,535,100)	28	(2,718,600)
(c) 1989 Early Retirement Window	50,325,900	29	2,650,700
(d) New 1991 Bases	(74,440,900)	30	(3,843,000)
(e) 1990-91 Deferral	23,409,900	24	1,388,400
(f) 1991-92 Deferral	20,264,600	24	1,201,900
(g) Total	$ 422,611,800		$ 25,581,200
3. Bases at July 1, 1992			
(a) Original	$ 460,820,400	23	$ 28,112,200
(b) 1989 Base	(51,641,800)	27	(2,841,000)
(c) 1989 Early Retirement Window	51,489,200	28	2,770,000
(d) New 1991 Bases*	(76,245,700)	29	(4,015,900)
(e) 1990/91 Deferral	23,783,200	23	1,450,900
(f) 1991/92 Deferral	20,587,700	23	1,255,900
(g) Total	$ 428,793,000		$ 26,732,100

In respect of the 1990 Early Retirement Window, change in Salary Scale and Change in Asset Method.

Notes: (1) Following the funding method, if the change in unfunded liability is greater than 10% of the existing amount of unfunded liability, the change in unfunded liability is separately amortized over a 30-year period.

(2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together.

EXHIBIT I - Development of Contribution Percentages (cont'd)

B1. __Teachers - Development of Normal Cost__

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

- 11,594 active participants (including 7,450 fully vested)
- 954 inactive participants
- 4,826 pensioners (including 169 beneficiaries of deceased pensioners and active employees)

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

1. Actuarial present value of benefits	
(a) Active employees	$ 1,726,701,600
(b) Inactive employees	27,160,200
(c) Retirees and beneficiaries	996,620,200
(d) Total	$ 2,750,482,000
2. Actuarial value of assets	1,352,892,300
3. Frozen Initial Liability (unfunded liability)	735,319,400
4. Present value of future employee contributions	381,258,900
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	281,011,400
6. Actuarial present value of future compensation	4,485,398,500
7. Normal cost percentage (5. ÷ 6.)	6.27%
8. Covered Payroll - Employees under Retirement Age	442,800,500
9. Normal Cost, (7. x 8.)	$ 27,741,600

EXHIBIT I - Development of Contribution Percentages (cont'd)

B2. <u>Teachers - Development of Employer Cost</u>

1.	Total Payroll	$	458,958,600
2.	Normal Cost		27,763,600
3.	Amortization of Frozen Initial Liability		44,857,800
4.	Projected 1993-94 Covered Payroll		479,611,700
5.	1993-94 Employer Normal Cost ((2. ÷ 1.) x 4.)		29,016,500
6.	Total annual cost if paid on July 1, 1993 (3. + 5.)		73,874,300
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$	76,829,300
8.	Employer fiscal 1993-94 cost as a percent of payroll (7 ÷ 4)		16.02%

EXHIBIT I - Development of Contribution Percentages (cont'd)

B3. Teachers - Determination of Frozen Initial Liability

	Base	Amortization Period	Payment
1. June 30, 1990 bases at July 1, 1990			
(a) Original Unfunded	$ 711,780,500	25	$ 41,109,400
2. Bases at July 1, 1991			
(a) Original	$ 724,324,800	24	$ 42,958,900
(b) New 1991 Bases[(1)]	(43,847,500)	24	(2,600,500)
(c) 1990/91 Deferral[(2)]	22,297,000	24	1,322,400
(d) 1991/92 Deferral[(2)]	21,003,500	24	1,245,700
(e) Total	$ 723,777,800		$ 42,926,500
3. Bases at July 1, 1992			
(a) Original[(1)]	$ 735,875,200	23	$ 44,891,800
(b) New 1991 Bases	(44,546,800)	23	(2,717,600)
(c) 1999/91 Deferral	22,652,600	23	1,381,900
(d) 1991/92 Deferral	21,338,400	23	1,301,700
(e) Total	$ 735,319,400		$ 44,857,800

Notes: (1) If the change in the unfunded liability is less than 10% of the existing unfunded liability, the change in the unfunded liability is amortized over the remaining amortization period of the original unfunded liability.

(2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together with the original unfunded.

EXHIBIT II - PENSION BENEFIT OBLIGATION, VESTED BENEFIT LIABILITY

Pension Benefit Obligation

The value of the pension benefit obligation required for disclosure by Statement No. 5 of the Governmental Accounting Standards Board is shown below as of June 30, 1992.

	Pension Benefit Obligation	
	State Employees	Teachers
1. Participants currently receiving benefits and terminated employees not yet receiving benefits	$ 894,978,900	$ 1,023,780,400
2. Current employees		
Accumulated employee contributions	208,611,800	299,102,600
Employer-financed vested	250,716,100	483,872,500
Employer-financed nonvested	148,855,400	266,974,900
3. Total pension benefit obligation	$ 1,503,162,200	$ 2,073,730,400

Vested Benefit Liability

The value of vested benefits represents the current value of all benefits accrued by present and former employees which are not conditional on the future employment of the employee for payment. The benefits valued include benefits payable to current retirees and beneficiaries, deferred pensions and benefits accrued by active participants with at least ten years of service. For active employees with less than ten years of service, only the accumulated employee contributions are included.

The value of vested benefits as of June 30, 1992 is as follows:

	Vested Benefit Liability	
	State Employees	Teachers
Active participants	$ 459,327,900	$ 782,975,000
Inactive participants	28,055,200	27,160,200
Retired members	866,923,700	996,620,200
Total Value of Vested Benefits	$ 1,354,306,800	$ 1,806,755,500
Assets at Market Value	$ 1,092,464,600	$ 1,399,495,400
Vested Benefits Funding Level	80.67%	77.46%

EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS

a. <u>Actuarial Funding Method</u>

Actuarial Funding Method - Frozen initial liability method. This method is alternatively referred to as the entry age normal cost method with frozen initial liability.

Entry Age - The employee's age at the time he or she would have commenced participation if the plan had always been in existence.

Frozen actuarial liability - At the time this funding method was introduced June 30, 1985 the unfunded liability was calculated and called the Frozen Actuarial Liability. This amount was originally to be funded over a 30 year period by the sum-of-the-digits amortization method. Effective from 1989, however the outstanding balance, referred to as the Unfunded Liability, is to be amortized over the remaining amortization period using a level percent of salary funding. (ref. General Laws section 36-10-2 and 36-10-2.1). Subsequent changes to the Unfunded Liability due to changes to benefits or actuarial assumptions are amortized either over a new 30-year period or over the remaining initial amortization period depending on how large the total change to the unfunded liability for each fiscal year is relative to the existing unfunded liability. The following table illustrates the amortization method:

Change in Unfunded Liability	Amortization Period
Less than 1% of existing Unfunded	No new base set up (existing Unfunded not changed)
Between 1% and 10% of existing Unfunded	The change to Unfunded is amortized over current remaining period i.e., aggregated with existing Unfunded
Over 10% of existing Unfunded	A separate base equal to change in Unfunded is set up and amortized over a new 30 year period

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

b. Actuarial Assumptions Concerning Future Events

Mortality - 1971 Group Annuity Mortality Table with Mortality for disabled persons set equal to the age 65 mortality under 1971 Group Annuity Mortality Table.

	Sample Rates			
	Mortality		Expected Life	
Age	Males	Females	Males	Females
20	.050%	.026%	55.3 yrs.	61.6 yrs.
25	.062	.035	50.4	56.7
30	.080	.047	45.6	51.8
35	.112	.065	40.8	47.0
40	.163	.094	36.1	42.1
45	.292	.140	31.4	37.4
50	.529	.215	26.9	32.6
55	.852	.326	22.8	28.0
60	1.312	.549	18.8	23.5
65	2.126	.956	15.2	19.3
70	3.611	1.648	11.9	15.3

Investment Return - 8.0%, compounded annually.

Salary Increases - Salaried will increase at a rate of 4.5%, compounded annually.

Retirement Age - State employees are assumed to retire at the later of age 62-1/2 or completion of the service requirements. Teachers are assumed to retire at the later of age 61 or completion of the service requirements.

Disability - Disability is assumed to occur in accordance with the following table with 15% of disabilities being occupational.

Disability - Sample Rates	
Age	Rate of Disability
20	.06%
25	.09
30	.11
35	.15
40	.22
45	.36
50	.61
55	1.01
60	--

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

Withdrawal - Termination of service for reasons other than death, retirement, or disability will be in accordance with the following tables.

Sample Withdrawal Rates

Age	State Employees	Teachers
20	21.20%	12.39%
25	15.80%	9.70%
30	11.60%	7.50%
35	8.40%	5.66%
40	6.20%	4.14%
45	4.20%	2.75%
50	2.60%	1.35%
55	--	--
60	--	--

Cost of Living Adjustments - 3% compound annually beginning on the January 1st following a participant's third anniversary of retirement.

Actuarial Value of Assets - The actuarial value of assets was set equal to the market value of assets as of June 30, 1991 as reported to Mercer by the Treasury Department in December 1991. Investment gains and losses relative to the expected return on assets from this date onward will be recognized over a 3-year smoothing period.

Estimation of Unknown Employee Characteristics - Missing dates for participants are estimated using a band-type averaging method assigning band grouped average dates to those individuals with missing dates of birth or hire. For example, an employee missing a date of hire is given an estimated date of hire based on the average of known dates of hire for persons in his age band. For Employees who are missing salaries, salaries are estimated based on employee contributions for the year ending June 30, 1992 and with regard to employee salary history, where this information was insufficient, average salaries were used. For State Employees this is $28,200, and for Teachers it is $38,700 for the salary year July 1, 1991 to June 30, 1992.

PRE-RETIREMENT DEATH BENEFITS

Lump Sum Benefit

There are no age or service requirements for this benefit.

Amount of Benefit:

(a) $800 per year of service with a minimum of $4,000 and a maximum of $16,000, plus

(b) Refund of employee contributions.

Joint and Survivor Benefit (optional)

Service Requirement: 10 years for General Employees and Correctional officers, 8 years for Legislators.

Amount of Benefit: Benefit employee would have received had he/she retired the day before he/she died and chosen the joint and survivor option.

Occupational Death Benefit

This benefit has no age or service requirement.

Amount of benefit:

(a) 50% of salary to spouse or children of employees under age 18, less workmen's compensation, plus

(b) refund of employee contributions.

EXHIBIT IV - Summary of Plan Provisions (cont'd)

POST-RETIREMENT DEATH BENEFITS	Lump sum in the amount of: (a) 100% of employee contributions less benefits paid, plus (b) Pre-retirement death benefit, reduced 25% per year of retirement, with a minimum of $4,000.
EMPLOYEE CONTRIBUTIONS	State Employees: 7.75% of which .25% reflects contributions for post-retirement health benefits. Teachers: 8.5% Legislators: 30.0%
AVAILABLE BENEFIT OPTIONS	Joint and Survivor: Actuarially Equivalent Benefit paying either 100% or 50%, depending on option selected, of retirement benefit to surviving beneficiary. Social Security: Pays an increased benefit until age 62 and a reduced benefit thereafter to provide a level benefit when Social Security payments are accounted for.
POST-RETIREMENT COST OF LIVING ADJUSTMENT	Retirees' benefits are adjusted annually by 3%, compounded, to allow for increases in cost of living. Cost of living adjustments begin on the January 1st following the third anniversary of an employee's retirement.

APPENDIX - Model Letter to Cities and Towns Participating In the Teacher's Retirement Plan

The (city) (town) of ______________________________ provides retirement benefits to its public school teachers through its participation in the Rhode Island Retirement System. The system is a statutory, mandatory, state-wide, multiple retirement system, which first covered Rhode Island teachers on July 1, 1949. It is administered 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 teacher contributions of 8-1/2 percent of pay effective July 1, 1986. 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. Contributions are reported as a percent of payroll, payable in part by the State of Rhode Island and in part by the (city) (town). The split between the State and Municipality is specified in the statute. For fiscal year 1993-94, by statute the State will pay 40% and the Municipality will pay 60%.

The actuarial valuation prepared by William M. Mercer, Incorporated uses the entry age normal cost method with the frozen initial liability. The valuation assumes an 8 percent interest return on assets and assumes an annual salary increase of 4.5%. In addition, other actuarial assumptions are made for post-retirement increases and other contingencies as set forth in the published annual reports of the Retirement Board. Following are comparative highlights of the last three years for the Teachers system as a whole:

	Year Beginning July 1,		
	1992	1991	1990*
Active participants	11,590	11,420	10,778
Pensioners and beneficiaries	4,826	4,834	3,869
Inactive participants	954**	2,294	3,069
Liability for accrued vested benefits	$1,806,755,500	$ 1,672,008,200	$1,284,910,600
Net assets at actuarial value	1,352,892,300	1,261,831,500	1,037,737,400

As shown in State's financial statements:

	Year Ended June 30,		
	1992	1991	1990*
Employer contributions	$ 49,361,171	$ 47,201,290	$ 82,435,940
Member contributions	38,883,346	36,701,446	37,159,860
Total contributions	$ 88,244,517	$ 83,902,936	$ 119,595,800
Net miscellaneous income	388,422	478,768	(4,440,352)
Investment income	141,936,132	74,965,344	63,912,874
Total income available for benefit payments	$ 230,569,071	$ 159,347,048	$ 179,068,323
Benefit payments	100,009,279	100,362,397	64,603,816
Excess of income over expenses	$ 130,559,792	$ 58,984,651	$ 114,464,507

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

* Prepared by previous actuary.

** The database as of June 30, 1992 reflects the withdrawal of inactive participants contribution balances.

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 multiple employer system and are then expressed as a percentage of the aggregate participating payroll. Each participating City or Town for 1994 fiscal year will apply 60% of this factor to its participating payroll (the remaining forty percent of the employer cost is contributed by the State as well as the full cost of deferred contributions by the State).

Employer contributions by the (city) (town) of ______________________ for each of the last 2 years (together with the amount for the current year, based on the promulgated rate percent of 9.26%*) are as follows:

	Year Ended June 30,		
	1990	1991	1992
Participating payroll			
Employer contributions			

With respect to the Teachers Retirement System, William M. Mercer, Incorporated, independent actuaries advising the Retirement Board, have stated:

> "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, 2022. 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 combined contributions required each year by the (city) (town) of ______________________ and the State will remain relatively level as a percent of payroll as the System moves toward funding the full actuarial liability. 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.

- The promulgated rate percent for certain towns which did not participant in the 1990 early retirement incentive program is 8.21%. These towns are listed below:

Code	2003	Burrillville
	2009	East Greenwich
	2015	Jamestown
	2018	Little Compton
	2025	North Smithfield

Investments

We are pleased to submit herewith the total investments for the Employees' Retirement System for the 1991-92 Fiscal year.

The summary of investments schedule shows that the invested Assets of the Retirement System are maintained in six (6) major areas. At least three-quarters of the Assets are invested in Equities and Fixed Income-Bonds.

A detailed list of all Assets for each Investment Account is available for review at the Retirement Division.

SUMMARY OF INVESTMENTS

OPERATIONS: (July 1,1991 - June 30, 1992)	
TOTAL INVESTMENTS - JULY 1, 1991	$1,934,445,017
ADD:	
PURCHASES DURING YEAR	2,758,609,299
TOTAL --	4,693,054,316
DEDUCT:	
REDEMPTIONS & SALES DURING THE YEAR	-2,577,687,918
TOTAL INVESTMENTS - JUNE 30, 1992	$2,115,366,398

INVESTMENT ACCOUNT: (By Type of Security)

Fixed Income-Bonds	887,142,975	41.94%
State Street Stiff Acct.	200,664,000	9.49
Short Term Paper	1,837,279	0.08
Venture Capital	125,981,782	5.96
Real Estate	109,284,882	5.17
Equities	790,455,480	37.36
Totals	$2,115,366,398	100.00%