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

AS OF JUNE 30, 1994

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SECTION I - SUMMARY OF VALUATION RESULTS

Contribution Requirements

Retirement Income

The contribution requirements for fiscal 1997 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 1997	Fiscal 1996	Fiscal 1995
State Employees Plan:			
Normal Cost	12.69%	12.21%	12.72%
Unfunded Liability Cost	6.11%	5.99%	6.35%
Total Cost	18.80%	18.20%	19.07%
Less Employee Contribution	7.75%	7.75%	7.75%
Employer Cost*	11.05%	10.45%	11.32%
Teachers Plan:			
Normal Cost	14.46%	14.78%	14.77%
Unfunded Liability Cost	9.61%	9.43%	9.75%
Total Cost	24.07%	24.21%	24.52%
Less Employee Contribution	8.50%	8.50%	8.50%
Employer Cost	(1) ~~15.57%~~ 14.57	15.71%	16.02%

* The employer pension cost is calculated based on an employee contribution rate of 7.75% of salary. We have therefore assumed that the State will pay the entire cost for retiree medical benefits. Any funds contributed to a 401(h) account have been ignored in determining the contribution results shown above.

In 1993 the Retirement Board elected to compute future fiscal year costs one extra year in advance to assist the fiscal budget process. Therefore employer costs for fiscal years ending in 1995, 1996 and 1997 are based on the valuation results and data as of June 30, 1992, June 30, 1993 and June 30, 1994 respectively.

For fiscal 1997, the Teachers' Plan rate is to be paid 40% by the State and 60% by the cities and towns. The overall rate of ~~15.57%~~ 14.57 includes the cost of prior fiscal year State contribution deferrals. The deferral represents 0.57% of the rate and is payable by the State. The cities' and towns' share is therefore 60% of 15.00%, or ~~9.00%~~, and the State will contribute the balance of the 15.57%, or ~~6.57%~~. 8.40%

6.17%

(1) see revision letter from mercer.

SECTION I - Summary of Valuation Results (cont'd)

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
	2018	Little Compton
	2025	North Smithfield

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 1997 of the group is 13.84% (i.e., 15.57% minus the cost of the 1990 early retirement incentive program of 1.73%) and as above the State will meet the full cost of prior fiscal year deferrals of 0.57%. The contribution for these towns is therefore ~~7.96%~~ 7.36% and the State contributes the balance of ~~5.88%~~. 5.4%

Plan Experience

The employer costs for fiscal 1997 have changed from the costs for fiscal 1996 due to a number of factors:

State Employees

- Average pay increased by 5.5% for State Employees employed continuously throughout the entire year versus the assumed rate of 4.5%. This caused costs to increase by approximately 0.3%.
- The actuarial value of assets (utilized to calculate the employer contribution) returned 9% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for State Employees of approximately 0.3%.

SECTION I - Summary of Valuation Results (cont'd)

- Demographic experience caused the employer cost to increase by approximately 0.6%. This experience included fewer retirements and less staff turnover than expected.

- In conclusion, the net effect of the plan experience caused the employer cost to increase by approximately 0.6% from 10.45% to 11.05%.

Teachers

- Average pay increased by 6.3% for Teachers employed continuously throughout the entire year, versus the assumed rate of 4.5%. This factor leads to an increase in cost of approximately 0.4%.

- The actuarial value of assets returned 9% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for Teachers of approximately 0.3%.

- Changes to the participant group, especially due to a greater number of Teachers leaving service than expected, caused the employer cost to decrease by approximately 0.2%.

- In conclusion, the net effect of the plan experience for Teachers caused the employer cost to decrease by approximately 0.1% from 15.71% to 15.57%.

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 change from year to year is a smaller proportion of the total cost than the change in the employer cost net of employee contributions. Due to the fact that employee contributions are a constant percentage of payroll, any gains or losses are passed on to the employer's share of the cost.

SECTION I - Summary of Valuation Results (cont'd)

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 (under the Entry Age Normal Funding Method) compares the actuarial value of assets to the value of accrued benefits with projected salary increases to retirement.

The projected benefit ratio increased between 1993 and 1994. This is mainly attributable to contributions and investment return in excess of the value of benefits attributable to the prior year with projected salary increases to retirement.

	Ratio of Assets to Liabilities		
	June 30, 1994	**June 30, 1993**	**June 30, 1992**
State Employees	64.85%	64.38%	62.42%
Teachers	61.15%	58.73%	56.63%

Vested Benefits/Market Value of Assets

The ratio of assets to the vested benefit liability compares the value of vested benefits to the market value of assets. Vested benefits are:

- Participants with more than 10 years of service and pensioners - value of accrued benefit but not less than the value of accumulated employee contributions.

- Participants with less than 10 years of service - value of accumulated employee contributions.

SECTION I - Summary of Valuation Results (cont'd)

The vested benefit ratio has decreased since the last year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. The decrease in the ratio reflects the less than favorable actual asset return. The market value of assets returned 4.0% compared with an assumed return of 8%.

	Ratio of Assets to Liabilities		
	June 30, 1994	June 30, 1993	June 30, 1992
State Employees	81.04%	83.55%	80.67%
Teachers	78.34%	79.32%	77.46%

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 1992. The cost of the program is 0.62% of payroll.

The Early Retirement Incentive Program of 1990

Unlike the 1989 program, the 1990 program was available to both State employees and Teachers. 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 1993. The cost for the State Employees' Plan is 0.60% of payroll.

SECTION I - Summary of Valuation (cont'd)

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 1993 and is equal to 1.70% 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.

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

	7/1/93 to 6/30/94	7/1/92 to 6/30/93	7/1/91 to 6/30/92
Time-weighted return on market value of assets[1]	4.0%	11.1%	13.5%
Market Value of Assets at end of period	$2,916,977,000	$ 2,811,948,000	$2,569,300,000
Actuarial Value of Assets at end of period	$2,965,214,000	$ 2,726,034,000	$2,483,700,000
Total Contribution	$ 203,025,000	$ 183,973,000	$ 138,000,000
Total Benefit Payments	$ 211,050,000	$ 203,925,000	$ 196,700,000

(1) As prepared by Wilshire Associates

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

SECTION I - Summary of Valuation (cont'd)

The actuarial value of assets recognizes one-third of the investment gains or losses in excess of the assumed return of 8% and also a one-third portion of previous gains or losses as yet unrecognized. As a result the actuarial value of assets of the fund returned approximately 9% during fiscal 1994. Spreading investment gains and losses over a three year period helps to reduce volatility in the plan's contribution requirements.

The contribution income was still less than the benefit outgo during fiscal 1994. However, the shortfall of contribution income against benefit outgo of $ 8 million was less than in previous years (especially when the State deferred a part of the contribution requirement). The income from investments, when accumulated with contributions received, exceeded the net outgo, see Table 4, and therefore monies were available for reinvestment.

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, 1994 utilized to determine plan costs.

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, 1993 valuation.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1994, can be summarized as follows:

	State Employees		Teachers	
	June 30, 1994	June 30, 1993	June 30, 1994	June 30, 1993
Number of Covered Employees	14,211	14,582	11,378	11,588
Average Annual Salary	$31,300	$29,800	$41,700	$40,000
Average Age (years)	44.7	44.0	44.8	44.2
Average Service (years)	11.8	11.1	15.5	14.8
Number of Vested Employees	7,628	7,372	7,290	7,335
Number of Employees Eligible for Retirement	1,309	1,261	1,268	1,053

Please note that below we discuss the increase in the average salary level for all employees. In Section I we discussed the increase in the average salary level for employees who were participants on both June 30, 1993 and June 30, 1994. The cost of benefits is directly impacted by the increase to salaries for the group of employees who were employed continuously during the plan year.

The average annual salary for State employees rose from $29,800 to $31,300. This represents an increase of 5%, and is down from the 5.7% average increase from June, 1992 to June, 1993. Average age and service for State employees increased by 0.7 years.

The average annual salary for Teachers rose from $40,000 to $41,700 or 4.3%. The average age for Teachers increased from 44.2 years to 44.8 years, and average years of service increased from 14.8 to 15.5 years.

SECTION II - Employee Data (cont'd)

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 34 missing salaries, 13 missing dates of birth, and 45 missing dates of hire. For active Teachers, there were approximately 881 missing salaries, 287 missing dates of hire and 152 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 estimation 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, 1994	June 30, 1993	June 30, 1994	June 30, 1993
Pensioners				
Number	7,838	7,860	4,701	4,706
Average Age	71.4	70.9	69.8	70.0
Average Monthly Benefit	$954	$917	$1,886	$1,815
Beneficiaries				
Number	656	619	197	215
Average Age	71.5	71.7	69.1	70
Average Monthly Benefit	$701	$669	$984	$1,097

Data for pensioners remained relatively stable with the number of pensioners for the Teachers' Plan and the number for the State Plan remaining about equal. Average benefits grew slightly reflecting the impact of the Cost of Living Adjustments.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1994 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.

62.5 State

61 Teacher

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	2 18,864									2 18,864
20-24	151 23,090	22 22,956								173 23,073
25-29	632 26,352	370 26,138	25 24,064							1,027 26,220
30-34	517 27,956	676 28,810	350 28,706	46 26,583						1,589 28,445
35-39	440 28,109	603 30,124	487 31,908	467 30,010	80 30,175					2,077 30,092
40-44	346 30,196	501 31,098	404 32,070	595 35,279	461 33,477	50 32,468				2,357 32,682
45-49	317 28,602	497 29,232	364 32,613	487 37,394	538 41,579	201 40,267	9 34,966			2,413 35,000
50-54	196 28,620	358 28,806	344 30,683	297 35,036	300 37,344	166 41,445	41 38,596	4 37,588		1,706 33,235
55-59	131 28,818	281 28,021	275 30,144	276 32,266	252 32,256	99 36,839	34 47,450	13 37,349		1,361 31,388
60-64	59 25,988	181 27,521	191 28,705	228 31,494	192 31,879	83 35,139	20 36,793	12 47,002	6 51,136	972 30,681
65-69	26 29,165	63 30,093	98 27,026	80 31,792	60 30,812	18 38,464	19 39,257	4 51,496	4 29,952	372 30,803
70-74	7 24,768	18 22,005	28 23,916	29 30,871	19 27,375	9 27,602	2 52,381	1 35,728	2 48,285	115 27,304
75+	4 22,477	6 11,670	13 8,850	19 23,673	2 15,027		1 90,280	2 35,631		47 19,497
TOTAL Average Pay	2,828 $27,742	3,576 $28,930	2,579 $30,545	2,524 $33,605	1,904 $35,750	626 $38,500	126 $41,168	36 $42,024	12 $43,600	14,211 $31,307

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	81 19,526									81 21,468
25-29	468 26,414	139 32,363								607 27,542
30-34	315 29,706	398 36,091	38 40,266	14 27,943						765 33,606
35-39	263 32,215	415 38,240	204 42,298	181 42,785	16 45,698					1,079 38,377
40-44	401 32,266	527 40,084	213 42,130	709 41,789	717 45,392	28 47,707				2,595 41,001
45-49	279 36,251	435 41,850	158 44,771	323 44,858	1,397 45,922	741 47,034	10 46,253			3,343 44,679
50-54	119 39,020	218 42,519	73 43,979	191 44,925	328 46,123	590 47,508	177 47,968	7 45,026		1,703 45,615
55-59	38 39,419	92 44,544	44 44,921	86 45,584	158 46,395	156 47,471	116 50,729	33 48,157	3 45,771	726 46,611
60-64	19 40,935	33 42,719	20 46,189	42 45,520	78 46,053	55 47,194	19 46,539	25 50,160	9 46,768	300 45,898
65-69	3 43,379	6 43,326	5 43,887	21 45,759	38 45,442	32 46,707	16 47,136	8 48,330	11 50,378	140 46,335
70-74		1 44,455	1 67,342	4 41,303	8 43,848	6 48,075	3 51,510	4 43,301	4 51,630	31 46,790
75+	2 43,330	2 47,085		1 41,864	1 14,153				2 37,943	8 39,092
TOTAL Average Pay	1,988 $31,227	2,266 $39,440	756 $43,126	1,572 $42,909	2,741 $45,819	1,608 $47,249	341 $48,708	77 $48,571	29 $44,819	11,378 $41,736

Table 2A - Distribution of Pensioners - State Employees

Number of Pensioners and Total Monthly Pensions Paid by Age

	Pension Type						
Age	Service Retirements	Beneficiaries	Legislator's Pension	Accidental Disabilities	Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
< 30	0	2	0	5	0	7	0.08%
	$ 0	$ 1,501	$ 0	$ 6,951	$ 0	$ 8,452	$ 1,207.43
30-39	0	7	0	8	6	21	0.25%
	0	5,517	0	11,260	2,822	19,599	933.29
40-49	39	31	7	20	42	139	1.64%
	73,698	16,684	7,000	26,096	20,777	144,255	1,037.81
50-54	135	19	3	7	31	195	2.30%
	316,471	17,678	2,835	5,576	18,268	360,828	1,850.40
55-59	266	33	18	11	42	370	4.36%
	676,633	30,589	15,362	12,265	26,202	761,051	2,056.89
60-64	725	64	29	19	73	910	10.71%
	1,055,818	52,399	28,112	19,872	38,283	1,194,484	1,312.62
65-69	1,588	82	32	30	71	1,803	21.23%
	1,594,873	61,074	28,829	21,958	33,311	1,740,045	965.08
70-74	1,746	130	31	16	62	1,985	23.37%
	1,456,330	80,303	33,305	11,167	28,276	1,609,381	810.77
75-79	1,308	121	29	7	58	1,523	17.93%
	946,874	78,808	28,295	3,886	21,225	1,079,088	708.53
80-84	801	81	17	9	20	928	10.93%
	551,160	60,493	16,512	5,890	7,490	641,545	691.32
85-89	378	64	7	3	7	459	5.40%
	234,731	40,690	7,592	2,473	1,797	287,283	625.89
90-94	105	20	3	0	0	128	1.51%
	59,366	12,699	2,790	0	0	74,855	584.80
95-99	24	2	0	0	0	26	0.31%
	14,118	1,610	0	0	0	15,728	604.92
100+	0	0	0	0	0	0	0.00%
	0	0	0	0	0	0	0.00
Total	7,115	656	176	135	412	8,494	100.00%
	$ 6,980,072	$ 460,045	$ 170,632	$ 127,394	$ 198,451	$ 7,936,594	934.38

Table 2B - Distribution of Pensioners - Teachers
Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
	Pension Type					
< 30	0	3	0	0	3	0.06%
	$ 0	$ 2,737	$ 0	$ 0	$ 2,737	$ 912.42
30-39	1	4	0	0	5	0.10%
	2,430	3,122	0	0	5,551	1,110.27
40-49	26	12	6	0	44	0.90%
	58,506	9,680	10,465	0	78,650	1,787.50
50-54	267	13	5	20	305	6.23%
	723,432	15,586	8,602	22,149	769,769	2,523.83
55-59	504	12	4	17	537	10.96%
	1,527,626	13,318	6,612	18,753	1,566,310	2,916.78
60-64	722	26	5	20	773	15.78%
	1,755,880	30,188	10,175	25,654	1,821,897	2,356.92
65-69	806	26	5	24	861	17.58%
	1,558,019	28,755	8,910	25,921	1,621,605	1,883.40
70-74	664	24	4	25	717	14.64%
	1,038,587	27,120	5,094	24,033	1,094,834	1,526.96
75-79	559	24	2	20	605	12.35%
	754,090	21,137	2,466	17,272	794,965	1,313.99
80-84	455	24	0	10	489	9.98%
	604,767	23,734	0	8,646	637,147	1,302.96
85-89	370	15	0	3	388	7.92%
	459,735	10,725	0	2,057	472,517	1,217.83
90-94	120	10	0	3	133	2.72%
	145,056	5,813	0	2,305	153,174	1,151.68
95-99	28	4	0	1	33	0.67%
	32,700	1,933	0	1,167	35,801	1,084.86
100+	5	0	0	0	5	0.10%
	7,157	0	0	0	7,157	1,431.35
Total	4,527	197	31	143	4,898	100.00%
	$ 8,667,984	$ 193,848	$ 52,324	$ 147,956	$ 9,062,113	$ 1,850.17

Table 4 - Summary Statement of Income and Expenses

	1994			1993		
Employer contributions	$ 126,459,796			$ 110,032,552		
Member contributions	76,564,970			73,940,463		
Total contributions		$ 203,024,766			$ 183,973,015	
Investment income:						
Dividends	$ 32,992,473			$ 36,604,988		
Interest	94,979,148			86,198,288		
Capital gains (and losses)	79,120,726			57,781,462		
Other	10,440,906			119,000		
Expenses	(7,162,837)			(6,203,338)		
Net investment income		210,370,416			174,500,400	
Total income available for benefit payments			$ 413,395,182			$ 358,473,415
Benefit payments:						
Pension benefits		$ 195,344,691			$ 195,141,826	
Death benefits		2,719,208			2,887,220	
Contribution refunds and other payments		12,986,228			5,895,858	
Total benefit payments			211,050,127			203,924,904
Excess of income over expenses			$ 202,345,055			$ 154,548,511

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

Table 5 - Composition of Assets as of June 30, 1994

	Market Value	Percent of Holdings
Cash/Short Term Investments Short Term Investment Fund Money Market Instruments	$ 278,524,136	9.6%
Equities - Domestic	1,203,530,280	41.3%
Equities - International	212,628,322	7.3%
Fixed Income - Government	949,922,395	32.6%
Fixed Income - Corporate	149,663,393	5.1%
Repurchase Agreements	2,400,267	0.1%
Real Estate and Venture Capital	120,308,111	4.0%
Total Fund Investments	**$ 2,916,976,904**	**100.0%**

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

	1994		1993	
State Employees:				
Employer reserves	$ 788,590,130		$ 746,948,542	
Member reserves	256,820,694		232,564,339	
Total State Employees reserves		$ 1,045,410,824		$ 979,512,881
Teachers:				
Employer reserves	$ 1,024,922,092		$ 938,869,036	
Member reserves	365,961,557		331,475,661	
Total Teacher reserves		1,390,883,649		1,270,344,697
Teachers Survivors:				
Employer reserves	$ 63,819,760		$ 59,068,371	
Member reserves	11,172,813		10,697,584	
Total Teachers Survivors reserves		74,992,573		69,765,955
Unallocated:				
Unreserved Balance		49,571,572		N/A
Total Book Value of Assets		$ 2,560,858,618		$ 2,319,856,609*

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

*Also includes $233,076 of unclaimed benefit reserve which is no longer reported by the retirement system.

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	12.69%	14.46%
Less Employee Contributions	7.75%	8.50%
Employer Normal Cost	4.94%	5.96%
Unfunded Cost due to:		
Original Unfunded	6.43%	9.62%
1989 Assumption Changes	(0.65%)	0.00%*
1989 Early Retirement Incentive	0.63%	None
1990 Early Retirement Incentive	0.61%	1.73%
1991 Assumption and Method Changes	(1.53%)	(2.31%)
Fiscal 1990-91 Deferral	0.33%	0.30%
Fiscal 1991-92 Deferral	0.29%	0.27%
Total Unfunded	6.11%	9.61%
Total Cost as a percentage of payroll	11.05%	15.57%

* The effect of the 1989 assumption changes in the Teachers Plan was less than the minimum threshold for setting up a separate base. Thus, 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 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 0.57% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.00% and a contribution requirement for the State of 6.57%.

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 7.96% and for the State is 5.88%.

SECTION IV - Results of the Valuation (cont'd)

The State Employee's Plan fiscal 1997 contribution requirement of 11.05% compares to the fiscal 1996 contribution requirement of 10.45%. The increase in the contribution requirement is discussed in Section I and a complete development of the fiscal 1997 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1997 contribution requirement of 15.57% compares to the fiscal 1996 contribution requirement of 15.71%. The decrease in the contribution requirement is discussed in Section I and a complete development of the contribution for Teachers for fiscal 1997 is shown in Exhibit I, parts B1, B2 and B3.

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, 1994.

This certificate contains the following attached exhibits:

EXHIBIT I -	Actuarial Cost Development of Fiscal Year 1996-97 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.

Bernard H. Friedman, A.S.A., M.A.A.A.
Consultant

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:

- 14,211 active participants (including 7,628 fully vested)
- 2,389 inactive participants
- 8,494 pensioners (including 656 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	$ 1,231,439,000
	(b) Inactive employees	30,708,000
	(c) Retirees and beneficiaries	912,596,000
	(d) Total	$ 2,174,743,000
2.	Actuarial value of assets	1,234,373,500
3.	Frozen Initial Liability (unfunded liability)	438,794,100
4.	Present value of future employee contributions	305,289,400
5.	Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	196,286,000
6.	Actuarial present value of future compensation	3,939,218,000
7.	Covered Payroll - Employees under Retirement Age	434,002,000
8.	Employer Normal Cost, (5. x 7. ÷ 6.)	$ 21,613,300

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

A2. **State Employees - Development of Employer Cost**

1.	Total Covered Payroll for fiscal 1995	$ 454,687,000
2.	Employer Normal Cost	21,613,300
3.	Amortization of Frozen Initial Liability	29,191,700
4.	Projected 1996-97 Covered Payroll	496,529,600
5.	1996-97 Employer Normal Cost ((2. ÷ 1.) x 4.)	23,585,200
6.	Total annual cost if paid on July 1, 1996 (3. + 5.)	52,776,900
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$ 54,888,000
8.	a. Employer Normal Cost percentage	4.94%
	b. Employer Unfunded Cost percentage	6.11%
	c. Employer fiscal 1997 Cost (7. ÷ 4.)	11.05%

WILLIAM M.
MERCER
INCORPORATED

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

AS OF JUNE 30, 1994

Prepared by:

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

March, 1995

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SECTION I - SUMMARY OF VALUATION RESULTS

Contribution Requirements

Retirement Income

The contribution requirements for fiscal 1997 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 1997	Fiscal 1996	Fiscal 1995
State Employees Plan:			
Normal Cost	12.69%	12.21%	12.72%
Unfunded Liability Cost	6.11%	5.99%	6.35%
Total Cost	18.80%	18.20%	19.07%
Less Employee Contribution	7.75%	7.75%	7.75%
Employer Cost*	11.05%	10.45%	11.32%
Teachers Plan:			
Normal Cost	14.46%	14.78%	14.77%
Unfunded Liability Cost	9.61%	9.43%	9.75%
Total Cost	24.07%	24.21%	24.52%
Less Employee Contribution	8.50%	8.50%	8.50%
Employer Cost	(1) ~~15.57%~~ 14.57	15.71%	16.02%

* The employer pension cost is calculated based on an employee contribution rate of 7.75% of salary. We have therefore assumed that the State will pay the entire cost for retiree medical benefits. Any funds contributed to a 401(h) account have been ignored in determining the contribution results shown above.

In 1993 the Retirement Board elected to compute future fiscal year costs one extra year in advance to assist the fiscal budget process. Therefore employer costs for fiscal years ending in 1995, 1996 and 1997 are based on the valuation results and data as of June 30, 1992, June 30, 1993 and June 30, 1994 respectively.

For fiscal 1997, the Teachers' Plan rate is to be paid 40% by the State and 60% by the cities and towns. The overall rate of 14.57 ~~15.57%~~ includes the cost of prior fiscal year State contribution deferrals. The deferral represents 0.57% of the rate and is payable by the State. The cities' and towns' share is therefore 60% of 15.00%, or ~~9.00%~~, and the State will contribute the balance of the 15.57%, or ~~6.57%~~. 8.40% 6.17%

(1) see revision letter from Mercer.

SECTION I - Summary of Valuation Results (cont'd)

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
	2018	Little Compton
	2025	North Smithfield

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 1997 of the group is 13.84% (i.e., 15.57% minus the cost of the 1990 early retirement incentive program of 1.73%) and as above the State will meet the full cost of prior fiscal year deferrals of 0.57%. The contribution for these towns is therefore ~~7.96%~~ 7.36% and the State contributes the balance of ~~5.88%~~. 5.48

Plan Experience

The employer costs for fiscal 1997 have changed from the costs for fiscal 1996 due to a number of factors:

State Employees

- Average pay increased by 5.5% for State Employees employed continuously throughout the entire year versus the assumed rate of 4.5%. This caused costs to increase by approximately 0.3%.

- The actuarial value of assets (utilized to calculate the employer contribution) returned 9% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for State Employees of approximately 0.3%.

SECTION I - Summary of Valuation Results (cont'd)

- Demographic experience caused the employer cost to increase by approximately 0.6%. This experience included fewer retirements and less staff turnover than expected.

- In conclusion, the net effect of the plan experience caused the employer cost to increase by approximately 0.6% from 10.45% to 11.05%.

Teachers

- Average pay increased by 6.3% for Teachers employed continuously throughout the entire year, versus the assumed rate of 4.5%. This factor leads to an increase in cost of approximately 0.4%.

- The actuarial value of assets returned 9% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for Teachers of approximately 0.3%.

- Changes to the participant group, especially due to a greater number of Teachers leaving service than expected, caused the employer cost to decrease by approximately 0.2%.

- In conclusion, the net effect of the plan experience for Teachers caused the employer cost to decrease by approximately 0.1% from 15.71% to 15.57%.

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 change from year to year is a smaller proportion of the total cost than the change in the employer cost net of employee contributions. Due to the fact that employee contributions are a constant percentage of payroll, any gains or losses are passed on to the employer's share of the cost.

SECTION I - Summary of Valuation Results (cont'd)

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 (under the Entry Age Normal Funding Method) compares the actuarial value of assets to the value of accrued benefits with projected salary increases to retirement.

The projected benefit ratio increased between 1993 and 1994. This is mainly attributable to contributions and investment return in excess of the value of benefits attributable to the prior year with projected salary increases to retirement.

	Ratio of Assets to Liabilities		
	June 30, 1994	June 30, 1993	June 30, 1992
State Employees	64.85%	64.38%	62.42%
Teachers	61.15%	58.73%	56.63%

Vested Benefits/Market Value of Assets

The ratio of assets to the vested benefit liability compares the value of vested benefits to the market value of assets. Vested benefits are:

- Participants with more than 10 years of service and pensioners - value of accrued benefit but not less than the value of accumulated employee contributions.

- Participants with less than 10 years of service - value of accumulated employee contributions.

SECTION I - Summary of Valuation Results (cont'd)

The vested benefit ratio has decreased since the last year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. The decrease in the ratio reflects the less than favorable actual asset return. The market value of assets returned 4.0% compared with an assumed return of 8%.

	Ratio of Assets to Liabilities		
	June 30, 1994	June 30, 1993	June 30, 1992
State Employees	81.04%	83.55%	80.67%
Teachers	78.34%	79.32%	77.46%

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 1992. The cost of the program is 0.62% of payroll.

The Early Retirement Incentive Program of 1990

Unlike the 1989 program, the 1990 program was available to both State employees and Teachers. 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 1993. The cost for the State Employees' Plan is 0.60% of payroll.

SECTION I - Summary of Valuation (cont'd)

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 1993 and is equal to 1.70% 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.

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

	7/1/93 to 6/30/94	7/1/92 to 6/30/93	7/1/91 to 6/30/92
Time-weighted return on market value of assets[1]	4.0%	11.1%	13.5%
Market Value of Assets at end of period	$2,916,977,000	$ 2,811,948,000	$2,569,300,000
Actuarial Value of Assets at end of period	$2,965,214,000	$ 2,726,034,000	$2,483,700,000
Total Contribution	$ 203,025,000	$ 183,973,000	$ 138,000,000
Total Benefit Payments	$ 211,050,000	$ 203,925,000	$ 196,700,000

(1) As prepared by Wilshire Associates

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

SECTION I - Summary of Valuation (cont'd)

The actuarial value of assets recognizes one-third of the investment gains or losses in excess of the assumed return of 8% and also a one-third portion of previous gains or losses as yet unrecognized. As a result the actuarial value of assets of the fund returned approximately 9% during fiscal 1994. Spreading investment gains and losses over a three year period helps to reduce volatility in the plan's contribution requirements.

The contribution income was still less than the benefit outgo during fiscal 1994. However, the shortfall of contribution income against benefit outgo of $ 8 million was less than in previous years (especially when the State deferred a part of the contribution requirement). The income from investments, when accumulated with contributions received, exceeded the net outgo, see Table 4, and therefore monies were available for reinvestment.

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, 1994 utilized to determine plan costs.

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, 1993 valuation.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1994, can be summarized as follows:

	State Employees		Teachers	
	June 30, 1994	June 30, 1993	June 30, 1994	June 30, 1993
Number of Covered Employees	14,211	14,582	11,378	11,588
Average Annual Salary	$31,300	$29,800	$41,700	$40,000
Average Age (years)	44.7	44.0	44.8	44.2
Average Service (years)	11.8	11.1	15.5	14.8
Number of Vested Employees	7,628	7,372	7,290	7,335
Number of Employees Eligible for Retirement	1,309	1,261	1,268	1,053

Please note that below we discuss the increase in the average salary level for all employees. In Section I we discussed the increase in the average salary level for employees who were participants on both June 30, 1993 and June 30, 1994. The cost of benefits is directly impacted by the increase to salaries for the group of employees who were employed continuously during the plan year.

The average annual salary for State employees rose from $29,800 to $31,300. This represents an increase of 5%, and is down from the 5.7% average increase from June, 1992 to June, 1993. Average age and service for State employees increased by 0.7 years.

The average annual salary for Teachers rose from $40,000 to $41,700 or 4.3%. The average age for Teachers increased from 44.2 years to 44.8 years, and average years of service increased from 14.8 to 15.5 years.

SECTION II - Employee Data (cont'd)

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 34 missing salaries, 13 missing dates of birth, and 45 missing dates of hire. For active Teachers, there were approximately 881 missing salaries, 287 missing dates of hire and 152 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 estimation 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, 1994	June 30, 1993	June 30, 1994	June 30, 1993
Pensioners				
Number	7,838	7,860	4,701	4,706
Average Age	71.4	70.9	69.8	70.0
Average Monthly Benefit	$954	$917	$1,886	$1,815
Beneficiaries				
Number	656	619	197	215
Average Age	71.5	71.7	69.1	70
Average Monthly Benefit	$701	$669	$984	$1,097

Data for pensioners remained relatively stable with the number of pensioners for the Teachers' Plan and the number for the State Plan remaining about equal. Average benefits grew slightly reflecting the impact of the Cost of Living Adjustments.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1994 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.

62.5 State

61 Teacher

Table 1A - Distribution of State Employees in Active Service

Age	Years of Service and Average Annual Earnings									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	2 18,864									2 18,864
20-24	151 23,090	22 22,956								173 23,073
25-29	632 26,352	370 26,138	25 24,064							1,027 26,220
30-34	517 27,956	676 28,810	350 28,706	46 26,583						1,589 28,445
35-39	440 28,109	603 30,124	487 31,908	467 30,010	80 30,175					2,077 30,092
40-44	346 30,196	501 31,098	404 32,070	595 35,279	461 33,477	50 32,468				2,357 32,682
45-49	317 28,602	497 29,232	364 32,613	487 37,394	538 41,579	201 40,267	9 34,966			2,413 35,000
50-54	196 28,620	358 28,806	344 30,683	297 35,036	300 37,344	166 41,445	41 38,596	4 37,588		1,706 33,235
55-59	131 28,818	281 28,021	275 30,144	276 32,266	252 32,256	99 36,839	34 47,450	13 37,349		1,361 31,388
60-64	59 25,988	181 27,521	191 28,705	228 31,494	192 31,879	83 35,139	20 36,793	12 47,002	6 51,136	972 30,681
65-69	26 29,165	63 30,093	98 27,026	80 31,792	60 30,812	18 38,464	19 39,257	4 51,496	4 29,952	372 30,803
70-74	7 24,768	18 22,005	28 23,916	29 30,871	19 27,375	9 27,602	2 52,381	1 35,728	2 48,285	115 27,304
75+	4 22,477	6 11,670	13 8,850	19 23,673	2 15,027		1 90,280	2 35,631		47 19,497
TOTAL Average Pay	2,828 $27,742	3,576 $28,930	2,579 $30,545	2,524 $33,605	1,904 $35,750	626 $38,500	126 $41,168	36 $42,024	12 $43,600	14,211 $31,307

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	81 19,526									81 21,468
25-29	468 26,414	139 32,363								607 27,542
30-34	315 29,706	398 36,091	38 40,266	14 27,943						765 33,606
35-39	263 32,215	415 38,240	204 42,298	181 42,785	16 45,698					1,079 38,377
40-44	401 32,266	527 40,084	213 42,130	709 41,789	717 45,392	28 47,707				2,595 41,001
45-49	279 36,251	435 41,850	158 44,771	323 44,858	1,397 45,922	741 47,034	10 46,253			3,343 44,679
50-54	119 39,020	218 42,519	73 43,979	191 44,925	328 46,123	590 47,508	177 47,968	7 45,026		1,703 45,615
55-59	38 39,419	92 44,544	44 44,921	86 45,584	158 46,395	156 47,471	116 50,729	33 48,157	3 45,771	726 46,611
60-64	19 40,935	33 42,719	20 46,189	42 45,520	78 46,053	55 47,194	19 46,539	25 50,160	9 46,768	300 45,898
65-69	3 43,379	6 43,326	5 43,887	21 45,759	38 45,442	32 46,707	16 47,136	8 48,330	11 50,378	140 46,335
70-74		1 44,455	1 67,342	4 41,303	8 43,848	6 48,075	3 51,510	4 43,301	4 51,630	31 46,790
75+	2 43,330	2 47,085		1 41,864	1 14,153				2 37,943	8 39,092
TOTAL Average Pay	1,988 $31,227	2,266 $39,440	756 $43,126	1,572 $42,909	2,741 $45,819	1,608 $47,249	341 $48,708	77 $48,571	29 $44,819	11,378 $41,736

Table 2A - Distribution of Pensioners - State Employees

Number of Pensioners and Total Monthly Pensions Paid by Age

	Pension Type						
Age	Service Retirements	Beneficiaries	Legislator's Pension	Accidental Disabilities	Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
< 30	0	2	0	5	0	7	0.08%
	$ 0	$ 1,501	$ 0	$ 6,951	$ 0	$ 8,452	$ 1,207.43
30-39	0	7	0	8	6	21	0.25%
	0	5,517	0	11,260	2,822	19,599	933.29
40-49	39	31	7	20	42	139	1.64%
	73,698	16,684	7,000	26,096	20,777	144,255	1,037.81
50-54	135	19	3	7	31	195	2.30%
	316,471	17,678	2,835	5,576	18,268	360,828	1,850.40
55-59	266	33	18	11	42	370	4.36%
	676,633	30,589	15,362	12,265	26,202	761,051	2,056.89
60-64	725	64	29	19	73	910	10.71%
	1,055,818	52,399	28,112	19,872	38,283	1,194,484	1,312.62
65-69	1,588	82	32	30	71	1,803	21.23%
	1,594,873	61,074	28,829	21,958	33,311	1,740,045	965.08
70-74	1,746	130	31	16	62	1,985	23.37%
	1,456,330	80,303	33,305	11,167	28,276	1,609,381	810.77
75-79	1,308	121	29	7	58	1,523	17.93%
	946,874	78,808	28,295	3,886	21,225	1,079,088	708.53
80-84	801	81	17	9	20	928	10.93%
	551,160	60,493	16,512	5,890	7,490	641,545	691.32
85-89	378	64	7	3	7	459	5.40%
	234,731	40,690	7,592	2,473	1,797	287,283	625.89
90-94	105	20	3	0	0	128	1.51%
	59,366	12,699	2,790	0	0	74,855	584.80
95-99	24	2	0	0	0	26	0.31%
	14,118	1,610	0	0	0	15,728	604.92
100+	0	0	0	0	0	0	0.00%
	0	0	0	0	0	0	0.00
Total	7,115	656	176	135	412	8,494	100.00%
	$ 6,980,072	$ 460,045	$ 170,632	$ 127,394	$ 198,451	$ 7,936,594	934.38

Table 2B - Distribution of Pensioners - Teachers

Number of Pensioners and Total Monthly Pensions Paid by Age

	Pension Type					
Age	Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities	Total by Age	Percent of Pensioners/ Average Pension
< 30	0	3	0	0	3	0.06%
	$ 0	$ 2,737	$ 0	$ 0	$ 2,737	$ 912.42
30-39	1	4	0	0	5	0.10%
	2,430	3,122	0	0	5,551	1,110.27
40-49	26	12	6	0	44	0.90%
	58,506	9,680	10,465	0	78,650	1,787.50
50-54	267	13	5	20	305	6.23%
	723,432	15,586	8,602	22,149	769,769	2,523.83
55-59	504	12	4	17	537	10.96%
	1,527,626	13,318	6,612	18,753	1,566,310	2,916.78
60-64	722	26	5	20	773	15.78%
	1,755,880	30,188	10,175	25,654	1,821,897	2,356.92
65-69	806	26	5	24	861	17.58%
	1,558,019	28,755	8,910	25,921	1,621,605	1,883.40
70-74	664	24	4	25	717	14.64%
	1,038,587	27,120	5,094	24,033	1,094,834	1,526.96
75-79	559	24	2	20	605	12.35%
	754,090	21,137	2,466	17,272	794,965	1,313.99
80-84	455	24	0	10	489	9.98%
	604,767	23,734	0	8,646	637,147	1,302.96
85-89	370	15	0	3	388	7.92%
	459,735	10,725	0	2,057	472,517	1,217.83
90-94	120	10	0	3	133	2.72%
	145,056	5,813	0	2,305	153,174	1,151.68
95-99	28	4	0	1	33	0.67%
	32,700	1,933	0	1,167	35,801	1,084.86
100+	5	0	0	0	5	0.10%
	7,157	0	0	0	7,157	1,431.35
Total	4,527	197	31	143	4,898	100.00%
	$ 8,667,984	$ 193,848	$ 52,324	$ 147,956	$ 9,062,113	$ 1,850.17

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, pension payments, and administrative expenses. 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, 1994 and 1993. For the plan year ending June 30, 1994, the Employees' Retirement Fund showed a net income of $202,345,055.

The total market value of assets as of June 30, 1994 was $2,916,976,904. This is divided among the plans as follows (pro-rata based on the Book Value of assets as supplied by the State of Rhode Island Treasurer's Office).

State Employees	$	1,214,293,102	41.6%
Teachers		1,615,575,996	55.4%
Teachers' Survivors		87,107,806	3.0%
Total	$	2,916,976,904	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, 1994 and 1993. The reserve allocations are based on the book value of assets.

SECTION III - Plan Assets (cont'd)

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 actuarial value of assets returned approximately 9% compared with an 8% assumed return. The total Actuarial Value of Assets at June 30, 1994, was $2,965,214,165 and is divided among the plans based on a prorata share of the market value of assets as follows:

State Employees	$	1,234,373,540	41.6%
Teachers		1,642,292,340	55.4%
Teachers' Survivors		88,548,285	3.0%
Total	$	2,965,214,165	100.0%

Table 3 - Calculation of Actuarial Asset Value at June 30, 1994

1.	Actuarial Asset Value at June 30, 1993 (equal to market)	$	2,726,033,873
2.	Contributions		
	(a) Employees		76,564,970
	(b) State		78,544,267
	(c) Municipal		45,862,242
	(d) Miscellaneous		2,053,287
	(e) Total	$	203,024,766
3.	Benefit Payments and Other Disbursements		
	(a) Pension Benefit	$	163,767,413
	(b) Cost of Living Adjustments		31,577,278
	(c) Death Benefits		2,719,208
	(d) Refund of Contributions, Social Security Supplements and other Miscellaneous expenses		12,986,228
	(e) Total	$	211,050,127
4.	Assumed Return at 8.00%		
	(a) On Assets	$	218,082,710
	(b) On Contributions (assume midyear)		8,120,991
	(c) On Benefit Payments		(8,442,005)
	(d) Total	$	217,761,696
5.	Tentative Actuarial Asset Value on June 30, 1994 [1. + 2.(e) - 3.(e) + 4.(d)]		2,935,770,208
6.	Market Value on June 30, 1994		2,916,976,904
7.	Excess of Market over Tentative Actuarial Asset Value		(18,793,304)
8.	Prior year adjustments not recognized 1993 $21,567,725 x 2 1992 $42,778,725 x 1		85,914,175
9.	Current Year Experience 7. - 8.		(104,407,479)
10.	Current Year Adjustment to be recognized (1/3 of Experience)		(34,902,493)
11.	Cumulative Adjustment 1994 (34,902,493) 1993 21,567,725 1992 42,778,725		29,443,957
12.	Actuarial Asset Value on June 30, 1994 5. + 11.	$	2,965,214,165

Table 4 - Summary Statement of Income and Expenses

	1994			1993		
Employer contributions	$ 126,459,796			$ 110,032,552		
Member contributions	76,564,970			73,940,463		
Total contributions		$ 203,024,766			$ 183,973,015	
Investment income:						
Dividends	$ 32,992,473			$ 36,604,988		
Interest	94,979,148			86,198,288		
Capital gains (and losses)	79,120,726			57,781,462		
Other	10,440,906			119,000		
Expenses	(7,162,837)			(6,203,338)		
Net investment income		210,370,416			174,500,400	
Total income available for benefit payments			$ 413,395,182			$ 358,473,415
Benefit payments:						
Pension benefits		$ 195,344,691			$ 195,141,826	
Death benefits		2,719,208			2,887,220	
Contribution refunds and other payments		12,986,228			5,895,858	
Total benefit payments			211,050,127			203,924,904
Excess of income over expenses			$ 202,345,055			$ 154,548,511

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

Table 5 - Composition of Assets as of June 30, 1994

	Market Value	Percent of Holdings
Cash/Short Term Investments Short Term Investment Fund Money Market Instruments	$ 278,524,136	9.6%
Equities - Domestic	1,203,530,280	41.3%
Equities - International	212,628,322	7.3%
Fixed Income - Government	949,922,395	32.6%
Fixed Income - Corporate	149,663,393	5.1%
Repurchase Agreements	2,400,267	0.1%
Real Estate and Venture Capital	120,308,111	4.0%
Total Fund Investments	**$ 2,916,976,904**	**100.0%**

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

	1994		1993	
State Employees:				
Employer reserves	$ 788,590,130		$ 746,948,542	
Member reserves	256,820,694		232,564,339	
Total State Employees reserves		$ 1,045,410,824		$ 979,512,881
Teachers:				
Employer reserves	$ 1,024,922,092		$ 938,869,036	
Member reserves	365,961,557		331,475,661	
Total Teacher reserves		1,390,883,649		1,270,344,697
Teachers Survivors:				
Employer reserves	$ 63,819,760		$ 59,068,371	
Member reserves	11,172,813		10,697,584	
Total Teachers Survivors reserves		74,992,573		69,765,955
Unallocated:				
Unreserved Balance		49,571,572		N/A
Total Book Value of Assets		$ 2,560,858,618		$ 2,319,856,609*

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

*Also includes $233,076 of unclaimed benefit reserve which is no longer reported by the retirement system.

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	12.69%	14.46%
Less Employee Contributions	7.75%	8.50%
Employer Normal Cost	4.94%	5.96%
Unfunded Cost due to:		
Original Unfunded	6.43%	9.62%
1989 Assumption Changes	(0.65%)	0.00%*
1989 Early Retirement Incentive	0.63%	None
1990 Early Retirement Incentive	0.61%	1.73%
1991 Assumption and Method Changes	(1.53%)	(2.31%)
Fiscal 1990-91 Deferral	0.33%	0.30%
Fiscal 1991-92 Deferral	0.29%	0.27%
Total Unfunded	6.11%	9.61%
Total Cost as a percentage of payroll	11.05%	15.57%

* The effect of the 1989 assumption changes in the Teachers Plan was less than the minimum threshold for setting up a separate base. Thus, 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 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 0.57% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.00% and a contribution requirement for the State of 6.57%.

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 7.96% and for the State is 5.88%.

SECTION IV - Results of the Valuation (cont'd)

The State Employee's Plan fiscal 1997 contribution requirement of 11.05% compares to the fiscal 1996 contribution requirement of 10.45%. The increase in the contribution requirement is discussed in Section I and a complete development of the fiscal 1997 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1997 contribution requirement of 15.57% compares to the fiscal 1996 contribution requirement of 15.71%. The decrease in the contribution requirement is discussed in Section I and a complete development of the contribution for Teachers for fiscal 1997 is shown in Exhibit I, parts B1, B2 and B3.

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, 1994.

This certificate contains the following attached exhibits:

EXHIBIT I -	Actuarial Cost Development of Fiscal Year 1996-97 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.

Bernard H. Friedman, A.S.A., M.A.A.A.
Consultant

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

EXHIBIT I - DEVELOPMENT OF CONTRIBUTION PERCENTAGES

A1. <u>State Employees - Development of Normal Cost</u>

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

- 14,211 active participants (including 7,628 fully vested)
- 2,389 inactive participants
- 8,494 pensioners (including 656 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	$ 1,231,439,000
	(b) Inactive employees	30,708,000
	(c) Retirees and beneficiaries	912,596,000
	(d) Total	$ 2,174,743,000
2.	Actuarial value of assets	1,234,373,500
3.	Frozen Initial Liability (unfunded liability)	438,794,100
4.	Present value of future employee contributions	305,289,400
5.	Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	196,286,000
6.	Actuarial present value of future compensation	3,939,218,000
7.	Covered Payroll - Employees under Retirement Age	434,002,000
8.	Employer Normal Cost, (5. x 7. ÷ 6.)	$ 21,613,300

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

A2. **State Employees - Development of Employer Cost**

1.	Total Covered Payroll for fiscal 1995	$	454,687,000
2.	Employer Normal Cost		21,613,300
3.	Amortization of Frozen Initial Liability		29,191,700
4.	Projected 1996-97 Covered Payroll		496,529,600
5.	1996-97 Employer Normal Cost ((2. ÷ 1.) x 4.)		23,585,200
6.	Total annual cost if paid on July 1, 1996 (3. + 5.)		52,776,900
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$	54,888,000
8.	a. Employer Normal Cost percentage		4.94%
	b. Employer Unfunded Cost percentage		6.11%
	c. Employer fiscal 1997 Cost (7. ÷ 4.)		11.05%

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

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

			Base	Amortization Period		Payment
1.	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
2.	Bases at July 1, 1993					
	(a) Original	$	467,324,900	22	$	29,377,000
	(b) 1989 Base		(52,704,900)	26		(2,968,800)
	(c) 1989 Early Retirement Window		52,616,700	27		2,894,600
	(d) New 1991 Bases					
	- Assumption and Method changes		(130,014,300)	28		(6,994,400)
	- 1990 Early Retirement Window		52,006,100	28		2,797,800
	(e) 1990/91 Deferral		24,118,900	22		1,516,200
	(f) 1991/92 Deferral		20,878,300	22		1,312,500
	(g) Total	$	434,225,700		$	27,934,900
3.	Bases at July 1, 1994					
	(a) Original	$	472,983,700	21	$	30,698,800
	(b) 1989 Base		(53,715,000)	25		(3,102,300)
	(c) 1989 Early Retirement Window		53,699,900	26		3,024,800
	(d) New 1991 Bases					
	- Assumption and Method changes		(132,861,500)	27		(7,309,100)
	- 1990 Early Retirement Window		53,145,000	27		2,923,600
	(e) 1990/91 Deferral		24,410,900	21		1,584,400
	(f) 1991/92 Deferral		21,131,100	21		1,371,500
	(g) Total	$	438,794,100		$	29,191,700

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. <u>Teachers - Development of Normal Cost</u>

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

- 11,378 active participants (including 7,290 fully vested)
- 1,600 inactive participants
- 4,898 pensioners (including 197 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	$	1,931,910,000
	(b) Inactive employees		57,105,000
	(c) Retirees and beneficiaries		1,065,432,000
	(d) Total	$	3,054,447,000
2.	Actuarial value of assets		1,642,292,300
3.	Frozen Initial Liability (unfunded liability)		754,727,900
4.	Present value of future employee contributions		387,021,000
5.	Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)		270,405,800
6.	Actuarial present value of future compensation		4,553,188,000
7.	Covered Payroll - Employees under Retirement Age		467,770,000
8.	Normal Cost, (5. x 7. ÷ 6.)	$	27,785,500

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

B2. **Teachers - Development of Employer Cost**

1.	Total Covered payroll for fiscal 1995	$	485,325,000
2.	Employer Normal Cost		27,785,500
3.	Amortization of Frozen Initial Liability		48,985,200
4.	Projected 1996-97 Covered Payroll		529,987,000
5.	1996-97 Employer Normal Cost ((2. ÷ 1.) x 4.)		30,368,300
6.	Total annual cost if paid on July 1, 1996 (3. + 5.)		79,353,500
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$	82,527,600
8.	a. Employer Normal Cost percentage		5.96%
	b. Employer Unfunded Cost percentage		9.61%
	c. Employer fiscal 1997 Cost (7. ÷ 4.)		15.57%

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

B3. **Teachers - Determination of Frozen Initial Liability**

			Base	Amortization Period		Payment
1.	Bases at July 1, 1992					
	(a) Original	$	735,875,200	23	$	44,891,800
	(b) New 1991 Bases		(44,546,800)	23		(2,717,600)
	(c) 1990/91 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
2.	Bases at July 1, 1993					
	(a) Original	$	746,262,100	22	$	46,911,600
	(b) New 1991 Bases					
	- Assumption and Method changes		(179,171,400)	22		(11,263,100)
	- 1990 Early Retirement Window		133,995,700	22		8,423,200
	(c) 1990/91 Deferral		22,972,400	22		1,444,100
	(d) 1991/92 Deferral		21,639,600	22		1,360,300
	(e) Total		745,698,400			46,876,100
3.	Bases at July 1, 1994					
	(a) Original	$	755,298,500	21	$	49,022,300
	(b) New 1991 Bases					
	- Assumption and Method changes		(181,341,100)	21		(11,769,900)
	- 1990 Early Retirement Window		135,618,300	21		8,802,200
	(c) 1990/91 Deferral		23,250,600	21		1,509,100
	(d) 1991/92 Deferral		21,901,600	21		1,421,500
	(e) Total	$	754,727,900		$	48,985,200

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, 1994.

	Pension Benefit Obligation State Employees	Pension Benefit Obligation Teachers
Participants currently receiving benefits and terminated employees not yet receiving benefits	$ 943,304,000	$ 1,122,537,000
Current employees		
Accumulated employee contributions	258,894,000	373,154,000
Employer-financed vested	296,127,000	566,569,000
Employer-financed nonvested	182,244,000	289,164,000
Total pension benefit obligation	$ 1,680,569,000	$ 2,351,424,000

EXHIBIT II - Pension Benefit Obligation, Vested Benefit Liability (cont'd)

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, 1994 is as follows:

	Vested Benefit Liability	
	State Employees	Teachers
Active participants	$ 555,021,000	$ 939,723,000
Inactive participants	30,708,000	57,105,000
Retired members	912,596,000	1,065,432,000
Total Value of Vested Benefits	$ 1,498,325,000	$ 2,062,260,000
Assets at Market Value	$ 1,214,293,102	$ 1,615,575,996
Vested Benefits Funding Level	81.04%	78.34%

EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS

a. Actuarial Funding Method

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

Age	Mortality Males	Mortality Females	Expected Life Males	Expected Life 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, 1994 and with regard to employee salary history, where this information was insufficient, average salaries were used. For State Employees this is $31,300, and for Teachers it is $41,700 for the salary year July 1, 1993 to June 30, 1994.

EXHIBIT IV - SUMMARY OF PLAN PROVISIONS

PLAN NAME	Employees' Retirement System of the State of Rhode Island
FINAL AVERAGE SALARY	Final average salary is the three highest consecutive years of earned salary exclusive of overtime, bonuses, or severance pay.

NORMAL RETIREMENT

<u>Age and Service Requirements</u>

General Employees and Teachers may retire with full accrued benefits at age 60 with 10 years of service or after 28 years of service regardless of age.

Correctional Officers may retire with unreduced accrued benefits at age 50 with 20 years of service.

Legislators may retire with unreduced accrued benefits at age 55 with 8 years of service or after 20 years of service with no restriction on age.

<u>Amount of Retirement Benefits</u>

For State Employees and Teachers:

1.7% of final average salary times service up to 10 years, plus

1.9% of final average salary times service in excess of ten years through 20 years, plus

3.0% of final average salary times service in excess of 20 years up to the 34th year of service, plus

2.0% of final average salary for the 35th year. Maximum benefit is 80% of final average salary.

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

	For Correctional Officers: 2.0% of final average salary for the first 30 years of service, plus 6.0% of final average salary for the 31st year, plus 5.0% of final average salary for the 32nd year, plus 4.0% of final average salary for the 33rd year, plus 3.0% of final average salary for the 34th year, plus 2.0% of final average salary for the 35th year. Maximum benefit is 80% of final average salary. For Legislators: $600 per year of service. Maximum benefit is $10,000.
DISABILITY BENEFIT	<u>Non-occupational</u> Service Requirement: 5 years Amount of Benefit: Regular pension benefit based on service to disability and final average salary at time of disability. The minimum benefit is 17% of final average salary. <u>Occupational</u> There is no age or service requirements for the occupational disability benefit. Amount of Benefit: Two thirds of final salary at time of disability, payable immediately.
VESTING	Employees are vested in their retirement benefits on completion of 10 years of service.

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% Teachers: 8.50% Legislators: 30.00%
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 1996-97, 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:

	1994	Year Beginning July 1, 1993	1992
Active participants	11,378	11,588	11,594
Pensioners and beneficiaries	4,898	4,921	4,826
Inactive participants	1,600	1,156	954**
Liability for accrued vested benefits	$ 2,062,260,000	$1,941,452,200	$1,806,755,500
Net assets at actuarial value	$ 1,642,292,340	1,492,915,800	1,352,892,300

As shown in State's financial statements:

	1994	Year Ended June 30, 1993	1992
Employer contributions	$ 76,229,307	$ 72,206,480	$ 49,361,171
Member contributions	42,411,591	40,405,816	38,883,346
Total contributions	$ 118,640,898	$ 112,612,296	$ 88,244,517
Net miscellaneous income	834,335	327,868	388,422
Investment income	110,691,621	95,137,618	141,936,132
Total income available for benefit payments	$ 230,166,854	$ 208,077,782	$ 230,569,071
Benefit payments	109,025,246	104,236,082	100,009,279
Excess of income over expenses	$ 121,141,608	$ 103,841,700	$ 130,559,792

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

** 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 1997 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 9.00%*) are as follows:

	Year Ended June 30,		
	1992	1993	1994
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 7.96%. These towns are listed below:

Code	2003	Burillville
	2009	East Greenwich
	2018	Little Compton
	2025	North Smithfield