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

AS OF JUNE 30, 1991

Prepared by:

William M. Mercer, Incorporated
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March, 1992

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April 3, 1992

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, 1991.

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 1992-1993 for the Board to submit to the Legislature for certification.

We provided preliminary employer contribution rates (letter dated December 13, 1991) based on the financial information and census information available by early December 1991. The final rates, developed in this report, are unchanged. The employer contribution rate for the State Employees' Retirement Plan is 10.37% and the employer contribution rate for the Teachers' Retirement Plan is 14.74%.

The fiscal 1992-93 rate for the State Employees' Plan is less than the current (1991-92) fiscal year rate of 11.7%. The reduction is a result of several offsetting factors. A change to a more realistic salary scale and the recognition of previously unrecognized asset gains in the valuation of plan assets reduced the contribution rate. This reduction was partly offset by the effects of the 1990 early retirement window and the decision by the State to defer a portion of the fiscal 1990-91 and fiscal 1991-92 contribution requirements.

The contribution requirement for the Teachers' Plan was also reduced from 15.1% for the current (1991-92) fiscal year. The size of the reduction was smaller than for the State Employees' Plan. The same factors played a part in producing the reduction, however, the impact of the 1990 early retirement window was greater (due presumably to the absence of a 1989 early retirement window for Teachers) resulting in a smaller reduction to the contribution requirement.

This report 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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We would like to extend our thanks to James Reilly, Louis Capizano and Robert Ridings of the State Retirement System whose help in providing information and in answering our questions is greatly appreciated.

We look forward to the opportunity to meet with you to discuss the report.

Sincerely,

Barry M. Gilman, M.A.A.A.
Enrolled Actuary #90-2841
Principal

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Associate

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Associate

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TABLE OF CONTENTS

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SECTION I - SUMMARY OF VALUATION

Contribution Requirements

The contribution requirements for fiscal 1992-93 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 1992-93	Fiscal 1991-92	Fiscal 1990-91
State Employees Plan:			
Normal Cost	3.84%	5.6%	5.1%
Unfunded Liability Cost	6.53%	6.1%	5.3%
Total	10.37%	11.7%	10.4%
Teachers Plan:			
Normal Cost	4.81%	5.9%	6.0%
Unfunded Liability Cost	9.93%	9.2%	9.4%
Total	14.74%	15.1%	15.4%

Before recognition of the salary increase assumptions, the Normal Cost percentage generally remains constant. The reduction for fiscal 1992-93 is due to adopting a new salary scale assumption which is designed to more accurately estimate future pay increase experience.

The Unfunded Liability Cost has increased. This is a result of the following offsetting factors:

- Adoption of revised asset valuation method
- Early retirement program
- Change in salary increase assumption
- Deferral of State contributions

Overall the contribution requirements for fiscal 1992-93 are below previous years.

For fiscal 1992-93, the Teachers' Plan rate is to be paid 36% by the State and 64% by the cities and towns. The overall rate of 14.74% includes to cost of prior fiscal year State contribution deferrals. The deferral represents 0.6% of the rate and is payable by the State, the cities and towns share is therefore 64% of 14.14% or 9.05% and the State will contribute the balance of the 14.74% or 5.69%.

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

There were a number of town 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

As a result the contribution requirement for these towns is reduced by the cost of the early retirement incentive program. The overall contribution requirement of the group is 12.96% and as above the State will meet the full cost of prior fiscal year deferrals of 0.6%. The contribution for these towns is therefore 7.91% and the State contributes the balance of 5.05%.

Funded Status of the System

The funding method utilized by the System does not measure liabilities accrued to the valuation date against plan assets (the method aims to fund sufficient assets as a level annual percentage of pay for future benefits). There are several measures commonly used to describe the funded status of the plan. The following table summarizes two measures which are described below:

SECTION I - Summary of Valuation (cont'd)

	Ratio of Assets to Liabilities		
	Fiscal 1992-93	Fiscal 1991-92	Fiscal 1990-91
State Employees Plan:			
Projected Benefits Liability	62.56%	60.31%	61.45%
Vested Benefits Liability	77.54%	87.39%	86.44%
Teachers Plan:			
Projected Benefits Liability	56.66%	54.50%	50.91%
Vested Benefits Liability	75.47%	91.43%	81.17%

The ratio of assets to the projected benefit liability compares the value of accrued benefits including salary increases to retirement, to the actuarial value of assets. The ratio of assets to the vested benefit liability compares the value of vested benefits (basically the value of accrued benefits, no salary projection, for participants with more than ten years of service and the value of former employee's benefits) to the market value of assets.

The projected benefit ratio improved marginally since the prior fiscal year. This improvement results from the change in assumptions and calculation of actuarial asset value offsetting the detrimental effects of State contribution deferrals and the early retirement incentive programs. Note the large improvement between fiscal 1990-91 and fiscal 1991-92 for the Teachers' plan as compared to the State Employees' Plan. This reflects the fact that the 1989 early retirement program was not offered to Teachers but only the State Employees.

The vested benefit ratio, however has worsened since the prior fiscal year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. Therefore the changes made in the salary and asset assumptions have no beneficial impact on the vested benefit ratio.

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, as a level percentage of payroll, over 30 years (see Appendix II for a description of the funding method) commencing in the fiscal year 1991-92. The cost of the program is 0.67% 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, as a level percentage of payroll, over 30 years commencing in the fiscal year 1992-93. The cost for the State Employees Plan is 0.66% 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 1.78% 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:

	7/1/90 to 6/30/91	7/1/89 to 6/30/90	7/1/88 to 6/30/89
Time-weighted return on market value of assets[1]	7.5%	12.3%	14.8%
Market Value of Assets at end of period	$2,316,700,000	$ 2,222,100,000	$1,940,900,000
Actuarial Value of Assets at end of period	$2,316,700,000	$ 1,962,800,000	$1,732,200,000
Total Contribution	$ 149,700,000	$ 196,600,000	$ 182,200,000
Total Benefit Payments	$ 203,600,000	$ 139,400,000	$ 118,200,000

(1) As prepared by Wilshire Associates

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

Comparison of the market and actuarial values of assets in prior fiscal years shows a widening gap (the gap using the prior method of calculating the actuarial value of assets which only recognizes part of any investment gain would have been in excess of $0.3 billion). A discussion of the rationale of changing the asset valuation method can be found in Section III.

The change in asset valuation method reduced the State Employees' Plan cost by 1.19% and the Teachers' Plan cost by 1.59%.

The swing from net income in fiscal years 1988-89 and 1989-90 to net outgo (i.e. benefit payments exceeded contributions) in fiscal 1990-91 resulted from the effect of the early retirement incentives increasing payments and State contribution deferrals reducing income. The fund did increase during fiscal 1990-91 after accounting for investment results.

SECTION I - Summary of Valuation (cont'd)

Actuarial Method and Assumptions

Exhibit III describes the actuarial method adopted to calculate the contribution requirement and also the assumptions utilized in the calculation.

For the June 30, 1991 valuation the Retirement Board approved two changes to the assumptions. Firstly, assets were valued at market value and starting July 1, 1991 future investment gains and losses will be spread over a 3 year period. Secondly, the salary scale used to project earnings to retirement date was changed to an annual increase of 4.5%.

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, 1990 valuation except the early retirement incentive available to eligible participants who chose retirement between July 1, 1990 and December 31, 1990.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1991, can be summarized as follows:

	State Employees		Teachers	
	June 30, 1991	June 30, 1990	June 30, 1991	June 30, 1990
Number of Covered Employees	14,590	15,158	11,090	10,778
Average Annual Salary	$27,300	$26,300	$37,600	$38,700
Average Age (years)	43.3	43.5	43.0	44,0
Average Service (years)	10.2	10.5	13.6	16.0
Number of Vested Employees	7,163	6,133	7,101	6,687
Number of Employees Eligible for Retirement	1,150	1,367	764	1,274

When compared to last year a shift in the average demographic profile of the active population can be seen. The average annual salary for state employees rose slightly from an average of $26,300. This represents and increase of 3.8% on average, as opposed to a 6.9% average increase from June 1989 to June 1990. The average salary for an active teacher dropped by 2.8% from $38,700 to $37,600. This may be partly explained by the early retirement incentive program.

Other effects of the incentive program can be seen in the summary statistics. The average age for teachers dropped a full year, from 44 years to 43 years. Average years of service also dropped. Finally, the number of teachers eligible for service retirement under normal plan provisions dropped from 1,274 in June 1990 to 764 in June 1991.

The effects of the incentive program on state employees was smaller in scale but still significant. Average age and service dropped by two-tenths and three-tenths of a year respectively and the number of employees eligible for retirement under the normal provisions of the plan dropped by 217, from 1,367 to 1,150. This is similar to last year when decreases in average age, average service, and the number of employees eligible for service retirements resulted from the 1989 early retirement incentive program.

Missing data was estimated by using an average for employees with similar available data. For example, a person missing a date of hire, would be given an estimated date of hire based on his date of birth. Active employees missing salaries were given the average salary of all employees who had no data missing. For active state employees there were 33 missing salaries, 12 missing dates of birth, and 34 missing dates of hire. For active teachers there were approximately 240 missing salaries, 210 missing hire dates and 180 missing birth dates. The greater number of missing figures for teachers can be attributed to the greater difficulty in obtaining their data. In light of the large populations we are dealing with, the amount of missing data that needed estimation does not have a significant 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:

	State Employees		Teachers	
	June 30, 1991	June 30, 1990	June 30, 1991	June 30, 1990
Pensioners				
Number	7,851	7,217	4,704	5,699
Average Age	70.0	70.5	68.8	72.0
Average Monthly Benefit	$850	$773	$1,697	$1,422
Beneficiaries				
Number	565	612	130	170
Average Age	72.0	72.0	68.3	70
Average Monthly Benefit	$616	$617	$782	$827

The sizable increase in number of pensioners and average monthly benefit, and the corresponding decrease in the average age of pensioners can be all attributed in large part to the impact of the 1990 early retirement incentive program.

Again the impact is greater for teachers than state employees. This is most likely due to the effect of the 1989 early retirement incentive program which was only available to State employees.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1991 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 18,958									4 18,958
20-24	454 21,536	4 16,653								458 21,493
25-29	970 23,383	287 23,588	30 22,865							1,287 23,416
30-34	801 24,087	554 26,714	407 25,517	69 25,514						1,831 25,253
35-39	650 24,677	408 29,051	580 28,370	563 27,651	55 27,095					2,256 27,219
40-44	540 25,059	424 27,699	535 30,755	638 33,253	327 33,375	20 26,981				2,484 29,951
45-49	450 23,939	377 26,044	407 29,503	378 33,101	296 35,961	85 35,384	7 28,563			2,000 29,481
50-54	341 24,113	287 24,407	299 29,095	319 29,303	160 31,929	82 37,765	23 36,481	3 31,538		1,514 28,014
55-59	217 22,862	231 25,708	296 27,430	283 28,121	214 28,237	60 35,600	29 39,704	9 43,813	2 27,030	1,341 27,409
60-64	118 25,800	209 24,341	235 25,868	213 28,367	112 27,582	40 36,569	20 49,210	6 47,584	6 35,875	959 27,414
65-69	27 28,048	52 21,096	106 26,258	72 27,729	44 26,938	20 32,309	10 31,933	8 45,227	3 27,880	342 26,989
70-74	9 24,293	14 16,178	30 22,498	18 26,606	8 28,245	2 25,037	4 46,235	2 31,819	1 35,541	88 24,536
75+	1 10,000	7 12,205	13 17,313	3 22,238	2 27,125					26 16,980
TOTAL	4,582 23,873	2,854 26,101	2,938 28,104	2,556 30,104	1,218 31,818	309 35,401	93 39,558	28 42,853	12 32,374	14,590 27,303

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	154 22,018									154 22,018
25-29	609 24,912	57 29,945								666 25,343
30-34	417 27,868	224 32,794	69 37,901							710 30,397
35-39	689 30,018	237 35,936	438 39,898	315 40,157	1 41,586					1,680 35,337
40-44	624 31,526	270 37,409	411 37,668	1,131 40,737	1,113 41,754	3 40,772				3,552 38,830
45-49	344 33,535	159 37,236	156 41,465	299 41,746	1,048 42,417	348 43,406	2 42,291			2,356 40,768
50-54	142 35,063	74 40,168	92 41,807	153 41,007	254 42,276	252 43,974	85 45,642			1,052 41,608
55-59	44 35,243	31 40,252	42 41,466	99 41,373	133 41,964	61 43,368	68 43,363	18 43,493		496 41,521
60-64	18 35,820	12 41,435	25 43,603	44 41,546	95 41,569	44 41,979	38 43,300	24 43,707	18 41,832	318 41,835
65-69	4 42,320	5 36,183	10 41,491	12 41,508	27 42,159	7 45,085	12 42,270	2 55,083	6 47,920	85 42,612
70-74		1 38,280	1 38,685	3 41,801	5 37,789	2 44,904	3 39,960	1 42,156	2 44,886	18 40,718
75+	3 23,272									3 23,272
TOTAL	3,048 29,359	1,070 36,007	1,244 39,528	2,056 40,869	2,676 42,064	717 43,525	208 44,161	45 44,092	26 43,472	11,090 37,627

Table 2A - Distribution of Pensions - 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	1	0	1	0	2	0.02%
	$ 0	$ 133	$ 0	$ 1,003	$ 0	$ 1,136	$ 568.00
30-39	0	8	0	4	11	23	0.27%
	0	5,045	0	2,021	3,778	10,844	471.48
40-49	104	18	1	12	38	173	2.06%
	202,808	8,666	565	8,816	14,345	235,200	1,359.54
50-54	209	14	7	2	22	254	3.02%
	483,844	13,080	7,465	717	13,060	518,166	2,040.02
55-59	315	30	23	16	70	454	5.39%
	694,897	20,493	19,469	9,758	34,234	778,851	1,715.53
60-64	1,073	55	36	18	102	1,284	15.26%
	1,198,626	36,190	31,222	10,354	43,022	1,319,414	1,027.58
65-69	1,776	101	29	23	90	2,019	23.99%
	1,416,883	60,603	27,922	13,848	33,538	1,552,794	769.09
70-74	1,533	97	28	12	90	1,760	20.91%
	1,058,919	58,564	25,731	6,372	30,295	1,179,881	670.39
75-79	1,107	99	27	10	43	1,286	15.28%
	691,560	59,349	23,336	6,103	11,644	791,992	615.86
80-84	635	78	12	5	21	751	8.92%
	344,475	47,518	11,464	3,462	5,817	412,736	549.58
85-89	242	41	2	1	1	287	3.41%
	125,448	23,500	1,344	779	903	151,974	529.53
90-94	77	17	3	0	0	97	1.15%
	43,040	12,341	2,688	0	0	57,069	588.34
95-99	18	6	1	0	0	25	0.30%
	7,079	2,564	538	0	0	10,181	407.24
100+	1	0	0	0	0	1	0.01%
	228	0	0	0	0	228	228.00
	7,090	565	169	104	488	8,416	
Total	$ 6,266,809	$ 348,046	$ 151,742	$ 63,234	$ 190,636	$ 7,020,467	$ 834.18

Table 2B - Distribution of Pensions - Teachers

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type				Total by Age	Percent of Pensioners/ Average Pension
	Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities		
< 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	4,548	130	23	133	4,834	
	$ 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 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 3 shows a summary of income and expenditures for the years ended June 30, 1991 and 1990. For the plan year ending June 30, 1991 the Employees' Retirement Fund showed a net increase of $80,861,970.

The total market value of assets as of June 30, 1991 was $2,316,654,500. This is divided among the plans as follows:

State Employees	$	985,796,300	42.5%
Teachers		1,261,831,500	54.5%
Teacher's Survivors		69,026,700	3.0%
Total	$	2,316,654,500	100.0%

Table 4 shows the composition of the investments of the fund.

Please note that the allocation of the assets incorporated in the valuation as of June 30, 1991 reflects the allocations provided by the Treasury Department of the State of Rhode Island available as of December 1991. If the final allocation of funds between plans differs from the above figures, subsequent valuations will record a gain or loss which will be spread forward as part of future years contribution requirements.

Table 5 shows the allocation of reserves to State Employees Plan, Teachers Plan, and Teacher's Survivors Plan as of June 30, 1991 and 1990. The reserve allocations are based on the book value of assets. The financial statements indicate that 43.5% of the book value of assets relate to State Employees, 53.5% relate to Teachers, and 3.0% relate to Teachers Survivors benefits. There is also a small unallocated reserve for unclaimed benefits.

Actuarial Value of Assets

As of the current valuation, a new method to calculate the actuarial value of assets has been employed. Comparison of prior years market and actuarial values of assets indicate a widening gap, the actuarial value lagging further behind the market value each year. The gap was created because in prior years the actuarial value only recognized a portion of each years' investment gain or loss. The large investment gains on equity investments earlier in the 1980's initially created the gap. The actuarial value of assets as of June 30, 1991 was written up to equal the market value of assets at that date. A three year period to spread future investment gains and losses will commence effective July 1, 1991.

Table 3 - Summary Statement of Income and Expenses

	1991			1990		
Employer contributions	$ 80,651,984			$ 129,449,799		
Member contributions	69,021,965			67,155,955		
Total contributions		$ 149,673,949			$ 196,605,754	
Net miscellaneous items		1,234,553			(4,384,981)	
Investment income:						
Dividends	$ 27,663,856			$ 29,723,591		
Interest	96,283,294			86,349,770		
Capital gains (and losses)	13,895,976			16,043,927		
Writedown	0			(6,771,650)		
Other	3,258			370,765		
Expenses	(4,313,531)			(3,579,240)		
Net investment income		133,532,853			122,137,163	
Total income available for benefit payments			$ 284,441,355			$ 314,357,935
Benefit payments:						
Pension benefits		$ 181,940,583			$ 133,053,253	
Death benefits		2,254,306			2,569,443	
Contribution refunds		19,384,496			3,749,876	
Total benefit payments			203,579,385			139,372,573
Excess of income over expenses			$ 80,861,970			$ 174,985,363

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

Table 4 - Composition of Assets as of June 30, 1991

	Market Value
Cash/Short Term Investments Short Term Investment Fund Money Market Instruments	$ 305,300,000
Equities - Domestic	1,109,000,000
Equities - International	46,700,000
Fixed Income - Government	664,200,000
Fixed Income - Corporate	39,200,000
Fixed Income - In State	31,400,000
Real Estate	106,000,000
Venture Capital	14,900,000
Total Fund Investments	$ 2,316,700,000

Table 5 - Allocation of Book Value Assets by Plan - Reserve Values

	1991		1990	
State Employees:				
Employer reserves	$ 663,786,787		$ 652,779,874	
Member reserves	189,365,218		178,270,045	
Total State Employees reserves		$ 853,152,005		$ 831,049,919
Teachers:				
Employer reserves	$ 784,472,996		$ 722,997,705	
Member reserves	265,096,192		270,899,404	
Total Teacher reserves		1,049,569,188		993,897,109
Teachers Survivors:				
Employer reserves	$ 48,048,389		$ 45,198,506	
Member reserves	9,754,440		9,520,071	
Total Teachers Survivors reserves		57,802,829		54,718,578
Unallocated:				
Unclaimed benefit reserve		229,482		225,929
Total assets		$ 1,960,753,504		$ 1,879,891,535

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	3.84%	4.81%
Unfunded Cost due to:		
Original Unfunded	6.87%	9.94%
1989 Assumption Changes	(0.69%)	0.00%*
1989 Early Retirement Incentive	0.67%	None
1990 Early Retirement Incentive	0.66%	1.78%
Change in asset valuation	(1.19%)	(1.59%)
Change in salary scale	(0.45%)	(0.80%)
Fiscal 1990-91 Deferral	0.35%	0.31%
Fiscal 1991-92 Deferral	0.31%	0.29%
Total Cost as a percentage of payroll	10.37%	14.74%

* 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 64% by the cities and towns and 36% by the State. However the State will pay the total cost of 0.6% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.05% and a contribution requirement for the State of 5.69%.

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 7.91% and for the State is 5.05%.

It will be noted that the impact of the 1990 early retirement incentive was greater for the Teacher's Plan. This is primarily due to a much larger participation in the incentive program, approximately twice the number of teachers opted to retire than state employees.

The change in the salary scale also impacted the Teachers' Plan to a greater extent. This was due to the larger proportion of active employee liabilities in the Teachers' Plan (changing the salary scale only affects active employee liabilities).

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 1992-93 contribution requirement of 10.37% compares to the fiscal 1991-92 contribution requirement of 11.70%. The decrease in the contribution requirement is the result of several offsetting factors. If the salary and asset assumptions had not been changed the contribution requirement would have increased as a result of both the 1990 early retirement incentive program and the state contribution deferrals and also due to slightly adverse investment experience during the previous fiscal year. The effect of the changes to the salary scale assumption and asset valuation method more than offset the increase in the contribution requirement discussed above. The table on the previous page details the change to the contribution requirement of these events. Development of the fiscal 1992-93 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1992-93 contribution requirement of 14.74% compares to the fiscal 1991-92 contribution requirement of 15.1%. The comments above concerning the reduction of the contribution requirement of the State Employee's Plan also apply to the Teacher's Plan. However, the decrease in the contribution requirement for the Teacher's Plan was not as large. This can be explained by the greater impact of the 1990 early retirement incentive program. Development of the contribution for Teachers for fiscal 1992-93 is shown in Exhibit I, parts B1, B2 and B3.

It will be noted that the impact of the 1990 early retirement incentive was greater for the Teacher's Plan. This is primarily due to a much larger participation in the incentive program, approximately twice the number of teachers opted to retire than state employees.

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Teacher Survivors Plan

A complete analysis of the finances of the Teacher Survivors Plan is not possible due to lack of sufficient data. However, making reasonable assumptions regarding age and family size we estimate that the current assets of $69.0 million together with future income will be sufficient to meet benefit payments when 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, 1991.

This certificate contains the following attached exhibits:

Exhibit I -	Actuarial Cost Development of Fiscal Year 1992-93 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 my knowledge, the information supplied in this actuarial valuation is complete and accurate and in my opinion each individual assumption used (a) is reasonably related to the experience of the plan and to reasonable expectations and (b) represents my best estimate of anticipated experience under the plan.

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

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:

- 14,590 active participants (including 7,163 fully vested)
- 2,263 inactive participants
- 8,416 pensioners (including 565 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	$ 936,163,400
	(b) Inactive employees	30,520,700
	(c) Retirees and beneficiaries	826,764,700
	(d) Total	$ 1,793,448,800
2.	Actuarial value of assets	985,796,300
3.	Frozen Initial Liability (unfunded liability)	422,611,800
4.	Present value of future employee contributions	257,434,200
5.	Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	127,606,500
6.	Actuarial present value of future compensation	3,321,731,000
7.	Normal cost percentage (5. ÷ 6.)	3.84%
8.	Covered Payroll - Employees under Retirement Age	373,936,500
9.	Normal Cost, (7. x 8.)	$ 14,359,200

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

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

1.	Total Covered Payroll	$	389,586,600
2.	Normal Cost		14,359,200
3.	Amortization of Frozen Initial Liability		25,581,200
4.	Projected 1992-93 Covered Payroll		407,118,000
5.	1992-93 Employer Normal Cost ((2. ÷ 1.) x 4.)		15,022,700
6.	Total annual cost if paid on July 1, 1992 (3. + 5.)		40,603,900
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$	42,228,100
8.	Employer fiscal 1992-93 cost as a percent of payroll (7 ÷ 4)		10.37%

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

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

		Base	Amortization Period	Payment
1.	June 30, 1990 Unfunded bases at July 1, 1990			
(a)	Original Unfunded	$ 445,731,800	25	$ 25,743,500
(b)	1989 Plan Amendment and Assumption Change[1]	(49,393,400)	29	(2,601,600)
(c)	1989 Early Retirement Window[1]	49,134,700	30	2,536,600
(d)	Total	$ 445,473,100		$ 25,678,500
2.	Breakdown of 1991 Bases			
(a)	1990 Early Retirement Window	$ 50,000,000		
(b)	Change in Salary Scale	(33,994,000)		
(c)	Change in Asset Method	(90,446,900)		
(d)	Subtotal[1]	(74,440,900)	30	(3,843,000)
(e)	1990-91 Deferral of Contributions[2]	23,409,900	24	1,388,400
(f)	1991-92 Deferral of Contributions[2]	20,264,600	24	1,201,900
(g)	Total	$ (30,766,400)		$ (1,252,700)
3.	Bases at July 1, 1991			
(a)	Original Unfunded	$ 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)	1991 Bases	(30,766,400)		(1,252,700)
(e)	Total	$ 422,611,800		$ 25,581,200

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:

- 11,090 active participants (including 7,101 fully vested)
- 2,644 inactive participants
- 4,834 pensioners (including 565 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	$ 1,537,495,700
	(b) Inactive employees	34,535,200
	(c) Retirees and beneficiaries	968,882,900
	(d) Total	$ 2,540,913,800
2.	Actuarial value of assets	1,261,831,500
3.	Frozen Initial Liability (unfunded liability)	723,777,800
4.	Present value of future employee contributions	355,331,100
5.	Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	199,973,400
6.	Actuarial present value of future compensation	4,180,366,400
7.	Normal cost percentage (5. ÷ 6.)	4.78%
8.	Covered Payroll - Employees under Retirement Age	415,607,900
9.	Normal Cost, (7. x 8.)	$ 19,866,100

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

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

1.	Total Covered Payroll	$	430,036,200
2.	Normal Cost		19,866,100
3.	Amortization of Frozen Initial Liability		42,926,500
4.	Projected 1992-93 Covered Payroll		449,387,800
5.	1992-93 Employer Normal Cost ((2. ÷ 1.) x 4.)		20,761,700
6.	Total annual cost if paid on July 1, 1992 (3. + 5.)		63,688,200
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	$	66,235,700
8.	Employer fiscal 1992-93 cost as a percent of payroll (7 ÷ 4)		14.74%

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.	Breakdown of 1991 Bases					
	(a) 1990 Early Retirement Window	$	130,000,000			
	(b) Change in Salary Scale		(58,074,300)			
	(c) Change in Asset Method		(115,773,200)			
	(d) Subtotal[1]		(43,847,500)	24		(2,600,500)
	(e) 1990-91 Deferral of Contributions[2]		22,297,000	24		1,322,400
	(f) 1991-92 Deferral of Contributions[2]		21,003,500	24		1,245,700
	(g) Total	$	(547,000)		$	(32,400)
3.	Bases at July 1, 1991					
	(a) Original Unfunded	$	724,324,800	24	$	42,958,900
	(b) 1991 Base		(547,000)	24		(32,400)
	(c) Total	$	723,777,800		$	42,926,500

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.

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, 1991.

	Pension Benefit Obligation	
	State Employees	Teachers
1. Participants current receiving benefits and terminated employees not yet receive benefits	$ 857,285,400	$ 1,003,418,100
2. Current employees		
Accumulated employee contributions	189,365,200	265,096,200
Employer-financed vested	191,955,300	351,678,700
Employer-financed nonvested	153,828,300	298,562,500
3. Total pension benefit obligation	$ 1,392,434,200	$ 1,918,755,500

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, 1991 is as follows:

	Vested Benefit Liability	
	State Employees	Teachers
Active participants	$ 414,059,100	$ 668,590,100
Inactive participants	30,520,700	34,535,200
Retired members	826,764,700	968,882,900
Total Value of Vested Benefits	$ 1,271,344,500	$ 1,672,008,200
Assets at Market Value	$ 985,296,300	$ 1,261,831,500
Vested Benefits Funding Level	77.54%	75.47%

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

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 participants 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. Gains and losses 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, their salaries are estimated by the average salaries for those employees whose data is complete. For State Employees this is $27,585, and for Teachers it is $37,840 for the salary year July 1, 1990 to June 30, 1991.

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** 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.

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 $12,000.

DISABILITY BENEFIT

Non-occupational

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.

Occupational

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% 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, a statutory, mandatory, state-wide, multi-employer retirement system, which first covered Rhode Island teachers on July 1, 1949. This System is administered as a unified state-wide system by the State Retirement Board, the composition of which is set forth in the pertinent state statute. The assets are held in the custody of the State Treasurer as an undivided single fund.

The actuarial costs of the retirement benefits are partially funded by employee contributions of 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 as a rate percent of payroll, payable in part by the State of Rhode Island and in part by the (city) (town). The split between State and Municipality is specified in the statute. For fiscal year 1992-93, the State will pay 36% and the Municipality will pay 64%. The statute provided for increasing graduated percentages of the annual normal cost and interest on the unfunded liability until the year beginning July 1, 1986 when the full normal cost and amortization payments on a 30-year schedule are required.

The actuarial valuation prepared by William M. Mercer, Incorporated applying the entry age normal cost method with the frozen initial liability, assuming 8 percent interest return on invested assets and applying assumed rates of salary progression, allowance for post-retirement increases and other actuarial assumptions - all as set forth in the published annual reports of the Retirement Board - reveal the following comparative highlights of the last three years for the Teachers system as a whole:

	Year Beginning July 1,		
	1989*	1990*	1991
Active participants	10,995	10,778	11,090
Pensioners and beneficiaries	3,744	3,869	4,834
Inactive participants	2,380	3,069	2,644
Liability for accrued vested benefits	$1,233,408,700	$ 1,284,910,600	$1,620,193,000
Net assets at actuarial value	893,536,700	1,037,737,400	1,261,831,500

As shown in State's financial statements:

	Year Ended June 30,		
	1989*	1990*	1991
Employer contributions	$ 72,217,030	$ 82,435,940	$ 47,201,290
Member contributions	31,348,826	37,159,860	36,701,446
Total contributions	$ 103,565,856	$ 119,595,800	$ 83,902,936
Net miscellaneous income	766,545	(4,440,352)	478,768
Investment income	121,392,937	63,912,874	74,965,344
Total income available for benefit payments	$ 225,725,338	$ 179,068,323	$ 159,347,048
Benefit payments	58,199,115	64,603,816	100,362,397
Excess of income over expenses	$ 167,526,222	$ 114,464,507	$ 58,984,651

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

* Prepared by previous actuary.

Actuarial costs and liabilities, as shown in the summary presentation, are determined in the aggregate for the Teachers System. Accordingly, employer contributions are first determined in the aggregate for all participating employers in this multi-employer system; are then expressed as a rate percent of the aggregate participating payroll; and for fiscal year 1992-93, sixty-four percent of this rate percent is then promulgated to each participating employer as the actuarial cost factor to be applied to its participating payroll (the remaining thirty-six 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 year years (together with the amount for the current year, based on the promulgated rate percent of 9.05%) are as follows:

		Year Ended June 30,	
	1989	1990	1991
Participating payroll			
Employer contributions			

With respect to the Teachers Retirement System, William M. Mercer, Incorporated, independent actuaries advising the Retirement Board, have stated on December 20, 1991:

> "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, 2021. 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 of 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 7.91%. These towns are listed below:

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