

**ACTUARIAL VALUATION OF THE
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM
OF THE STATE OF RHODE ISLAND
AS OF JUNE 30, 1994**

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SECTION I - SUMMARY OF THE VALUATION

Contribution Requirements

The contribution rates for fiscal 1997 for each unit in the Municipal Retirement System are set out in Section IV. The rates are split into the normal cost percentage and the past service cost percentage. The past service cost percentage represents the amortization of the unfunded liability. For comparison, the rates for the 1995 and 1996 fiscal years are also shown.

The aggregate employer normal cost for all units for general employees is 1.36% of total general employees payroll. The previous year percentage was 1.48% of payroll. The rate decreased due to the greater number of actual terminations than expected. Also, there were a few units which did not adopt a COLA but were valued as such last year. This year they were valued without the COLA provision. The past service cost for general employees (the annual amount required to pay off the unfunded liabilities) increased from 0.47% in the previous year to 0.51% of payroll. The predominant factor causing the increase was the addition of two new units with unfunded liabilities to the system.

The combined employer normal cost for police and fire departments is 4.36% of police and fire payroll, a slight increase from 4.34% last year. The past service cost for police and fire departments in aggregate (the annual amount required to pay off the unfunded liabilities) has decreased from 0.99% last year to 0.84% of payroll. The decrease in past service cost results from the combination of a reduction due to favorable investment experience (the actuarial value of assets returned 9.1%) offset by an increase due to units electing benefit improvements. As noted later in this report, there were 2 police and fire departments which elected benefit improvements since the last valuation.

The actual funding percentage for any unit participating in the plan will vary from the above depending on its particular demographics. Each unit's costs and liabilities is independently determined.

Please refer to Section IV for a presentation of liabilities and costs for each unit separately.

SECTION I - SUMMARY OF THE VALUATION (Cont'd)

Funded Status

Of the 56 municipalities covering general employees, 15 have unfunded liabilities. Many of the unfunded units were recent participants in the System with prior service credits. The total unfunded liability on the valuation date for all general employees was \$4,931,300.

Of the 33 police and fire departments, 9 had unfunded liabilities. As above, most of the units with unfunded liabilities were recent participants in the System with prior service credits or have recently improved the level of benefits offered. The total unfunded liability for all Police and Fire units on the valuation date was \$1,839,700.

The recent change in valuing assets for valuation purposes (effective as of the June 30, 1991 valuation), which recognizes a portion of the unrealized gains or losses in the market value of assets, has reduced or eliminated the unfunded liabilities for many units. (Previously, the book value of assets was used for valuation purposes.)

Recent favorable investment experience has also caused the unfunded liabilities to decrease. The majority of units are overfunded as of the valuation date. Because employer contributions (equal to the normal cost) and employee contributions are still made to overfunded units, the fully funded status of these units will most likely be maintained in the future.

The value of the System's vested benefits for both general employees and policemen and firemen is approximately \$258.0 million. The market value of assets on June 30, 1994 exceeded this amount by \$173.9 million. Last year the market value of assets exceeded vested benefit liabilities by \$202.6 million. However there are 9 units in total with unfunded vested liabilities. It should be noted that because each unit is individually evaluated, the surplus plan assets from one unit may not be used to offset the unfunded liabilities from another unit.

SECTION I - SUMMARY OF THE VALUATION (Cont'd)

Section IV and Exhibit II provide financial details for each unit and also show vested liabilities and benefit obligations for disclosure as required by Governmental Accounting Standards Board Statement No. 5.

Assets of the Retirement System

As of June 30, 1994 the market value of assets for the general employee units was \$366.2 million and for police and fire units the market value of assets was \$65.7 million. Section III presents an income statement and provides a breakdown of the investments of the System into investment categories.

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

	<u>7/1/93 to 6/30/94</u>	<u>7/1/92 to 6/30/93</u>	<u>7/1/91 to 6/30/92</u>
Investment yield*	2.20%	11.10%	13.50%
Market Value of Assets at end of period	\$ 431,990,100	\$ 437,549,000	\$ 381,973,000
Total Contributions	14,723,300	18,022,800	17,305,900
Investment Income	<u>30,727,300</u>	<u>26,711,200</u>	<u>30,910,500</u>
Total Income	45,450,600	44,734,000	48,216,400
Total Benefit Payments	\$ 19,836,300	\$ 18,428,600	\$ 17,104,700
Net Income**	\$ 25,614,300	\$ 26,305,400	\$ 31,111,700

*Provided by Wilshire Associates.

**Excludes unrealized gains and losses (see page 13)

SECTION I - SUMMARY OF THE VALUATION (Cont'd)

The investment yields should be compared with the assumed return of 8%. In recent years, the total benefit payments have grown at a faster rate than the contributions to the plan and benefit payments now exceed the level of plan contributions. However the total income to the fund, including investment income, still exceeds the benefit outgo.

Actuarial Method and Assumptions

Exhibit IV describes the actuarial method adopted to calculate the contribution rates for each unit and also describes the actuarial assumptions utilized.

The assumptions remained unaltered since the previous valuation of June 30, 1993.

Participant Data

Section II discusses the participant data in detail and Exhibit III provides charts showing key statistics for each unit's participant data.

We received the participant data from the Retirement System. There were 5,387 current active participants in the general employee units and 656 police and firemen. These figures represent decreased participation and result from the fact that there were more retirements and terminations than new hires during the year. The number of current retirees reported was 2,803, up from 2,720 in the previous year.

Changes in the Retirement System

The following new units have been included in the valuation of the Municipal Retirement System as of June 30, 1994:

SECTION I - SUMMARY OF THE VALUATION (Cont'd)

Smoothed Contribution Rate

Exhibit IV describes the smoothed contribution rate option. The following units are eligible to elect the option for fiscal 1997.

	<u>Unit</u>	<u>Contribution Rate</u>	<u>Smoothed Contribution Rate</u>
3029	Richmond	4.65%	3.82%
3036	Westerly	54.81%	46.15%
3045	Coventry Lighting District	42.68%	39.81%
3067	East Smithfield Water	13.34%	8.12%
4042	Valley Falls Fire	29.18%	25.76%

In determining whether a unit is eligible to elect a smoothed contribution rate, we have calculated whether the difference between the fiscal 1996 cost, adjusted for benefit improvements, if any, and the fiscal 1997 cost exceeds 2%. The only exception to this rule applies for units which were eligible for a smoothed rate for fiscal 1996. In those cases we have compared the fiscal 1996 smoothed rate with the fiscal 1997 cost.

SECTION II - EMPLOYEE DATA

Active Employees

A summary of the key employee statistics as of June 30, 1994 is as follows:

	<u>General Employees</u>		<u>Policemen and Firemen</u>	
	<u>June 30, 1994</u>	<u>June 30, 1993</u>	<u>June 30, 1994</u>	<u>June 30, 1993</u>
Number of Covered Employees	5,387	5,508	656	703
Average Annual Salary	\$20,900	\$19,800	\$31,200	\$29,000
Average Age (years)	46.9	46.2	35.2	34.7
Average Service (years)	10.0	9.6	9.1	8.4
Number of Vested Employees	1,992	1,909	213	219
Number of Employees Eligible for Retirement	615	594	59	57

The average annual salary for general employees increased by 5.6%. This is due to a combination of several factors. Average salaries for continuing members increased by 8.5%. However, this increase was offset by the addition of new employees earning less than current members or retirees whom they replaced. The ratio of average salaries of new entrants to the average salaries of terminated employees was approximately 78%.

The average annual salary for policemen and firemen rose by 7.6%. As above, however, policemen and firemen employed continuously throughout the year experienced an average pay increase of 10.8% and new hires were paid approximately half that of the terminating employees they were replacing.

SECTION II - Employee Data (Cont'd)

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 employees within the same municipal group. For active general employees there were 255 missing salaries, 219 missing dates of birth, and 277 missing dates of hire. For policemen and firemen there were approximately 12 missing dates of birth, and 26 missing hire dates. The impact of missing data varies depending on the individual unit and the data missing from that unit.

This year there were more missing data items than last year.

Tables 1A and 1B provide a distribution of employees by age and service for general employees and policemen and firemen, respectively.

Retirees and Beneficiaries

The data provided for retirees and beneficiaries 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:

	<u>June 30, 1994</u>	<u>June 30, 1993</u>
Pensioners		
Number	2,661	2,599
Average Age	70.2	69.9
Average Monthly Benefit	\$ 562	\$ 533
Beneficiaries		
Number	142	121
Average Age	69.0	68.9
Average Monthly Benefit	\$ 423	\$ 406

SECTION II - Employee Data (Cont'd)

The increase in the average monthly benefit can be attributed in part to the ratio of the average benefits payable to those who died in the past year versus those who retired. This ratio was 44%, indicating that the new retirees have over twice as large a pension as those retirees who died in the past year. Furthermore, there were 77% more new pensioners than departing pensioners during the year. The increase in average monthly benefits can also be partly attributed to increases caused by cost of living adjustments.

Table 2 shows distributions for pensions in payment status as of June 30, 1994 by age and pension type. This table also indicates total monthly pension payments by age, average payments by age, and total monthly payments by type.

Exhibit III shows a summary of key data statistics for each municipality as of June 30, 1994 and June 30, 1993.

Table 1A - Distribution of Municipal General Employees in Active Service at June 30, 1994

<u>Age</u>	<u>Years of Service and Average Annual Earnings</u>										<u>Total</u>	
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40+</u>	<u>0</u>		
20-24	52	3										55
	\$16,868	20,846										17,085
25-29	146	114	2									262
	19,686	22,551	26,034									20,981
30-34	140	198	42	9								389
	20,300	22,611	23,463	23,046								21,888
35-39	258	263	85	51	12							669
	17,858	21,177	24,340	25,412	21,908							20,648
40-44	280	312	245	99	69	19						1,024
	17,622	20,929	16,696	27,673	25,619	25,661						20,053
45-49	187	299	161	83	66	31	6					833
	18,508	19,460	20,816	24,960	29,039	32,865	30,672					21,388
50-54	126	223	147	109	87	32	8	6				738
	20,305	19,922	20,845	24,350	24,481	29,413	30,604	24,901				21,904
55-59	79	167	102	127	87	42	15	2	7			628
	19,001	21,303	22,604	22,123	20,908	25,219	29,398	23,969	22,607			21,814
60-64	53	155	73	77	75	39	4	1	2			479
	19,800	20,380	21,502	21,890	22,027	19,325	22,185	37,104	30,844			20,995
65-69	19	56	33	44	33	23	3		6			217
	14,734	17,120	21,470	21,707	19,515	18,078	13,824		29,808			19,273
70-74	1	9	6	13	16	13	1	1	3			63
	27,857	10,419	20,596	17,586	19,808	13,961	12,012	1,750	25,303			16,856
75+	3	4	2	14	1	4	2					30
	16,139	15,405	18,550	15,990	33,796	8,374	14,006					15,543
TOTAL	1,344	1,803	898	626	446	203	39	10	18			5,387
	18,646	20,689	20,442	23,759	23,654	24,055	26,014	23,393	25,217			20,929

Table 1B - Distribution of Policemen and Firemen in Active Service at June 30, 1994

Age	Years of Service and Average Annual Earnings										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
0-19											0
20-24	34 27,261										34 27,261
25-29	92 28,371	60 31,916	1 15,212								153 29,675
30-34	60 28,708	90 30,321	22 30,258								172 29,750
35-39	25 29,328	46 31,013	44 32,237	16 32,594	16 36,262						131 31,296
40-44	9 33,337	9 30,701	18 32,987	18 33,550	21 35,158	4 35,608					70 33,631
45-49	4 31,370	5 36,205	6 34,121	9 29,792	7 34,906	5 44,040	2 46,966				49 33,874
50-54			3 29,372	6 35,765	7 35,562	2 37,690	1 43,613				23 37,442
55-59	3 36,557	1 48,688	1 49,546	2 26,573	2 34,928		1 54,992				17 36,999
60-64	1 37,779			1 28,159	1 43,163						5 38,157
65-69		1 45,489									2 44,326
70-74											0
75+											0
TOTAL	228 28,797	212 31,235	95 31,952	52 32,489	54 35,645	11 40,240	4 48,134				656 31,200

Table 2 - Distribution of Retirees and Beneficiaries at June 30, 1994

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type							Percent of Pensioners/ Average Pension
	Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities	Total by Age			
< 30	0	1	1	0	2		0.07%	
30-39	\$ 0	\$ 290	\$ 1,575	\$ 0	\$ 1,865	\$	933	
40-49	0	2	3	3	8	\$	0.29%	
	0	651	4,399	964	6,014	\$	752	
50-54	22	4	12	10	48	\$	1.71%	
	34,191	3,128	16,242	5,169	58,730	\$	1,224	
55-59	38	4	9	18	69	\$	2.46%	
	64,591	2,335	10,632	7,561	85,119	\$	1,234	
60-64	87	10	11	24	132	\$	4.71%	
	120,883	6,421	10,571	9,891	147,766	\$	1,119	
65-69	371	26	12	26	435	\$	15.52%	
	283,775	14,433	9,588	7,747	315,543	\$	725	
70-74	645	26	9	21	701	\$	25.01%	
	392,705	11,577	8,607	6,271	419,160	\$	598	
75-79	612	25	9	18	664	\$	23.69%	
	279,063	7,234	5,469	4,651	296,417	\$	446	
80-84	367	25	4	6	402	\$	14.34%	
	127,043	7,117	1,997	1,204	137,361	\$	342	
85-89	215	15	0	2	232	\$	8.28%	
	55,719	5,421	0	425	61,565	\$	265	
90-94	75	4	0	0	79	\$	2.82%	
	19,736	1,410	0	0	21,146	\$	268	
95+	26	0	0	1	27	\$	0.96%	
	4,541	0	0	56	4,597	\$	170	
	3	0	0	1	4	\$	0.14%	
	422	0	0	56	478	\$	120	
Total	2,461	142	70	130	2,803	\$	100.00%	
	1,382,669	60,017	69,080	43,995	1,555,761	\$	555	

SECTION III - PLAN ASSETS

The Fund receives all member and employer contributions. The assets are invested by the State Investment Commission, with the investment earnings being added to the Fund and available for reinvestment. Payments from the Fund are primarily for refunds of employee contributions, lump sum death benefits, and pension payments. Contribution refunds occur when an employee terminates employment before completing 10 years of service and elects to take a refund, or when he or she dies after retirement without having received payments from the Fund equal to his or her total contributions.

As of the July 1, 1991 actuarial valuation, the value of assets utilized to assess the contribution rates, referred to as the actuarial value of assets, was altered from the book value of assets to a market related value of assets. The actuarial value recognizes investment gains and losses, relative to the assumed 8% return, over a three year period, and is developed in Table 3. The actuarial value of assets for each unit is assessed in proportion to the amount of reserves allocated to each unit relative to the total reserves is shown in Table 7.

During fiscal 1994, the investment earnings represented 2.20% of the average market value of assets of the Fund during the fiscal year as reported by Wilshire Associates. The yield for the previous fiscal year was 11.10%.

Table 4 provides a summary of income and expenses for the years ended June 30, 1994 and 1993. For the plan year ended June 30, 1994, the market value of the Municipal Employees' Retirement Fund showed a net decrease of \$5,558,787 from \$437,548,896 to \$431,990,109. The decrease is represented by net income of \$25,614,264 and unrealized assets losses during the year of \$31,173,051.

SECTION III - PLAN ASSETS (Cont'd)

Table 5 provides a distribution of the assets by category of investment. As of June 30, 1994, the Fund was comprised of 51.6% equities, 34.8% fixed income securities, 3.8% real estate and venture capital, with the balance, 9.8%, held in cash, short term paper, and other highly liquid assets.

The financial statements indicate that 84.8% of the assets are allocated to general employees and 15.2% are for policemen and firemen. There is also a small unallocated reserve for unclaimed benefits.

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

1. Actuarial Asset Value at June 30, 1993	\$ 413,105,554
2. Contributions	
a. Employees	9,322,182
b. Employers	5,188,321
c. Miscellaneous	<u>212,753</u>
d. Total	\$ 14,723,256
3. Disbursements	
a. Pensions in payment	18,489,371
b. Death Benefits	563,990
c. Refund of Employee Contributions	<u>782,894</u>
d. Total	\$ 19,836,255
4. Assumed Return at 8.00%	
a. On Beginning of Year Assets	33,048,444
b. On Contributions	588,930
c. On Benefit Payments	<u>(793,450)</u>
d. Total	\$ 32,843,924
5. Tentative Actuarial Asset Value June 30, 1994	
1. + 2.d. - 3.d. + 4.d.	440,836,479
6. Market Value June 30, 1994	431,990,109
7. Excess of Market Value over Tentative Actuarial Asset Value	(8,846,370)
8. Prior Adjustments not Recognized	
1993 x 2	17,681,098
1992 x 1	<u>6,762,245</u>
Total	24,443,343
9. Current Year Investment Gain/(Loss)	(33,289,713)
10. Current Year Adjustment to be recognized (1/3 of Gain/(Loss))	(11,096,571)
11. Cumulative Adjustment	
1994	(11,096,571)
1993	8,840,549
1992	<u>6,762,245</u>
Total	4,506,223
12. Actuarial Asset Value on June 30, 1994	
5. + 11	445,342,702

Table 4
Summary Statement of Income and Expenses

	1994	1993
Employer contributions	\$ 5,188,321	\$ 9,005,074
Member contributions	<u>9,322,182</u>	<u>8,841,514</u>
Total contributions	\$ 14,510,503	\$ 17,846,586
Net miscellaneous items	212,753	176,261
Investment income:		
Dividends	\$ 5,306,249	
Interest	13,295,957	\$ 4,727,363
Capital gains	9,105,769	12,451,175
Miscellaneous	<u>3,019,288</u>	10,331,874
Net investment income	<u>30,727,263</u>	<u>26,711,181</u>
Total income available for benefit payments	\$ 45,450,519	\$ 44,734,028
Benefit payments:		
Pension benefits	\$ 18,489,371	\$ 17,029,905
Death benefits	563,990	670,392
Contribution refunds	<u>782,894</u>	<u>728,323</u>
Total benefit payments	<u>19,836,255</u>	<u>18,428,620</u>
Excess of income over expenses	\$ <u>25,614,264</u>	\$ <u>26,305,408</u>

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

Table 5
Composition of Plan Assets at Market Value
June 30, 1994

Cash/Short Term Investments		
Short Term Investment Fund		
Money Market Instruments	\$ 42,489,833	9.8%
Equities - Domestic	203,408,173	47.1%
Equities - International	19,450,594	4.5%
Fixed Income - Government	133,300,294	30.9%
Fixed Income - Corporate	16,663,628	3.9%
Real Estate and		
Venure Capital	<u>16,677,587</u>	<u>3.8%</u>
TOTAL FUND INVESTMENTS	\$ 431,990,109	100.0%

SECTION IV - RESULTS OF THE VALUATION

The purpose of the actuarial valuation of the System as of July 1, 1994 is to calculate the contribution requirements for the 1997 fiscal year.

The table below sets out the results of the valuation in the aggregate.

General Employees

The costs for general employees computed as of June 30, 1994 for fiscal 1997 are developed as follows:

<u>Item</u>	Fiscal 1997		
	<u>Amount</u>	<u>% of Payroll</u>	<u>Previous Year</u>
1. Participating payroll	\$ 112,745,900	---	
2. Total normal cost	8,916,500	7.91%	8.01%
3. Employee Contributions	7,386,000	6.55%	6.53%
4. Employer Normal Cost 2. - 3.	1,530,500	1.36%	1.48%
5. Amortization of unfunded actuarial liability	571,100	0.51%	0.47%
6. Total annual cost = 4. + 5.	2,101,600	1.86%	1.95%
7. Total annual cost payable monthly = 6. plus 1/2 year interest	2,185,700	1.94%	2.03%

The funding method calculates a normal cost which remains level as a percentage of payroll over each participant's working life. The normal cost for the whole System will remain stable if the average age at entry remains stable. The total normal cost percentage for general employees remained relatively stable, decreasing from 8.01% of payroll to 7.91%.

SECTION IV - RESULTS OF THE VALUATION (Cont'd)

Police and Fire

The costs for police and fire units computed as of June 30, 1994 for fiscal 1997 are developed as follows:

<u>Item</u>	Fiscal 1997		<u>Previous Year</u>
	<u>Amount</u>	<u>% of Payroll</u>	
1. Participating payroll	\$ 20,467,500	---	
2. Total normal cost	2,568,600	12.55%	12.47%
3. Employee Contributions	1,676,000	8.19%	8.13%
4. Employer Normal Cost 2. - 3.	892,600	4.36%	4.34%
5. Amortization of unfunded actuarial liability	172,600	0.84%	0.99%
6. Total annual cost 4. + 5.	1,065,200	5.20%	5.33%
7. Total annual cost payable monthly = 6. plus 1/2 year interest	1,107,800	5.41%	5.54%

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

The total normal cost percentage for police and fire units increased from 12.47% to 12.55%. This increase is due to the adoption of COLA's by a few units since the last year.

SECTION IV - RESULTS OF THE VALUATION (Cont'd)

Exhibit 1 shows that the total unfunded liability for general employees was \$4,931,300 and for policemen and firemen was \$1,839,700. These figures equal the sum of the individual unit's unfunded liabilities with negative unfunded liabilities (i.e. assets exceed liabilities) for certain units set equal to zero.

Table 6 shows the normal cost and past service cost for each unit and also the employer costs produced by the previous two actuarial valuations.

Table 7 shows each unit's reserves, accrued liabilities and vested liabilities. In aggregate the assets cover the value of vested liabilities.

GASB Disclosure Information

Exhibit II provides the pension benefit obligation amounts required for disclosure by the Governmental Accounting Standards Board (GASB) Statement No. 5. Liabilities are shown in the aggregate and for each unit separately.

SECTION IV - RESULTS OF THE VALUATION (Cont'd)

GASB Statement #5 requires the calculation of a standardized measure called the "pension benefit obligation" which is independent of the actuarial funding method. This amount is the actuarial present value of projected benefits prorated by service credited to date. It differs from the "value of vested benefits" due to:

- inclusion of future salary increases,
- inclusion of non-vested benefits, and
- proration of benefits over projected service.

For the entire Retirement System, the "pension benefit obligation" as of June 30, 1994 is \$312,497,600. Approximately one-half of this amount is attributable to benefits on behalf of active employees and the other half is attributable to the benefits of pensioners and inactive employees not yet receiving benefits.

Table 6 - Recommended Employer Contribution Rates

MUNICIPALITY		EMPLOYEE CONTRIBUTION RATE	FISCAL 1997			Total Employer Rates for the Fiscal Years	
			EMPLOYER NORMAL COST	PAST SERVICE COST	TOTAL EMPLOYER RATE	1996	1995
General Employees							
1		6.00%	1.56%	0.00%	1.56%	1.67%	1.60%
2	B	7.00%	0.46%	0.00%	0.46%	0.73%	0.82%
3	C	7.00%	2.83%	0.00%	2.83%	3.33%	3.75%
4		6.00%	0.44%	15.98%	16.42%	18.04%	13.00%
5	C	7.00%	1.47%	13.24%	14.71%	13.67%	14.84%
7	B	7.00%	1.40%	0.00%	1.40%	1.60%	1.54%
8		6.00%	3.11%	0.00%	3.11%	3.14%	3.18%
9		6.00%	1.33%	0.00%	1.33%	1.17%	1.29%
10	B	7.00%	2.13%	0.00%	2.13%	2.04%	2.19%
11		6.00%	3.25%	0.00%	3.25%	3.48%	3.62%
12		6.00%	0.61%	2.00%	2.61%	5.43%	3.27%
13		6.00%	2.73%	0.00%	2.73%	2.80%	3.32%
14		6.00%	2.22%	0.00%	2.22%	2.32%	2.31%
15	C	7.00%	0.70%	0.00%	0.70%	0.94%	1.09%
16	C	7.00%	1.35%	0.00%	1.35%	1.57%	1.99%
21	B	7.00%	0.28%	0.00%	0.28%	0.44%	0.45%
22		6.00%	1.03%	0.99%	2.02%	1.74%	3.21%
23		6.00%	1.65%	0.00%	1.65%	1.85%	1.75%
24		6.00%	1.16%	0.00%	1.16%	0.76%	0.66%
25		6.00%	2.88%	0.00%	2.88%	3.26%	3.03%
26	C	7.00%	1.30%	0.00%	1.30%	1.38%	0.72%
29		6.00%	1.27%	3.38%	4.65%	1.82%	1.88%
30	B	7.00%	2.55%	0.00%	2.55%	2.08%	2.24%
31		6.00%	1.86%	0.00%	1.86%	1.98%	2.33%
32		6.00%	1.32%	0.00%	1.32%	1.52%	1.38%
33		6.00%	2.75%	0.00%	2.75%	3.97%	3.34%
34		6.00%	1.19%	0.00%	1.19%	1.82%	1.73%
36		6.00%	4.38%	50.43%	54.81%	44.89%	42.15%
37		6.00%	4.27%	0.72%	4.99%	4.44%	4.68%
39		6.00%	1.64%	0.00%	1.64%	1.82%	1.99%
40		6.00%	2.22%	0.00%	2.22%	2.28%	2.18%
41	B	7.00%	5.63%	0.00%	5.63%	4.44%	4.82%
42	C	7.00%	1.96%	11.75%	13.71%	---	---
43		6.00%	3.10%	2.47%	5.57%	---	---
44	1	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
45		6.00%	0.00%	42.68%	42.68%	53.44%	63.41%
46	C	7.00%	6.87%	14.78%	21.65%	24.03%	22.60%
51		6.00%	3.00%	0.00%	3.00%	3.11%	3.49%
52		6.00%	3.97%	0.00%	3.97%	2.71%	2.93%
53	B	7.00%	1.63%	0.00%	1.63%	1.57%	1.20%
56		6.00%	2.60%	0.09%	2.69%	2.24%	2.51%
57	B	7.00%	4.18%	0.00%	4.18%	4.66%	5.60%
59		6.00%	2.30%	0.00%	2.30%	2.34%	0.77%
65		6.00%	3.57%	0.00%	3.57%	3.71%	3.23%
66	B	7.00%	4.61%	0.00%	4.61%	4.31%	4.84%
67	C	7.00%	3.96%	9.38%	13.34%	6.12%	6.75%
68		6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
71		6.00%	4.03%	0.00%	4.03%	3.71%	1.75%
72		6.00%	2.57%	0.00%	2.57%	4.29%	4.87%
79		6.00%	3.84%	0.00%	3.84%	4.10%	4.38%
83		6.00%	3.32%	0.00%	3.32%	3.29%	3.11%
84		6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
96		6.00%	3.56%	16.78%	20.34%	23.26%	25.50%
98		6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
99		6.00%	2.73%	3.45%	6.18%	5.84%	11.04%
100		6.00%	2.56%	0.00%	2.56%	2.89%	2.63%

Table 6 - Recommended Employer Contribution Rates

MUNICIPALITY		EMPLOYEE CONTRIBUTION RATE	FISCAL 1997			Total Employer Rates for the Fiscal Years		
			EMPLOYER NORMAL COST	PAST SERVICE COST	TOTAL EMPLOYER RATE	1996	1995	
Police and Fire								
42	Valley Falls Fire	D	8.00%	4.33%	24.85%	29.18%	23.76%	18.14%
46	Lime Rock Fire	1	7.00%	1.68%	2.06%	3.74%	3.74%	3.74%
47	North Smithfield Vol. Fire	D	8.00%	5.82%	0.00%	5.82%	5.97%	6.97%
50	East Greenwich Fire	D	8.00%	5.36%	0.00%	5.36%	5.39%	5.46%
54	East Greenwich Police	D	8.00%	4.93%	0.00%	4.93%	5.24%	5.02%
55	North Kingstown Fire	D	8.00%	4.68%	0.00%	4.68%	4.59%	4.69%
58	North Providence Police & Fire	D	8.00%	4.40%	0.00%	4.40%	4.41%	4.60%
60	Barrington Police	D	8.00%	4.54%	0.59%	5.13%	4.18%	2.94%
61	Barrington Fire		7.00%	3.34%	0.00%	3.34%	3.11%	3.17%
62	Warren Police	C,D	9.00%	6.56%	0.00%	6.56%	5.13%	5.65%
63	South Kingstown Police & Fire	C	8.00%	3.98%	0.00%	3.98%	3.68%	3.69%
64	Primrose Volunteer Fire	B,D	9.00%	7.41%	0.00%	7.41%	5.98%	5.57%
76	North Smithfield Police	D	8.00%	4.09%	0.00%	4.09%	4.22%	5.54%
77	Tiverton Fire	D	8.00%	3.05%	0.00%	3.05%	4.52%	4.54%
82	Foster Police	D	8.00%	3.26%	0.00%	3.26%	3.89%	3.44%
85	Woonsocket Police	C,D	9.00%	6.24%	0.00%	6.24%	6.29%	6.23%
86	Charlestown Police		7.00%	3.82%	0.00%	3.82%	3.78%	3.96%
87	Hopkinton Police	D	8.00%	3.15%	0.00%	3.15%	3.08%	5.05%
88	Glocester Police	C,D	9.00%	4.92%	0.00%	4.92%	8.62%	6.48%
89	West Greenwich Police		7.00%	3.18%	0.00%	3.18%	2.85%	4.94%
90	Burrillville Police	C,D	9.00%	8.96%	0.00%	8.96%	8.64%	7.00%
91	Cumberland Police	D	8.00%	4.19%	0.00%	4.19%	4.54%	2.80%
92	Washington Fire		7.00%	3.12%	0.00%	3.12%	3.70%	4.54%
93	Woonsocket Fire	C,D,2	9.00%	6.14%	0.00%	6.14%	6.36%	7.11%
94	Bristol Fire		7.00%	6.40%	0.00%	6.40%	6.42%	6.42%
95	Cumberland Hill Fire	C,D	9.00%	7.05%	5.94%	12.99%	14.59%	5.01%
98	Coventry Fire		7.00%	2.71%	3.58%	6.29%	7.47%	10.74%
100	Tiogue Fire	C	7.00%	3.47%	6.67%	10.14%	10.59%	10.31%
101	North Cumberland	D	8.00%	3.32%	5.37%	8.69%	9.40%	8.20%
102	Central Coventry Fire		7.00%	3.39%	4.74%	8.13%	8.92%	10.72%
103	Hopkins Hill Fire		7.00%	2.63%	0.00%	2.63%	2.26%	3.33%
106	Cumberland Fire	D	8.00%	4.98%	9.83%	14.81%	18.99%	12.50%
107	Lincoln Rescue		7.00%	2.89%	4.99%	7.88%	8.83%	9.15%

NOTES

- B - Municipality has adopted COLA Plan B
- C - Municipality has adopted COLA Plan C
- D - Municipality has adopted the "20-year" optional Police & Fire Plan

- 1 - No data was reported for either Souther RI Collaborative or Lime Rock Fire.
- 2 - By special agreement, the Woonsocket Firefighters are currently contributing 8.0% of salary; please note that the above employer costs assume an employee contribution of 9.0%.

Table 7 - Liabilities and Funded Status as of June 30, 1994

MUNICIPALITY		ACTUARIAL VALUE OF ASSETS	TOTAL ACCRUED LIABILITY	VESTED LIABILITY	TOTAL UNFUNDED LIABILITY	UNFUNDED VESTED LIABILITY
General Employees						
1 Barrington		\$12,391,147	\$8,660,861	\$6,707,214	\$0	\$0
2 Bristol	B	8,585,604	6,516,629	4,892,906	0	0
3 Burrillville	C	8,801,300	7,081,763	4,726,624	0	0
4 Central Falls		713,815	2,806,032	1,966,705	2,092,217	1,252,890
5 Charlestown	C	296,721	1,026,875	670,333	730,154	373,612
7 Cranston	B	63,396,048	47,610,725	33,371,974	0	0
8 Cumberland		8,400,904	7,829,472	5,777,770	0	0
9 East Greenwich		9,239,463	6,172,211	4,696,574	0	0
10 East Providence	B	39,600,421	32,917,202	25,894,130	0	0
11 Exeter/West Greenwich		1,621,001	1,252,935	692,394	0	0
12 Foster		1,064,795	1,167,327	842,663	102,532	0
13 Glocester		1,282,416	1,197,452	884,858	0	0
14 Hopkinton		1,237,568	914,142	573,044	0	0
15 Jamestown	C	2,890,085	2,299,724	1,524,320	0	0
16 Johnston	C	16,153,755	13,858,611	10,275,960	0	0
21 Newport	B	25,000,703	23,543,916	16,091,077	0	0
22 New Shoreham		1,060,634	1,159,451	771,388	98,817	0
23 North Kingstown		14,316,069	11,756,879	8,841,840	0	0
24 North Providence		12,927,936	9,035,447	7,421,181	0	0
25 North Smithfield		6,073,725	3,872,659	3,072,958	0	0
26 Pawtucket	C	48,556,200	42,604,287	29,964,683	0	0
29 Richmond		398,339	524,312	352,582	125,973	0
30 Scituate	B	4,457,571	3,735,144	2,642,963	0	0
31 Smithfield		9,875,576	6,767,328	5,077,167	0	0
32 South Kingstown		13,475,886	9,189,947	6,045,788	0	0
33 Tiverton		6,300,113	4,394,210	3,578,024	0	0
34 Warren		3,833,665	3,678,935	3,276,529	0	0
36 Westerly		760,494	1,008,870	1,004,421	248,376	243,927
37 West Greenwich		504,288	530,110	383,473	25,822	0
39 Woonsocket		31,716,554	20,822,143	16,444,891	0	0
40 Chariho School Dist.		2,739,234	2,544,885	1,383,131	0	0
41 Foster/Glocester	B	1,309,100	1,235,781	750,212	0	0
42 Tiogue Fire & Lighting	C	4,877	12,409	3,684	7,532	0
43 Narragansett Housing		5,095	13,110	2,145	8,015	0
44 Southern RI Collaborative	1	1,754	0	591	0	0
45 Coventry Lighting Dist.		179,309	409,713	324,153	230,404	144,844
46 Hope Valley Fire	C	24,581	71,115	46,671	46,534	22,090
51 Cranston Housing		1,169,915	782,407	578,058	0	0
52 East Providence Housing		1,034,979	508,291	458,657	0	0
53 Pawtucket Housing	B	4,311,844	2,457,693	1,901,310	0	0
56 Cumberland Housing		547,394	549,020	459,587	1,626	0
57 Lincoln Housing	B	685,260	556,632	429,974	0	0
59 Bristol Housing		661,253	430,316	281,013	0	0
65 Burrillville Housing		249,200	86,396	55,830	0	0
66 North Providence Housing	B	408,407	232,861	146,188	0	0
67 East Smithfield Water	C	179,088	284,450	109,743	105,362	0
68 Greenville Water		402,022	300,903	182,080	0	0
71 Warren Housing		425,364	283,789	189,242	0	0
72 Johnston Housing		407,003	264,639	213,466	0	0
79 Coventry Housing		433,657	366,125	317,501	0	0
83 West Warwick Housing		391,405	367,143	236,527	0	0
84 Smithfield Housing		83,685	62,983	67,602	0	0
96 Central Falls Housing		570,213	1,109,714	974,967	539,501	404,754
98 Lime Rock Administrative Svcs.		16,249	13,144	3,954	0	0
99 Central Falls Schools		1,167,352	1,735,791	730,558	568,439	0
100 Bristol/Warren Schools		5,186,541	2,368,461	1,310,507	0	0

Table 7 - Liabilities and Funded Status as of June 30, 1994

MUNICIPALITY		ACTUARIAL VALUE OF ASSETS	TOTAL ACCRUED LIABILITY	VESTED LIABILITY	TOTAL UNFUNDED LIABILITY	UNFUNDED VESTED LIABILITY
Police and Fire						
42 Valley Falls Fire	D	\$361,012	\$1,119,056	\$853,344	\$758,044	492,332
46 Lime Rock Fire	1	118,121	9,033	\$18,067	0	0
47 North Smithfield Vol. Fire	D	204,876	191,255	\$83,103	0	0
50 East Greenwich Fire	D	3,515,146	2,509,510	\$2,051,279	0	0
54 East Greenwich Police	D	4,606,932	2,535,142	\$2,040,945	0	0
55 North Kingstown Fire	D	10,770,727	8,718,273	7,257,599	0	0
58 North Providence Police & Fire	D	7,788,978	5,960,178	3,817,070	0	0
60 Barrington Police	D	3,654,371	3,702,421	3,234,254	48,050	0
61 Barrington Fire		6,085,541	4,226,169	4,188,399	0	0
62 Warren Police	C,D	3,523,526	3,115,496	2,403,001	0	0
63 South Kingstown Police & Fire	C	7,287,569	4,268,359	2,889,996	0	0
64 Primrose Volunteer Fire	B,D	776,800	536,260	271,697	0	0
76 North Smithfield Police	D	2,495,114	1,783,243	1,163,530	0	0
77 Tiverton Fire	D	3,239,951	2,233,290	1,800,853	0	0
82 Foster Police	D	680,451	394,149	265,599	0	0
85 Woonsocket Police	C,D	3,676,206	2,728,724	1,423,311	0	0
86 Charlestown Police		761,500	693,669	473,681	0	0
87 Hopkinton Police	D	622,513	364,856	241,515	0	0
88 Gloucester Police	C,D	656,856	542,616	224,390	0	0
89 West Greenwich Police		399,238	332,086	207,245	0	0
90 Burrillville Police	C,D	1,869,901	1,199,815	937,556	0	0
91 Cumberland Police	D	463,664	245,219	127,920	0	0
92 Washington Fire		207,312	191,896	93,570	0	0
93 Woonsocket Fire	C,D,2	1,927,917	1,638,414	753,740	0	0
94 Bristol Fire		33,801	18,812	8,930	0	0
95 Cumberland Hill Fire	C,D	489,110	659,865	351,695	170,755	0
98 Coventry Fire		369,684	447,536	199,663	77,852	0
100 Tiogue Fire	C	85,621	185,647	68,998	100,026	0
101 North Cumberland	D	346,652	559,175	245,969	212,523	0
102 Central Coventry Fire		235,856	317,872	247,559	82,016	11,703
103 Hopkins Hill Fire		34,004	16,879	19,003	0	0
106 Cumberland Fire	D	248,580	467,299	362,625	218,719	114,045
107 Lincoln Rescue		133,224	304,907	84,151	171,683	0

NOTES

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - No data was reported for either Southern RI Collaborative or Lime Rock Fire.

2 - The above exhibit does not include the liabilities in respect of the closed South Kingstown Housing and Scituate Police units.

MUNICIPAL 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 Factors as of June 30, 1994

- A. General employees
- B. Police and firemen

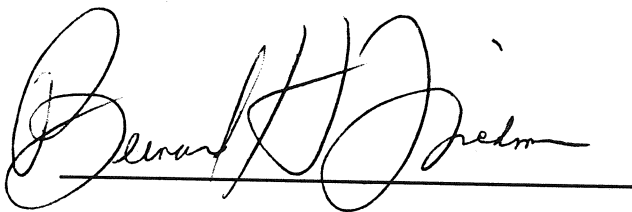
EXHIBIT II - Pension Benefit Obligation

EXHIBIT III - Participant Information

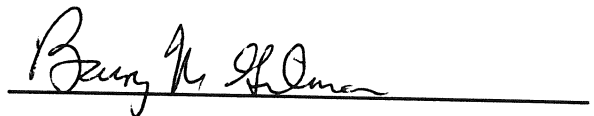
EXHIBIT IV - Actuarial Method and Assumptions

EXHIBIT V - Summary of Plan Provisions

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate (except as noted in Exhibit I) and in our opinion the assumptions used in the aggregate (a) are reasonably related to the experience of the plan and to reasonable expectations and (b) represent 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 - ACTUARIAL COST FACTORS AS OF JUNE 30, 1994

A. GENERAL EMPLOYEES

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

- a. 5,387 active participants (including 1,992 fully vested) with total annual salaries of \$112,745,900)
- b. 914 inactive participants
- c. 2,649 pensioners (including 136 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost		\$	8,916,500
2. Projected employee contributions			7,386,000
3. Employer normal cost			1,530,500
4. Actuarial liability			
Active employees	\$	167,114,300	
Inactive employees		4,296,600	(a)
Pensioners (including beneficiaries of deceased pensioners and active employees)		129,600,300	
Total			301,011,200
5. Assets (Actuarial Value)			377,561,400
6. Unfunded actuarial liability			4,931,300 (b)
Liability for accrued vested benefits:	\$	219,623,800	(c)

- (a) The liability for inactive participants is equal to their outstanding contributions.
- (b) Equal to the sum of the individual municipalities unfunded liabilities with negative unfunded liabilities for certain units set equal to zero.
- (c) The liability for accrued vested benefits is based on the same retirement age assumptions as are costs, following the procedure required by Statement No. 5 of the Governmental Accounting Standards Board.
- (d) Detail figures may not add to totals shown because of rounding.
- (e) The assets and liabilities of the closed South Kingston Housing unit are included above, but are not shown in table 7.

EXHIBIT I - ACTUARIAL COST FACTORS AS OF JUNE 30, 1994 (Cont'd)

B. POLICE AND FIRE

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

- a. 656 active participants (including 213 fully vested) with total annual salaries of \$20,467,500)
- b. 80 inactive participants
- c. 154 pensioners (including 6 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost		\$	2,568,600
2. Projected employee contributions			1,676,000
3. Employer normal cost			892,600
4. Actuarial liability			
Active employees	\$	30,569,200	
Inactive employees		909,900	(a)
Pensioners (including beneficiaries of deceased pensioners and active employees)		20,788,200	
Total			52,267,300
5. Assets (Actuarial Value)			67,781,300
6. Unfunded actuarial liability			1,839,700 (b)
Liability for accrued vested benefits:	\$	38,410,300	(c)

- (a) The liability for inactive employees is equal to their outstanding contributions.
- (b) Equal to the sum of the individual municipalities unfunded liabilities with negative unfunded liabilities for certain units set equal to zero.
- (c) The liability for accrued vested benefits is based on the same retirement age assumptions as are costs, following the procedure required by Statement No. 5 of the Governmental Accounting Standards Board.
- (d) Detail figures may not add to totals shown because of rounding.
- (e) The assets and liabilities of the closed Scituate Police unit are included above, but are not shown in table 7.

EXHIBIT II - 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.

	<u>Pension Benefit Obligation</u>		
	<u>General Employees</u>	<u>Police and Fire</u>	<u>Total</u>
1. Participants currently receiving benefits and terminated employees not yet receiving benefits	\$ 133,896,900	\$ 21,698,100	\$ 155,595,000
2. Current employees			
Accumulated employee contributions	49,371,000	9,696,500	59,067,500
Employer-financed vested	36,383,100	7,065,900	43,449,000
Employer-financed nonvested	<u>45,167,300</u>	<u>9,296,600</u>	<u>54,463,900</u>
3. Total pension benefit obligation	\$ 264,818,300	\$ 47,757,100	\$ 312,575,400

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

Exhibit II - PENSION BENEFIT OBLIGATION (Cont'd)

Pension Benefit Obligation as of June 30, 1994 by Plan

MUNICIPALITY		RETIREE AND INACTIVE LIABILITY	ACCUMULATED EMPLOYEE CONTRIBUTIONS	EMPLOYER FINANCED VESTED	EMPLOYER FINANCED NON-VESTED	TOTAL BENEFIT OBLIGATION
General Employees						
1	Barrington	\$4,565,600	\$1,367,400	\$774,200	\$1,080,900	\$7,788,100
2	Bristol	3,274,900	968,200	649,800	810,600	5,703,500
3	Burrillville	2,745,500	1,207,800	773,300	1,366,800	6,093,400
4	Central Falls	1,414,700	279,300	272,700	435,600	2,402,300
5	Charlestown	323,500	116,600	230,200	203,100	873,400
7	Cranston	16,995,700	8,188,800	8,187,400	7,688,200	41,060,100
8	Cumberland	3,821,200	1,310,600	646,000	1,289,700	7,067,500
9	East Greenwich	2,589,600	1,180,800	926,200	781,300	5,477,900
10	East Providence	19,358,000	4,216,800	2,319,300	3,903,700	29,797,800
11	Exeter/West Greenwich	272,200	272,300	147,900	332,900	1,025,300
12	Foster	442,400	216,200	184,100	143,900	986,600
13	Glocester	610,500	271,000	3,400	157,500	1,042,400
14	Hopkinton	278,000	182,700	112,400	181,000	754,100
15	Jamestown	781,200	441,800	301,300	380,500	1,904,800
16	Johnston	5,719,000	1,844,700	2,712,200	2,074,600	12,350,500
21	Newport	9,437,700	3,605,600	3,047,700	3,993,900	20,084,900
22	New Shoreham	396,000	228,400	147,000	169,100	940,500
23	North Kingstown	5,689,100	2,198,900	953,800	1,470,900	10,312,700
24	North Providence	4,155,900	1,942,900	1,322,400	713,900	8,135,100
25	North Smithfield	1,846,200	683,000	543,800	442,300	3,515,300
26	Pawtucket	18,933,800	6,901,300	4,129,600	7,707,800	37,672,500
29	Richmond	133,700	82,400	136,500	82,000	434,600
30	Scituate	1,484,300	606,500	552,100	628,500	3,271,400
31	Smithfield	2,607,500	1,256,400	1,213,300	992,700	6,069,900
32	South Kingstown	2,750,300	2,196,300	1,099,200	1,560,000	7,605,800
33	Tiverton	2,260,300	700,700	617,000	469,600	4,047,600
34	Warren	2,825,800	257,400	193,300	231,200	3,507,700
36	Westerly	894,900	109,500	0	31,100	1,035,500
37	West Greenwich	286,100	97,400	0	87,500	471,000
39	Woonsocket	11,523,700	3,173,300	1,747,800	2,317,900	18,762,700
40	Chariho School Dist.	450,000	602,500	330,700	624,300	2,007,500
41	Foster/Glocester	424,100	240,900	85,200	350,000	1,100,200
42	Tiogue Fire & Lighting	0	700	3,000	4,700	8,400
43	Narragansett Housing	0	2,100	0	9,000	11,100
44	Southern RI Collaborative	0	0	0	0	0
45	Coventry Lighting Dist.	0	21,900	302,200	53,000	377,100
46	Hope Valley Fire	0	4,100	42,600	19,500	66,200
51	Cranston Housing	404,900	142,700	30,400	117,100	695,100
52	East Providence Housing	323,300	135,400	0	39,100	497,800
53	Pawtucket Housing	1,243,900	485,100	172,400	263,300	2,164,700
56	Cumberland Housing	396,400	56,300	6,900	42,300	501,900
57	Lincoln Housing	297,900	74,900	57,200	94,300	524,300
59	Bristol Housing	118,500	80,700	81,700	88,800	369,700
65	Burrillville Housing	0	34,500	21,400	11,300	67,200
66	North Providence Housing	61,100	75,000	10,100	41,500	187,700
67	East Smithfield Water	35,900	26,900	46,900	128,300	238,000
68	Greenville Water	71,200	64,600	46,300	67,600	249,700
71	Warren Housing	61,600	61,700	66,000	61,800	251,100
72	Johnston Housing	174,100	36,600	2,800	27,700	241,200
79	Coventry Housing	197,400	57,900	62,200	29,500	347,000
83	West Warwick Housing	121,300	68,300	46,900	78,300	314,800
84	Smithfield Housing	55,100	12,500	0	0	67,600
96	Central Falls Housing	805,400	59,700	109,900	86,200	1,061,200
98	Lime Rock Administrative Svcs.	0	4,000	0	2,100	6,100
99	Central Falls Schools	195,800	234,600	300,200	630,900	1,361,500
100	Bristol/Warren Schools	13,900	682,400	614,200	568,000	1,878,500

Exhibit II - PENSION BENEFIT OBLIGATION (Cont'd)

Pension Benefit Obligation as of June 30, 1994 by Plan

MUNICIPALITY		RETIREE AND INACTIVE LIABILITY	ACCUMULATED EMPLOYEE CONTRIBUTIONS	EMPLOYER FINANCED VESTED	EMPLOYER FINANCED NON-VESTED	TOTAL BENEFIT OBLIGATION
Police and Fire						
42 Valley Falls Fire	D	\$489,400	\$61,300	302,600	\$177,300	1,030,600
46 Lime Rock Fire	1	9,000	9,000	0	0	18,000
47 North Smithfield Vol. Fire	D	100	59,500	23,500	71,100	154,200
50 East Greenwich Fire	D	1,621,900	336,100	93,300	303,800	2,355,100
54 East Greenwich Police	D	1,318,200	483,200	239,600	326,300	2,367,300
55 North Kingstown Fire	D	5,292,400	1,221,500	743,700	946,800	8,204,400
58 North Providence Police & Fire	D	1,283,800	1,363,900	1,169,300	1,536,800	5,353,800
60 Barrington Police	D	2,380,200	433,000	421,100	293,200	3,527,500
61 Barrington Fire		3,790,600	384,700	13,100	0	4,188,400
62 Warren Police	C,D	1,368,900	412,600	621,500	501,100	2,904,100
63 South Kingstown Police & Fire	C	1,192,600	952,400	745,000	945,900	3,835,900
64 Primrose Volunteer Fire	B,D	37,200	101,700	132,800	188,800	460,500
76 North Smithfield Police	D	331,800	357,400	474,400	470,300	1,633,900
77 Tiverton Fire	D	727,600	426,700	646,600	291,900	2,092,800
82 Foster Police	D	119,400	107,500	38,600	85,100	350,600
85 Woonsocket Police	C,D	332,600	998,300	92,400	773,600	2,196,900
86 Charlestown Police		316,200	157,500	0	160,800	634,500
87 Hopkinton Police	D	24,100	155,000	62,400	76,100	317,600
88 Gloucester Police	C,D	72,200	152,100	0	245,000	469,300
89 West Greenwich Police		9,600	73,900	123,800	85,700	293,000
90 Burrillville Police	C,D	749,500	188,100	0	191,700	1,129,300
91 Cumberland Police	D	15,900	100,200	11,900	64,300	192,300
92 Washington Fire		6,200	66,600	20,800	62,500	156,100
93 Woonsocket Fire	C,D,2	67,200	680,700	5,900	530,800	1,284,600
94 Bristol Fire		0	8,900	0	9,300	18,200
95 Cumberland Hill Fire	C,D	0	73,700	278,000	218,100	569,800
98 Coventry Fire		70,200	68,500	61,000	173,200	372,900
100 Tiogue Fire	C	0	20,500	48,500	94,500	163,500
101 North Cumberland	D	5,200	78,200	162,600	206,000	452,000
102 Central Coventry Fire		10,400	53,800	183,400	42,700	290,300
103 Hopkins Hill Fire		5,700	13,300	0	0	19,000
106 Cumberland Fire	D	0	52,400	310,200	65,700	428,300
107 Lincoln Rescue		0	44,300	39,900	158,200	242,400

NOTES

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - No data was reported for either Southern RI Collaborative or Lime Rock Fire.

2 - The above exhibit does not include the liabilities in respect of the closed South Kingstown Housing and Scituate Police units.

EXHIBIT III - PARTICIPANT INFORMATION

Active Employees as of June 30, 1994

Active Employees as of June 30, 1993

MUNICIPALITY	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY
General Employees								
1 Barrington	129	47.2	10.6	\$22,800	129	47.4	10.7	\$22,000
2 Bristol	82	44.1	11.9	23,500	76	43.1	10.3	22,500
3 Burrillville	144	47.4	9.3	21,700	133	47.1	8.5	20,100
4 Central Falls	53	42.3	9.1	25,800	50	41.4	8.1	22,200
5 Charlestown	25	43.1	7.7	24,600	27	39.0	6.3	22,400
7 Cranston	823	47.1	11.0	20,900	791	46.1	10.1	19,400
8 Cumberland	201	48.8	7.7	19,600	230	48.2	6.9	19,200
9 East Greenwich	124	47.1	10.1	20,500	131	46.3	9.4	19,200
10 East Providence	389	47.3	9.5	23,500	399	46.8	9.1	22,600
11 Exeter/West Greenwich	51	45.1	6.8	19,700	49	44.9	6.4	16,700
12 Foster	39	47.2	9.2	16,900	39	43.6	7.7	15,000
13 Gloucester	51	44.4	5.8	17,900	54	43.9	4.6	16,900
14 Hopkinton	29	44.7	8.1	21,800	24	43.4	6.2	20,300
15 Jamestown	43	42.7	9.5	25,400	41	42.5	9.5	24,200
16 Johnston	220	48.8	10.8	19,500	203	48.7	10.6	19,300
21 Newport	335	45.3	11.4	23,400	312	44.2	10.9	22,200
22 New Shoreham	42	43.1	7.2	26,200	34	43.0	6.4	20,800
23 North Kingstown	206	46.9	9.8	22,900	301	46.2	8.6	19,300
24 North Providence	197	49.2	11.5	15,300	250	47.1	10.7	16,700
25 North Smithfield	73	48.5	9.8	20,900	73	47.8	8.3	19,800
26 Pawtucket	614	47.4	11.4	21,500	648	46.6	10.8	20,500
29 Richmond	21	42.4	6.7	20,000	18	40.0	3.9	20,100
30 Scituate	79	50.4	10.1	16,200	77	49.3	9.3	16,800
31 Smithfield	126	49.3	10.5	23,700	121	48.6	10.0	22,700
32 South Kingstown	258	45.2	9.1	20,100	269	44.2	8.5	18,900
33 Tiverton	71	50.6	9.8	22,500	77	49.1	8.7	21,400
34 Warren	30	46.3	10.3	21,500	29	45.9	9.0	20,600
36 Westerly	3	59.4	9.3	27,200	4	57.7	16.3	40,400
37 West Greenwich	20	47.4	5.1	19,100	19	47.0	3.9	17,600
39 Woonsocket	385	47.0	9.5	18,900	379	46.6	8.8	19,100
40 Chariho School Dist.	110	44.3	7.5	18,100	113	43.7	6.5	16,900
41 Foster/Glocester	42	48.2	6.6	17,900	42	47.6	6.0	16,800
42 Tiogue Fire & Lighting	2	1	46.3	12.8	5,700	---	---	---
43 Narragansett Housing	2	2	46.2	3.4	19,500	---	---	---
44 Southern RI Collaborative	1	---	---	---	---	---	---	---
45 Coventry Lighting Dist.	3	58.3	27.5	33,800	3	57.3	26.5	31,100
46 Hope Valley Fire	1	58.8	13.5	32,100	1	57.8	10.9	28,900
51 Cranston Housing	15	45.7	7.1	26,300	15	46.1	6.8	25,200
52 East Providence Housing	9	47.3	6.5	24,300	13	48.7	7.5	25,300
53 Pawtucket Housing	43	43.0	7.4	26,200	42	43.4	7.3	24,500
56 Cumberland Housing	7	46.0	7.5	27,100	8	43.7	6.3	26,100
57 Lincoln Housing	8	44.8	7.4	25,400	8	43.8	6.4	22,700
59 Bristol Housing	8	46.8	9.6	23,900	8	44.4	9.7	22,000
65 Burrillville Housing	3	47.2	7.5	21,600	2	50.1	10.2	29,600
66 North Providence Housing	7	44.6	7.0	24,200	7	46.0	8.2	21,200
67 East Smithfield Water	5	48.0	11.1	25,900	4	48.6	9.7	13,400
68 Greenville Water	3	48.4	16.2	38,000	4	52.0	15.1	35,000
71 Warren Housing	5	52.0	11.2	23,600	6	49.6	8.6	22,100
72 Johnston Housing	5	43.0	6.5	18,700	6	45.6	7.2	20,200
79 Coventry Housing	8	51.0	5.3	21,800	4	50.1	8.3	24,300
83 West Warwick Housing	7	48.7	10.0	26,300	7	47.7	9.0	22,200
84 Smithfield Housing	1	31.1	5.3	24,100	2	36.3	4.8	22,000
96 Central Falls Housing	13	48.4	6.4	26,800	11	46.8	6.4	23,800
98 Lime Rock Administrative Svcs.	1	34.5	6.3	25,100	1	33.5	5.3	23,800
99 Central Falls Schools	96	44.7	7.4	16,100	96	44	6.3	15,100
100 Bristol/Warren Schools	121	46.5	8.6	15,700	118	46.7	7.8	15,500

EXHIBIT III - PARTICIPANT INFORMATION

Active Employees as of June 30, 1994

Active Employees as of June 30, 1993

MUNICIPALITY	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY
Police and Fire								
42 Valley Falls Fire	10	38.8	14.8	\$27,300	13	39.3	14.6	\$26,400
46 Lime Rock Fire	1	---	---	---	---	---	---	---
47 North Smithfield Vol. Fire	9	34.4	5.9	25,300	9	33.4	4.9	22,300
50 East Greenwich Fire	22	34.5	7.4	36,100	24	33.1	6.1	32,500
54 East Greenwich Police	23	35.2	9.5	30,000	27	36.5	10.3	28,500
55 North Kingstown Fire	63	36.1	10.7	30,100	68	35.8	10.6	29,400
58 North Providence Police & Fire	81	36.3	9.4	39,200	92	35.2	8.7	33,300
60 Barrington Police	22	37.4	11.4	29,900	24	37.9	13.3	32,000
61 Barrington Fire	20	38.0	11.5	16,200	24	36.6	10.5	29,600
62 Warren Police	21	37.0	11.8	32,300	21	37.0	11.2	32,400
63 South Kingstown Police & Fire	39	39.3	14.5	34,600	43	38.6	13.6	33,200
64 Primrose Volunteer Fire	7	37.0	11.4	29,300	6	37.3	10.2	25,400
76 North Smithfield Police	16	39.3	12.2	44,600	19	37.7	10.5	30,900
77 Tiverton Fire	25	39.5	11.5	29,800	27	39.1	11.0	26,900
82 Foster Police	6	33.1	11.0	27,700	6	35.6	12.4	28,200
85 Woonsocket Police	74	30.3	5.7	32,000	76	29.8	5.1	30,000
86 Charlestown Police	19	34.6	5.7	28,800	15	34.3	5.4	26,500
87 Hopkinton Police	9	36.0	7.1	34,300	10	34.1	5.9	31,600
88 Gloucester Police	12	36.7	7.2	30,700	13	37.2	5.6	26,500
89 West Greenwich Police	7	39.8	12.4	27,300	7	38.3	12.5	27,000
90 Burrillville Police	13	38.5	5.3	35,400	18	39.1	5.1	25,700
91 Cumberland Police	14	29.2	4.9	25,800	12	28.8	4.1	25,000
92 Washington Fire	8	33.2	7.1	28,400	9	31.2	5.9	24,000
93 Woonsocket Fire	63	29.8	5.1	29,800	68	29.0	4.3	24,500
94 Bristol Fire	1	44.9	4.0	37,600	1	43.9	3.0	32,100
95 Cumberland Hill Fire	10	39.0	12.9	24,700	10	38.0	11.9	26,200
98 Coventry Fire	12	34.4	10.9	23,500	9	35.8	10.3	27,000
100 Tiogue Fire	5	38.9	10.3	27,700	4	33.2	6.9	25,600
101 North Cumberland	13	33.4	11.0	28,100	14	32.0	10.0	26,100
102 Central Coventry Fire	8	36.8	9.1	27,300	10	33.4	6.9	24,200
103 Hopkins Hill Fire	3	28.9	3.2	11,900	4	27.3	2.7	17,000
106 Cumberland Fire	9	41.6	10.7	23,200	9	40.6	9.7	27,800
107 Lincoln Rescue	12	33.7	8.4	27,800	11	33.1	7.4	27,200

NOTES

- 1 - No data was reported for either Southern RI Collaborative or Lime Rock Fire.
- 2 - New unit.

EXHIBIT III - PARTICIPANT INFORMATION (Cont'd)

Retirees and Beneficiaries

MUNICIPALITY	NUMBER	AVERAGE AGE	AVERAGE MONTHLY BENEFIT
General Employees			
1 Barrington	109	72.1	\$420
2 Bristol	75	70.9	468
3 Burrillville	52	70.5	554
4 Central Falls	22	64.1	564
5 Charlestown	3	65.5	860
7 Cranston	372	72.0	494
8 Cumberland	74	67.6	484
9 East Greenwich	60	69.8	424
10 East Providence	268	68.1	854
11 Exeter/West Greenwich	7	67.8	292
12 Foster	9	69.0	548
13 Gloucester	8	64.9	640
14 Hopkinton	8	73.1	351
15 Jamestown	17	69.5	499
16 Johnston	103	69.8	542
21 Newport	165	71.6	609
22 New Shoreham	8	64.3	401
23 North Kingstown	98	69.8	570
24 North Providence	103	70.9	359
25 North Smithfield	53	70.8	325
26 Pawtucket	389	71.9	482
29 Richmond	6	67.6	204
30 Scituate	38	71.8	412
31 Smithfield	59	71.3	426
32 South Kingstown	70	72.3	372
33 Tiverton	50	70.5	429
34 Warren	53	69.8	510
36 Westerly	11	72.6	738
37 West Greenwich	5	70.5	602
39 Woonsocket	259	70.8	455
40 Chariho School Dist.	9	66.3	442
41 Foster/Glocester	8	66.1	446
42 Tiogue Fire & Lighting	---	---	---
43 Narragansett Housing	---	---	---
44 Southern RI Collaborative	---	---	---
45 Coventry Lighting Dist.	---	---	---
46 Hope Valley Fire	---	---	---
51 Cranston Housing	8	71.9	2,203
52 East Providence Housing	8	75.3	363
53 Pawtucket Housing	24	72.0	501
56 Cumberland Housing	6	64.8	600
57 Lincoln Housing	4	70.8	676
59 Bristol Housing	2	66.8	555
65 Burrillville Housing	---	---	---
66 North Providence Housing	2	70.9	295
67 East Smithfield Water	1	77.6	523
68 Greenville Water	1	67.0	751
71 Warren Housing	1	78.1	478
72 Johnston Housing	3	71.5	562
79 Coventry Housing	5	65.7	337
83 West Warwick Housing	2	64.8	572
84 Smithfield Housing	1	70.5	574
96 Central Falls Housing	6	62.0	1,104
98 Lime Rock Administrative Svcs.	---	---	---
99 Central Falls Schools	3	62.9	544
100 Bristol/Warren Schools	---	---	---

EXHIBIT III - PARTICIPANT INFORMATION (Cont'd)

Retirees and Beneficiaries

MUNICIPALITY	NUMBER	AVERAGE AGE	AVERAGE MONTHLY BENEFIT
Police and Fire			
42 Valley Falls Fire	3	56.6	\$1,426
46 Lime Rock Fire	---	---	---
47 North Smithfield Vol. Fire	---	---	---
50 East Greenwich Fire	11	64.6	1,246
54 East Greenwich Police	9	66.8	1,319
55 North Kingstown Fire	34	61.5	1,310
58 North Providence Police & Fire	7	64.0	1,532
60 Barrington Police	17	60.7	1,177
61 Barrington Fire	27	59.7	1,211
62 Warren Police	13	61.6	937
63 South Kingstown Police & Fire	10	60.2	958
64 Primrose Volunteer Fire	1	80.1	304
76 North Smithfield Police	2	58.8	1,362
77 Tiverton Fire	9	67.5	773
82 Foster Police	1	58.4	731
85 Woonsocket Police	1	37.7	1,670
86 Charlestown Police	2	35.7	1,081
87 Hopkinton Police	---	---	---
88 Gloucester Police	1	58.1	378
89 West Greenwich Police	---	---	---
90 Burrillville Police	4	52.7	1,440
91 Cumberland Police	---	---	---
92 Washington Fire	---	---	---
93 Woonsocket Fire	---	---	---
94 Bristol Fire	---	---	---
95 Cumberland Hill Fire	---	---	---
98 Coventry Fire	1	53.9	549
100 Tiogue Fire	---	---	---
101 North Cumberland	---	---	---
102 Central Coventry Fire	---	---	---
103 Hopkins Hill Fire	---	---	---
106 Cumberland Fire	---	---	---
107 Lincoln Rescue	---	---	---

NOTE: The above exhibit does not include the inactive participants of the closed South Kingstown Housing and Scituate Police units.

EXHIBIT IV - ACTUARIAL METHOD AND ASSUMPTIONS

a. Actuarial Funding Method

Actuarial Funding Method - Entry age normal cost method has been utilized. This method spreads the cost of benefits to be provided to an individual participant as a level percentage of pay from his or her date of employment to the assumed date of retirement.

Due to experience gains and losses or amendments to the benefits, accrued liabilities will not exactly equal the value of assets. The difference between the accrued liabilities and assets is called the unfunded liability. In 1988, the rules regarding amortizing the unfunded liability were changed. Under the new rules, the existing unfunded liability in 1988 was amortized over the remainder of a 25 year period which commenced on the date the unit joined the System. Subsequent divergences from the actuarial assumptions are to be funded over the projected future salaries of active members.

Smoothed Contribution Rate - Due to large fluctuations in the contribution rates of certain municipalities, the Retirement Board elected to adopt a procedure which would allow a unit the option of paying a smoothed contribution rate. The smoothed contribution rate equals the previous fiscal year's contribution rate plus the greater of 2% or one eighth of the increase in contribution rate (plus the cost of any benefit improvements).

EXHIBIT IV - 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.

<u>Age</u>	<u>Sample Rates</u>		<u>Expected Future Lifetime</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
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 - Salaries will increase at a rate of 4.5%, compounded annually.

Retirement Age - Municipal employees are assumed to retire at the later of age 65 or completion of the service requirements. Police and Firemen are assumed to retire at the later of age 60 or completion of the service requirements. For police and fire departments electing the optional plan paying unreduced benefits after 20 years of service, employees are assumed to retire at the later of age 57 and completion of 10 years of service.

Disability - Disability is assumed to occur in accordance with the following table with 15% of disabilities being occupational for municipal employees and 50% of disabilities being occupational for police and firemen.

EXHIBIT IV - ACTUARIAL METHOD AND ASSUMPTIONS (Cont'd)

Disability - Sample Rates

<u>Municipal Employees</u>		<u>Police and Firemen</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.06%	20	.12%
25	.09	25	.17
30	.11	30	.22
35	.15	35	.29
40	.22	40	.44
45	.36	45	.72
50	.61	50	1.21
55	1.01	55	--
60	--	60	--

Withdrawal - Termination of service for reasons other than death, retirement, or disability will be in accordance with the following tables. For police and firemen, no withdrawal for reasons other than death, disability, or retirement is assumed.

Sample Withdrawal Rates

<u>Age</u>	<u>Municipal Employees</u>
20	21.20%
25	15.80%
30	11.60%
35	8.40%
40	6.20%
45	4.20%
50	2.60%
55	--
60	--

Cost of Living Adjustments - 3%, not compound, beginning on the January 1st following a participant's retirement if the municipal group elects this optional benefit provision.

