

**ACTUARIAL VALUATION OF THE  
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM  
OF THE STATE OF RHODE ISLAND  
AS OF JUNE 30, 1996**

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**TABLE OF CONTENTS**

	<u>Page</u>
<b>Section I - Summary of the Valuation</b> .....	1
<b>Section II - Employee Data</b> .....	7
Table 1A - Distribution of Municipal General Employees in Active Service .....	10
Table 1B - Distribution of Policemen and Firemen in Active Service.....	11
Table 2 - Distribution of Retirees and Beneficiaries .....	12
<b>Section III - Plan Assets</b> .....	13
Table 3 - Calculation of Actuarial Asset Value at June 30, 1996 .....	15
Table 4 - Summary Statement of Income and Expenses .....	16
Table 5 - Composition of Plan Assets at Market Value .....	17
<b>Section IV - Results of the Valuation</b> .....	18
Table 6 - Recommended Employer Contribution Rates .....	21
Table 7 - Liabilities and Funded Status as of June 30, 1996 .....	24
<b>Certificate of Actuarial Valuation</b> .....	27
<b>Exhibit I - Actuarial Cost Factors as of June 30, 1996</b> .....	28
A. General Employees .....	28
B. Policemen and Firemen .....	29
<b>Exhibit II - Participant Information</b> .....	30
<b>Exhibit III - Actuarial Method and Assumptions</b> .....	36
<b>Exhibit IV - Summary of Plan Provisions</b> .....	40

## **SECTION I - SUMMARY OF THE VALUATION**

### **Contribution Requirements**

The contribution rates for fiscal 1999 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 1997 and 1998 fiscal years are also shown. Effective with this June 30, 1996 valuation, the actuarial value of assets were re-established at market value.

The aggregate employer normal cost for all units for general employees is 1.59% of total general employees payroll. The previous year percentage was 1.30% of payroll. The rate increased due to a combination of benefit improvements and demographic changes. The past service cost for general employees (the annual amount required to pay off the unfunded liabilities) decreased slightly from 0.47% in the previous year to 0.43% of payroll. The main factor causing this decrease was favorable investment performance and the restatement of the actuarial value of assets offset somewhat by benefit improvements and demographic changes. As noted later in this report, there were 4 general employee units which elected benefit improvements, and 6 general employee units where past service cost has been eliminated since the last valuation.

The combined employer normal cost for police and fire departments is 7.45% of police and fire payroll, an increase from 4.58% last year. The past service cost for police and fire departments in aggregate (the annual amount required to pay off the unfunded liabilities) has increased from 0.99% last year to 2.27% of payroll. The increase in normal cost and past service cost results primarily from the adoption of a new set of assumptions regarding retirement age and from the combination of an increase due to units electing benefit improvements offset by a reduction due to favorable investment experience and the restatement of the actuarial value of assets (the actuarial value of assets returned approximately 16.80%). As noted later in this report, there were 4 police and fire departments which elected benefit improvements, 6 police and fire units with a new past service cost (including the 2 new units that entered the system on June 30, 1996), and 1 police unit where past service cost has been eliminated 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 are 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)**

### **Government Accounting Standards Board Disclosure:**

The format of this report has been revised this year. New accounting disclosure requirements under Statements Number 25 and 27 of the Government Accounting Standards Board (GASB) have replaced Statement Number 5 of the GASB. These new disclosure items require information in addition to actuarial values and will be provided in a separate report. The sections contained in previous actuarial reports presenting accrued, vested, and projected benefits in accordance with Statement Number 5 of the GASB have been eliminated in this report.

### **Funded Status**

Of the 59 municipalities covering general employees, 16 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 \$4,846,200.

Of the 38 police and fire departments, 17 had unfunded liabilities. The change in the assumed retirement age created unfunded liabilities at several units. Also, as above, many 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 \$5,564,400.

Recent favorable investment experience would have caused the unfunded liabilities to decrease. However, because of the change in assumed retirement age applicable to the Police and Fire units, many units are underfunded as of the valuation date. Because employer contributions (equal to the normal cost) and employee contributions are still made to overfunded units, units which are fully funded will most likely remain fully funded in the future if the actuarial assumptions are met.

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

### Assets of the Retirement System

As of June 30, 1996 the market value of assets for the general employee units was \$467.3 million and for police and fire units the market value of assets was \$97.1 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: The investment yield should be compared with the assumed return of 8%.

	<u>7/1/95 to</u> <u>6/30/96</u>		<u>7/1/94 to</u> <u>6/30/95</u>		<u>7/1/93 to</u> <u>6/30/94</u>
Investment yield	13.49%		17.05%		2.20%*
Market Value of Assets at end of period	\$ 564,388,300	\$	499,157,800	\$	431,990,100
Total Contributions	22,087,900		15,820,000		14,723,300
Investment Income**	54,933,500		42,282,800		30,727,300
Unrealized Gains/(Losses)	<u>12,291,500</u>		<u>30,856,000</u>		<u>-----</u>
Total Income	\$ 89,312,900	\$	88,958,800	\$	45,450,600
Total Benefit Payments	\$ 24,082,400	\$	21,791,100	\$	19,836,300
Net Income	\$ 65,230,500	\$	67,167,700	\$	25,614,300**

\* Provided by Wilshire Associates.

\*\* Excludes unrealized gains and losses.

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

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

### **Actuarial Method and Assumptions**

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

Other than the restatement of the actuarial value of assets to market value, the methods and assumptions have not changed since the previous valuation of June 30, 1995 for general employees. For police and fire units, the assumed retirement age has been lowered to reflect expected future experience, and the restatement of the actuarial value of assets has been recognized.

### **Participant Data**

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

We received the participant data from the Retirement System. There were 5,745 current active participants in the general employee units and 798 police and firemen. These figures represent decreased participation in the general employee units and increased participation among police and firemen. The number of current retirees reported was 3,013, up from 2,901 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, 1996:

	<u>Unit</u>	<u>Entered System</u>
4056	North Kingstown Police	7/1/96
4099	South Kingstown Emergency Medical Services	7/1/96

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

**Plan Benefits**

Plan provisions are summarized in Exhibit IV. In the valuation results, Section IV, we list the benefit structures for each unit separately indicating which units have adopted a COLA benefit or the 20 year police and fire plan.

The following units adopted benefit changes:

	<u>Unit</u>	<u>Benefit Change (Effective Date)</u>	
3014	Hopkinton	COLA C	(1/1/97)
3034	Warren	COLA C	(1/1/97)
3051	Cranston Housing	COLA C	(1/1/97)
3052	East Providence Housing	COLA B	(1/1/97)
4050	East Greenwich Fire	COLA C	(1/1/97)
4086	Charlestown Police	20 year plan	(7/1/97)
4087	Hopkinton Police	COLA C	(1/1/97)
4102	Central Coventry Fire	20 year plan	(7/1/96)

If certain units, prior to fiscal 1999, reach a decision to adopt a new benefit structure, the contribution rates incorporated in this report will be altered accordingly.

## 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 1999. The number of units has increased dramatically because the change in assumed retirement age for police and fire units increased cost significantly.

	<u>Unit</u>	<u>Contribution Rate</u>	<u>Smoothed Contribution Rate</u>
3036	Westerly	107.06%	55.51%
3041	Foster/Glocester	10.93%	8.14%
4042	Valley Falls Fire	40.70%	27.70%
4047	North Smithfield Voluntary Fire	8.97%	7.85%
4050	East Greenwich Fire	10.14%	9.44%
4055	North Kingstown Fire	7.14%	6.81%
4056	North Kingstown Police	15.65%	7.46%
4058	North Providence Fire	7.47%	6.62%
4060	Barrington Police	17.79%	9.13%
4062	Warren Police	12.04%	8.57%
4076	North Smithfield Police	9.28%	7.81%
4077	Tiverton Fire	7.44%	5.12%
4082	Foster Police	7.66%	5.18%
4085	Woonsocket Police	10.68%	8.31%
4086	Charlestown Police	16.41%	5.77%
4087	Hopkinton Police	8.03%	6.88%
4088	Glocester Police	12.70%	8.13%
4090	Burrillville Police	12.90%	10.39%
4091	Cumberland Rescue	8.37%	6.47%
4092	Washington Fire	14.66%	8.28%
4093	Woonsocket Fire	10.80%	8.29%
4095	Cumberland Hill Fire	24.07%	15.64%
4099	South Kingstown EMT	13.19%	9.42%
4101	North Cumberland	16.22%	9.37%
4103	Hopkins Hill Fire	5.09%	4.52%
4109	Warren Fire	32.96%	29.17%

In determining whether a unit is eligible to elect a smoothed contribution rate, we have calculated whether the difference between the fiscal 1998 cost, adjusted for benefit improvements, if any, and the fiscal 1999 cost exceeds 2%. The only exception to this rule applies for units which were eligible for a smoothed rate for fiscal 1998. In those cases we have compared the fiscal 1998 smoothed rate with the fiscal 1999 cost.



## 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 4 missing salaries, 287 missing dates of birth, and 18 missing dates of hire. For policemen and firemen there was 1 missing salary, 64 missing dates of birth; and 4 missing hire dates. The impact of missing data varies depending on the individual unit and the data missing from that unit.

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, 1996</u>	<u>June 30, 1995</u>
<b>Pensioners</b>		
Number	2,817	2,746
Average Age	70.4	70.4
Average Monthly Benefit	\$ 629	\$ 591
<b>Beneficiaries</b>		
Number	196	155
Average Age	69.0	68.8
Average Monthly Benefit	\$ 448	\$ 439

## **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 continuing retirees versus those who retired during the year. This ratio was 68%, indicating that, on the average, the new retirees have 148% as large a pension as continuing retirees. 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, 1996 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 II shows a summary of key data statistics for each municipality as of June 30, 1996 and June 30, 1995.

Table 1A - Distribution of Municipal General Employees in Active Service at June 30, 1996

Years of Service and Average Annual Earnings

GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	46 \$ 16,273	2 \$ 32,000								48
25-29	125 \$ 17,933	107 \$ 23,713	1 \$ 19,819							233
30-34	181 \$ 18,306	216 \$ 24,461	70 \$ 26,111	2 \$ 21,736						469
35-39	244 \$ 16,544	249 \$ 23,174	97 \$ 25,496	62 \$ 28,578	9 \$ 24,778					661
40-44	432 \$ 15,407	324 \$ 21,774	132 \$ 25,613	100 \$ 29,671	66 \$ 28,956	10 \$ 30,048				1,064
45-49	277 \$ 16,922	413 \$ 21,753	188 \$ 23,561	106 \$ 28,622	67 \$ 31,650	55 \$ 32,051	1 \$ 13,090			20,931
50-54	133 \$ 18,743	256 \$ 21,588	158 \$ 22,228	99 \$ 26,845	67 \$ 28,052	34 \$ 31,269	11 \$ 39,478	4 \$ 29,072		762
55-59	99 \$ 19,166	173 \$ 22,256	119 \$ 24,031	126 \$ 23,638	101 \$ 24,015	39 \$ 26,083	12 \$ 30,354	4 \$ 40,395	3 \$ 28,004	23,205
60-64	45 \$ 20,225	148 \$ 22,079	77 \$ 23,257	71 \$ 23,772	63 \$ 25,789	43 \$ 22,215	9 \$ 20,731	2 \$ 30,060	3 \$ 23,548	676
65-69	11 \$ 14,092	53 \$ 20,051	41 \$ 20,944	21 \$ 21,611	22 \$ 23,929	30 \$ 19,584	4 \$ 17,244	1 \$ 4,753	2 \$ 33,360	185
70-74	2 \$ 16,511	11 \$ 16,269	12 \$ 21,353	9 \$ 21,244	11 \$ 30,036	16 \$ 18,218	2 \$ 7,030	1 \$ 1,800	2 \$ 43,265	66
75+		3 \$ 11,407	3 \$ 16,603	3 \$ 15,626	1 \$ 24,226	3 \$ 27,925				13
TOTAL	1,595 \$ 17,036	1,955 \$ 22,309	898 \$ 23,896	599 \$ 26,431	407 \$ 27,188	230 \$ 26,353	39 \$ 27,723	12 \$ 28,998	10 \$ 27,720	18,378 5,745 22,095

**Table 1B - Distribution of Policemen and Firemen in Active Service at June 30, 1996**

**Years of Service and Average Annual Earnings**

Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Total
20 to 24	9	1								10
	\$ 24,583	\$ 30,660							\$	\$ 25,191
25 to 29	43	68	6							117
	\$ 30,275	\$ 33,368	\$ 30,175						\$	\$ 32,068
30 to 34	78	133	51	2						264
	\$ 25,116	\$ 33,471	\$ 35,238	\$ 34,624					\$	\$ 31,352
35 to 39	10	59	68	40	3					180
	\$ 28,045	\$ 33,812	\$ 34,435	\$ 36,478	\$ 30,572				\$	\$ 34,299
40 to 44	3	15	39	38	16	1				112
	\$ 28,958	\$ 33,418	\$ 34,214	\$ 36,250	\$ 39,126	\$ 42,027			\$	\$ 35,429
45 to 49		7	7	12	18	12	1			57
		\$ 31,719	\$ 33,673	\$ 34,662	\$ 39,453	\$ 39,329	\$ 45,338		\$	\$ 36,862
50 to 54			3	5	16	10	3			37
			\$ 34,868	\$ 32,667	\$ 38,037	\$ 41,101	\$ 40,864		\$	\$ 38,112
55 to 59		1		2	1	6	2	1		13
		\$ 37,161		\$ 48,254	\$ 29,453	\$ 37,909	\$ 37,823	\$ 39,880		\$ 35,877
60 to 64		1	1	1		2	1		1	7
		\$ 33,860	\$ 44,926	\$ 31,726		\$ 41,651	\$ 46,518	\$ 47,454	\$	\$ 41,112
65 to 69			1							1
			\$ 44,238						\$	\$ 44,238
70 and up										0
Total	143	285	176	100	54	31	7	1	1	798
	\$ 29,961	\$ 33,475	\$ 34,566	\$ 36,134	\$ 38,258	\$ 39,863	\$ 41,442	\$ 39,880	\$ 47,454	\$ 33,499

Table 2 - Distribution of Retirees and Beneficiaries at June 30, 1996

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	1	1	0	0	2	0.07%	
30-39	0	290	2,098	0	0	2,388	1,194	
	\$	\$	\$	\$	\$	\$	\$	
40-49	0	2	4	4	0	10	0.33%	
	\$	\$	\$	\$	\$	\$	\$	
50-54	25	8	15	14	62	114	874	
	\$	\$	\$	\$	\$	\$	\$	
55-59	41,570	3,905	21,452	8,163	75,090	63	2.06%	
	\$	\$	\$	\$	\$	\$	\$	
60-64	62,735	4,754	9,014	6,781	83,284	158	2.09%	
	\$	\$	\$	\$	\$	\$	\$	
65-69	172,653	10,872	8,848	10,349	202,723	430	5.24%	
	\$	\$	\$	\$	\$	\$	\$	
70-74	362	30	8	30	430	715	1,283	
	\$	\$	\$	\$	\$	\$	\$	
75-79	313,498	18,942	8,158	10,552	351,151	817	14.27%	
	\$	\$	\$	\$	\$	\$	\$	
80-84	651	32	10	22	715	1,322	23.73%	
	\$	\$	\$	\$	\$	\$	\$	
85-89	436,617	13,169	9,810	6,422	466,019	652	14.27%	
	\$	\$	\$	\$	\$	\$	\$	
90-94	662	43	10	17	732	518	24.30%	
	\$	\$	\$	\$	\$	\$	\$	
95+	351,036	16,277	7,218	4,472	379,004	484	16.06%	
	\$	\$	\$	\$	\$	\$	\$	
Total	176,521	8,859	2,053	1,839	189,272	391	7.60%	
	\$	\$	\$	\$	\$	\$	\$	
	209	17	2	1	229	296	3.29%	
	\$	\$	\$	\$	\$	\$	\$	
	61,517	5,249	789	334	67,889	287	0.83%	
	\$	\$	\$	\$	\$	\$	\$	
	90	9	0	0	99	4	0.13%	
	\$	\$	\$	\$	\$	\$	\$	
	23,939	4,500	0	0	28,439	176	0.61%	
	\$	\$	\$	\$	\$	\$	\$	
	24	1	0	0	25	3,013	100%	
	\$	\$	\$	\$	\$	\$	\$	
	4,803	69	0	0	4,872	617	12.65%	
	\$	\$	\$	\$	\$	\$	\$	
	4	0	0	0	4	1,859,572	100%	
	\$	\$	\$	\$	\$	\$	\$	
	706	0	0	0	706	1,859,572	100%	
	\$	\$	\$	\$	\$	\$	\$	
Total	2,612	196	71	134	3,013	617	100%	
	\$	\$	\$	\$	\$	\$	\$	
	1,645,594	87,831	75,809	50,339	1,859,572	617	100%	
	\$	\$	\$	\$	\$	\$	\$	

### **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 or terminates employment with more than 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. 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 and is shown in Table 7.

The actuarial value of assets was reset to equal the market value of assets as of June 30, 1996. A reconciliation of the market value of assets is shown in Table 3.

During fiscal 1996, the investment earnings represented approximately 13.49% of the average market value of assets of the Fund during the fiscal year. The yield for the previous fiscal year was 17.05%.

Table 4 provides a summary of income and expenses for the years ended June 30, 1996 and June 30, 1995. For the plan year ended June 30, 1996, the market value of the Municipal Employees' Retirement Fund showed a net increase of \$65,230,500 from \$499,157,800 to \$564,388,300.

### **SECTION III - PLAN ASSETS (Cont'd)**

Table 5 provides a distribution of the assets by category of investment. As of June 30, 1996, the Fund was comprised of 57.0% equities, 34.4% fixed income securities, 3.8% real estate and venture capital, with the balance, 4.8%, held in cash, short term paper, and other highly liquid assets.

Approximately 82.8% of the assets is allocated to general employees and 17.2% is for policemen and firemen.

**Table 3 - Calculation of Actuarial Asset Value at June 30, 1996**

<b>1. Market Value of Assets at June 30, 1995</b>	\$ 499,157,766 *
<b>2. Contributions</b>	
a. Employees	11,438,486 *
b. Employers	5,444,410
c. Contribution for N. Kingstown Police	<u>5,205,000</u>
d. Total	\$ 22,087,896
<b>3. Disbursements</b>	
a. Pensions in Payment	21,650,866
b. Total Death Benefits	383,168
c. Refund of Contributions, etc.	<u>2,048,334</u>
d. Total	\$ 24,082,368
<b>4. Investment Income **</b>	\$ 54,933,529
<b>5. Unrealized Gains/(Losses)</b>	\$ 12,291,490
<b>6. Market Value June 30, 1996</b>	\$ 564,388,313
<b>7. Actuarial Asset Value on June 30, 1996</b>	\$ 564,388,313

\*Already includes the \$500,000 contribution for Newport Housing; we reduced the "employee" contributions for FY96 by an equal amount.

\*\* Excludes unrealized gains and losses



**Table 4**  
**Summary Statement of Income and Expenses**

	<u>1996</u>	<u>1995</u>
Employer contributions	\$ 5,444,410	\$ 4,448,941
Member contributions	11,438,486	10,568,025
Contribution for New Unit (North Kingstown Police in 1996; Newport Housing in 1995)	<u>5,205,000</u>	<u>500,000</u>
Total contributions	\$22,087,896	\$15,516,966
Net miscellaneous items	0	303,019
Net Investment income*	54,933,529	42,282,768
Unrealized gains/(losses)	<u>12,291,443</u>	<u>30,855,971</u>
Total income available for benefit payments	\$89,312,868	\$88,958,724
Benefit payments:		
Pension benefits	\$21,650,866	\$20,306,466
Death benefits	383,168	597,969
Contribution refunds	<u>2,048,334</u>	<u>886,632</u>
Total benefit payments	24,082,368	21,791,066
Excess of income over expenses	<u>\$65,230,500</u>	<u>\$67,167,658</u>

\* Excludes unrealized gains and losses.

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

**Table 5**

**Composition of Plan Assets at Market Value  
June 30, 1996**

<b>Cash/Short Term Investments</b>		
<b>Short Term Investment Fund</b>		
<b>Money Market Instruments</b>	\$ 26,702,314	4.8%
<b>Equities - Domestic</b>	266,889,947	47.7%
<b>Equities - International</b>	51,884,040	9.3%
<b>Fixed Income - Government</b>	182,608,219	32.7%
<b>Fixed Income - Foreign</b>	1,331,492	0.2%
<b>Fixed Income - Corporate</b>	8,245,760	1.5%
<b>Real Estate and Venture Capital</b>	<u>21,521,541</u>	<u>3.8%</u>
<b>TOTAL FUND INVESTMENTS</b>	\$ 559,183,313	100.0%
<b>Contribution for North Kingstown Police (New Unit)</b>	<u>5,205,000</u>	
Total Fund Investments including North Kingstown Police Contribution	\$ 564,388,313	

## SECTION IV - RESULTS OF THE VALUATION

The purpose of the actuarial valuation of the System as of July 1, 1996 is to calculate the contribution requirements for the 1999 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, 1996 for fiscal 1999 are developed as follows:

<u>Item</u>	<u>Fiscal 1999</u> <u>Amount</u>	<u>% of</u> <u>Payroll</u>	<u>Previous</u> <u>Year</u>
1. Participating payroll	\$ 126,937,100	---	---
2. Total normal cost	10,370,800	8.17%	7.86%
3. Employee Contributions	8,353,600	6.58%	6.56%
4. Employer Normal Cost 2. - 3.	2,017,200	1.59%	1.30%
5. Amortization of unfunded actuarial liability	549,300	0.43%	0.47%
6. Total annual cost = 4. + 5.	2,566,500	2.02%	1.77%
7. Total annual cost payable monthly = 6. plus 1/2 year interest	2,669,200	2.10%	1.84%

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, increasing from 7.86% of payroll to 8.17%.

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

Police and Fire

The costs for police and fire units computed as of June 30, 1996 for fiscal 1999 are developed as follows:

<u>Item</u>	<u>Fiscal 1999</u> <u>Amount</u>	<u>% of</u> <u>Payroll</u>	<u>Previous</u> <u>Year</u>
1. Participating payroll	\$ 26,732,300	---	---
2. Total normal cost	4,259,200	15.93%	12.85%
3. Employee Contributions	2,267,800	8.48%	8.27%
4. Employer Normal Cost 2. - 3.	1,991,400	7.45%	4.58%
5. Amortization of unfunded actuarial liability	607,700	2.27%	0.99%
6. Total annual cost 4. + 5.	2,599,100	9.72%	5.57%
7. Total annual cost payable monthly = 6. plus 1/2 year interest	2,703,100	10.11%	5.79%

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

The total normal cost percentage for police and fire units increased from 12.85% to 15.93%. This increase is primarily due to the change in the assumed retirement age.

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

Exhibit I shows that the total unfunded liability for general employees was \$4,846,220 and for policemen and firemen was \$5,564,366. These figures equal the sum of the individual units' 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.

**Table 6 - Recommended Employer Contribution Rates**

**Table 6 - Recommended Employer Contribution Rates**

Note: For FY '99, assets are on a market value basis.

MUNICIPALITY		FISCAL 1999			Total Employer Rates for the Fiscal Years		
		EMPLOYEE CONTRIBUTION RATE	EMPLOYER NORMAL COST	PAST SERVICE COST	TOTAL EMPLOYER RATE	1998	1997
<b>General Employees</b>							
1	Barrington	6.00%	1.71%	0.00%	1.71%	1.45%	1.56%
2	Bristol	B 7.00%	0.88%	0.00%	0.88%	0.48%	0.46%
3	Burrillville	C 7.00%	3.08%	0.00%	3.08%	2.67%	2.83%
4	Central Falls	6.00%	1.27%	18.65%	19.92%	19.03%	16.42%
5	Charlestown	C 7.00%	1.65%	7.80%	9.45%	10.90%	14.71%
7	Cranston	B 7.00%	1.82%	0.00%	1.82%	1.46%	1.40%
8	Cumberland	6.00%	2.51%	0.98%	3.49%	2.48%	3.11%
9	East Greenwich	6.00%	1.48%	0.00%	1.48%	1.07%	1.33%
10	East Providence	B 7.00%	2.10%	0.00%	2.10%	1.99%	2.13%
11	Exeter/West Greenwich	6.00%	2.33%	0.00%	2.33%	3.01%	3.25%
12	Foster	6.00%	2.09%	1.99%	4.08%	5.64%	2.61%
13	Glocester	6.00%	2.38%	0.00%	2.38%	2.58%	2.73%
14	Hopkinton	C 7.00%	3.05%	0.00%	3.05%	3.05%	2.87%
15	Jamestown	C 7.00%	1.26%	0.00%	1.26%	0.55%	0.70%
16	Johnston	C 7.00%	1.88%	0.00%	1.88%	1.39%	1.35%
17	Lincoln	6.00%	2.18%	5.24%	7.42%	13.35%	9.84%
21	Newport	B 7.00%	0.74%	0.00%	0.74%	0.43%	0.28%
22	New Shoreham	6.00%	1.77%	0.00%	1.77%	1.83%	2.02%
23	North Kingstown	6.00%	2.06%	0.00%	2.06%	1.67%	1.65%
24	North Providence	6.00%	1.22%	0.00%	1.22%	0.84%	1.16%
25	North Smithfield	C 7.00%	3.95%	0.00%	3.95%	3.82%	3.82%
26	Pawtucket	C 7.00%	1.28%	0.00%	1.28%	1.18%	1.30%
29	Richmond	6.00%	2.26%	0.00%	2.26%	6.43%	4.65%
30	Scituate	B 7.00%	2.88%	0.00%	2.88%	2.42%	2.55%
31	Smithfield	6.00%	1.94%	0.00%	1.94%	1.80%	1.86%
32	South Kingstown	6.00%	1.64%	0.00%	1.64%	1.38%	1.38%
33	Tiverton	6.00%	2.45%	0.00%	2.45%	2.24%	2.75%
34	Warren	C 7.00%	2.36%	0.00%	2.36%	2.20%	1.91%
36	Westerly	6.00%	0.00%	107.06%	107.06%	56.87%	54.81%
37	West Greenwich	6.00%	2.45%	4.44%	6.89%	4.97%	4.99%
39	Woonsocket	6.00%	2.07%	0.00%	2.07%	1.61%	1.64%
40	Charlho School District	6.00%	2.43%	0.00%	2.43%	2.12%	2.22%
41	Foster/Glocester	B 7.00%	3.23%	7.70%	10.93%	6.14%	5.63%
42	Tiogoe Fire & Lighting	C 7.00%	2.93%	25.32%	28.25%	31.61%	31.69%
43	Narragansett Housing	6.00%	2.80%	1.17%	3.97%	5.94%	5.57%
45	Coventry Lighting District	6.00%	0.00%	9.63%	9.63%	30.66%	42.68%
46	Hope Valley Fire	C 7.00%	6.95%	0.00%	6.95%	18.56%	21.65%
51	Cranston Housing	C 7.00%	4.15%	0.00%	4.15%	3.81%	3.81%
52	East Providence Housing	B 7.00%	4.48%	0.00%	4.48%	4.83%	4.14%
53	Pawtucket Housing	B 7.00%	1.49%	0.00%	1.49%	1.27%	1.63%

**Table 6 - Recommended Employer Contribution Rates (Cont'd)**

**Table 6 - Recommended Employer Contribution Rates**

Note: For FY '99, assets are on a market value basis.

MUNICIPALITY	FISCAL 1999 EMPLOYEE CONTRIBUTION RATE	FISCAL 1999			Total Employer Rates for the Fiscal Years	
		EMPLOYER NORMAL COST	PAST SERVICE COST	TOTAL EMPLOYER RATE	1998	1997
<b>General Employees</b>						
56 Cumberland Housing	6.00%	4.58%	0.00%	4.58%	4.78%	2.69%
57 Lincoln Housing	7.00%	5.05%	0.00%	5.05%	4.10%	4.18%
59 Bristol Housing	6.00%	2.97%	0.00%	2.97%	2.69%	2.30%
65 Burrillville Housing	6.00%	3.27%	0.00%	3.27%	3.41%	3.57%
66 North Providence Housing	7.00%	2.81%	0.00%	2.81%	4.03%	4.61%
67 East Smithfield Water	7.00%	4.16%	0.00%	4.16%	6.48%	13.34%
68 Greenville Water	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
69 Newport Housing	6.00%	2.02%	3.61%	5.63%	11.46%	11.46%
71 Warren Housing	6.00%	4.02%	0.00%	4.02%	3.92%	4.03%
72 Johnston Housing	6.00%	0.18%	0.00%	0.18%	0.18%	2.57%
77 Tiverton Local 2670A	7.00%	3.42%	0.00%	3.42%	3.57%	5.75%
79 Coventry Housing	6.00%	3.65%	0.00%	3.65%	3.68%	3.84%
80 South Kingstown Housing	---	---	---	---	---	---
83 West Warwick Housing	6.00%	1.87%	0.00%	1.87%	3.37%	3.32%
84 Smithfield Housing	6.00%	1.08%	0.00%	1.08%	0.01%	0.00%
96 Central Falls Housing	6.00%	4.23%	9.19%	13.42%	15.71%	20.34%
98 Lime Rock Administrative Services	6.00%	1.10%	4.41%	5.51%	4.17%	0.00%
99 Central Falls Schools	6.00%	2.62%	0.37%	2.99%	4.71%	6.18%
100 Bristol/Warren Schools	7.00%	3.71%	0.00%	3.71%	3.36%	3.36%

**Table 6 - Recommended Employer Contribution Rates (Cont'd)**

**Table 6 - Recommended Employer Contribution Rates**  
 Note: For FY '99, assets are on a market value basis.

Police and Fire MUNICIPALITY		FISCAL 1999 EMPLOYEE CONTRIBUTION RATE	FISCAL 1999			Total Employer Rates		
			EMPLOYER NORMAL COST	PAST SERVICE COST	TOTAL EMPLOYER RATE	1998	1997	
42	Valley Falls Fire	D	8.00%	5.39%	35.31%	40.70%	25.70%	29.18%
46	Lime Rock Fire	3	---	---	---	---	1.96%	3.74%
47	North Smithfield Voluntary Fire	D	8.00%	8.97%	0.00%	8.97%	5.85%	5.82%
50	East Greenwich Fire	C,D	9.00%	10.14%	0.00%	10.14%	7.44%	7.44%
54	East Greenwich Police	C,D	9.00%	8.90%	0.00%	8.90%	7.12%	7.12%
55	North Kingstown Fire	D	8.00%	7.14%	0.00%	7.14%	4.81%	4.68%
56	North Kingstown Police	C,D,2	9.00%	8.08%	7.57%	15.65%	5.46%	5.46%
58	North Providence Fire	D	8.00%	7.47%	0.00%	7.47%	4.62%	4.40%
60	Barrington Police	D	8.00%	5.69%	12.10%	17.79%	10.46%	5.13%
61	Barrington Fire	D	8.00%	6.85%	0.00%	6.85%	4.90%	4.90%
62	Warren Police	C,D	9.00%	9.68%	2.36%	12.04%	6.57%	6.56%
63	South Kingstown Police & Fire	C,D,1	9.00%	4.18%	0.00%	4.18%	4.01%	3.98%
64	Primrose Volunteer Fire	B,D	9.00%	7.46%	0.00%	7.46%	7.79%	7.41%
73	Scituate Police	3	---	---	---	---	---	---
76	North Smithfield Police	C,D	9.00%	9.28%	0.00%	9.28%	5.81%	5.81%
77	Tiverton Fire	D	8.00%	7.44%	0.00%	7.44%	3.12%	3.05%
82	Foster Police	D	8.00%	7.66%	0.00%	7.66%	3.18%	3.26%
85	Woonsocket Police	C,D	9.00%	10.68%	0.00%	10.68%	6.31%	6.24%
86	Charlestown Police	D	8.00%	9.19%	7.22%	16.41%	3.77%	3.82%
87	Hopkinton Police	C,D	9.00%	8.03%	0.00%	8.03%	4.88%	4.70%
88	Glocester Police	C,D	9.00%	8.80%	3.90%	12.70%	6.13%	4.92%
89	West Greenwich Police/Rescue		7.00%	2.60%	0.00%	2.60%	2.76%	3.18%
90	Burrillville Police	C,D	9.00%	9.82%	3.08%	12.90%	8.39%	8.96%
91	Cumberland Rescue	D	8.00%	8.37%	0.00%	8.37%	4.47%	4.19%
92	Washington Fire	D	8.00%	8.72%	5.94%	14.66%	6.28%	6.28%
93	Woonsocket Fire	C,D,4	9.00%	10.80%	0.00%	10.80%	6.29%	6.14%
94	Bristol Fire		7.00%	6.63%	0.00%	6.63%	6.39%	6.40%
95	Cumberland Hill Fire	C,D	9.00%	7.99%	16.08%	24.07%	13.64%	12.99%
98	Coventry Fire		7.00%	5.10%	4.80%	9.90%	10.28%	6.29%
99	South Kingstown EMT	C,D,2	9.00%	11.97%	1.22%	13.19%	7.42%	7.42%
100	Tiogue Fire		7.00%	4.37%	2.28%	6.65%	5.42%	7.14%
101	North Cumberland	D	8.00%	7.40%	8.82%	16.22%	7.37%	8.69%
102	Central Coventry Fire	D	8.00%	4.74%	7.52%	12.26%	12.39%	12.39%
103	Hopkins Hill Fire		7.00%	5.09%	0.00%	5.09%	2.52%	2.63%
106	Cumberland Fire	D	8.00%	3.06%	8.09%	11.15%	11.34%	14.81%
107	Lincoln Rescue		7.00%	4.84%	2.35%	7.19%	7.07%	7.88%
108	New Shoreham Police		7.00%	6.23%	0.00%	6.23%	10.14%	10.14%
109	Warren Fire	D	8.00%	11.60%	21.36%	32.96%	27.17%	27.17%

**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 - S. Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1992, and 2.5% of salary for service on or after July 1, 1992.
- 2 - New unit.
- 3 - Closed unit.
- 4 - By special agreement, the Woonsocket Firefighters are currently contributing 8.0% of salary; the above costs assume an employee contribution of 9.0%.



# Table 7 - Liabilities and Funded Status as of June 30, 1996

Table 7 - Liabilities and Funded Status as of June 30, 1996

Note: For FY '99, assets are on a market value basis.

MUNICIPALITY		MARKET VALUE OF ASSETS	TOTAL ACCRUED LIABILITY	VESTED LIABILITY	TOTAL UNFUNDED LIABILITY	UNFUNDED VESTED LIABILITY
<b>General Employees</b>						
1	Barrington	\$15,247,961	\$10,183,001	\$7,696,601	\$0	\$0
2	Bristol	10,102,524	7,612,370	6,169,665	0	0
3	Burrillville	11,173,627	8,418,760	6,204,472	0	0
4	Central Falls	1,216,930	3,060,012	2,598,736	1,843,082	1,381,806
5	Charlestown	797,562	1,368,740	998,905	571,178	201,343
7	Cranston	79,103,440	60,317,812	45,252,809	0	0
8	Cumberland	10,652,927	11,004,662	8,768,581	351,735	0
9	East Greenwich	11,577,998	7,492,873	5,387,719	0	0
10	East Providence	45,276,783	43,904,941	35,936,139	0	0
11	Exeter/West Greenwich	2,305,139	1,878,618	1,358,766	0	0
12	Foster	1,312,215	1,397,940	1,018,555	85,725	0
13	Glocester	1,760,716	1,626,084	1,123,801	0	0
14	Hopkinton	1,545,056	1,060,424	797,957	0	0
15	Jamestown	3,674,742	3,031,488	2,090,716	0	0
16	Johnston	19,257,945	16,759,701	13,239,716	0	0
17	Lincoln	93,377	213,250	113,503	119,873	20,126
21	Newport	30,146,836	28,854,117	21,929,295	0	0
22	New Shoreham	1,375,668	1,040,879	720,516	0	0
23	North Kingstown	17,760,947	15,095,844	10,620,099	0	0
24	North Providence	16,233,714	11,255,497	8,684,684	0	0
25	North Smithfield	7,680,098	4,905,157	3,840,180	0	0
26	Pawtucket	58,693,573	49,777,763	37,891,651	0	0
29	Richmond	557,444	556,188	397,254	0	0
30	Scituate	5,544,980	4,729,509	3,573,296	0	0
31	Smithfield	12,362,629	7,559,679	6,090,675	0	0
32	South Kingstown	17,751,500	11,373,261	7,757,950	0	0
33	Tiverton	6,671,139	4,295,260	3,484,474	0	0
34	Warren	4,139,492	4,027,460	3,573,010	0	0
36	Westerly	820,322	1,235,301	1,228,681	414,979	408,359
37	West Greenwich	686,436	861,129	532,142	174,693	0
39	Woonsocket	38,546,472	22,574,527	17,948,529	0	0
40	Chariho School District	3,939,175	3,395,956	2,023,297	0	0
41	Foster/Glocester	1,773,584	2,232,091	1,704,505	458,507	0
42	Tiogue Fire & Lighting	21,631	46,225	44,609	24,594	22,978
43	Narragansett Housing	28,795	35,898	10,465	7,103	0
45	Coventry Lighting District	380,195	472,133	388,144	91,938	7,949
46	Hope Valley Fire	63,823	81,581	63,694	17,758	0
51	Cranston Housing	1,527,041	1,115,540	693,590	0	0
52	East Providence Housing	1,289,814	1,007,294	806,359	0	0
53	Pawtucket Housing	5,487,305	3,175,057	2,419,262	0	0

**Table 7 - Liabilities and Funded Status as of June 30, 1996 (Cont'd)**

Table 7 - Liabilities and Funded Status as of June 30, 1996

Note: For FY '99, assets are on a market value basis.

<u>MUNICIPALITY</u>	<u>MARKET VALUE OF ASSETS</u>	<u>TOTAL ACCRUED LIABILITY</u>	<u>VESTED LIABILITY</u>	<u>TOTAL UNFUNDED LIABILITY</u>	<u>UNFUNDED VESTED LIABILITY</u>
<b>General Employees</b>					
56 Cumberland Housing	626,436	479,435	483,526	0	0
57 Lincoln Housing	863,705	673,865	545,603	0	0
59 Bristol Housing	866,254	484,316	348,978	0	0
65 Burrillville Housing	349,492	142,935	69,506	0	0
66 North Providence Housing	549,230	315,412	211,701	0	0
67 East Smithfield Water	265,831	142,993	97,120	0	0
68 Greenville Water	503,279	345,660	253,469	0	0
69 Newport Housing	958,030	1,147,637	699,321	189,607	0
71 Warren Housing	576,565	363,127	266,651	0	0
72 Johnston Housing	518,737	412,761	341,460	0	0
77 Tiverton Local 2670A	1,244,600	1,021,361	619,908	0	0
79 Coventry Housing	563,842	451,113	388,100	0	0
80 South Kingstown Housing	34,781	26,657	26,657	0	0
83 West Warwick Housing	489,131	371,680	265,254	0	0
84 Smithfield Housing	97,848	83,242	65,958	0	0
96 Central Falls Housing	825,582	1,171,184	1,011,154	345,602	185,572
98 Lime Rock Administrative Services	28,932	50,179	15,924	21,247	0
99 Central Falls Schools	2,216,370	2,344,969	1,276,182	128,599	0
100 Bristol/Warren Schools	7,173,808	4,798,144	3,093,001	0	0

**Table 7 - Liabilities and Funded Status as of June 30, 1996 (contd.)**

**Table 7 - Liabilities and Funded Status as of June 30, 1996**

Note: For FY '99, assets are on a market value basis.

Police and Fire MUNICIPALITY		MARKET VALUE OF ASSETS	TOTAL ACCRUED LIABILITY	VESTED LIABILITY	TOTAL UNFUNDED LIABILITY	UNFUNDED VESTED LIABILITY
42 Valley Falls Fire	D	\$664,999	\$1,645,463	\$1,348,425	\$980,464	\$683,426
46 Lime Rock Fire	3	164,787	18,689	18,689	0	0
47 North Smithfield Voluntary Fire	D	376,911	368,615	160,753	0	0
50 East Greenwich Fire	C,D	4,372,438	4,200,982	3,175,310	0	0
54 East Greenwich Police	C,D	5,929,306	4,699,527	3,878,358	0	0
55 North Kingstown Fire	D	13,182,180	11,659,066	9,758,745	0	0
56 North Kingstown Police	C,D,2	5,205,000	6,284,803	3,623,249	1,079,803	0
58 North Providence Fire	D	10,977,014	9,709,400	6,764,366	0	0
60 Barrington Police	D	4,187,083	5,071,071	4,490,456	883,988	303,373
61 Barrington Fire	D	6,900,744	5,648,487	4,927,611	0	0
62 Warren Police	C,D	4,371,771	4,529,237	3,856,473	157,466	0
63 South Kingstown Police & Fire	C,D,1	9,660,947	6,903,919	5,072,055	0	0
64 Primrose Volunteer Fire	B,D	1,095,467	665,644	537,163	0	0
73 Scituate Police	3	125,437	47,790	47,790	0	0
76 North Smithfield Police	C,D	3,444,680	2,542,798	1,996,909	0	0
77 Tiverton Fire	D	4,244,728	3,335,302	2,685,714	0	0
82 Foster Police	D	859,639	762,629	522,053	0	0
85 Woonsocket Police	C,D	6,166,949	5,923,324	2,839,529	0	0
86 Charlestown Police	D	1,088,211	1,490,497	1,001,694	402,286	0
87 Hopkinton Police	C,D	951,029	735,507	431,293	0	0
88 Gloucester Police	C,D	1,032,844	1,204,830	626,829	171,986	0
89 West Greenwich Police/Rescue		619,109	531,535	351,526	0	0
90 Burrillville Police	C,D	2,525,908	2,745,231	2,196,043	219,323	0
91 Cumberland Rescue	D	742,335	604,270	278,703	0	0
92 Washington Fire	D	381,518	548,378	288,173	166,860	0
93 Woonsocket Fire	C,D,4	3,725,748	3,674,551	1,471,419	0	0
94 Bristol Fire		62,015	33,261	14,944	0	0
95 Cumberland Hill Fire	C,D	886,147	1,212,233	903,168	326,086	17,021
98 Coventry Fire		604,264	772,608	518,895	168,344	0
99 South Kingstown EMT	C,D,2	106,703	133,137	0	26,434	0
100 Tiogue Fire		165,577	177,406	99,367	11,829	0
101 North Cumberland	D	679,410	1,055,759	565,578	376,349	0
102 Central Coventry Fire	D	483,449	749,309	529,734	265,860	46,285
103 Hopkins Hill Fire		74,079	43,971	34,780	0	0
106 Cumberland Fire	D	555,364	797,206	580,558	241,842	25,194
107 Lincoln Rescue		339,286	387,552	199,106	48,266	0
108 New Shoreham Police		83,750	75,503	77,797	0	0
109 Warren Fire	D	17,477	54,658	2,697	37,181	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 - S. Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1992, and 2.5% of salary for service on or after July 1, 1992.

2 - New unit.

3 - Closed unit.

4 - By special agreement, the Woonsocket Firefighters are currently contributing 8.0% of salary; the above costs assume an employee contribution of 9.0%.

**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, 1996.

This certificate contains the following attached exhibits:

EXHIBIT I - Actuarial Cost Factors as of June 30, 1996

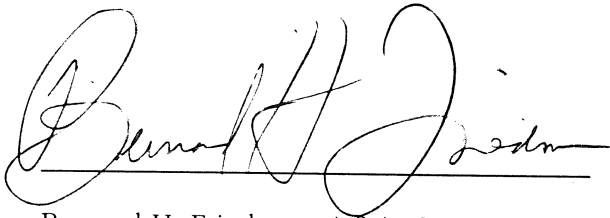
- A. General employees
- B. Police and firemen

EXHIBIT II - Participant Information

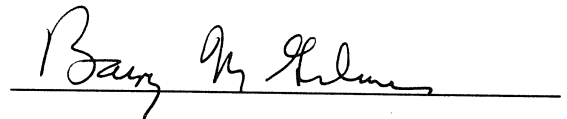
EXHIBIT III - Actuarial Method and Assumptions

EXHIBIT IV - Summary of Plan Provisions

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate (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.



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

## EXHIBIT I - ACTUARIAL COST FACTORS AS OF JUNE 30, 1996

### A. GENERAL EMPLOYEES

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

- a. 5,745 active participants (including 2,206 fully vested) with total annual salaries of \$126,937,073
- b. 948 inactive participants
- c. 2,819 pensioners (including 170 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost	\$ 10,370,800
2. Projected employee contributions	8,353,600
3. Employer normal cost	2,017,200
4. Actuarial liability	373,860,700
5. Assets (Actuarial Value)	467,334,000
6. Unfunded actuarial liability	4,846,200 (a)

- (a) Equal to the sum of the individual municipalities unfunded liabilities with negative unfunded liabilities for certain units set equal to zero.

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

**EXHIBIT I - ACTUARIAL COST FACTORS AS OF JUNE 30, 1996 (Cont'd)**

**B. POLICE AND FIRE**

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

- a. 798 active participants (including 354 fully vested) with total annual salaries of \$26,732,344
- b. 28 inactive participants
- c. 194 pensioners (including 26 beneficiaries of deceased pensioners and active employees)

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

1. Total normal cost	\$ 4,259,200
2. Projected employee contributions	2,267,800
3. Employer normal cost	1,991,400
4. Actuarial liability	91,025,500
5. Assets (Actuarial Value)	97,054,300
6. Unfunded actuarial liability	5,564,400 (a)

(a) Equal to the sum of the individual municipalities unfunded liabilities with negative unfunded liabilities for certain units set equal to zero.

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

## EXHIBIT II - PARTICIPANT INFORMATION

Active Employees as of June 30, 1996

Active Employees as of June 30, 1995

MUNICIPALITY	Active Employees as of June 30, 1996			Active Employees as of June 30, 1995					
	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY	NUMBER	AVERAGE AGE	AVERAGE SERVICE	AVERAGE SALARY	
<b>General Employees</b>									
1 Barrington		145	46.4	10.5	\$24,920	153	47.2	11.3	\$23,820
2 Bristol	B	77	44.4	11.4	25,206	86	45.4	12.4	24,226
3 Burrillville	C	134	47.3	9.9	22,750	143	47.6	10.3	21,034
4 Central Falls		49	41.3	8.2	21,625	47	42.9	10.6	24,783
5 Charlestown	C	31	40.3	7.1	25,358	30	39.9	7.3	24,233
7 Cranston	B	811	46.9	10.5	22,792	812	46.9	10.9	22,115
8 Cumberland		213	48.9	9.5	20,633	210	48.8	8.7	20,543
9 East Greenwich		132	47.3	10.7	23,908	132	47.4	11.0	20,420
10 East Providence	B	400	46.9	9.8	25,996	418	47.0	10.0	24,736
11 Exeter/West Greenwich		56	45.9	8.7	17,176	59	46.0	7.8	17,156
12 Foster		37	44.3	8.2	17,368	37	44.2	9.4	16,837
13 Gloucester		53	45.0	7.5	20,428	58	45.5	8.2	19,056
14 Hopkinton	C	24	46.4	5.9	21,336	25	46.3	8.8	20,984
15 Jamestown	C	47	44.7	10.0	25,825	45	43.8	10.5	26,972
16 Johnston	C	223	47.8	10.0	20,404	223	48.8	11.5	19,305
17 Lincoln		9	40.5	4.7	29,962	9	43.0	9.0	22,322
21 Newport	B	314	45.1	11.7	24,651	351	45.2	11.6	23,475
22 New Shoreham		38	43.1	6.3	21,916	42	44.1	8.2	22,610
23 North Kingstown		309	47.6	10.1	20,627	301	47.4	10.3	20,503
24 North Providence		262	46.3	9.6	19,080	290	47.2	11.3	18,329
25 North Smithfield	C	81	47.8	8.9	20,968	79	48.7	9.6	20,115
26 Pawtucket	C	645	46.9	11.6	22,515	673	47.1	11.6	22,140
29 Richmond		21	43.1	6.2	21,105	23	45.5	8.5	21,294
30 Scituate	B	84	49.6	9.2	17,590	94	49.2	10.3	16,778
31 Smithfield		120	48.2	9.6	25,093	128	47.6	10.1	24,899
32 South Kingstown		281	45.7	9.4	21,269	287	45.6	10.0	21,032
33 Tiverton		59	49.9	10.6	23,247	61	49.5	11.0	21,939
34 Warren	C	33	45.6	9.5	23,340	32	47.0	10.1	23,149
36 Westerly		2	58.8	16.8	38,919	3	59.0	16.8	31,558
37 West Greenwich		21	49.0	11.1	21,018	21	48.0	6.8	18,763
39 Woonsocket		413	46.7	9.2	18,952	431	46.9	9.5	19,269
40 Chariho School District		113	44.9	8.3	19,520	117	45.4	8.7	19,305
41 Foster/Glocester	B	39	48.1	10.2	18,716	47	48.6	8.1	19,044
42 Tiogue Fire & Lighting	C	2	54.0	19.4	6,440	2	53.0	17.4	5,939
43 Narragansett Housing		4	42.3	3.2	18,034	3	46.9	6.6	16,817
45 Coventry Lighting District		3	60.3	29.5	38,408	3	59.3	28.5	36,768
46 Hope Valley Fire	C	1	60.8	13.9	34,427	1	59.8	14.5	34,709
51 Cranston Housing	C	17	48.6	9.0	28,552	15	48.0	8.3	29,241
52 East Providence Housing	B	14	47.0	7.4	25,354	12	47.9	8.6	27,464
53 Pawtucket Housing	B	44	43.8	8.3	30,881	43	43.5	8.4	27,597

**EXHIBIT II - PARTICIPANT INFORMATION (Cont'd)**

Active Employees as of June 30, 1996

Active Employees as of June 30, 1995

<u>MUNICIPALITY</u>		<u>NUMBER</u>	<u>AVERAGE</u> <u>AGE</u>	<u>AVERAGE</u> <u>SERVICE</u>	<u>AVERAGE</u> <u>SALARY</u>	<u>NUMBER</u>	<u>AVERAGE</u> <u>AGE</u>	<u>AVERAGE</u> <u>SERVICE</u>	<u>AVERAGE</u> <u>SALARY</u>
<b>General Employees</b>									
56 Cumberland Housing		12	43.8	2.1	16,159	13	42.3	9.0	23,389
57 Lincoln Housing	B	8	49.5	9.1	27,685	8	45.8	8.4	27,907
59 Bristol Housing		8	48.8	11.1	25,286	8	47.8	10.0	24,087
65 Burrillville Housing		4	47.1	8.0	22,015	3	48.2	9.0	28,809
66 North Providence Housing	B	8	40.6	6.1	24,972	9	43.5	6.8	23,226
67 East Smithfield Water	C	4	45.1	6.1	30,754	4	49.0	11.3	28,539
68 Greenville Water		4	40.9	10.7	30,276	3	49.4	17.4	34,518
69 Newport Housing		21	49.2	11.1	30,208	21	47.1	10.1	30,700
71 Warren Housing		6	52.6	11.8	25,395	6	51.6	10.8	24,265
72 Johnston Housing		6	48.6	10.4	23,841	6	47.6	9.2	25,741
77 Tiverton Local 2670A	C	23	52.5	10.8	24,311	19	53.3	10.1	23,276
79 Coventry Housing		8	48.8	7.3	24,964	8	52.3	7.4	26,731
80 South Kingstown Housing	3	---	---	---	---	---	---	---	---
83 West Warwick Housing		7	49.0	9.7	25,366	7	49.7	11.0	22,365
84 Smithfield Housing		3	39.8	5.6	20,214	3	41.0	8.0	16,987
96 Central Falls Housing		15	48.4	6.0	26,329	15	46.9	6.2	25,469
98 Lime Rock Administrative Service		2	42.0	9.8	22,365	2	41.0	8.8	20,048
99 Central Falls Schools		106	44.3	7.9	17,551	102	44.5	7.8	16,599
100 Bristol/Warren Schools	B	139	46.8	7.9	18,079	134	47.4	9.6	17,431



## EXHIBIT II - PARTICIPANT INFORMATION (Cont'd)

Active Employees as of June 30, 1996

Active Employees as of June 30, 1995

MUNICIPALITY		NUMBER	AVERAGE			NUMBER	AVERAGE			
			AGE	SERVICE	SALARY		AGE	SERVICE	SALARY	
<b>Police and Fire</b>										
42	Valley Falls Fire	D	12	39.5	14.6	28,730	11	39.3	14.9	\$29,666
46	Lime Rock Fire	3	---	---	---	---	5	33.9	12.1	14,458
47	North Smithfield Voluntary Fire	D	9	36.4	7.9	27,761	9	35.4	6.9	26,546
50	East Greenwich Fire	C,D	24	36.2	9.9	37,404	24	35.1	8.5	36,528
54	East Greenwich Police	C,D	31	38.6	12.1	31,060	23	37.4	11.3	30,445
55	North Kingstown Fire	D	67	38.0	12.8	33,845	67	37.0	11.3	32,563
56	North Kingstown Police	C,D,2	49	38.2	13.6	35,041	---	---	---	---
58	North Providence Fire	D	100	36.2	10.0	35,505	89	36.1	10.0	38,645
60	Barrington Police	D	24	36.0	11.4	33,524	25	38.9	12.9	28,674
61	Barrington Fire	D	21	38.0	12.4	34,444	22	38.2	12.0	43,607
62	Warren Police	C,D	21	36.3	10.3	33,776	19	37.6	12.3	34,817
63	South Kingstown Police & Fire	C,D,1	44	41.1	16.0	37,367	42	40.1	15.2	36,819
64	Primrose Volunteer Fire	B,D	6	40.2	13.7	27,364	7	38.7	12.4	27,881
73	Scituate Police	3	---	---	---	---	---	---	---	---
76	North Smithfield Police	C,D	18	38.4	12.6	34,132	18	39.8	13.4	34,374
77	Tiverton Fire	D	26	38.8	11.4	31,706	27	40.1	12.2	30,307
82	Foster Police	D	7	33.7	11.8	29,669	4	32.2	10.5	31,052
85	Woonsocket Police	C,D	83	32.4	7.9	36,708	83	31.4	6.6	34,723
86	Charlestown Police	D	17	36.7	9.3	34,252	17	35.6	6.7	33,037
87	Hopkinton Police	C,D	10	37.1	9.4	34,546	11	36.4	8.3	33,616
88	Glocester Police	C,D	14	37.4	9.6	31,673	15	38.7	7.8	27,977
89	West Greenwich Police/Rescue		8	40.5	14.8	29,958	8	39.5	13.8	29,192
90	Burrillville Police	C,D	20	34.4	7.2	31,955	20	36.0	6.3	30,669
91	Cumberland Rescue	D	14	32.3	7.7	29,064	15	31.0	6.1	28,854
92	Washington Fire	D	9	35.3	10.2	29,961	10	33.4	8.0	27,142
93	Woonsocket Fire	C,D,4	75	31.7	6.6	33,413	72	30.8	6.1	32,647
94	Bristol Fire		1	46.9	6.0	42,735	1	45.9	5.0	43,535
95	Cumberland Hill Fire	C,D	10	41.0	15.0	29,705	10	40.0	14.0	31,074
98	Coventry Fire		12	36.6	9.6	29,183	12	36.9	11.0	28,029
99	South Kingstown EMT	C,D,2	7	33.4	3.3	24,806	---	---	---	---
100	Tiogue Fire		4	36.2	9.9	26,827	4	35.2	8.9	25,641
101	North Cumberland	D	14	35.0	12.9	29,512	14	34.0	11.9	28,634
102	Central Coventry Fire	D	11	35.8	9.5	32,054	10	35.4	9.4	33,781
103	Hopkins Hill Fire		4	31.5	3.1	19,302	4	29.3	4.7	21,103
106	Cumberland Fire	D	10	42.2	11.6	30,449	9	42.6	11.7	36,300
107	Lincoln Rescue		12	35.3	8.4	25,757	12	35.1	9.4	28,831
108	New Shoreham Police		3	41.4	4.5	36,586	3	40.4	7.3	44,667
109	Warren Fire	D	1	49.4	8.0	33,712	1	48.4	7.0	35,000

**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 - S. Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1992, and 2.5% of salary for service on or after July 1, 1992.

2 - New unit.

3 - Closed unit.

4 - By special agreement, the Woonsocket Firefighters are currently contributing 8.0% of salary; the above costs assume an employee contribution of 9.0%.

**EXHIBIT II - PARTICIPANT INFORMATION (Cont'd)**

	MUNICIPALITY	Retirees and Beneficiaries As of June 30, 1996			Retirees and Beneficiaries As of June 30, 1995			
		NUMBER	AVERAGE AGE	AVERAGE MONTHLY BENEFIT	NUMBER	AVERAGE AGE	AVERAGE MONTHLY BENEFIT	
<b>General Employees</b>								
1	Barrington	107	72.6	\$442	104	72.3	\$427	
2	Bristol	B	74	71.6	496	74	71.4	472
3	Burrillville	C	59	70.4	546	57	70.3	537
4	Central Falls		28	63.8	610	25	64.0	562
5	Charlestown	C	4	66.8	825	4	65.8	803
7	Cranston	B	401	71.6	583	396	71.4	542
8	Cumberland		91	68.7	548	81	68.1	503
9	East Greenwich		60	70.1	469	59	69.9	454
10	East Providence	B	275	68.9	927	268	68.7	882
11	Exeter/West Greenwich		9	66.2	603	7	68.8	291
12	Foster		13	69.0	554	12	68.4	621
13	Glocester		8	65.0	631	8	63.2	572
14	Hopkinton	C	10	69.5	570	8	71.0	421
15	Jamestown	C	17	70.1	585	17	70.5	502
16	Johnston	C	120	69.8	644	112	70.1	598
17	Lincoln		—	—	—	—	—	—
21	Newport	B	176	71.4	695	175	71.2	650
22	New Shoreham		8	66.3	400	8	65.3	400
23	North Kingstown		101	71.2	563	99	70.9	551
24	North Providence		115	71.4	407	107	71.4	363
25	North Smithfield	C	58	71.7	378	55	71.2	335
26	Pawtucket	C	387	71.8	541	391	72.1	496
29	Richmond		6	69.6	203	6	68.6	203
30	Scituate	B	40	71.6	487	38	72.8	422
31	Smithfield		74	71.6	477	69	71.5	489
32	South Kingstown		72	73.0	422	71	72.3	399
33	Tiverton		51	71.7	437	51	71.1	425
34	Warren	C	53	70.2	543	55	70.3	518
36	Westerly		12	72.2	907	10	73.2	718
37	West Greenwich		4	72.1	479	5	71.5	600
39	Woonsocket		262	71.5	457	259	71.3	465
40	Chariho School District		15	65.4	537	11	65.5	408
41	Foster/Glocester	B	12	64.6	804	9	65.1	524
42	Tiogoe Fire & Lighting	C	—	—	—	—	—	—
43	Narragansett Housing		—	—	—	—	—	—
45	Coventry Lighting District		—	—	—	—	—	—
46	Hope Valley Fire	C	—	—	—	—	—	—
51	Cranston Housing	C	7	72.7	472	8	72.8	437
52	East Providence Housing	B	10	75.1	395	10	74.1	395
53	Pawtucket Housing	B	25	74.3	556	24	73.0	515

**EXHIBIT II - PARTICIPANT INFORMATION (Cont'd)**

<u>MUNICIPALITY</u>	<u>Retirees and Beneficiaries</u> <u>As of June 30, 1996</u>			<u>Retirees and Beneficiaries</u> <u>As of June 30, 1995</u>			
	<u>NUMBER</u>	<u>AVERAGE</u> <u>AGE</u>	<u>AVERAGE</u> <u>MONTHLY</u> <u>BENEFIT</u>	<u>NUMBER</u>	<u>AVERAGE</u> <u>AGE</u>	<u>AVERAGE</u> <u>MONTHLY</u> <u>BENEFIT</u>	
<b>General Employees</b>							
56 Cumberland Housing	6	66.8	634	6	65.8	599	
57 Lincoln Housing	B	3	73.5	765	4	71.8	692
59 Bristol Housing		2	68.8	553	2	67.8	553
65 Burrillville Housing		—	—	—	—	—	—
66 North Providence Housing	B	3	68.6	288	3	67.6	279
67 East Smithfield Water	C	—	—	—	1	78.6	521
68 Greenville Water		2	67.5	815	1	68.0	749
69 Newport Housing		—	—	—	—	—	—
71 Warren Housing		1	80.1	476	1	79.1	476
72 Johnston Housing		3	73.5	560	3	72.5	560
77 Tiverton Local 2670A	C	—	—	—	—	—	—
79 Coventry Housing		5	67.7	337	5	66.7	337
80 South Kingstown Housing	3	1	75.4	246	1	74.4	246
83 West Warwick Housing		2	66.8	570	2	65.8	570
84 Smithfield Housing		1	72.5	572	1	71.5	572
96 Central Falls Housing		7	64.1	1,027	7	63.1	1,027
98 Lime Rock Administrative Services		—	—	—	—	—	—
99 Central Falls Schools		5	65.2	492	5	64.2	473
100 Bristol/Warren Schools	B	14	62.5	797	—	—	—

**EXHIBIT II - PARTICIPANT INFORMATION (Cont'd)**

Police and Fire MUNICIPALITY		Retirees and Beneficiaries As of June 30, 1996			Retirees and Beneficiaries As of June 30, 1995		
		NUMBER	AVERAGE		NUMBER	AVERAGE	
			AGE	MONTHLY BENEFIT		AGE	MONTHLY BENEFIT
42 Valley Falls Fire	D	3	58.6	1,452	3	57.6	\$1,437
46 Lime Rock Fire	3	—	—	—	—	—	—
47 North Smithfield Voluntary Fire	D	—	—	—	—	—	—
50 East Greenwich Fire	C,D	13	63.6	1,373	11	65.6	1,243
54 East Greenwich Police	C,D	12	67.0	1,145	10	65.2	1,332
55 North Kingstown Fire	D	38	63.1	1,216	34	61.3	1,348
56 North Kingstown Police	C,D,2	—	—	—	—	—	—
58 North Providence Fire	D	14	65.0	1,475	10	64.4	1,706
60 Barrington Police	D	21	61.4	1,141	18	60.9	1,201
61 Barrington Fire	D	28	61.6	1,177	27	60.7	1,208
62 Warren Police	C,D	18	61.9	1,085	14	62.1	1,065
63 South Kingstown Police & Fire	C,D,1	14	59.9	1,043	12	59.8	1,120
64 Primrose Volunteer Fire	B,D	1	82.1	321	1	81.1	312
73 Scituate Police	3	1	67.0	497	1	66.0	497
76 North Smithfield Police	C,D	3	60.5	1,238	2	59.8	1,359
77 Tiverton Fire	D	13	63.9	935	10	66.4	877
82 Foster Police	D	2	55.4	1,203	2	54.4	1,203
85 Woonsocket Police	C,D	1	39.7	1,755	1	38.7	1,710
86 Charlestown Police	D	2	37.7	1,078	2	36.7	1,078
87 Hopkinton Police	C,D	—	—	—	—	—	—
88 Gloucester Police	C,D	2	60.8	695	1	59.1	377
89 West Greenwich Police/Rescue		—	—	—	—	—	—
90 Burrillville Police	C,D	7	53.9	1,690	5	55.7	1,666
91 Cumberland Rescue	D	—	—	—	—	—	—
92 Washington Fire	D	—	—	—	—	—	—
93 Woonsocket Fire	C,D,4	—	—	—	—	—	—
94 Bristol Fire		—	—	—	—	—	—
95 Cumberland Hill Fire	C,D	—	—	—	—	—	—
98 Coventry Fire		1	35.1	1,745	2	44.5	1,146
99 South Kingstown EMT	C,D,2	—	—	—	—	—	—
100 Tiogue Fire		—	—	—	—	—	—
101 North Cumberland	D	—	—	—	—	—	—
102 Central Coventry Fire	D	—	—	—	—	—	—
103 Hopkins Hill Fire		—	—	—	—	—	—
106 Cumberland Fire	D	—	—	—	—	—	—
107 Lincoln Rescue		—	—	—	—	—	—
108 New Shoreham Police		—	—	—	—	—	—
109 Warren Fire	D	—	—	—	—	—	—

**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 - S. Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1992, and 2.5% of salary for service on or after July 1, 1992.

2 - New unit.

3 - Closed unit.

4 - By special agreement, the Woonsocket Firefighters are currently contributing 8.0% of salary, the above costs assume an employee contribution of 9.0%.

## EXHIBIT III - 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 III - ACTUARIAL METHOD AND ASSUMPTIONS (Cont'd)**

b. **Actuarial Assumptions Concerning Future Events**

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

<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	.081	.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 and completion of 10 years of service, or at the later of the age 55 and completion of 25 years of service, if earlier. 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 55 and completion of 10 years of service, or at the later of age 50 and completion of 20 years of service, if earlier. For all Police and Firemen, this represents a change from what was assumed in the prior valuation.

*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 III - 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	1.41	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	--

Terminated employees are assumed to receive an annuity at Normal Retirement Age. The effect of these employees electing a refund of their contributions instead, a lesser value, is assumed to be offset by the effect of ignoring any refunds of employee contributions attributable to withdrawal prior to becoming vested.

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

### **EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS (Cont'd)**

*Actuarial Value of Assets* - The actuarial value of assets spreads investment gains and losses relative to the assumed return of 8%, over a three year period. The actuarial value of assets was reset to equal the market value of assets as of June 30, 1996.

*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 in the same municipal group whose data is complete.



**EXHIBIT IV - SUMMARY OF PLAN PROVISIONS.**

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PLAN NAME

Municipal Employees' Retirement System of the State of Rhode Island

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FINAL AVERAGE SALARY

Final average salary is the three highest consecutive years of earned salary exclusive of overtime, bonuses, or severance pay.

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NORMAL RETIREMENT

Age and Service Requirements

**General Employees** may retire with full accrued benefits at age 58 with 10 years of service or after 30 years of service regardless of age.

**Police and Firemen** may retire with unreduced accrued benefits at age 55 with 10 years of service or after 25 years regardless of age.

**Police and Firemen under the Optional Plan** may retire with unreduced accrued benefits at age 55 with 10 years of service or after 20 years of service with no restriction on age.

Amount of Retirement Benefits

2% of final average salary times service, maximum benefit is 75% of final average salary.

For the optional 20-year service plan, retirement benefit is 2.5% of final average salary times service with a maximum benefit of 75% of final average salary.

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**EXHIBIT IV - SUMMARY OF PLAN PROVISIONS (Cont'd)**

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EARLY RETIREMENT

Age and Service Requirement

Early retirement is only available to policemen and firemen under the normal plan.

Amount of Retirement Benefits

Regular pension accrued, reduced by 6% for each year of age less than 55.

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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, payable immediately. The minimum benefit is 20% 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.

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VESTING

Employees are vested in their retirement benefits on completion of 10 years of service.

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**EXHIBIT IV - SUMMARY OF PLAN PROVISIONS (Cont'd)**

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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.

Amount of Benefit: Benefit employee would have received had he/she retired the day before he/she died and chosen the 100% joint and survivor option.

Police and Firemen's Survivor Benefit

There is no age of service requirement for this benefit.

Amount of Benefit:

- (a) 30% of final average salary to spouse plus 10% to each child under age 18, plus
- (b) refund of employee contributions.

**EXHIBIT IV - SUMMARY OF PLAN PROVISIONS (Cont'd)**

PRE-RETIREMENT DEATH  
BENEFITS (Cont'd)

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. Police and firemen also receive 10% for each child under 18 to a maximum of 66-2/3%.
  - (b) refund of employee contributions.
- 

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

Municipal Employees: 6% until maximum benefit (75% of final average salary) is accrued. Increased to 7% with post-retirement cost-of-living increase.

Policemen and Firemen: 7% until maximum benefit (75% of final average salary) is accrued. Increased to 8% with post-retirement cost-of-living increase. Increased by 1% for 20 year service plan.

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**EXHIBIT IV - SUMMARY OF PLAN PROVISIONS (Cont'd)**

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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.

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POST-RETIREMENT  
COST OF LIVING  
ADJUSTMENT

Retirees' benefits are adjusted annually by 3%, not compounded, to allow for increases in cost of living if their municipal group adopts this benefit provision.

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