

**Actuarial Rep**

**I**

REPORT ON AN ACTUARIAL VALUATION  
OF THE  
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM  
AS OF JUNE 30, 1976

Presented herewith is a report on an annual actuarial valuation of the system completed as of June 30, 1976. The purpose of an actuarial valuation is to establish the financial condition of the system according to actuarial criteria reflecting accruing cost requirements. From the results of the valuation, the progress of the system during the year under review may be measured and analyzed. In such valuation, effect is given to all accrued liabilities and currently accruing costs for the benefits comprising the prescribed benefit schedule.

An analysis is made of the changes occurring in the active membership among the several participating municipalities. In this process, account is taken of the additions to membership during the year and the principal characteristics thereof, the separations from the service due to resignation, death or retirement, and other pertinent factors. The experience of the system among retirements is reviewed and evaluated. In the report on the valuation, the factors and conditions that are inherent in the valuation procedure are reviewed and other problems arising in the operations of the system that are of relevance are discussed. The basic assumptions applied in the valuation for the determination of costs and liabilities are also presented.

Part 1. ACTUARIAL ASSUMPTIONS

1. Mortality expectancy: The 1951 Group Annuity Table (projected)
2. Interest rate: 5% per annum
3. Turnover factors: Assumed annual rates of withdrawal from all causes -
 

Age	rates per 1,000	
	Male	Female
20	182	219
25	167	196
30	121	143
35	92	110
40	63	75
45	48	57
50	22	26
55	10	12
60 and over	Mortality only	
4. Future salary increments: Assumed annual compound rate for the long term - 4% per year
5. Average age at retirement: Male - 66 years  
Female - 64 years
6. Disability rates: Actual operating experience. It was assumed that 12-1/2% of all disablements would occur in line of duty.
7. Marital status: 85% of employees in service were assumed to be married with the average of the wives 4 years younger than the employees; 75% of the employees retiring on pension were assumed to be married.
8. Administrative expense: None

Part 2. MEMBERSHIP STATISTICS

Code reference	City or Town	Number of Active Members	Number of Pensioners		Total Membership
			Male	Female	
1	Barrington	134	28	9	171
2	Bristol	108	15	4	127
3	Burrillville	101	--	1	102
7	Cranston	509	87	71	667
9	East Greenwich	130	2	3	135
10	East Providence	281	69	22	372
14	Hopkinton	22	5	--	27
15	Jamestown	46	4	2	52
16	Johnston	200	4	2	206
21	Newport	280	58	11	349
23	North Kingstown	173	24	8	205
24	North Providence	188	27	7	222
25	North Smithfield	77	9	2	88
26	Fawtucket	753	169	41	963
30	Scituate	65	17	2	84
31	Smithfield	100	9	4	113
32	South Kingstown	139	10	8	157
33	Tiverton	90	12	2	104
34	warren	74	16	2	92
39	woonsocket	345	74	18	437
<u>SPECIAL UNITS</u>					
50	East Greenwich Fire District	10	--	--	10
51	Cranston Housing Authority	13	--	--	13
52	East Providence Housing Authority	10	--	--	10
53	Fawtucket Housing Authority	33	9	--	42
Carried forward		3,881	648	219	4,748

Code reference	City or Town	Number of Active Members	Number of Pensioners		Total Membership
			Male	Female	
	Brought forward	3,881	648	219	4,748
54	Each Greenwich Police	20	4	1	25
55	North Kingstown Police and Fire	78	8	--	86
56	Cumberland Housing Authority	3	--	--	3
57	Lincoln Housing Authority	6	--	--	6
58	North Providence Police	50	4	1	55
59	Bristol Housing Authority	5	--	--	5
60	Barrington Police and Fire	59	6	--	65
61	Smithfield Police and Fire	23	3	--	26
62	Warren Police	20	3	--	23
63	South Kingstown Police and Fire	35	1	1	37
64	Frimrose Volunteer Fire Dept.	6	--	--	6
65	Burrillville Housing Authority	2	--	--	2
66	North Providence Housing Authority	3	--	--	3
67	East Smithfield water District	3	1	--	4
68	Greenville water District	3	--	--	3
71	Warren Housing Authority	2	--	--	2
	Totals	4,199	678	222	5,099

Part 3. UNFUNDED ACCRUED LIABILITY

Code	Municipality	Entry Year of Membership	Annuity Plan	Unfunded Accrued Liability
<u>General Employees</u>				
1	Barrington	1957	2% \$	227,128
2	Bristol	1957	2	117,313
3	Burrillville	1968	1-2/3	215,618
7	Cranston	1963	2	1,755,384
9	East Greenwich	1957	2	134,720
10	East Providence	1961	2	763,204
14	Hopkinton	1969	1-2/3	100,722
15	Jamestown	1964	2	118,312
16	Johnston	1968	2	420,518
21	Newport	1966	1-2/3	1,165,441
23	North Kingstown	1957	2	286,260
24	North Providence	1961	2	374,218
25	North Smithfield	1964	2	140,871
26	Pawtucket	1962	2	2,439,110
30	Scituate	1967	2	326,899
31	Smithfield	1959	2	102,111
32	South Kingstown	1957	2	76,741
33	Tiverton	1964	1-2/3	268,273
34	Warren	1957	2	177,363
39	Woonsocket	1962	1-2/3	1,615,276
<u>Special Authorities</u>				
51	Cranston Housing Authority	1968	2	39,864
52	East Providence Housing Authority	1968	2	31,306
53	Pawtucket Housing Authority	1968	2	246,500
56	Cumberland Housing Authority	1969	1-2/3	8,906
57	Lincoln Housing Authority	1969	1-2/3	9,411
59	Bristol Housing Authority	1970	2	8,273
65	Burrillville Housing Authority	1972	2	8,962
66	North Providence Housing Authority	1973	2	717
67	East Smithfield Water District	1973	2	12,406
68	Greenville Water District	1973	2	15,007
71	Warren Housing Authority	1975	2	6,222
	Carried forward			\$11,213,056

Code	Municipality	Entry Year of Membership	Annuity Plan	Unfunded Accrued Liability
	Brought forward			\$11,213,056
	<u>Police &amp; Fire</u>			
50	East Greenwich Fire District	1967	2%	45,311
54	East Greenwich Police	1968	2	61,712
55	North Kingstown Police	1968	2	293,198
	and Fire	1969	2	111,823
58	North Providence Police	1970	2	135,831
60	Barrington Police and Fire	1970	2	45,787
62	Warren Police			
63	South Kingstown Police and Fire	1971	2	102,188
61	Smithfield Police and Fire	1972	2	117,973
64	Primrose Volunteer Fire Dept.	1972	2	37,019
	<u>Total</u>			<u>\$12,163,898</u>

Part 4. RECOMMENDED RATES OF CONTRIBUTION  
FOR PARTICIPATING MUNICIPALITIES

				JUNE 30, 1976		
Code	City or Town	Year of Member- ship	Rate of Pension Credit	Per cent of Payroll for Employer's Contributions		
				Normal Cost	Accrued Liability	Total
	<u>General Employees</u>					
1	Barrington	1957	2%	10.70%	1.40%	12.10%
2	Bristol	1957	2	11.50	1.30	12.80
3	Burrillville	1968	1-2/3	8.36	--	8.36
7	Cranston	1963	2	8.59	3.52	12.11
9	East Greenwich	1957	2	10.80	1.50	12.30
10	East Providence	1961	2	10.70	2.01	12.71
14	Hopkinton	1969	1-2/3	8.60	8.20	16.80
15	Jamestown	1964	2	8.84	4.19	13.03
16	Johnston	1968	2	8.16	3.83	11.99
21	Newport	1966	1-2/3	6.78	5.77	12.55
23	North Kingstown	1957	2	8.90	1.20	10.10
24	North Providence	1961	2	7.81	1.87	9.68
25	North Smithfield	1964	2	8.65	4.41	13.06
26	Pawtucket	1962	2	6.59	4.26	10.85
30	Scituate	1967	2	8.93	8.55	17.48
31	Smithfield	1959	2	8.70	1.00	9.70
32	South Kingstown	1957	2	9.00	0.40	9.40
33	Tiverton	1964	1-2/3	6.08	6.88	12.96
34	warren	1957	2	9.90	3.20	13.10
39	Woonsocket	1962	1-2/3	7.02	3.71	10.73
	<u>Housing Authorities</u>					
51	Cranston	1968	2%	8.42%	1.52%	9.94%
52	East Providence	1968	2	8.11	1.41	9.52
53	Pawtucket	1968	2	10.68	10.10	20.78
56	Cumberland	1969	1-2/3	4.20	1.10	5.30
57	Lincoln	1969	1-2/3	4.70	1.20	5.90
59	Bristol	1970	2	8.40	1.30	9.70
65	Burrillville	1972	2	6.30	2.50	8.80
66	North Providence	1973	2	5.80	0.20	6.00
71	Warren	1975	2	12.10	2.00	14.10
	<u>Water Districts</u>					
67	East Smithfield	1973	2	12.20	6.60	18.80
68	Greenville	1973	2	4.50	5.10	9.60

<u>Code</u>	<u>City or Town</u>	<u>Year of Membership</u>	<u>Rate of Pension Credit</u>	<u>Total Employer's Contributions</u>
<u>Police and Fire</u>				
50	East Greenwich Fire District	1967	2%	14.00%
54	East Greenwich Police	1968	2	14.00
55	North Kingstown Police and Fire	1968	2	14.00
58	North Providence Police	1968	2	14.00
60	Barrington Police and Fire	1970	2	14.00
62	Warren Police	1970	2	14.00
63	South Kingstown Police and Fire	1971	2	14.00
61	Smithfield Police and Fire	1972	2	14.00
64	Primrose Volunteer Fire Dept.	1972	2	14.00

The aforesaid rates are to be applied to the budgeted payroll for each fiscal year on the employees participating in the system. Thus, sufficient revenues will be provided currently to meet the system's annual accruing requirements. These requirements consist of the current service cost, technically referred to as the "normal cost", plus the annual amortization payment on the "Unfunded Accrued Liability".

#### Part 5. VALUATION OF PENSION ROLL

The results of a valuation of the retirement annuities in force at June 30, 1976 are as follows:

	<u>Male</u>	<u>Female</u>
Number on pension roll	678	222
Proportion of total	75.3%	24.7%
Annual payments	\$1,578,831	\$439,782
Average annual payment	\$2,303	\$1,981
Average age	65.6	64.2
Actuarial reserve requirements	\$16,798,697	\$5,001,363

The actuarial reserve requirements on pensioners as established at June 30, 1976 amounted to \$21,800,060. This compares with the balance in the "Retirement Reserve" at that date of \$22,228,508. This calculation confirms the adequacy of the retirement reserve according to the actuarial standards applied in this valuation to measure expected mortality among the retired members.

Part 6. OBLIGATIONS OF MUNICIPALITIES

In subscribing to membership in the system, the several cities and towns and the special governmental units have undertaken pension obligations consisting of (a) the accrued liability for past service, and (b) the accruing cost for future service generally known as "normal cost" constituting the current year's pension liability.

Past service. The liability for pension credit in the case of each municipality for service by their employees prior to the date of participation was established at the time participation was applied for. A past service contribution rate was fixed as a percentage of payroll, as required by law, at a rate that would bring about the amortization of the total accrued liability in a period of 25 years from the effective dates of participation. This period for amortization purposes was fixed since, on the average, the past service is expected to be fully amortized by the time the employees in service at the beginning date of participation have left the service by resignation, death or retirement.

Current service. "Normal cost" was computed upon the basis of the total membership with full effect to the particular ages of the employees, as members of the system, their service and their rates of salary. Such rate is calculated as a percentage of payroll. The "normal cost" rate thus determined is to be

applied to the current payroll budget for each municipality covering the employees participating in the system.

Unfunded accrued liability. The past service liability and normal cost rates are presented in the succeeding pages of this report. The unfunded accrued liability at June 30, 1976 for the several participating municipalities and special governmental units amounted to \$ 12,163,898. This accrued liability in the case of each participating entity represents the amount of its unpaid indebtedness to the system on account of past service plus deficiencies in normal cost requirements on account of future service. Parts of these deficiencies were due to the variations between the established contribution rates for such service reflecting actuarial criteria and the results of actual operations affecting each participating municipality. A part of such liability may also be due to substantive changes in the benefit schedule occurring since the dates when the original contribution rates were formulated.

Part 7. BASIC FACTORS FOR ACTUARIAL VALUATION PURPOSES

An actuarial valuation is basically an analysis of statistical data reflecting mortality and service experience among the active and retired members. The data consists of (1) the current additions to membership as new employees enter service, (2) separation from service due to resignation or dismissal without right to a retirement annuity, (3) the rates of retirement, that is, the number of members who will survive at retirement and qualify for benefits, (4) deaths among active members, (5) disability occurring before attainment of the prescribed retirement age, (6) deaths among retired members and beneficiaries and (7) other factors of pertinence.

All of the foregoing factors are active and interactive in the calculation of pension liabilities. These factors and others are considered in the formulation of contribution rate schedules designed for the purpose of accumulating reserves to provide for the pension and benefit payouts to employees and survivors of employees who may ultimately qualify for benefits.

The financial effect of these factors on the system varies with the ages of the members, therefore exposure tables are prepared for the factors consisting of new entrants, deaths among the members and separations from service. Different rates are formulated for male and female members so as to give effect to the sex factor.

The ratio of actual terminations due to the aforesaid factors to the number of members exposed to separation for the several causes, at the various ages, results in rates of termination. These rates are generally leveled out to eliminate marked variances between ages in cases where the data may be limited in scope or is fragmentary in form.

In this way, the actuary tests the rates as developed in the current year's actuarial valuation by applying previously established rates. By comparing the expected deaths and terminations under the aforesaid procedure with actual terminations for each of the several causes during the period covered by the actuarial valuation, the accuracy of the newly established termination or separation rates may be checked. Revisions or changes, if necessary, may be made currently.

Such a valuation, therefore, provides the basis for making appropriate assumptions for use in actuarial valuations and cost determinations in respect to the following factors.

1. New members. Members entering service form a part of the exposure study and are a basic element in the formulation of rates of separation from service. This factor has a direct effect in the funding of a retirement system. The underlying trend appears to be towards advanced ages at entry into service which means eventual higher costs.

2. Separation from service. Rates of separation are applied to as a forecast of the number of active members who



will be the same as the average of the two values of the variables.

3. Correlation between variables. The correlation coefficient is a measure of the degree of relationship between two variables. It is a value between -1 and +1. A value of +1 indicates a perfect positive correlation, a value of -1 indicates a perfect negative correlation, and a value of 0 indicates no correlation.

4. Regression analysis. This is a statistical method for determining the relationship between two variables. It is used to predict the value of one variable from the value of another.

5. Probability. This is a measure of the chance of an event occurring. It is a value between 0 and 1. The probability of an event occurring is the number of favorable outcomes divided by the total number of possible outcomes.

6. Standard deviation. This is a measure of the spread of a distribution of values. It is the square root of the variance. The standard deviation is a measure of the average deviation of a value from the mean.

7. Index numbers. These are used to measure changes in a variable over time. They are based on a fixed average base year, which is the average of the

of the 3 different components of the index. The index is calculated as the average of the three components. The index is a measure of the average of the three components.

8. Index numbers. These are used to measure changes in a variable over time. They are based on a fixed average base year, which is the average of the three components.

9. Index numbers. These are used to measure changes in a variable over time. They are based on a fixed average base year, which is the average of the three components.

applies particularly to the earnings progression rates since these rates are frequently influenced by the employer's current personnel policies, economic changes and related factors.

Part 8. RE-EVALUATION OF CONTRIBUTION RATES FOR CITIES AND TOWNS

In each annual actuarial valuation, a review is made of the rates of contribution for the cities and towns having had at least 10 years of membership in the System. As participating units attain this status, their operating experience is evaluated as a check of the adequacy or inadequacy of their contribution rates. A current adjustment or revision of these rates is recommended, if necessary.

Participating city subject to review. The following city participating in the System has been subject to this evaluation during the fiscal year covered by this report.

<u>Name of City</u>	<u>Date of Participation</u>	<u>Number of Members June 30, 1976</u>	
		<u>Employees</u>	<u>Pensioners</u>
City of Newport	1966	280	69

The City of Newport maintains a 1-2/3% annuity rate.

Two additional units are to be considered next year in this re-evaluation with participation in the System for at least 10 years, namely, the Town of Scituate and the East Greenwich Fire District whose participation in the System began in 1967.

Basic factors. Pension obligations represent long term commitments, maturing many years after the obligations are initiated. These obligations, therefore, must be considered on a long term basis. Transitory factors or short term

Fluctuations are generally disregarded in an evaluation of their cost aspects. For this reason, a revaluation or re-examination of contribution rates is made for those cities and towns that have had at least 10 years of participation.

A period of 10 years constitutes a reasonable period for the development of abnormal or substantive changes in basic factors. These factors include mortality among active and retired members, turnover rates, ages at retirement, salary trends and others that are pertinent in a determination of actuarial costs and liabilities. As participating units acquire longer operating experience, a review of their contribution rates is undertaken and adjustments are made as required.

Results of re-evaluation. The valuation discloses the cost of financing the currently accruing pension obligation generally designated as the "normal cost", and the requirements for the amortization of the accrued liability. The cost requirements for each of these items are expressed as a percentage of total payroll.

Amortization of accrued liabilities. It has been suggested that a longer period of time be prescribed for the amortization of the accrued liabilities than the remaining period of 25 years from the initial dates of participation of the cities and towns in the retirement system. There is merit to this suggestion. A number of substantive amendments have been made during the last several years in the law governing the System. These new amendments increased the normal cost and added to the accrued liabilities. While it is desirable that the accrued liabilities be liquidated within a reasonable period of time, this objective may still be attained according to accepted standards by apportioning the remaining unfunded accrued liabilities over a somewhat longer period as has been proposed.

Accordingly, in the calculation of the rates of contribution hereinabove set forth, a 25-year period of amortization, dating from July 1, 1977, has been used and a 5% interest rate assumption was applied. This rate of interest may be considered a reasonable investment return expectancy for the long term under the prescribed investment authority, and the progressive investment management policies in force in the operation of the System.

<u>Name of Participating City</u>	<u>Percent of Payroll - 7/1/1977</u>		
	<u>Normal Cost</u>	<u>Accrued Liability</u>	<u>Total Annual Cost</u>
City of Newport	7.26%	4.22%	11.48%

These costs were computed as of June 30, 1976 based upon the provisions of the law in force at that date.

Recommendation. The foregoing rates, as a percentage of employees' payroll, are hereby recommended to the Retirement Board of the Employees' Retirement System for certification to the City of Newport as the rates of contribution effective as of July 1, 1977.

It should be noted that little change has occurred in the total rate of contribution for the city that was evaluated. While some reduction in the total rate occurred as the result of an extension of the period of time for the amortization of the unfunded accrued liabilities, this reduction was substantially offset by increased costs and liabilities due principally to the following factors: (1) improvements in the benefit schedule during recent years as evidenced by actual operating experience, the full effect of which had not been previously expressed in the current rates; (2) increases in salaries during recent years at somewhat higher rates than were applied in cost determinations to give effect to the "3-year final average salary" base used in the computation of the retirement annuity; (3) improved mortality among

active members and pensioners; and (4) reduced turnover in employment.

The recommended rates realistically reflect the City's share of the cost of the retirement system under the established benefit schedule after giving effect to operating results to date and the assumptions made as to probable future experience.

Part 9. RESERVE ACCOUNTS

The reserve accounts maintained by the system are intended as an accounting technique to record the pension credits established for active members and pensioners, respectively. These reserves represent contributions made by the members and by the participating cities and towns, and the special governmental units.

With these reserve accounts it is possible to evaluate more closely the current progress of the system in the accumulation of assets to meet the accrued and accruing liabilities for future benefit payouts in the case of members who qualify for retirement and other benefits.

A negative balance exists in the "Employers' Contribution Reserve" for several cities and towns. This has come about principally by the retirement of aged employees shortly after the commencement of participation in the system for the applicable city or town. With additional revenues that will result from continued operations of the system, these negative balances should eventually be removed. In the course of time, with further operations, these negative balances should be removed and a credit balance should be established for all participating cities and towns which will represent the reserves required to meet the liabilities on account of the membership. These reserves will consist of the pension credits earned by the members during services rendered.

Part 10. FUTURE PENSION AND BENEFIT PAYOUTS

To illustrate the necessity for adequate funding of pension obligations on a systematic basis, in accordance with the accruing aspects of pension cost, a projection of future pension and benefit payouts is presented in this report. Such a projection serves to point up the full meaning of the accruing pension obligations in terms that may be more readily understood by the officials of government having the responsibility of formulating budgets and more particularly by members of legislative bodies.

The following projection of future payouts of pensions and benefits shows the persistent upward trend in such expenditures by the system for a number of years:

<u>Fiscal Year Ended June 30</u>	<u>Estimate of future benefit and pension payouts (in millions)</u>
1976	\$2.1
1980	3.1
1985	5.0
1990	7.2
1995	9.6

The foregoing projection is subject to reexamination each year in the future in the light of additional operating experience and the results thereof will be disclosed in the annual reports of the Board.

## Part 11. FINANCING PENSION COST

The financing of pension cost by the governmental employer is, in its most simple form, a matter of current budgeting of the accruing pension cost in the same manner as other current operating expenses of government. Such cost is basically deferred salary. The true cost of pensions to an employer in any fiscal year is represented by the value of the pension credits earned during the year by the active members. These yearly pension credits form a proportionate part of the ultimate retirement benefits which would become due and payable as the members qualify for retirement by fulfilling the prescribed age and service conditions.

The pension and benefit payments to retired employees, therefore, are derived from a combination or accumulation of all earned pension credits covering a number of productive years which represent the total periods of service rendered by employees. It is the accumulation of these pension credits for the service rendered by the members which constitutes the reserve required for meeting the pension payments to the qualifying members. This current accumulation of pension credits represents the real cost of pension benefits in any fiscal period.

The foregoing illustrates the accrual or reserve principle that underlies a retirement system. Actuarial criteria reflects the accrual concept. This concept governs all

retirement system operations. Even if a retirement plan did not specifically prescribe the method of financing the pension credits, the accrual principle would be implicit in its basic provisions. Rates of contribution are formulated with the view of accumulating the reserves to meet the earned pension credits and the total ultimate payouts for the retirement and other benefits to members who qualify for payments. Current revenues from these rates are substantially in excess of the current expenditures for benefits. The resulting excess represents the reserve to meet the future pension and benefit payments to employees who qualify for retirement.

It is the reserve created by the application of these contribution rates that is frequently a source of temptation to officials of government, particularly those having to do with the formulation of budgets. This has brought about, in some instances, the curtailment of revenues from the retirement system by means of arbitrary cut-backs in appropriations below the requirements for the accruing pension credits. Pressures also arise from time to time for the application or diversion of a part or all of the accumulated reserves of a system for other governmental purposes.

In its true concept, pension cost is a current operating expense of government. It is an obligation which cannot logically be deferred. It has a direct and immediate relationship to the entire fiscal operations of government. There is no short cut method or formula for financing this cost. A retirement plan

is considered to be a legitimate part of an employee welfare program of governmental concern. The principle that government should bear a measure of responsibility for employees whose productivity has become impaired due to old age or disability is now generally accepted. Since this is the case, government should face up to its responsibility for the proper financing of the obligation. It should be willing to meet the cost of pensions on the most practical and economical basis. The only real method of meeting such cost is the one that reflects the accruing or current budgeting concept.

Actuarial funding methods. Several actuarial cost methods are currently recognized for the determination of pension costs and liabilities. In the case of a fixed benefit formula such as that in effect for the Municipal Employees' Retirement System, two specific methods are commonly used, namely, the "Accrued Benefit Method" and "Projected Benefit Method".

The accrued benefit method is otherwise referred to as the "Unit credit", "step-rate" or "single premium" method. It involves the determination of each year's earned pension credit as a present value figure as of the attained ages of the members. Obviously, as the ages of the employees advance, the yearly pension credit costs increase correspondingly. However, the increases in aggregate costs may be somewhat curtailed or may partially be offset by other compensating factors in the

complexion of the total membership occasioned by separations or deaths.

The "projected benefit method", frequently referred to as the "entry-age normal-cost" or "aggregate level cost", provides for the projection of the benefits to be earned by the employees and the contributions to be made to finance these benefits. This is the method employed in the financing of the Municipal Employees' Retirement System. Supplemental liabilities are provided for accrued pension credits previously earned by the members that are unfunded. The cost of ancillary benefits such as disability or death may be financed on a one-year term premium basis considering the insurance character of these benefits.

Part 12. CONCLUDING COMMENT

The results of operations reported herein reflect constructive progress during the year. Some adjustments in the accrued liabilities were made to give effect to salary increases above the assumed projected rates. Management and administrative policies of the Retirement Board are in accord with progressive methods of procedure thus effectuating the basic objectives and purposes of the retirement system.

The policies in effect in the investment of the system's reserves reflect prudent management of the investment account. An excellent record of performance has been demonstrated over the years. High quality rated securities have been acquired producing reasonable rates of income to the system. The procedures in administration reflect a conscientious and constructive approach to its current operating problems and result in a high standard of service to the participating membership.

A. A. Weinberg

Actuary

January 10, 1977

## Financial Statements II



Comparative Financial Balance Sheet

June 30

<u>Assets</u>	<u>1976</u>	<u>1975</u>
Cash	\$ 126,630	\$ 318,088
Accrued Interest Receivable	488,185	337,308
Investments (At Amortized Book Value for Bonds and Cost for Stocks)	<u>36,093,362</u>	<u>30,623,325</u>
Total Assets	\$ <u>36,708,177</u>	\$ <u>31,278,721</u>
 <u>Liabilities &amp; Reserves</u>		
<u>Current Liabilities</u>		
Unclaimed Benefits	\$ 6,837	\$ 11,110
<u>Reserves-General Employees</u>		
Members Contribution	8,890,175	7,727,616
Employers Accumulation	1,766,828	732,804
Retirement	<u>22,228,508</u>	<u>19,484,747</u>
Total Reserves-General Employees	32,885,511	27,945,167
<u>Reserves-Police &amp; Fire</u>		
Members Contribution	1,330,703	1,246,516
Employers Accumulation	349,348	325,579
Retirement	<u>2,135,778</u>	<u>1,750,349</u>
Total Reserves-Police & Fire	\$ 3,815,829	\$ 3,322,444
Total Liabilities & Reserves	\$ <u>36,708,177</u>	\$ <u>31,278,721</u>

ANALYSIS OF INCOME & EXPENDITURES  
FOR THE YEAR ENDED - JUNE 30, 1976

	Contract Employment Amount	%	Volume & Price Amount	%	Total
Members Contributions	\$1,776,800	24.7	\$ 208,596	29.5	\$1,985,396
Employers Contributions	2,524,862	49.2	657,528	59.2	3,182,390
Investment Earnings	1,855,145	25.8	227,669	24.9	2,082,814
<u>Total</u>	<u>6,156,807</u>	<u>100.0</u>	<u>893,793</u>	<u>100.0</u>	<u>7,050,600</u>

	Contract Employment Amount	%	Volume & Price Amount	%	Total
Monthly Premiums	\$1,866,595	25.4	\$5,552	0.6	\$1,872,147
Supervisor Benefits			26,588	3.0	26,588
State Contribution	156,274	2.5	24,280	2.7	180,554
Volume of Contributions	255,208	4.1	208,500	23.3	463,708
<u>Total</u>	<u>2,278,077</u>	<u>37.0</u>	<u>3,007,910</u>	<u>43.0</u>	<u>5,285,987</u>

	Contract Employment Amount	%	Volume & Price Amount	%	Total
Total Expenditures	\$2,278,077	37.0	\$3,007,910	43.0	\$5,285,987
Excess Income over Expenditures to Employees	\$4,878,730	79.0	\$500,883	7.1	\$5,379,613

ANALYSIS OF INVESTMENT EARNING

	Investment Earnings - Insurance	Total
Investment Earnings - Insurance	\$ 695,100	\$ 695,100
Investment Earnings - Other	198,693	893,793
<u>Total</u>	<u>893,793</u>	<u>893,793</u>

	Total Expenditures on Investments	Total Investment Earnings
Total Expenditures on Investments	\$ 3,007,910	\$ 893,793
Capital Gains		
<u>Total Investment Earnings</u>		<u>\$ 893,793</u>

**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM**  
OF THE STATE OF RHODE ISLAND

**Reserve Accounts - Allocation of Fund Balances**

June 30, 1976

General Employees	Code	Members Reserves	Employers Reserves	Retirement Reserves
Barrington	01	412,407.24	66,695.88	1,284,450.18
Bristol	02	271,988.46	373,109.03	558,757.67
Burrillville	03	163,841.52	160,957.36	85,436.94
Cranston	07	1,371,784.70	195,569.45	3,434,597.17
East Greenwich	09	206,979.34	345,051.98	332,928.44
East Providence	10	932,149.03	163,460.66	2,868,620.20
Hopkinton	14	21,657.33	-3,769.54	60,094.40
Jamestown	15	95,820.84	161,360.89	104,299.20
Johnston	16	297,926.39	461,021.79	280,984.17
Newport	21	777,144.05	-315,132.60	2,233,859.26
North Kingstown	23	413,725.73	383,175.82	874,623.10
North Providence	24	236,954.87	-34,908.59	642,428.08
North Smithfield	25	164,995.96	242,244.72	243,524.76
Pawtucket	26	1,561,083.94	-1,594,968.52	4,545,856.70
Scituate	30	119,231.53	-42,432.74	398,645.79
Smithfield	31	121,679.48	195,106.98	489,358.08
South Kingstown	32	242,049.99	322,067.21	665,642.92
Tiverton	33	228,502.02	231,154.45	270,857.92
Warren	34	157,166.93	95,162.61	427,087.63
Woonsocket	39	830,424.58	64,830.79	2,170,434.98
Cranston Housing Authority	51	27,928.90	57,486.91	18,313.33
East Prov., Housing Authority	52	27,307.45	46,885.56	15,835.21
Pawtucket Housing Authority	53	97,644.42	143,949.11	198,154.77
Cumberland Housing Authority	56	10,006.06	8,960.30	3,850.45
Lincoln Housing Authority	57	16,567.50	12,423.99	5,670.42
Bristol Housing Authority	59	10,365.61	18,645.22	5,688.25
Burrillville Housing Authority	65	3,470.75	4,474.51	974.65
North Prov., Housing Authority	66	3,216.59	4,024.75	857.10
East Smithfield Water District	67	3,251.59	4,455.99	3,473.46
Greenville Water District	68	4,617.26	7,529.34	1,119.99
Warren Housing Authority	71	666.83	2,140.94	82.91
Totals		8,890,174.57	1,766,628.25	22,228,508.07

**Police & Fire**

East Greenwich Fire District	50	51,254.22	92,176.38	30,790.34
East Greenwich Police	54	97,450.43	-23,303.16	188,088.48
W. Kingstown Police & Fire	55	361,771.21	150,228.82	610,325.19
W. Providence Police & Fire	58	180,223.90	-23,643.58	335,347.88
Barrington Police & Fire	60	336,613.61	157,617.00	425,712.22
Smithfield Police & Fire	61	22,282.27	-82,871.99	133,285.98
Warren Police	62	73,552.50	-57,577.56	209,433.16
W. Kingstown Police & Fire	63	124,571.44	109,352.36	143,232.24
Providence Volunteer Fire Dept.	64	11,425.14	16,676.53	3,841.64
Totals		2,133,762.43	349,348.42	2,133,776.13

**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM**

Average Balance - Last Period of Reporting Period Last Ending - June 30, 1976

General Employees	Code	Total all Reserves	Average	%	Contribution or Retention
Barrington	01	3,218,979.24	1,509,489.52	94.88%	101,298.12
Bristol	02	2,137,466.54	1,048,734.28	93.24%	67,242.84
Burrillville	03	664,706.53	342,353.02	91.59%	21,536.78
Cranston	07	8,946,236.13	4,481,115.09	13.60%	281,900.95
East Greenwich	09	1,543,453.33	781,723.67	92.37%	49,188.44
East Providence	10	7,241,521.74	3,620,765.88	90.98%	227,784.14
Hopkinton	14	124,769.44	62,894.77	95.18%	3,977.54
Jamestown	15	633,724.98	315,862.94	90.96%	26,186.81
Johnston	16	1,764,599.54	882,299.78	92.57%	55,489.27
Newport	21	4,839,789.72	2,419,894.86	97.34%	152,209.20
North Kingstown	23	2,995,701.22	1,498,350.61	94.54%	94,250.95
North Providence	24	1,503,956.98	751,979.04	92.28%	67,302.15
North Smithfield	25	1,149,352.30	574,676.15	91.74%	94,150.28
Pawtucket	26	8,164,687.16	4,082,343.58	12.39%	254,824.59
Scituate	30	644,592.91	322,296.45	91.28%	28,973.78
Smithfield	31	1,598,082.54	779,141.28	92.36%	49,001.88
South Kingstown	32	2,265,547.27	1,132,773.63	93.97%	76,041.19
Tiverton	33	1,242,039.25	621,019.63	91.91%	39,694.34
Warren	34	1,230,346.71	615,183.36	91.88%	38,699.88
Woonsocket	39	5,332,662.87	2,766,331.43	98.39%	174,035.46
Cranston Housing Authority	51	176,269.89	88,134.94	90.28%	5,534.48
East Providence Hous. Auth.	52	158,146.99	79,073.50	90.14%	4,974.51
Pawtucket Housing Authority	53	769,769.48	384,884.74	91.58%	24,201.75
Cumberland Housing Auth.	56	39,456.44	19,813.23	90.04%	1,243.70
Lincoln Housing Authority	57	58,921.74	29,465.87	90.08%	1,864.83
Bristol Housing Authority	59	43,184.45	21,588.23	90.09%	1,989.92
Burrillville Housing Auth.	65	14,542.46	7,281.23	90.02%	456.02
W. Prov., Housing Auth.	66	13,274.97	6,637.48	90.00%	434.57
E. Smithfield Water Dist.	67	16,878.94	8,439.47	90.02%	538.27
Greenville Water District	68	21,521.91	10,760.95	90.02%	663.81
Warren Housing Authority	71	2,807.77	1,403.89	90.00%	82.91
Totals		58,975,529.40	29,487,764.70	89.49%	1,855,148.30

**Police & Fire**

East Greenwich Fire Dist.	50	298,621.51	149,310.76	90.45%	9,389.95
East Greenwich Police	54	494,485.76	232,242.88	90.70%	14,613.51
W. Kingstown Police & Fire	55	1,975,279.79	987,539.90	12.59%	62,143.57
W. Providence Police & Fire	58	977,422.77	488,722.39	91.48%	50,740.53
Barrington Police & Fire	60	1,628,442.81	814,221.40	92.47%	51,203.82
Smithfield Police & Fire	61	450,858.88	225,429.44	90.58%	14,178.21
Warren Police	62	412,536.21	206,268.10	92.97%	12,978.96
W. King. Police & Fire	63	658,658.47	329,329.24	91.00%	20,728.38
Providence Volunteer Fire Dept.	64	54,245.74	27,122.87	90.18%	2,695.12
Police & Fire Total		6,325,583.34	3,460,291.95	10.50%	217,889.42
Grand Total		65,301,112.74	33,948,056.65	100.00%	2,072,837.72