

REPORT ON AN ACTUARIAL VALUATION OF THE ASSETS
AND LIABILITIES OF THE EMPLOYEES RETIREMENT SYSTEM
OF THE STATE OF RHODE ISLAND AS OF JUNE 30, 1956

The results of an actuarial valuation of the assets and liabilities of the Employees Retirement System of the State of Rhode Island as of June 30, 1956, are presented herewith.

Basis of Valuation

The benefit and contribution provisions of the plan of operation governing the system forming the basis of this valuation are summarized in the appendix.

Statistics

The census data required for our valuation and all financial information were supplied to us, in excellent form, by Joseph B. Lewis, Secretary.

Membership

	- State Employees -	
	<u>Male</u>	<u>Female</u>
Number of members	4,632	3,060
Proportion of total	60.2%	39.8%
Annual salaries	\$14,450,682.00	\$8,007,735.00
Average age	47.2	42.4
Average total service	8.5	7.7

	- Teacher-members -	
	<u>Male</u>	<u>Female</u>
Number of members	1,404	3,764
Proportion of total	27.2%	72.8%
Annual Salaries	\$5,548,603.00	\$14,018,422.00
Average age	41.0	44.3
Average total service	11.9	16.0

Beneficiaries

State Employees - Male

	<u>Number</u>	<u>Annual Payments</u>	<u>Reserve Requirements</u>
Retirement annuities -			
Maximum rate	112	\$129,033	\$1,026,306
Option 1	28	31,754	229,714
Option 2	14	19,081	268,667
Option 3	8	17,030	214,644
Actuarial equivalent	1	1,349	17,016
Disability annuities -			
Ordinary disability	9	10,603	130,916
Ordinary disability -			
Option 1	1	644	8,120
Accidental disability	<u>5</u>	<u>2,088</u>	<u>29,452</u>
Totals	<u>178</u>	<u>\$211,582</u>	<u>\$1,924,835</u>

(continued)

Beneficiaries - (Continued)

State Employees - Female

	<u>Number</u>	<u>Annual Payments</u>	<u>Reserve Requirements</u>
Retirement annuities -			
Maximum rate	84	\$ 98,642	\$1,034,487
Option 1	13	15,258	140,376
Actuarial equivalent	1	2,628	39,590
Disability annuities -			
Ordinary disability	6	3,401	51,292
Ordinary disability -			
Option 1	1	645	8,664
Accidental disability	2	2,524	33,088
Beneficiary annuities -	<u>5</u>	<u>5,955</u>	<u>65,917</u>
Totals	112	\$129,053	\$1,373,414
	<u>==</u>	<u>=====</u>	<u>=====</u>

Teachers -Male

	<u>Number</u>	<u>Annual Payments</u>	<u>Reserve Requirements</u>
Retirement annuities -			
Maximum rate	48	\$123,238	\$1,116,699
Option 2	8	14,338	220,113
Option 3	6	14,407	173,139
Actuarial equivalent	2	3,571	47,446
Disability annuities -			
Ordinary disability	<u>5</u>	<u>7,874</u>	<u>115,749</u>
Totals	69	\$163,428	\$1,673,146
	<u>==</u>	<u>=====</u>	<u>=====</u>

(continued)

Beneficiaries - (Continued)

Teachers - Female

	<u>Number</u>	<u>Annual Payments</u>	<u>Reserve Requirements</u>
Retirement Annuities -			
Maximum rate	354	\$804,456	\$8,746,753
Option 1	5	11,680	122,662
Option 2	2	2,741	45,072
Option 3	1	1,627	22,927
Actuarial equivalent	1	2,709	40,804
Disability annuities -			
Ordinary disability	26	38,397	598,083
Accidental disability	<u>1</u>	<u>2,667</u>	<u>60,078</u>
Totals	390	\$864,277	\$9,636,379
	<u>=====</u>	<u>=====</u>	<u>=====</u>

Summary of beneficiaries

	<u>Number</u>	<u>Annual Payments</u>	<u>Reserve Requirements</u>
State Employees -			
Male	178	\$ 211,582	\$ 1,924,835
Female	112	129,053	1,373,414
Teachers -			
Male	69	163,428	1,673,146
Female	<u>390</u>	<u>864,277</u>	<u>9,636,379</u>
Totals	749	\$1,368,340	\$14,607,774
	<u>=====</u>	<u>=====</u>	<u>=====</u>

Results of Valuation

The accompanying Valuation Balance Sheet presents the financial condition of the system from a technical standpoint at June 30, 1956, taking into account all accrued and prospective liabilities for benefit payments to be made subsequent to that date.

Total liabilities at June 30, 1956, amounted to \$85,915,235.00, of which the sum of \$27,607,883.00, was applicable to the period subsequent to that date. The accrued liabilities at the balance sheet date, therefore, amounted to \$58,307,352.00. The assets available to meet these liabilities, after providing for refunds to members withdrawing from the system in future years, totalled \$16,340,105.15. The accrued unfunded obligation, therefore, at the date of this valuation was \$41,967,246.85. This constitutes a deferred obligation of the State of Rhode Island and the cities and towns, to be discharged by future contributions under the established method of financing.

Liability For Benefits In Force - \$14,607,774.00

The total liabilities on account of persons in receipt of pensions and benefits constitute the amount required to pay out these pensions and benefits during the remainder of the lifetime of the beneficiaries. These liabilities compare with the net available assets of the system of \$16,340,105.15.

Accrued Liability On Active Members - \$43,699,578.00

This liability consists of the earned pension credits of the State employees and teachers prior to July 1, 1936 and July 1, 1949, respectively, and earned pension credits for service rendered by the members between these dates and June 30, 1956.

Future Service Liability - \$27,607,883.00

This liability represents the value of the benefits to be earned by the present members during service subsequent to June 30, 1956. Effect has been given to the probable separations from service of certain members during future years due to death or resignation.

Other Benefits

The death and disability incidents incurred by the system during the year were below the expected number for the size of membership. The experience for a number of years indicates that a much smaller number of claims for these benefits has been incurred than in the case with other governmental agencies. Disability claims will probably increase in future years, especially for teacher-members. A rigid policy governing disability benefits should be maintained in administration in order that the cost of these benefits may be kept within reasonable limits.

VALUATION BALANCE SHEET - JUNE 30, 1956

A S S E T S

PRESENT ASSETS

Net present assets	\$22,906,371.15	
Less, releases of member contributions on account of refunds and death benefits	<u>6,566,266.00</u>	\$16,340,105.15

DEFERRED ASSETS

Obligation of the members and
the employer for retirement
and disability annuities
covering service of members
for the remainder of their
active working lifetime sub-
sequent to June 30, 1956 -

State Employees -		
Members	\$ 4,911,007.00	
State	<u>7,512,921.00</u>	12,423,928.00
Teachers -		
Members	\$ 4,365,279.00	
State	5,409,338.00	
Cities and towns	<u>5,409,338.00</u>	15,183,955.00

DEFERRED OBLIGATION OF THE STATE OF
RHODE ISLAND AND CITIES AND TOWNS

Accrued Unfunded Liability - Present value of annuities and benefits in force, and accrued liabilities for retirement annuities and disability annuities on account of service prior to July 1, 1956, after credit for available present assets		<u>41,967,246.85</u>
Total Assets		<u>\$85,915,235.00</u>

VALUATION BALANCE SHEET - JUNE 30, 1956

L I A B I L I T I E S

ACCRUED LIABILITIES

Reserve requirements
for annuities and
benefits in force -

State Employees	\$ 3,298,249.00	
Teachers	<u>11,309,525.00</u>	\$14,607,774.00

Present Value of accrued
requirements for retire-
ment annuities, disability
annuities and death bene-
fits at June 30, 1956

State Employees -

Male	\$10,009,153.00	
Female	<u>4,627,214.00</u>	14,636,367.00

Teachers -

Male	5,680,048.00	
Female	<u>23,383,163.00</u>	29,063,211.00

PROSPECTIVE LIABILITIES

Present Value of retirement
annuities and disability
annuities on account of
service to be rendered
after June 30, 1956 -

State Employees	\$12,423,928.00	
Teachers	<u>15,183,955.00</u>	<u>27,607,883.00</u>

Total Liabilities		<u><u>\$85,915,235.00</u></u>
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Financing the System

The results of the valuation disclose that the unfunded accrued liability of the system increased during the year from \$38,591,271.92 to \$41,967,246.85. This increase was due to the partial reserve method of financing the system. Under this method the unfunded liability will continue to increase for a number of years. This increase can be mitigated by an upward adjustment in contribution rates on the part of the State and the cities and towns, as well as the members of the system. The necessity for such adjustment is indicated by the operating experience of the past years and by a projection of expected payments by the system during the ensuing ten years.

To illustrate the financial status of the system at this time on a current basis, a comparison is made of total present assets with the amount of current and matured obligations. The latter item is represented by the contribution credit accounts of the members, and the amount required to pay out the annuities and benefits entered upon and in force:

Contribution Credits -

State Employees	
Teachers	\$ 7,059,061.75
	5,026,543.67
Present value of annuities and benefits entered upon and in force -	
State Employees	3,298,249.00
Teachers	<u>11,309,525.00</u>
Total Current and Matured Obligations	\$26,693,379.42
Total present assets	<u>22,906,371.15</u>
Excess of current liabilities over present assets	\$ 3,787,008.27

Due to the persistent upward trend in payments for annuities and benefits during recent years which has been especially pronounced in the case of the teacher members, the total assets had fallen below the amount of current and matured obligations. This makes for an unsatisfactory financial condition from a technical standpoint which can be adjusted only by larger contributions by the members or by the State, or both.

The present method of financing requires a periodic reexamination of the rates of contribution based upon the operating experience of the system and probable future payments reflecting projected computed estimates. Cost calculations disclose that an increase in contribution rates will be necessary beginning July 1, 1957, as follows:

On account of State employees 1% of payroll
 On account of teacher members 2% of payroll

The foregoing rates may be assumed entirely by the State for State employees, and by the State and cities and towns for the teachers, or may be divided between the members and the employers in equitable proportions. An adjustment in contributions by the members will require legislative action since the rate of contribution by members is specifically provided in Chapter 18. An increase in contributions by the employers may be authorized by the retirement board.

Pertinent statistics illustrating the upward trend in membership and annuities, and in pension and death benefit payments, during the last ten years are as follows:

<u>June 30th</u>	<u>Members</u>		<u>Annuitants</u>	
	<u>State Employees</u>	<u>Teachers</u> <u>1/</u>	<u>State Employees</u>	<u>Teachers</u> <u>1/</u>
1947	3894	-	112	-
1948	4446	-	139	-
1949	4700	-	155	-
1950	5688	4287	162	137
1951	5805	4464	178	198
1952	6410	4558	188	243
1953	6538	4681	213	307
1954	7039	4745	239	374
1955	7259	4823	255	417
1956	7692	5168	290	459

1/ Became members on July 1, 1949

Pension and Death Benefit Payments

Year Ended
June 30th

	<u>State</u>	
	<u>Employees</u>	<u>Teachers</u>
	\$ 85,000.00	-
	116,200.00	-
	149,000.00	-
	193,700.00	\$ 251,200.00
	198,500.00	365,400.00
	254,300.00	465,500.00
	301,200.00	620,200.00
	324,700.00	788,600.00
	362,600.00	923,700.00
	467,600.00	1,096,000.00

1947
1948
1949
1950
1951
1952
1953
1954
1955
1956

Conclusion

The system is gradually broadening its operations. Membership is steadily increasing. The system is making satisfactory progress and is fulfilling its objectives in an effective manner. The policies and methods of procedure in effect in administration insure the continuance of a high standard of efficiency in operations.

Respectfully submitted,



A. A. Weinberg
Actuary