

REPORT OF THE ACTUARY  
ON AN  
ACTUARIAL VALUATION OF THE SYSTEM  
AS OF JUNE 30, 1954

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, 1954

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, 1954, are presented herewith.

Basis of Valuation

This valuation is based upon the benefit and contribution provisions of the plan of operation underlying the system as summarized in the appendix.

Statistical Data

Membership statistics are summarized as follows:

	<u>State Employees</u>	
	<u>Male</u>	<u>Female</u>
Number of members	4232	2807
Proportion of total	60.1%	39.9%
Annual salaries	\$13,424,368.00	\$7,509,925.00
Average salary	\$3,172.00	\$2,675.00
Average age (years)	46.9	41.1
Average total service (years)	7.6	6.9

	Teachers	
	Male	Female
Number of members	1225	3520
Proportion of total	25.8%	74.3%
Annual salaries	\$5,064,555.00	\$13,418,206.00
Average salary	\$4,134.00	\$3,812.00
Average age (years)	41.7	49.9
Average total service (years)	12.7	17.1

Beneficiaries

	State Employees			Teachers		
	Num-ber	Annual Payments	Reserve	Num-ber	Annual Payments	Reserve
<u>Retirement Annuities-</u>						
Male	88	\$ 91,068.92	\$ 685,796.00	40	\$ 92,144.58	\$ 870,566.00
Female	67	71,882.55	678,361.00	293	616,467.54	6,832,935.00
<u>Beneficiary Annuities - Option 2</u>						
Male	-	---	---	-	---	---
Female	4	4,353.61	48,590.00	-	---	---
<u>Ordinary Disability -</u>						
Male	7	6,721.75	74,045.00	3	4,695.09	73,028.00
Female	5	2,269.43	32,082.00	21	28,611.08	462,658.00
<u>Accidental Disability -</u>						
Male	1	351.36	3,189.00	-	---	---
Female	2	2,524.44	33,049.00	1	2,666.67	61,973.00
<u>Cash Refund Annuities - Option 1</u>						
Male	30	34,955.02	248,422.00	-	---	---
Female	16	14,868.82	129,654.00	5	11,680.15	131,731.00
<u>Joint and Last Survivor - Option 2</u>						
Male	10	13,297.45	158,829.00	5	8,979.26	80,923.00
Female	1	1,601.16	15,844.00	2	2,740.53	35,301.00

(Continued)



<u>State Employees</u>				<u>Teachers</u>			
	<u>Num- ber</u>	<u>Annual Payments</u>	<u>Reserve</u>		<u>Num- ber</u>	<u>Annual Payments</u>	<u>Reserve</u>
Joint and Last Survivor - Option 3							
Male	4	\$ 6,954.54	\$ 73,257.00	2	\$ 3,559.09	\$ 24,148.00	
Female	-	---	---	1	1,626.67	27,740.00	
Ordinary Disability - Option 1							
Male	1	643.97	8,347.00	-	---	---	---
Female	1	645.41	8,661.00	-	---	---	---
Actuarial Equivalent -							
Male	1	1,349.38	17,491.00	1	1,226.42	22,568.00	
Female	1	2,628.00	40,157.00	-	---	---	---
<u>TOTALS</u>	<u>239</u>	<u>\$256,115.81</u>	<u>\$2,255,774.00</u>	<u>374</u>	<u>\$774,397.08</u>	<u>\$8,623,571.00</u>	

Valuation Balance Sheet

The accompanying valuation balance sheet presents the financial condition of the system from a technical standpoint, taking into account all accrued liabilities for service previous to the date of valuation, and all prospective liabilities covering future membership service.

Total accrued liabilities amounted to and consisted of the following:

	<u>Amount</u>
Present value of annuities and benefits entered upon and in force	\$10,879,345.00
Present value of retirement benefits earned on account of "prior service" -	
State Employees	\$ 2,081,068.00
Teachers	<u>21,398,766.00</u>
	23,479,834.00

(Continued)

Present value of retirement benefits  
accruing for "membership service" -

State Employees	\$ 8,601,640.00	
Teachers	<u>4,834,312.00</u>	<u>13,435,952.00</u>
TOTAL		<u><u>\$47,795,131.00</u></u>

To meet these liabilities the system had net present assets at the close of the fiscal year amounting to \$11,974,058.68. The excess of total liabilities over net assets amounting to \$35,821,072.32, constitutes the accrued unfunded liabilities. This amount constitutes a deferred obligation of the State of Rhode Island and of the cities and towns, to be discharged by future contributions to the system at the prescribed rates, under the applicable method of financing.

Prior Service

The liabilities for service rendered by State employees prior to July 1, 1936, and by the teachers of the cities and towns prior to July 1, 1949 were as follows:

State Employees -

Male	\$1,470,779.00	
Female	<u>610,289.00</u>	\$ 2,081,068.00

Teachers -

Male	3,627,314.00	
Female	<u>17,771,452.00</u>	<u>21,398,766.00</u>

TOTAL \$23,479,834.00

These liabilities represent prior service credits granted to the employees and teachers in accordance with the provisions of law. They represent the proportionate amount of annuity credits earned by the members concerned during their respective periods of prior service.

Accrued Membership Service

The accrued liabilities for membership service representing credits earned by the members towards their retirement allowances during service rendered after July 1, 1936, in the case of the State employees and after July 1, 1949, in the case of the teacher-members, to the date of valuation, were as follows:

State Employees -

Male	\$5,911,535.00	
Female	<u>2,690,105.00</u>	\$ 8,601,640.00

Teachers -

Male	\$1,109,154.00	
Female	<u>3,725,158.00</u>	<u>4,834,312.00</u>

Total		<u>\$13,435,952.00</u>
-------	--	------------------------

The liability for accrued membership service credits has been discharged partially by contributions made by the members during the period covered by these credits. The employer's share of the cost for such service will be discharged by future contributions.



The liabilities on account of pension credit for service subsequent to the date of valuation are as follows:

State Employees -

Male	\$ 6,966,558.00	
Female	<u>3,543,577.00</u>	\$10,510,135.00

Teachers -

Male	\$ 3,888,730.00	
Female	<u>8,902,475.00</u>	<u>12,791,205.00</u>

Total		<u>\$23,301,340.00</u>
-------	--	------------------------

The liability for future membership service is to be met by future contributions on the part of both the members and the employers.

Ordinary Death Benefit

This benefit constitutes group life insurance. The amount of insurance coverage for State Employees and teachers is as follows:

State Employees -

Male	\$ 9,970,700.00	
Female	<u>5,638,300.00</u>	\$15,609,000.00

Teachers -

Male	\$ 3,105,100.00	
Female	<u>11,087,500.00</u>	<u>14,192,600.00</u>

Total		<u>\$29,801,600.00</u>
-------	--	------------------------

The amount of insurance for State employees was increased considerably by the 1954 amendments to the retirement Act. Effect to this change, which became operative on July 1, 1954, will be given in the next annual valuation.

#### Other Benefits

The accidental death and disability benefit claims incurred by the system are below the normal expectancy in a group of workers of the size represented in the system. The number of ordinary disability claims incurred during the year was likewise below the expected rate for the number of persons subject to this risk.

#### Conclusion

The system is continuing to make progress in operations and is constantly improving its position. An upward revision in the employer's contribution rate for both State employees and teachers may be required upon termination of the ten-year period for which the present rates were established, in view of the several liberalizing changes in the plan of operations which have been made during recent years. The new rates will be determined at such time and a recommendation for a change will be made accordingly.

Respectfully submitted,

A. A. Weinberg  
Actuary



VALUATION BALANCE SHEET - JUNE 30, 1954

A S S E T S

PRESENT ASSETS

Net present assets	\$16,798,917.68	
Less, releases of member contributions on account of refunds and death benefits	<u>4,824,859.00</u>	\$11,974,058.68

DEFERRED ASSETS

Obligations of the participants and the employer for retirement and disability annuities covering service of members for the remainder of their active working lifetime subsequent to June 30, 1954 -

State Employees -		
Members	\$ 4,398,116.00	
State	<u>6,112,020.00</u>	10,510,136.00
Teachers -		
Members	\$ 4,329,018.00	
State	4,231,093.00	
Cities and Towns	<u>4,231,093.00</u>	12,791,204.00

DEFERRED OBLIGATION OF  
THE STATE OF RHODE ISLAND

Accrued Unfunded Liability - Present value of annuities and benefits in force, and accrued liabilities for retirement an- nuities and disability annuities on account of service prior to July 1, 1954		<u>35,821,072.32</u>
Total Assets		<u>\$71,096,471.00</u>

VALUATION BALANCE SHEET - JUNE 30, 1954

L I A B I L I T I E S

ACCRUED LIABILITIES

Reserve requirements  
for annuities and  
benefits in force -

State Employees  
Teachers

\$ 2,255,774.00  
8,623,571.00

\$10,879,345.00

Present Value of accrued  
requirements for retire-  
ment annuities, disability  
annuities and death benefits,  
at June 30, 1954 -

State Employees -

Male  
Female

\$ 7,382,314.00  
3,300,394.00

10,682,708.00

Teachers -

Male  
Female

\$ 4,736,468.00  
21,496,610.00

26,233,078.00

PROSPECTIVE LIABILITIES

Present Value of retirement  
annuities and disability  
annuities on account of  
service to be rendered  
after June 30, 1954 -

State Employees  
Teachers

\$10,510,136.00  
12,791,204.00

23,301,340.00

Total Liabilities

\$71,096,471.00

A P P E N D I X

Summary of Benefit and Contribution  
Provisions in Force

Statistical Tables