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, 1955

There is presented herewith 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, 1955.

Basis of Valuation

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

Statistics

Changes in the status of the membership of the system affecting active members and beneficiaries, and the financial data required for our valuation were supplied to us in excellent form by Joseph B. Lewis, Secretary.

Membership

		Employees -
	Male	Female
Number of members	4,359	2,900
Proportion of total	60.0%	40.0%
Annual salaries	\$13,667,138.00	\$7,666,654.00
Average age	46.8	40.9
Average total service	7.7	7.0

	- Teacher-members -		
	Male	Female	
Number of members	1,265	3,558	
proportion of total	26.2%	73.8%	
Annual salaries	\$5,095,177.00	\$13,317,835.00	
Average age	41.5	49.6	
Average total service	12.9	17.5	

Beneficiaries

State Employees - N	<u>Number</u>	Annual Payments	Reserve Requirements
Retirement annuities - Maximum rate Option 1 Option 2 Option 3 Actuarial equivalent	96 30 10 4 1	\$ 98,288 34,955 13,297 6,955 1,349	\$ 806,323 265,903 175,016 77,462 17,563
Disability annuities - Ordinary disability Ordinary disability - Accidental disability	Opt.1 1 5	7,260 644 2,088	80,345 8,382 30,289
Beneficiary annuities -			
Totals	155	\$164,836	\$1,461,283

(Continued)

Beneficiaries - (Continued)

State Employees - I	<u>Female</u> Number	Annual Payments	Reserve Requirements
Retirement annuities - Maximum rate Option 1 Option 2 Option 3 Actuarial equivalent	71 15 1	\$ 86,551 16,809 1,601 2,628	\$ 906,086 154,114 17,009 40,671
Disability annuities - Ordinary disability Ordinary disability - Accidental disability	Opt.1 1 2	2,269 645 2,524	32.726 8,928 34,095
Beneficiary annuities -	<u>4</u>	4,353	51,238
Totals	100	\$117,380	\$1,244,867
Teachers - Male	Number	Annual Payments	Reserve Requirements
Retirement annuties - Maximum rate	46	\$114,536	\$1,058,706
Option 1 Option 2 Option 3 Actuarial equivalent	- 6 4 1	10,020 7,924 1,226	149,473 99,204 16,463
Disability annuities - Ordinary disability Ordinary disability - Accidental disability	Opt.1 -	7,873 	118,984
Beneficiary annuities -	_=		
Totals	62	\$141,579	\$1,442,830
	=		

(Continued)

Beneficiaries - (Continued)

Teachers - Female

	Number	Annual Payments	Reserve Requirements
Retirement annuities - Maximum rate Option 1 Option 2 Option 3 Actuarial equivalent	320 5 2 1	\$698,076 11,680 2,740 1,626	\$7,595,263 127,174 46,223 24,431
Disability annuities - Ordinary disability Ordinary disability - Accidental disability	Optl 1	38,396 2,666	613,713 61,032
Beneficiary annuities			
Totals	355	\$755,184	\$8,467,836

Summary of beneficiaries

	Number	Annual Payments	Reserve Requirements
State Employees -			
Male Female	155 100	\$ 164,836 117,380	\$ 1,461,283 1,244,867
Teachers -			
Male Female	62 <u>355</u>	141,579 755,184	1,442,830 8,467,836
Totals	672	\$1,178,979	\$12,616,816
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Results of Valuation

The accompanying Valuation Balance Sheet presents the financial condition of the system from a technical standpoint taking into account all accrued and prospective liabilities for benefit payments to be made in future years. This statement differs from the usual financial presentation made by accountants in that it gives effect to all accrued and future benefit liabilities on account of the present members and annuitants, and all present and prospective assets. Total liabilities are balanced against total assets. Thus, a test of actuarial solvency is made. The test of solvency at any given date is whether the assets on hand are equal to the accrued liabilities. Any deficiency in present assets to meet the accrued liabilities represents the unfunded portion of the obligations, generally referred to as the actuarial reserve deficiency. Conversely, any excess of present assets over accrued liabilities constitutes true surplus.

It will be noted that the total liabilities at June 30, 1955, amounted to \$80,739,395.00, of which the sum of \$28,057,343.00, was applicable to the period subsequent to that date. The accrued liabilities at the balance sheet date, therefore, totalled \$52,682,052.00. The assets available to meet these liabilities, after providing for refunds to members withdrawing from the system in future years, amounted to \$14,090,780.08, indicating that the accrued unfunded obligation at the date of this valuation was \$38,591,271.92. This constitutes a deferred obligation of the

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State of Rhode Island and the cities and towns, to be discharged by future contributions under the established method of financing.

Liabilities On Account of Beneficiaries

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 amount to \$12,616,816.00, which compares with the net available assets of the system of \$14,090,780.08.

Liabilities On Account of Active Members

These liabilities consist of the pension credits provided State employees and teachers prior to July 1, 1936 and July 1, 1949, respectively, and pension credits for service rendered by the members subsequent to these dates. Credits for service rendered by the members prior to the date they came under the retirement system are technically called "prior service" credits. The prior service credits for the respective classes of members, at the date of valuation were as follows:

State Employees-

Male Female	\$1,429,233.00 533,891.00	\$ 1,963,124.00
Teachers -		
Male Female	3,601,004.00 17,223,254.00 Total	20,824,258.00 \$22,787,382.00

Pension credits accruing on account of service subsequent to July 1, 1936 for State employees, and July 1, 1949 for teachermembers, are technically referred to as "membership service" credits. These consist of two parts, namely, (1) credits for service to June 30, 1955, and (2) credits for service to be rendered thereafter during the productive life of the members until retirement. A summary of these two different types of credits is presented:

	Accrued Membership Service at June 30, 1955	Membership Service Subsequent to June 30, 1955
State Employees -		
Male Female	\$ 6,435,094.00 3,484,876.00	\$ 8,182,421.00 4,538,919.00
Teachers -		
Male Female	1,631,354.00 5,726,530.00	4,692,816.00 10,643.187.00
Totals	\$17,277,854.00	\$28,057,343.00

Insurance

The ordinary death benefit provided by the system according to length of service, up to a maximum of \$5,000.00, constitutes group life insurance. The ammount of insurance coverage for State employees and teachers is as follows:

State Employees -

Male Female		\$12,865,200.00 	\$20,197,600.00
Teachers -			
Male Female	Total	4,385,400.00 15,587,100.00	19,972,500.00 \$40,170,100.00

The foregoing amounts give effect to the increase in the amount of insurance coverage created by the 1954 amendments to the retirement Act, effective July 1, 1954.

Other Benefits

The several disability benefits provided by the system are below the expected number for the size of the 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 application of the policies and procedures governing disability benefits will be necessary for a proper and effective administration in order that the cost of these benefits may be kept within reasonable limits.

VALUATION BALANCE SHEET - JUNE 30, 1955

ASSETS

PRESENT ASSETS

Net present assets

\$19,744.158.08

Less, releases of member contributions on account of refunds and death benefits

<u>5.653,378.00</u>

\$14,090,780.08

DEFERRED ASSETS

Obligation of the member and the employer for retirement and disability annuities covering service of members for the remainder of their active working lifetime subsequent to June 30, 1955 -

State Employees -

Members State \$ 5,323,229.00 7.398.111.00

12,721,340.00

Teachers - Members

State Cities and towns \$ 5,190,316.00 5,072,843.00 5,072,844.00

15,336,003.00

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, 1954, after
credit for available present
assets

38,591,271.92

Total Assets

\$80,739,395.00

VALUATION BALANCE SHEET - JUNE 30, 1955

LIABILITIES

ACCRUED LIABILITIES

Reserve requirements for annuities and benefits in force -

State Employees Teachers	\$ 2,706,150.00 9,910,666.00	\$12,616,816.00
Present Value of accrued requirements for retire-ment annuities, disability annuities and death benefits at June 30, 1955 -		
State Employees - Male Female	\$ 7,864,327.00 4,018,767.00	11,883,094.00
Teachers - Male Female	5,232,358.00 22,949,784.00	28,182,142.00

PROSPECTIVE LIABILITIES

Present Value of retirement annuities and disability annuities on account of service to be rendered after June 30, 1955 -

State Employees Teachers	\$12,721,340.00 15,336,003.00	28,057,343.00
Total Liabilities		\$80,739,395.00

Conclusion

The results of operations for the year have given further confirmation to the opinion expressed in our report last year, that an upward adjustment in employer's contribution rates will be necessary, particularly in the case of the teacher-members. Liberalizing changes in benefits during recent years have created additional cost burdens. No increases in revenues were provided. These changes are now being reflected in increasingly larger benefit payments by the system.

Coordination of the system with the old-age and survivors insurance provisions of the Federal Social Security Act is feasible and practicable. The pension study commission which is now considering the problem will no doubt have some recommendations in this respect. Coordinating the two programs under a plan whereby rates of benefit under the system would be reduced in recognition of social security coverage would tend to keep the cost of combined coverage, both present and prospective, within reasonable limitations. Any plan that is finally agreed to must necessarily give full effect to prospective cost increases on the part of the members of the system, the State of Rhode Island and the cities and towns, both under the retirement system and federal social security.

Respectfully submitted,

A. A. Weinberg Actuary

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Summary of Benefit and Contribution Provisions