

REPORT OF THE ACCOUNTANT

REPORT OF AN ACTUARIAL VALUATION OF THE  
MEMBERSHIP SYSTEM AS OF JUNE 30, 1968

This report presents the results of an actuarial valuation of the membership system of the State of Puerto Rico as of June 30, 1968.

The purpose of the valuation was to establish the liabilities and reserve requirements for the accrued and prospective pension benefits under the prescribed benefit schedule. The financial condition of the system is established from a technical and actuarial standpoint by means of such valuation. An actuarial balance sheet is prepared to reflect the results of the valuation showing the accrued and prospective liabilities and the present and prospective assets to cover these liabilities.

In an actuarial valuation, a determination is made of the liabilities incurred for the several benefit obligations. The return required to meet these accrued liabilities for the lifetime of the members are also computed. The factors of mortality, interest and interest rate basis in these calculations. Other factors are the judgment in actuarial procedure, such as rates of salary and the progression until retirement of the members, interest earnings, disability incidents and ages of retirement.

Factors reflecting these basic factors were formulated in a summary and investigation of the past operating experience of the system

separate rates are used for State employees and teacher-members. A further division is made between male and female members to give effect to the diverse physiological conditions and employment characteristics affecting the two sexes. Some variations from these established standards frequently occur in current operations. These are considered by means of an adjustment of the results of the valuation according to the foregoing factors.

MEMBERSHIP STATISTICS

A variety of statistics was compiled and tabulated for this actuarial valuation. These statistics formed the basis of the valuation. Detailed tables reflecting this data are presented in the appendix. A summary thereof is as follows:

	State employees		Teachers	
	Male	Female	Male	Female
<u>ACTIVE MEMBERS</u>				
Number	6,162	5,474	2,961	5,452
Per cent of total	53.0%	47.0%	35.3%	64.7%
Annual salaries	\$42,859,735	\$29,591,274	\$22,956,624	\$41,495,072
Average salary	\$6,933	\$5,223	\$7,700	\$7,610
Average age	47.3	45.8	36.7	42.6
Average service	9.4	7.8	9.2	9.9

RETIREMENTS	State Employees		Teachers	
	Male	Female	Male	Female
Number on retirement	868	670	217	1,150
Per cent of total	56.4%	43.6%	15.9%	84.1%
Average age at June 30, 1968	71.4	71.0	70.8	72.1
Service retirements during year	106	89	20	123
Terminations	45	19	14	31
Average age of retirements during year	64.8	64.9	60.0	63.1

BASIS OF VALUATION

The benefit and contribution provisions forming the basis of this valuation are summarized in the appendix. The rate of interest used in the valuation was 3-1/2% per annum. The actuarial functions that were applied were those established in the previous actuarial surveys and investigations of the system with some modifications to reflect current operating developments.

RESULTS OF VALUATION

A test of progress in the operation of any retirement system is to the extent to which coverage is provided for the accrued liabilities for earned pension credits in comparison with the prior period. This assumes that the system is fully funded, that is, the accrued

pension credits are financed currently in full measure, and that the unfunded accrued liability is being systematically amortized. Pension liabilities represent discounted sums which include the interest factor, therefore the liabilities for prior years accrued currently at interest at the established rate.

The law prescribes a partial funding of liabilities for the Employees' Retirement System. Contributions by the employer represent the average annual requirements for benefits according to a 5-year projection of payments by the system. The rate per cent of contributions established in 1967 was 5.55% of payroll for State employees and 7.80% for teachers, with the latter cost being divided equally between the State and cities and towns. Since partial funding results in a deferment of the remainder of the incurred accruing cost, the unfunded accrued liability has been in a steady and persistent upward trend.

In the case of the Employees' Retirement System, operations for the 1968 fiscal year disclosed an increase in the unfunded accrued liability amounting to \$7,633,259.00. This increase is reconciled as follows:

Interest accrual at 3 1/2% on the unfunded accrued liability at June 30, 1967	\$4,095,446.00
Additional current service requirements for the 1967-1968 fiscal year	<u>3,537,813.00</u>
Total	<u>\$7,633,259.00</u>



VALUATION BALANCE SHEET - JUNE 30, 1968

Statement of Assets, Liabilities and Reserves

A S S E T S

NET PRESENT ASSETS:

Cash  
Investments (at amortized book value)  
Accrued Interest Receivable

\$ 1,477,043  
101,803,174  
983,480

DEFERRED ASSETS:

Present value of future service credits on account of service subsequent to July 1, 1968

State employees -  
Members  
State of Rhode Island \$11,022,262.00  
19,836,002.00  
Teacher-Members  
Members  
State of Rhode Island 12,311,338.00  
11,495,993.00  
Cities and Towns 11,495,993.00

66,161,580

UNFUNDED ACCRUED LIABILITY:

Due from employers for unfunded accrued pension credits

State of Rhode Island \$82,839,494.00  
Cities and Towns 43,806,497.00

124,645,991

TOTAL ASSETS

\$295,071,280

1/ The State of Rhode Island and the cities and towns share equally in the cost of teachers' pensions.

VALUATION BALANCE SHEET - JUNE 30, 1968

Statement of Assets, Liabilities and Reserves

LIABILITIES AND RESERVES

CURRENT LIABILITIES:

Unclaimed Benefits \$ 25,891.00

FUTURE SERVICE LIABILITY:

State employees \$28,723,458.00  
Teacher-members 37,438,130.00 66,161,588.00

RESERVE REQUIREMENTS:

RESERVE FOR MEMBER CONTRIBUTIONS -

State Employees -  
For service retirement and disability annuities \$10,204,839.00  
For future refunds 11,687,022.00 22,091,861.00

Teacher-Members -  
For service retirement and disability annuities \$16,854,852.00  
For future refunds 8,209,036.00 25,063,888.00

RESERVE FOR SURVIVOR BENEFITS 1,423,499.00

RESERVE FOR EMPLOYER CONTRIBUTIONS -

For service retirement and disability annuities on active members -

State Employees -  
Total requirements \$45,594,480.00  
Employee contributions 10,204,839.00 35,389,641.00

Teacher-Members -  
Total requirements \$86,875,350.00  
Employee contributions 16,854,852.00 70,020,498.00

RETIREMENT AND BENEFITS RESERVE -

State Employees 23,877,245.00

Teacher-Members 51,017,169.00

TOTAL LIABILITIES AND RESERVES

\$295,071,280.00

The following explanation of the several items comprising the assets, liabilities and reserves of the system is given to facilitate an understanding of their function and meaning.

Present Assets require no explanation. They comprise the assets on hand as taken from the financial reports prepared by the accountant of the system.

Deferred Assets consist of the obligations of the members and the employers for service to be rendered subsequent to June 30, 1968. They represent discounted amounts, actuarially determined giving effect to the factors of mortality, interest, turnover and others that enter into the computation of liabilities for annuities and benefits accruing on account of future service.

Unfunded Accrued Liability constitutes the amounts accrued and unpaid on account of service rendered prior to the balance sheet date. This is an accrued obligation of the State and the cities and towns to be discharged in future years by increased allocations to the system.

Current Liabilities represent accounts payable at the close of the year as shown by the financial statements prepared by the system.

Future Service Liability is an offset to Deferred Assets and represents the present value of the proportionate pension credit to be earned by the members during future service from the balance sheet date to the assumed ages of retirement.

Reserve for Members' Contributions consists of the amounts of the members' contribution credits at the balance sheet date. Part of these credits are subject to refund in future years on account of resignation, dismissal or death. A part of these credits are available to finance a portion of the annuities and benefits to become due in the case of members now in service who will ultimately qualify for retirement.

Reserve for Survivor Benefits represents the accumulation of contributions by the teacher-members and the cities and towns towards the survivor benefit provision specifically applicable to these members.

Reserve for Employer Contributions represents the amounts that must be provided to finance the employer's portion of the accrued pension credits for those employees now in service who will ultimately qualify for pensions at the ages assumed for their retirement.

Retirement and Benefits Reserve constitutes the amount necessary to pay out during the future lifetime of the pensioners on the roll the pensions already granted and in force at the balance sheet date.

CERTIFICATION

The accompanying Valuation Balance Sheet exhibits all assets, accrued liabilities and reserves of the system as of June 30, 1968. Present assets were taken from the financial statements submitted by the accountant of the system.

In our opinion, the accompanying Valuation Balance Sheet correctly presents the condition of the Employees' Retirement System of the State of Rhode Island at June 30, 1968, after giving effect to all accrued liabilities and actuarial reserve requirements of the several annuities and benefits under the applicable law in effect at such date.

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A. A. Weinberg  
Actuary

January 8, 1969

FINANCIAL STATEMENTS

1. Financial Balance Sheet as of June 30, 1968
2. Statement of Revenues and Expenditures for the Fiscal Year Ended June 30, 1968
3. Statement of Cash Receipts and Disbursements for the Fiscal Year Ended June 30, 1968
4. Comparative Statement of Investment Receipts and Disbursements, Fiscal Years Ended June 30, 1968 and 1967
5. Statement of Net Investment Earnings for Fiscal Year Ended June 30, 1968

FINANCIAL BALANCE SHEET - JUNE 30, 1968

A S S E T S

Cash		\$ 1,477,045.
Accrued Interest Receivable	\$102,692,865.53	983,480.
Investments	\$ 1,046,141.62	
Unamortized Dis-counts	156,452.47	889,689.15
Less-Unamortized Premiums		
Net Investments		101,803,176.
Total Assets		<u>\$104,263,702.</u>

LIABILITIES AND RESERVES

<u>Current Liabilities</u>		\$ 25,891.11
Unclaimed Benefits		
<u>Members' Contribution Reserves</u>		
State Employees	\$22,091,861.21	
Teachers	25,063,888.02	
Teachers' Survi-vors	1,423,439.55	
Total Members' Reserves		48,579,248.78
<u>General Reserves</u>		
State Employees	\$36,592,115.37	
Teachers	16,727,995.31	
Teachers' Survi-vors	2,161,251.98	
State Employees - Full funded costs	160,301.44	
Certain State Employees	16,165.04	
Certain Teachers	833.46	
Total General Reserves		55,658,562.60
Total Liabilities and Reserves		<u>\$104,263,702.</u>

STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1968

REVENUES

<u>Member Contributions -</u>			
State Employees	\$ 3,475,108.21		
Teachers	4,122,812.20		
Teachers' Survivors	388,435.67		
Death Benefit Premiums - Retired Legislators	\$690.00		
Retired Employees	361.95	1,054.95	
Employees Transferred - Municipalities		25,062.91	\$ 8,012,773.97
<u>General Fund Appropriations: -</u>			
State Employees	\$ 2,965,232.18		
Teachers	1,994,657.21		
Certain State Employees	15,200.00		4,975,089.39
<u>Municipal Contributions -</u>			
Teachers	\$ 2,639,070.93		
Teachers' Survivors	375,838.67		
Employees Transferred to State		105,220.75	3,120,130.35
<u>Other Contributions -</u>			
Full Funded Costs - Employees			307,715.44
Miscellaneous Receipts			3,327.00
Unclaimed Benefits			19,183.74
<u>Investment Income -</u>			
Investment Earnings	\$ 4,423,633.07		
Loss on Sales of Investments		49,142.38	4,374,490.69
<u>TOTAL REVENUES</u>			<u>\$20,812,710.58</u>

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EXPENDITURES

Pensions and Death Benefits -

State Employees	\$ 2,881,381.19	
Teachers	5,152,683.21	
Teachers' Survivors	27,253.20	
Certain State Employees	20,387.76	
Certain Teachers	1,419.96	\$ 8,083,125.32

Refunds of Contributions -

State Employees	\$ 1,067,588.61	
Teachers	727,076.60	
Teachers' Survivors	62,485.29	
Interest, Teachers' Survivors Contribution Refund	839.24	
To Municipalities a/c Teachers	27,153.09	
To Municipalities a/c Teachers' Survivors	23,107.08	
To Municipalities a/c Employees Transferred	1,580.27	1,909,850.18

Unclaimed Benefits 4.57

Miscellaneous Refunds 2,863.86

Investment Expense -

Postage & Insurance on Purchases 10.92

TOTAL EXPENDITURES \$ 9,995,851.19

EXCESS OF REVENUE OVER EXPENDITURES \$10,816,855.19

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

FISCAL YEAR ENDED JUNE 30, 1968

Cash Balance July 1, 1967 \$ 1,513,864.69

Receipts:

Investments Sold and Matured	\$10,548,808.34	
Investment Earnings	4,170,576.62	
Discounts on Purchases	312,899.48	
Loss on Sales of Investments	49,142.38	\$14,983,142.06

Member Contributions -

State Employees	\$ 3,475,408.24	
Teachers	4,122,812.20	
Teachers' Survivors	388,435.67	
Ins. Benefit Prem. Retired Employees	364.95	
Ins. Benefit Prem. Retired Legislators	690.00	
Employees Transferred-Municipalities	25,062.91	8,012,773.97

General Fund Contributions -

State Employees	\$ 2,965,232.18	
Teachers	1,994,657.21	
Certain State Employees	15,200.00	4,975,089.39

Municipal Contributions -

Teachers	\$ 2,639,070.93	
Teachers' Survivors	375,838.67	
Employees Transferred to State	105,220.75	3,120,130.35

Other Contributions -

Full Funded Costs-Employees	307,715.44	
Unclaimed Benefits	19,183.74	
Miscellaneous Receipts	3,327.00	
Inter-Fund Transfers	1,342.09	

TOTAL RECEIPTS

TOTAL AVAILABLE

31,422,704.04

\$32,936,568.73

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Statement of Cash Receipts and Disbursements - continued

Disbursements -

Investments Purchased	\$21,385,922.12	
Accrued Interest on Purchases	56,374.71	
Premiums on Purchases	20,029.50	
Postage & Insurance on Purchases	10.92	\$21,462,337.25

Pension Benefits - Death Benefits -  
Death Retirement Allowances

State Employees	\$ 2,881,381.19	
Teachers	5,152,683.21	
Teachers' Survivors	27,253.20	
Certain State Employees	20,387.76	
Certain Teachers	1,419.96	8,083,125.32

Refunds of Contributions -

State Employees	\$ 1,067,588.61	
Teachers	727,096.60	
Teachers' Survivors	62,485.29	
Interest, Teachers' Survivors Contribution Refunds	839.24	
Municipalities a/c Teachers	27,153.09	
Municipalities a/c Teachers' Survivors	23,107.08	
Municipalities a/c Employees Transferred	1,580.27	1,909,850.18

Inter-Fund Transfers 1,342.09

Unclaimed Benefits 4.57

Miscellaneous Refunds 2,863.86

TOTAL DISBURSEMENTS

\$31,459,523.

CASH BALANCE JUNE 30, 1968

\$ 1,477,045.

COMPARATIVE STATEMENT OF INVESTMENT  
RECEIPTS AND DISBURSEMENTS

FISCAL YEARS ENDED JUNE 30, 1968 and 1967

	<u>1967-1968</u>	<u>1966-1967</u>
<u>RECEIPTS</u>		
Interest & Dividends	\$4,170,576.62	\$3,605,386.40
Discounts on Purchases	312,899.48	504,603.17
Gain or Loss on Sales	- 49,142.38	77,095.23
<u>Gross Receipts</u>	<u>\$4,434,333.72</u>	<u>\$4,187,084.80</u>
<u>DISBURSEMENTS</u>		
Accrued Interest on Purchases	\$ 56,374.71	\$ 80,163.23
Premiums on Purchases	20,029.50	45,365.25
Commissions on Purchases	--	77.50
Postage & Insurance on Purchases	10.92	30.30
<u>Total Disbursements</u>	<u>\$ 76,415.13</u>	<u>\$ 125,936.28</u>
<u>NET INVESTMENT RECEIPTS FOR THE YEAR</u>	<u>\$4,357,918.59</u>	<u>\$4,061,148.52</u>