

Employees' Retirement System

State of Rhode Island and Providence Plantations

Annual Financial Report

for the Fiscal Year ended June 30, 1993

Hon. Nancy J. Mayer, General Treasurer

Employees' Retirement System

State of Rhode Island and Providence Plantations

Annual Financial Report

for the Fiscal Year ended June 30, 1993

Hon. Nancy J. Mayer, General Treasurer

Joann E. Flaminio, Executive Director

Page

Table of Contents

5	Transmittal
6	Retirement Board and Administration
7	Director's Letter
11	Plan Summary
15	Employees' Retirement System
79	Municipal Employees' Retirement System

The Honorable Bruce Sundlun
Governor, State of Rhode Island
and Providence Plantations
State House
Providence, Rhode Island 02903

Dear Governor Sundlun:

In accordance with Rhode Island General Laws, 36-8-8 and 45-21-34, I respectfully submit the Fifty-seventh Annual Financial Report of the Employees' Retirement System and the Thirty-sixth Annual Financial Report of the Municipal Employees' Retirement System of the State of Rhode Island for transmittal to the General Assembly. Please note that these two reports, which appeared under separate cover in prior years, have been consolidated into a single report.

The report covers the fiscal year ended June 30, 1993.

Respectfully submitted,



Nancy J. Mayer

General Treasurer and Chairperson, Employees' Retirement Board

/ejf

Employees' Retirement Board of Rhode Island

Honorable Nancy J. Mayer, Chairperson, General Treasurer
Marcia Reback, Vice Chairperson, Teacher Representative
Virgil N. Almeida, *Municipal Employee Representative*
Daniel L. Beardsley, *Designee of the R.I. League of Cities and Towns*
Michael R. Boyce, *Public Representative*
Louis Ciaramello, *C.L.U., Public Representative*
William B. Finelli, *Teacher Representative*
James A. Gillis, *State Employee Representative*
Sen. Walter J. Gray, *Senate Finance Chairman Designee*
James F. Mahoney, *House Fiscal Advisor*
Thomas V. Morrissey, *State Employee Representative*
Michael O'Keefe, *State Budget Officer*
Rep. Antonio J. Pires, *House Finance Chairman*
Edna Snow, *Retired Member Representative*
Jerome Williams, *Designee of the Department of Administration*

Employees' Retirement System of Rhode Island Administration

Joann E. Flaminio, *Executive Director*
James M. Reilly, *Assistant Executive Director*
Diane S. Bourne, *Assistant Director-Member Services*
Frank J. Karpinski, *Assistant Director-Finance*

***Employees' Retirement Board
State of Rhode Island***

I am pleased to present to you this Annual Financial Report of the Employees' Retirement System (ERSRI) and Municipal Employees' Retirement System (MERS) of the State of Rhode Island for the fiscal year ended June 30, 1993. This report is intended to provide the Governor, the General Assembly, members and beneficiaries of the system, and members of the general public with financial and actuarial information.

The report is divided into three sections:

- 1.** The introductory section presents the system's organization and purpose and summarizes plan benefits;
- 2.** The second section contains the financial statements of the Employees' Retirement System of Rhode Island, notes to the financial statements, and the results of the latest actuarial valuation by William M. Mercer Inc.;
- 3.** The third section contains the financial statements of the Municipal Employees' Retirement System, notes to the financial statements, and the results of the latest actuarial valuation also by William M. Mercer Inc.;

Membership

As of June 30, 1993, active membership in the Employees' and Municipal Employees' Retirement System totaled 32,381. A total of 16,120 pensioners were receiving benefits from the system.

Accounting Basis

The financial statements have been prepared in accordance with generally accepted accounting principles using the accrual basis of accounting. Under this method, revenue and expenses are recorded when incurred. Dividend income is recorded on the ex-dividend date. Interest income is accrued daily. Finally, investments are recorded at cost.

Financial Highlights

The major sources of revenue for ERSRI and MERS are employee contributions, employer contributions, and investment earnings. Total revenues for fiscal year 1993 were \$450,341,335. The expenditures of the fund consist primarily of payments made to members and beneficiaries for retirement, disability, death or survivor benefits. In total, benefits payments for fiscal year 1993 were \$227,654,924.

Administrative expenses of the retirement system and the cost of maintaining the retirement system are paid from a restricted receipt account which is used solely to pay such expenses. This account is reimbursed through the transfer of 1.5 % of the investment income from the retirement fund. Any non-encumbered funds at June 30th are transferred back to the retirement fund. Administrative expenses incurred by the system for the year ended June 30, 1993 amounted to \$1,650,598.

Funding

The actuary for the retirement system determines the actuarial liabilities and reserves utilizing the entry age normal cost method with an initial frozen liability. The total net assets of the Employees' Retirement System on the actuarial balance sheet on June 30, 1993 were \$2,726,033,873 while the total net assets of the Municipal Employees' Retirement System were \$413,105,554. The ratio of vested assets to liabilities for state employees as of June 30, 1993 was 83.55%, compared to 80.67% as of June 30, 1992. The ratio of vested assets to liabilities for teachers as of June 30, 1993 was 79.32%, compared to 77.46% as of June 30, 1992.

The unfunded liability for Rhode Island state employees as of June 30, 1993 amounted to \$399,132,100 while the unfunded liability for Rhode Island public school teachers amounted to \$674,852,400. The unfunded liability for municipal employees as of June 30, 1993 was \$153,070,996.

Finally, I would like to note that I assumed leadership of the retirement system on July 1, 1993, and as such, this report covers a time period during which I was not formally associated with the Employees' Retirement System of Rhode Island.

Sincerely,

A handwritten signature in cursive script that reads "Joann E. Flaminio". The signature is written in black ink and is positioned to the right of the typed name.

Joann E. Flaminio
Executive Director

/ejf

Employees' Retirement System Plan Summary

Administration

The Employees' Retirement System and the Municipal Employees' Retirement System are governed by a retirement board. The Board is composed of fifteen members in accordance with Title 36 of the Rhode Island General Laws and is chaired by the General Treasurer. The system is managed by an executive director and assistant executive director who are chosen by the retirement board. The system has twenty-two full-time employees.

Membership

All persons employed by the State of Rhode Island on at least a 20 hour basis are eligible for membership in the Employees' Retirement System of Rhode Island. All persons employed by a participating municipality on at least a 20 hour basis are eligible for membership in the Municipal Employees' Retirement System of Rhode Island. Public school teachers are eligible for membership in the Employees' Retirement System provided they are certified by the Board of Regents, engaged in teaching as a principal occupation and regularly employed on at least a half time basis.

Membership in the Employees' Retirement System is a condition of employment and is required of all employees who meet the Board's eligibility requirements. Members of the General Assembly are also eligible for participation in the Employees' Retirement System. Judges who were employed after December 31, 1989 participate in the Judicial Retirement Plan while state police who were employed after July 1, 1987 participate in the State Police Retirement Plan.

Employee and Employer Contributions

Benefits are financed by employee contributions, employer contributions, and investment earnings. ERSRI members pay a percentage of their salaries to the retirement system. Currently, teacher members contribute 8.50% of their annual salaries while state employees contribute 7.75% of their annual salaries. Municipal employees contribute 6.0% of their salaries and an additional one percent if their community has adopted a cost-

of-living provision. Each year, the retirement system's actuary determines the amount of additional monies necessary to fund the benefits of retirees and future retirees of the system. Based on the liability of the system, the actuary determines a percentage of payroll or "employer contribution" that is necessary to fund the established level of benefits. The actuary determines a different employer rate for state employees, public school teachers, and each participating municipality.

Retirement Benefit

The ERSRI retirement benefit is determined by two factors: Years of creditable service and final average salary. Public school teachers and state employees receive 1.7% of final average salary for the first ten years of creditable service and 1.9% for the next ten years of creditable service. For years twenty-one through thirty-four, members receive 3% of final average salary and 2% for year thirty-five. Municipal employees receive a flat 2.0% for each year of service. Benefits for members of the General Assembly, state correctional officers, judges, and state police vary according to their plan membership.

Retirement Options

The statutes governing the Employees' Retirement System allow the selection of four different retirement options:

Service Retirement Allowance/Maximum Plan

The Service Retirement Allowance (SRA) is based on creditable service and salary as a public employee. SRA provides the highest monthly benefit, but upon the death of the annuitant, all pension benefits stop.

Option #1/Joint and Survivor Full

Option #1 provides that upon the retiree's death, the retiree's beneficiary will receive the same lifetime retirement allowance that was received by the member.

Disability

Accidental Disability

Any active member who becomes disabled as the result of a work-related injury or hazard is eligible to apply for an accidental disability retirement. The statute governing accidental disability retirement requires that "the member is physically or mentally incapacitated for further services as the result of an injury sustained while in the performance of duty." The disability cannot be the result of "willful negligence or misconduct on the part of the member" and cannot be the result of age or length of service. The disability benefit equals 66 2/3 of the member's salary at the time of the accident or injury.

Ordinary Disability

Any active member who has at least five years of contributing service and who becomes disabled as the result of a non work-related injury or hazard is eligible to apply for an ordinary disability retirement. The statute governing ordinary disability retirement requires that the member be "physically or mentally incapacitated for the performance of duty." The disability equals what the member would have received had she/he been retired normally. In cases where the member has less than ten years of service, the member receives a benefit equal to that of a member with ten years of service.

Optional Annuity Protection

Those members with at least 10 years of service may provide their beneficiary with additional protection by completing an Optional Annuity Protection form. Should the member die while still in active service, the OAP beneficiary will have the option of receiving either a return of contributions or a monthly annuity. Spouses automatically receive this option of a monthly annuity provided the member had over ten years of service at the time of his/her death and the spouse is the sole beneficiary on file.

Teacher Survivor Benefit Plan

Teachers who do not contribute to Social Security participate in the Teachers' Survivors Benefit Plan. Members of the program are required to

make contributions of 1% of salary up to a salary of \$9,600 per year. After the death of the member, spousal benefits of up to \$700 per month are available at age 60. Additional family and children's benefits are also available.

Death Benefits

All members are entitled to receive a death benefit. Thus, for each year of service that has been rendered by the member, the member's beneficiary will receive a death benefit of \$800 up to a maximum of \$16,000. This amount is reduced 25% every year after retirement, but all beneficiaries will receive a minimum benefit of \$4,000.

Employees' Retirement System

Annual Financial Statement as of June 30, 1993

Actuarial Valuation

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND

BALANCE SHEET

JUNE 30, 1993

Assets

Cash and cash equivalents (Note 5)	\$293,637.636
Accrued interest and dividends receivable	24,172.392
Investments (Note 5)	2,025,907,578
Open trades receivable	7,229,849
Contributions receivable	19,641,026
Due from other funds (Note 6)	<u>29,180,720</u>
Total assets	<u>\$2,399,769,201</u>

Liabilities and Fund Balance

Liabilities:	
Accounts and vouchers payable	\$2,431,256
Open trades payable	24,335,330
Due to other funds	<u>6,225,385</u>
Total liabilities	<u>32,991,971</u>
Fund Balance:	
Reserved for employees' pension benefits	2,369,195,106
Reserved for employees' post-retirement healthcare benefits (Note 2)	<u>(2,417,876)</u>
Total fund balance	<u>2,366,777,230</u>
Total liabilities and fund balance	<u>\$2,399,769,201</u>

See notes to financial statements.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

EMPLOYEES' RETIREMENT FUND

STATEMENT OF REVENUES, EXPENSES, AND
CHANGES IN FUND BALANCE

FOR THE FISCAL YEAR ENDED JUNE 30, 1993

Operating revenues:	
Employer contributions for pension benefits	\$132,103,484
Employee contributions for pension benefits	74,440,646
Employer contributions for post-retirement healthcare benefits	1,036,246
Income from investments	192,902,539
Interest on contributions	2,363,531
Miscellaneous	<u>199,510</u>
Total operating revenues	<u>403,045,956</u>
Operating expenses:	
Pension benefits	198,030,501
Post-retirement healthcare benefits	1,931,913
Refunds of contributions	3,903,854
Management and professional fees	<u>4,764,801</u>
Total operating expenses	<u>208,631,069</u>
Operating income	<u>194,414,887</u>
Other financing sources (uses):	
Transfers from other funds	45,662
Transfers to other funds	<u>(1,508,222)</u>
Total other financing uses	<u>(1,462,560)</u>
Net income before extraordinary item	192,952,327
Extraordinary item (Note 12):	
Decrease in carrying value of investments	<u>(5,597,143)</u>
Net income	187,355,184
Fund balance, July 1	2,185,752,235
Prior period adjustment (Note 11)	<u>(6,330,189)</u>
Fund balance, July 1, restated	<u>2,179,422,046</u>
Fund balance, June 30	<u>\$2,366,777,230</u>

See notes to financial statements.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

EMPLOYEES' RETIREMENT FUND

STATEMENT OF CASH FLOWS

FOR THE FISCAL YEAR ENDED JUNE 30, 1993

Cash flows from operating activities:	
Cash received from employers and employees	\$183,258,037
Cash payments to suppliers for goods and services	(4,159,436)
Cash payments to retirees and survivors	(198,107,063)
Cash payments to health insurance carriers	(1,931,913)
Interest on contributions	588,837
Refunds of contributions	(3,903,854)
Cash payments to employees for services	(134,985)
Other operating revenue	276,072
Net cash used for operating activities	(24,114,305)

Cash flows from noncapital financing activities:	
Operating transfers-in from other funds	1,062,973
Operating transfers-out to other funds	(2,525,533)
Net cash used for noncapital financing activities	(1,462,560)

Cash flows from investing activities:	
Purchase of investment securities	(2,141,685,339)
Proceeds from sale and maturities of investment securities	2,041,306,675
Interest and dividends on investments	191,828,863
Net cash provided by investing activities	91,450,199

Net increase in cash and cash equivalents	65,873,334
Cash and cash equivalents, July 1	227,764,302
Cash and cash equivalents, June 30	\$293,637,636

Reconciliation of operating income to net cash provided by operating activities:	
Operating income	\$194,414,887

Adjustments to reconcile operating income to net cash provided by (used for) operating activities:	
Income from investments	(192,902,539)
Change in assets and liabilities:	
Increase in contributions receivable	(831,808)
Increase in due from other funds	456,935
Increase in vouchers payable	11,018
Increase in accounts payable	2,427
Increase in accrued expenses	3,915,495
Increase in due to other funds	
Total adjustments	(218,529,192)
Net cash used for operating activities	\$124,114,305

See notes to financial statements.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Note 1. Pension Benefits Plan Description

The Employees' Retirement System of the State of Rhode Island (the System), is a multiple-employer, cost-sharing, public employee retirement system that acts as a common investment and administrative agent for pension benefits to be provided to state employees who meet eligibility requirements as well as teachers and certain other employees employed by local school districts in Rhode Island. The activities of the Employees' Retirement System are accounted for in the Employees' Retirement Fund (the Fund). The financial statements of the Fund are included as a pension trust fund in the State of Rhode Island Comprehensive Annual Financial Report.

The plan covers most state employees other than certain personnel at the state colleges and university (principally faculty and administrative personnel). Legislators and elected officials may become members on an optional basis. Membership in the plan is compulsory for teachers, including superintendents, principals, school nurses, and certain other school officials in the public schools in the cities and towns.

The State payroll for employees covered by the plan for the year ended June 30, 1993 was approximately \$415,000,000 and the total payroll, including overtime pay not subject to pension contributions, for all state employees was approximately \$625,000,000. The payroll for teachers and other local school employees covered by the plan for the year ended June 30, 1993 was approximately \$469,000,000.

The plan provides unreduced benefits of 1.7% of earnings for each of the first ten years of service; 1.9% for each of the next ten years; 3.0% per year for each of the next fourteen years; and 2% for the 35th year. The maximum benefit is 80% of final average earnings after 35 years of service. Such benefits are available to members at least age 60 with 10 years of service, or after 28 years at any age. A different benefit formula applies to State correctional officers who may retire at age 50 if they have 20 years of service. Benefits are based on the average of the highest three consecutive years' earnings, exclusive of overtime.

After the third anniversary of retirement, "cost-of-living increases" amounting to 3% compounded annually are provided, independent of actual changes in the consumer price index. The plan also provides nonservice-related disability benefits after five years of service; service-related disability pensions with no

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

minimum service requirement; vested benefits after ten years of service; survivor's benefits for service-related death; and certain lump sum death benefits.

Rhode Island General Laws, Sections 16-16-22 and 36-10-1 require that members contribute a fixed percentage of their earnings to the System. For the year ended June 30, 1993 this percentage was 7 3/4% for State employees, 8 1/2% for teachers and other covered school employees and 30% for legislators. The contributions required by the State and various local school districts that participate in the plan are set forth in Rhode Island General Laws, Sections 16-16-22 and 36-10-2. Contribution rates are determined by the actuary in accordance with policies outlined in the Rhode Island General Laws. For the year ended June 30, 1993 the State was required to contribute 10.37% actuarially of covered payroll for state employees. The State contributed 10.12% to the retirement system and .25% to fund the State's share of providing post-retirement healthcare benefits in fiscal 1993. The actuarially calculated rate of 10.37%, however, did not include the .25% for post-retirement healthcare benefits. For the year ended June 30, 1993 the State was also required to contribute 5.69% for teachers and other covered school employees. The rate was 5.05% for those school districts not participating in the 1990 early retirement incentive program. For the year ended June 30, 1993 most local school districts contributed 9.05% of covered payroll for their covered employees. Those school districts not participating in the 1990 early retirement incentive program contributed 7.91% of covered payroll in fiscal 1993.

Membership in the plan, as of the most recent actuarial valuation date, June 30, 1993, is as follows:

Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them.	16,835
Active employees (including 14,707 fully vested and 2,314 eligible to retire)	<u>26,170</u>
Total	<u>43,005</u>

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Note 2. Post-retirement Healthcare Benefits Plan Description

In accordance with the Rhode Island General Laws, post-retirement healthcare benefits are provided to all members of the Employees' Retirement System who retire on or after July 1, 1989. The benefits in general cover medical and hospitalization costs for pre-Medicare retirees and a Medicare supplement for Medicare-eligible retirees. The State is required to pay a portion of the monthly premium. This payment varies with years of service and ranges from 50% for retirees with 10-15 years of service to 100% for retirees with 35 years of service. During fiscal year 1993, the State was required to fund the program at a rate of .25% of active member state employees' payroll (exclusive of overtime). A required actuarial valuation of the plan has been performed subsequent to June 30, 1993; however, significant assumptions and funding options have not been adopted.

If during the initial four-year period (fiscal years 1990-1993) the cost of this benefit exceeds plan contributions, the State is required to advance the necessary funds to the System. The advances will be repaid to the State from any subsequent excess funds contributed based on actuarial valuations. As of June 30, 1993, the cumulative cost of the post-retirement healthcare benefits, as recorded, exceeded the cumulative contributions by \$2,417,876. The excess costs were temporarily funded by the payroll and pension clearing fund of the State, and will be reimbursed by the Employees' Retirement Fund when the State provides the required advance. Of the \$2,417,876 excess costs, \$895,667 relate to the fiscal year ended June 30, 1993. The State Controller is currently analyzing all related transactions occurring since inception of the plan to determine the financial status of the post-retirement healthcare benefits plan.

Enrollment in the post-retirement healthcare plan, as of October 1, 1992, the most recent actuarial valuation date, is as follows:

Pre-age 65	754
Age 65 and older	<u>1,049</u>
	<u>1,803</u>

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Note 3. Summary of Significant Accounting Policies

These financial statements were prepared in accordance with generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board.

- (a) Basis of Accounting - The financial statements of the Employees' Retirement Fund (the Fund) are prepared on the accrual basis of accounting. Under this method revenues are recorded when earned and expenses are recorded when incurred. Dividend income is recorded on the ex-dividend date. Interest income is accrued daily.
- (b) Method Used to Value Investments - Investments are recorded in the financial statements at cost. The cost of investments sold is determined using the average cost method. Investment transactions are accounted for on the date the investments are traded. See Note 12 regarding pooling of assets with the Municipal Employees' Retirement Fund.
- (c) Security Loans - The State Investment Commission has authorized the securities custodian and transfer agent, State Street Bank and Trust Company (SSB), to also act as its agent for the purpose of lending certain securities of the Fund to borrowers selected by SSB. The loans are collateralized at all times by cash, securities issued or guaranteed by the United States government or its agencies, or certain irrevocable letters of credit, with a market value at least equal to the market value of the securities loaned. As with other extensions of credit, the Fund may bear the risk of delay in recovery or even loss of rights in the collateral should the borrower of the securities fail financially. The Fund receives compensation for lending its securities in the form of fees or from all or a portion of the income from the investment of the collateral. The Fund also continues to earn income on the securities loaned. At June 30, 1993 the Fund loaned securities having an estimated value of \$609 million.

As the Fund does not trade or sell the collateral received in the securities lending program, such collateral is not considered an asset of the Fund, and a corresponding liability is not required on the balance sheet.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Note 4. Administration of the System

The System is administered by the State Retirement Board which consists of 15 members: the General Treasurer, the Director of the Department of Administration or his or her designee; the Budget Officer or his or her designee; the Fiscal Advisor to the House Finance Committee or his or her designee; the President of the League of Cities and Towns or his or her designee; two (2) active State employee members of the retirement system to be elected by active State employees; two (2) active teacher members of the retirement system to be elected by active teachers; one active municipal employee member of the retirement system to be elected by active municipal employees; one retired member of the retirement system to be elected by retired members of the System; the Chairperson of the House Finance Committee or his or her designee; the Chairperson of the Senate Finance Committee or his or her designee; and two (2) public representatives, one of whom shall be a C.L.U. competent in the area of pension benefits, shall be appointed by the governor and whose term shall be for four (4) years, or until their successors are appointed.

The State Investment Commission oversees all investments made by the State of Rhode Island, including those made for the Fund. Certain investments are made by investment managers, engaged by the Commission, at their discretion in accordance with the investment objectives and guidelines for the Fund. Short-term investments are made on a daily basis by the General Treasurer. Rhode Island General Law, Section 35-10-11 (b)(3) requires that all investments shall be made in securities as would be acquired by prudent persons of discretion and intelligence who are seeking a reasonable income and the preservation of capital. The State Investment Commission shall not invest pension funds in any United States company, subsidiary, or affiliate doing business in, or with, the Republic of South Africa.

Note 5. Cash Deposits and Investments

Cash Deposits

At June 30, 1993, the carrying amount of the Employees' Retirement Fund cash deposits was \$7,118,478 and the bank balance was \$1,481,685. Of the bank balance, \$1,240,428 was covered by federal depository insurance and \$241,257 was uninsured and uncollateralized. The carrying amount and the bank balance include a certificate of deposit of \$101,503.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

In accordance with Rhode Island General Laws, Chapter 35-10.1, depository institutions holding deposits of the State, its agencies or governmental subdivisions of the State, shall at a minimum, insure or pledge eligible collateral equal to one hundred percent of time deposits with maturities greater than sixty days. Any of these institutions which do not meet minimum capital standards prescribed by federal regulators shall insure or pledge eligible collateral equal to one hundred percent of deposits, regardless of maturity. None of the deposits was required to be collateralized at June 30, 1993.

Investments

The Employees' Retirement Fund's investments are categorized in the following table to give an indication of the level of risk assumed by the entity at June 30, 1993. The investments of the Employees' Retirement Fund were pooled with those of the Municipal Retirement Fund (see Note 12).

- Category 1 includes cash equivalents and investments that are insured or registered or for which the securities are held by the Fund or its agent in the Fund's name.
- Category 2 includes uninsured and unregistered cash equivalents and investments for which the securities are held by the financial institution's, broker's or dealer's trust department or agent in the Fund's name.
- Category 3 includes uninsured and unregistered cash equivalents and investments for which the securities are held by the financial institution, broker or dealer, or investments held by the financial institution's, broker's or dealer's trust department or agent but not in the Fund's name.

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements**

June 30, 1993

Category	June 30, 1993	
	Carrying Amount	Market Value at June 30, 1993
1	\$781,725,839	\$885,777,502
2	\$	\$
3	\$549,073	\$3,302,524
U.S. Government and Agency Securities	2,753,451	3,302,524
Repurchase Agreements	189,085,439	192,184,114
Corporate Bonds and Notes	825,539,103	1,262,454,576
Equity Securities	97,868,204	98,375,716
Foreign Securities		
Money Market Funds		
Real Estate and Venture Capital Limited Partnerships	283,216,634	283,216,634
Total	2,312,426,736	2,840,473,885
Less amount classified as cash equivalents	(286,519,158)	(286,519,158)
	<u>\$2,025,907,578</u>	<u>\$2,553,954,727</u>

Commitments

Under agreements with certain investment portfolio managers, the Fund is committed to provide additional contributions for investment. At June 30, 1993 approximately \$13.5 million of unfulfilled commitments remained outstanding.

Note 6. Due From Other Funds

During fiscal year 1991, based on supplemental budget legislation, the State of Rhode Island (the State) withdrew \$20,788,812 from the Employees' Retirement Fund (the Fund). The Internal Revenue Service (IRS) has determined that this action was in violation of Section 401(a) of the Internal Revenue Code (the Code). On February 4, 1994, the District Director of the IRS approved an agreement between the State and the IRS whereby the State agreed to repay to the Fund by no later than December 31, 1994, \$20,788,812 plus accrued interest at eight percent (8%) compounded monthly retroactive to March 1, 1991. These amounts are to be reduced by the amounts already repaid to the Fund.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

The contributions due from other funds on the Fund's balance sheet as of June 30, 1993 includes \$20,788,812 of outstanding repayments and \$1,774,694 of related interest due as of that date.

The remaining balance relates to the State's share of retirement contributions for teachers due on June 30, 1993 and the post-retirement healthcare benefits plan described in Note 2.

Note 7. Administrative Expenses

Expenses of the Retirement Board and the cost of maintaining the Retirement Fund are paid from a restricted receipt account within the general fund which is used solely to pay such expenses. This account is reimbursed through the transfer of 1.5% of the investment income from the Fund up to a defined limit. Any non-encumbered funds at June 30 are transferred back to the Fund. Administrative expenses incurred by the Fund for the year ended June 30, 1993 amounted to \$1,449,555 and are included as transfers to other funds.

Note 8. Funding Status and Progress

The amount shown below as the "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases and step-rate benefits, estimated to be payable in the future as a result of employee service to date. The measure is intended to help users assess the funding status of the Fund on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among employers. The measure is the actuarial present value of credited projected benefits, and is independent of the funding method used to determine contributions to the System.

The pension benefit obligation was computed as part of the actuarial valuation performed as of June 30, 1993. Significant actuarial assumptions used in that valuation included (a) an annual rate of return on Fund investments of 8% compounded annually; (b) projected annual salary increases of 4.5%, compounded annually; (c) mortality rates based on the 1971 group annuity mortality table; (d) cost-of-living increases in pension benefits of 3% compounded annually beginning three years after retirement; and (e) a

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

retirement age of 62½ for State employees and 61 for teachers or completion of service requirement, if later.

The total unfunded pension benefit obligation, expressed in thousands, at June 30, 1993 is summarized below:

	<u>State Employees</u>	<u>Teachers</u>	<u>Total</u>
Pension benefit obligation:			
Retirees and beneficiaries			
receiving benefits and terminated			
employees not yet receiving benefits	\$ 919,941	\$ 1,074,359	\$ 1,994,300
Current employees			
Accumulated employee contributions	232,564	331,476	564,040
Employer-financed vested	268,682	535,617	804,299
Employer-financed nonvested	<u>165,353</u>	<u>273,367</u>	<u>438,720</u>
Total pension benefit obligation	\$ 1,586,540	\$ 2,214,819	\$ 3,801,359
Net assets at June 30, 1993			
available for benefits at carrying			
value (market value is \$2,894,824)	<u>999,800</u>	<u>1,369,395</u>	<u>2,369,195</u>
Unfunded pension benefit obligation	<u>\$ 586,740</u>	<u>\$ 845,424</u>	<u>\$ 1,432,164</u>

Note 9. Actuarially Determined Contribution Requirements and Contributions Made

The funding policy, as set forth in Rhode Island General Law, Section 36-10-2 provides for actuarially determined periodic contributions to the System. Employer contributions to the System include: (1) normal cost; (2) a payment required to amortize the unfunded frozen actuarial liability over twenty-seven years, beginning as of July 1, 1989, calculated such that each year's total unfunded liability payment increases at the assumed rate of inflation over the prior year's total payment; provided any subsequent changes to the unfunded liability due to changes to benefits or actuarial assumptions are amortized over a new 30-year period or over the remaining initial amortization period depending on how large the total change to the unfunded liability for each fiscal year is relative to the existing unfunded liability; and (3) interest on the unfunded frozen actuarial liability. The normal cost is determined using the entry age normal cost method with frozen initial liability.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

The significant actuarial assumptions used to determine the actuarial valuation are described in Note 8. The actuarial value of assets was book value as of June 30, 1991, which is the actuarial valuation date used to determine the fiscal 1993 state contribution rate.

The actuarially determined rate for the State fiscal year 1993 contribution for its employees was 10.37% and for teachers 5.69% for those communities with early retirement incentives and 5.05% for others. The State contribution for its employees was \$42,299,870 or 10.37% of covered payroll, which consisted of \$41,263,624 (or 10.12%) to the Retirement System and \$1,036,246 (or .25%) for post-retirement healthcare benefits (see Note 1 for further discussion on the rates). The State contributed \$21,076,696 for teachers.

Note 10. Historical Trend Information

Historical trend information, designed to provide information about the Fund's progress made in accumulating sufficient assets to pay benefits when due and required by the Governmental Accounting Standards Board (GASB) Statement No. 5 to be presented as additional information in the annual financial statements, has been presented for all years for which it is available. This information can be found in the Required Supplementary Information section of this report.

Note 11. Prior Period Adjustments

The beginning fund balance at July 1, 1992 was decreased by \$6,330,189 for the reasons below.

An error in recording the cost of the Fund's investments in real estate and venture capital limited partnerships, and the related income and expenses resulted in a prior year adjustment of \$4,020,299.

Post-retirement healthcare benefit contributions of \$2,283,163 withheld from retirees' pensions were erroneously included as Fund revenue in prior years. In addition, \$26,727 of the State's share of post-retirement healthcare benefit costs was not recorded in the Fund in prior years. These errors required a prior period adjustment of \$2,309,890 to the beginning fund balance.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Note 12. Extraordinary Item

On July 1, 1992, the State Investment Commission pooled the assets held by State Street Bank (the custodian) for the Employees' Retirement Fund and the Municipal Employees' Retirement Fund. Units were assigned to each Fund based on its share of the market value of the pooled assets, and a new cost basis was established for each Fund based on the number of units held and the pooled average cost per unit. This resulted in a reallocation of the Funds' carrying value of investments, decreasing and increasing the carrying value of investments of the State and Municipal Employees' Retirement Funds by approximately \$5.6 million, respectively.

Note 13. Related Party Transactions

(a) On behalf of the Employees' Retirement Fund, the State Investment Commission (SIC) purchased from the Rhode Island Depositors Economic Protection Corporation (DEPCO) preferred stock and the warrants to purchase common stock of Northeast Federal Corporation for \$20 million in fiscal year 1992. The SIC had the right to require DEPCO to repurchase the preferred stock and warrants, but the right could not be exercised until (i) both of DEPCO's Series A senior secured bonds and Series B subordinated unsecured bonds were repaid in full or (ii) June 30, 1996. DEPCO is included as a component unit in the combined financial statements of the Rhode Island Comprehensive Annual Financial Report.

In September 1993, DEPCO repurchased the preferred stock and warrants from the Employees' Retirement Fund for \$23,801,735. The Fund recognized a gain of \$3,801,735 on the sale.

(b) As of June 30, 1993, the Employees' Retirement Fund invested in bonds issued by the R.I. Housing and Mortgage Finance Corporation totaling \$8,230,000 and the R.I. Industrial Facilities Corporation totaling \$23,000,000. These entities are included as component units in the combined financial statements of the State of Rhode Island Comprehensive Annual Financial Report.

(c) As of June 30, 1993, the Employees' Retirement Fund owned 19.6% of the common stock of EquiCredit Corporation which has as its wholly owned operating subsidiary, Old Stone Credit Corporation (OSCC). The

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
Notes to Financial Statements

Fund, through the State Investment Commission, entered into a securities lending agreement with OSCC, whereby the State Investment Commission agreed to lend OSCC up to \$14 million face value of United States Treasury securities owned by the Fund. Upon receipt of the securities, OSCC pledged the securities to secure a line of credit up to \$14 million.

OSCC has pledged as collateral to the Fund all of its rights, title, and interest in the common stock of Old Stone Securities Corporation (a real estate mortgage investment conduit) and a security interest in all third party notes and third party mortgages. As with other extensions of credit, the Fund may bear the risk of delay in recovery or even loss of rights in the collateral should OSCC fail financially.

OSCC is also required to pay the Fund an annual fee of \$70,000 in advance, plus 0.5% of the value of loaned United States securities in excess of the maximum authorized amount during the preceding year. In addition, OSCC is required to reimburse the Fund for all of its expenses related to the securities lending agreement.

The maximum loan amount will be reduced to \$7 million on November 5, 1994, and the securities lending agreement will expire November 5, 1996. As of September 1993, the Fund's ownership of EquiCredit was reduced to 8.25%.

Note 14. Contingencies

Provided federal legislation is not passed by December 31, 1994 to exempt governmental plans from the higher 3-year average compensation limitation in Section 415 of the Code, the State agreed to pay to the Fund by June 30, 1995 an amount equal to the sum of the benefits paid to legislators under the plan in excess of \$10,000 (plus interest on such amount at 8 percent) for the fiscal years beginning on or after July 1, 1991, and to amend the State's general laws to comply with Section 415 of the Code. Failure to comply could affect the Fund's tax-exempt status. Resolution of this finding cannot presently be determined. Accordingly, no provision for any receivable that may result has been recognized in the Fund's fiscal year 1993 financial statements. However, the General Treasurer's Office has estimated that the potential cost to the State could be from \$2 million to \$2.5 million.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

EMPLOYEES' RETIREMENT FUND

REQUIRED SUPPLEMENTARY INFORMATION
REVENUES BY SOURCE AND EXPENSES BY TYPE

(Expressed in Thousands)

Fiscal Year	Revenues by Source				Total
	Employee Contributions	Employer Contributions	Investment Income	Other Income	
1984	\$ 34,500	\$ 71,565	\$ 70,467	\$ 227	\$176,759
1985	38,409	93,269	69,894	312	201,884
1986	46,364	103,521	95,464	394	245,743
1987	52,133	98,940	105,976	563	257,612
1988	62,058	101,038	141,769	1,474	306,339
1989	69,381	135,140	223,375	893	428,789
1990	64,964	115,011	151,328	767	332,070
1991	69,796	61,701	140,758	751	273,006
1992	70,711	70,637	271,201	1,089	413,638
1993	74,441	133,140	192,902	2,563	403,046

Expenses by Type

Fiscal Year	Benefits	Operating Expenses	Refunds	Other Expenses	Total
1984	\$ 63,808	\$	\$ 3,791	\$ 5	\$ 67,604
1985	68,358		4,370	126	72,854
1986	75,043		3,915	20	78,978
1987	93,565		4,183	2	97,750
1988	104,848	560	3,981		109,389
1989	113,840	1,318	4,377	2	119,537
1990	136,495	4,148	3,844		144,487
1991	185,637	3,249	4,377		193,263
1992	191,806	5,674	4,874		193,263
1993	199,962	4,765	3,904		208,631

Data for 1984 through 1988 is reported on the cash basis; data for 1989 through 1993 is reported on the accrual basis.

(Unaudited)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
EMPLOYEES' RETIREMENT FUND
REQUIRED SUPPLEMENTARY INFORMATION
ANALYSIS OF FUNDING PROGRESS

(Expressed in Thousands)

Fiscal Year	Net Assets Available for Benefits*	Pension Benefit Obligation	Percentage Funded (1)/(2)	Unfunded Pension Benefit Obligation (2)-(1)	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll <u>(4)/(5)</u>
(1)	(2)	(3)	(4)	(5)	(6)	
1987	\$1,196,304	\$2,327,225	51.4%	\$1,130,921	\$624,927	181.0%
1988	1,392,277	2,569,166	54.2%	1,176,889	738,696	159.3%
1989	1,710,607	2,728,467	62.7%	1,017,860	729,859	139.5%
1990	1,896,653	3,022,835	62.7%	1,126,182	819,329	137.5%
1991	1,975,462	3,311,190	59.7%	1,335,728	824,000	162.1%
1992	2,179,422	3,576,893	60.9%	1,397,471	816,000	171.3%
1993	2,369,195	3,801,359	62.3%	1,432,164	884,000	162.0%

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the Retirement Fund's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the Fund is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Fund. Trends in the unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the Fund's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the Fund. Historical trend information has been presented for all years for which it is available. The pension benefit obligation was not computed for years prior to 1987. Data for subsequent years will be added to the schedule.

(Unaudited)

* At cost

**ACTUARIAL VALUATION OF THE
EMPLOYEES' RETIREMENT SYSTEM
OF THE
STATE OF RHODE ISLAND**

AS OF JUNE 30, 1993

Prepared by:

**William M. Mercer, Incorporated
200 Clarendon Street
Boston, Massachusetts 02116**

TABLE OF CONTENTS

SECTION I - SUMMARY OF VALUATION RESULTS

SECTION II - EMPLOYEE DATA

- Table 1A - Distribution of State Employees in Active Service
- Table 1B - Distribution of Teachers in Active Service
- Table 2A - Distribution of Pensioners - State Employees
- Table 2B - Distribution of Pensioners - Teachers

SECTION III - PLAN ASSETS

- Table 3 - Calculation of Actuarial Asset Value at June 30, 1993
- Table 4 - Summary Statement of Income and Expenses
- Table 5 - Composition of Assets as of June 30, 1993
- Table 6 - Allocation of Book Value Assets by Plan - Reserve Values

SECTION IV - RESULTS OF THE VALUATION

CERTIFICATE OF THE ACTUARIAL VALUATION

EXHIBIT I - DEVELOPMENT OF CONTRIBUTION PERCENTAGES

- A. State Employees
 - 1. Development of Normal Cost
 - 2. Development of Employer Cost
 - 3. Determination of Frozen Initial Liability
- B. Teachers
 - 1. Development of Normal Cost
 - 2. Development of Employer Cost
 - 3. Determination of Frozen Initial Liability

EXHIBIT II - PENSION BENEFIT OBLIGATION, VESTED BENEFIT LIABILITY

EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS

EXHIBIT IV - SUMMARY OF PLAN PROVISIONS

**APPENDIX - Model Letter to Cities and Towns Participating in the
Teacher's Retirement Plan**

SECTION I - SUMMARY OF VALUATION RESULTS

Contribution Requirements

Retirement Income

The contribution requirements for fiscal 1996 for the State Employees' Retirement Plan and the Teachers' Retirement Plan are set out below. For comparison the contribution requirements for the previous two fiscal years are also shown.

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>	<u>Fiscal 1994</u>
State Employees Plan:			
Normal Cost	12.21%	12.72%	12.72%
Unfunded Liability Cost	<u>5.99%</u>	<u>6.35%</u>	<u>6.35%</u>
Total Cost	18.20%	19.07%	19.07%
Less Employee Contribution	<u>7.75%</u>	<u>7.75%</u>	<u>7.75%</u>
Employer Cost*	10.45%	11.32%	11.32%
Teachers Plan:			
Normal Cost	14.78%	14.77%	14.77%
Unfunded Liability Cost	<u>9.43%</u>	<u>9.75%</u>	<u>9.75%</u>
Total Cost	24.21%	24.52%	24.52%
Less Employee Contribution	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>
Employer Cost	15.71%	16.02%	16.02%

In 1993 the Retirement Board elected to compute future fiscal year costs one extra year in advance to assist the fiscal budget process. Therefore Employer costs for fiscal 1995 and 1994 are the same since the computation of the cost for both fiscal years was based on valuation results and data as of June 30, 1992. The employer cost for fiscal 1996 is based on the valuation results and data as of June 30, 1993.

For fiscal 1996, the Teachers' Plan rate is to be paid 40% by the State and 60% by the cities and towns. The overall rate of 15.71% includes the cost of prior fiscal year State contribution deferrals. The deferral represents 0.56% of the rate and is payable by the State, the cities and towns share is therefore 60% of 15.15% or 9.09% and the State will contribute the balance of the 15.71% or 6.62%.

SECTION I - Summary of Valuation Results (cont'd)

Postretirement Health Insurance

Certain retired State employees are eligible for postretirement medical benefits under the provisions of the Retirement System. A separate valuation of these benefits has been reported to the Retirement Board. The State must fund, as a minimum, the pay-as-you-go cost of insurance premiums in excess of the retiree cost sharing. Based on medical and payroll data supplied by the Department of Administration, we have estimated this cost as \$2,530,000 for fiscal 1995 (0.57% of payroll for State employees) and \$2,930,000 for fiscal 1996 (0.64% of payroll). The federal government is considering changes to the health care system and any projection of cost, which is dependent on assumed increases in health care cost, is quite difficult. In order to state with some degree of confidence that sufficient funds will be appropriated, we recommend that our assumed costs be increased by an additional 10%. Thus, our recommended State appropriation for postretirement medical benefits is as follows:

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>
Postretirement Medical Benefits:		
▶ Appropriation required by Legislation	0.25%	0.25%
▶ Additional Appropriation to meet current cost	<u>0.45%</u>	<u>0.38%</u>
▶ Total Appropriation as a % of payroll	0.70%	0.63%
▶ Total Appropriation	\$3,225,000	\$2,785,000

Total Appropriation

The total appropriation (as a percentage of payroll) by the State of Rhode Island to the Retirement System with regard to State employees is the sum of the appropriation for retirement income benefits and for postretirement health insurance benefits, as follows:

	<u>Fiscal 1996</u>	<u>Fiscal 1995</u>
State Employees		
▸ Retirement	10.45%	11.32%
▸ Postretirement Health	<u>0.70%</u>	<u>0.63%</u>
Total Appropriation	11.15%	11.95%

Towns which did not Participate in the 1990 Early Retirement Incentive Program

There were a number of towns which did not participate in the 1990 early retirement incentive program. These were:

Code Number:	2003	Burillville
	2009	East Greenwich
	2018	Little Compton
	2025	North Smithfield

As a result the contribution requirement for these towns is reduced by the cost of the early retirement incentive program. The overall contribution requirement for fiscal 1996 of the group is 14.01% (i.e., 15.71% minus the cost of the 1990 early retirement incentive program of 1.70%) and as above the State will meet the full cost of prior fiscal year deferrals of 0.56%. The contribution for these towns is therefore 8.07% and the State contributes the balance of 5.94%.

Plan Experience

The participant data submitted by the Retirement Board as of June 30, 1993 contained fewer unknown data items than in prior years. Therefore, less information had to be estimated. This reflects the efforts of the Board's staff to improve the quality of data.

The employer costs for fiscal 1996 have decreased from the costs for fiscal 1995 due to a number of factors:

State Employees

- Average pay increased by 5.9% for State Employees employed continuously throughout the entire year versus the assumed rate of 4.5%. This caused costs to increase by approximately 0.3%.
- The actuarial value of assets (utilized to calculate the employer contribution) returned 11% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for State Employees of approximately 0.9%.
- Changes to the participant group, such as pensioner mortality, staff turnover and retirements, caused the employer cost to decrease by approximately 0.3%.
- In conclusion, the net effect of the plan experience caused the employer cost to decrease by approximately 0.9% from 11.32% to 10.45%.

Teachers

- Average pay increased by 6.0% for Teachers employed continuously throughout the entire year, versus the assumed rate of 4.5%. This factor leads to an increase in cost of approximately 0.4%.
- The actuarial value of assets returned 11% for the year compared with an expected return of 8% - this leads to a reduction in the employer cost for Teachers of approximately 0.9%.
- Changes to the participant group, especially due to fewer Teachers leaving service than expected, caused the employer cost to increase by approximately 0.2%.
- In conclusion, the net effect of the plan experience for Teachers caused the employer cost to decrease by approximately 0.3% from 16.02% to 15.71%.

SECTION I - Summary of Valuation Results (cont'd)

When assessing the relative impact of the above factors it is appropriate to compare year to year changes in the total cost of benefits including employee contributions. When looked at in this manner, the change from year to year is a smaller proportion of the total cost than the change in the employer cost net of employee contributions. Due to the fact that employee contributions are a constant percentage of payroll, any gains or losses are passed on to the employer's share of the cost.

Funded Status of the System

There are several measures commonly used to describe the funded status of the plan. The following tables summarize two measures which are described below.

Projected Benefits/Actuarial Asset Value

The ratio of assets to the projected benefit liability (under the Entry-Age Funding Method) compares the actuarial value of assets to the value of accrued benefits with projected salary increases to retirement.

The projected benefit ratio increased between 1992 and 1993. This is mainly due to the favorable asset return.

	<u>Ratio of Assets to Liabilities</u>		
	<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1991</u>
State Employees	64.38%	62.42%	62.56%
Teachers	58.73%	56.63%	56.66%

SECTION I - Summary of Valuation Results (cont'd)

Vested Benefits/Market Value of Assets

The ratio of assets to the vested benefit liability compares the value of vested benefits to the market value of assets. Vested benefits are:

- Participants with more than 10 years of service and pensioners - value of accrued benefit but not less than the value of accumulated employee contributions.
- Participants with less than 10 years of service - value of accumulated employee contributions.

The vested benefit ratio has improved since the last year. For this ratio, salaries are not projected and liabilities are compared to the market value of assets. The improvement in the ratio reflects the favorable asset return. The market value of assets returned 11.1% compared with an assumed return of 8%.

<u>Ratio of Assets to Liabilities</u>			
<u>June 30, 1993</u>	<u>June 30, 1992</u>	<u>June 30, 1993</u>	<u>June 30, 1991</u>
83.55%	80.67%	77.54%	77.54%
79.32%	77.46%	75.47%	75.47%
State Employees		Teachers	

The incentive program allowed participants with 25 or more years of service (or if over age 60, 10 or more years of service) to retire and receive a 10% enhancement in their benefit service. The program was only available to state employees and approximately 750 state employees took the incentive offered. The cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll. (see Appendix II for a description of the funding method) commencing in fiscal year 1992. The cost of the program is 0.62% of payroll.

SECTION I - Summary of Valuation (cont'd)

The Early Retirement Incentive Program of 1990

Unlike the 1989 program, the 1990 program was available to both state employees and teachers. Participants with 23 or more years of service could retire and receive a 10% enhancement in their benefit service. In addition, the benefit was based on the final year's salary (rather than a three year average). Approximately 500 state employees and 800 teachers took the 1990 incentive program.

For the State Employees' Plan, the cost of the incentive is spread over 30 years, as a dollar amount which will increase in proportion with expected payroll, commencing in the fiscal year 1993. The cost for the State Employees' Plan is 0.60% of payroll.

For the Teachers' Plan, the cost is spread over a 24 year period (see Exhibit III for a description of the funding method) commencing in the fiscal year 1993 and is equal to 1.70% of payroll.

Assets of the Retirement System

Section III describes the assets of the retirement system, analyzes the cash flow during the previous fiscal year and shows the proportion of funds invested in each of the major investment categories.

SECTION I - Summary of Valuation (cont'd)

The table below provides a plan year summary of certain key statistics of the performance and transactions of the retirement fund:

	<u>7/1/92 to 6/30/93</u>	<u>7/1/91 to 6/30/92</u>	<u>7/1/90 to 6/30/91</u>
Time-weighted return on market value of assets ⁽¹⁾	11.1%	13.5%	7.5%
Market Value of Assets at end of period	\$2,811,948,000	\$ 2,569,300,000	\$2,316,700,000
Actuarial Value of Assets at end of period	\$2,726,034,000	\$ 2,483,700,000	\$2,316,700,000
Total Contribution	\$ 183,973,000	\$ 138,000,000	\$ 149,700,000
Total Benefit Payments	\$ 203,925,000	\$ 196,700,000	\$ 203,600,000

As prepared by Wilshire Associates

The return achieved by the fund should be compared with the assumed return of 8%.

The actuarial value of assets recognizes one-third of the investment gain in excess of the assumed return of 8% and also a one-third portion of previous gains as yet unrecognized. As a result the actuarial value of assets of the fund returned approximately 11% during fiscal 1993. The remaining two-thirds of the current year's excess investment gain will be recognized in future valuations. Spreading investment gains and losses over a three year period helps to reduce volatility in the plan's contribution requirements.

SECTION I - Summary of Valuation (cont'd)

The contribution income was still less than the benefit outgo during fiscal 1993. However, the shortfall of contribution income against benefit outgo of \$20 million was less than in previous years (when the State deferred a part of the contribution requirement). The income from investments exceeded the net outgo, see Table 4, and therefore monies were available for reinvestment.

Actuarial Method and Assumptions

Exhibit III describes the actuarial method adopted to calculate the contribution requirement and also the assumptions utilized in the calculation. There were no changes in the method and assumptions as of June 30, 1993 utilized to determine plan costs.

Plan Benefit Structure

The plan benefit structure is described in detail in Exhibit IV. There have been no changes to the standard benefit provisions since the June 30, 1992 valuation.

SECTION II - EMPLOYEE DATA

Active Employees

The pertinent information for active employees as of June 30, 1993, can be summarized as follows:

	<u>State Employees</u>		<u>Teachers</u>	
	June 30, 1993	June 30, 1992	June 30, 1993	June 30, 1992
Number of Covered Employees	14,582	14,513	11,588	11,594
Average Annual Salary	\$29,800	\$28,200	\$40,000	\$38,700
Average Age (years)	44.0	43.8	44.2	43.6
Average Service (years)	11.1	11.0	14.8	14.9
Number of Vested Employees	7,372	7,236	7,335	7,450
Number of Employees Eligible for Retirement	1,261	1,126	1,053	879

Please note that below we discuss the increase in the average salary level for all employees. In Section I we discussed the increase in the average salary level for employees who were participants on both June 30, 1992 and June 30, 1993. The cost of benefits is directly impacted by the increase to salaries for the group of employees who were employed continuously during the plan year.

The average annual salary for State Employees rose from \$28,200 to \$29,800. This represents an increase of 5.7%, and is up from the 3.3% average increase from June, 1991 to June, 1992. Average age and service for State Employees increased by 0.2 and 0.1 years respectively.

The average annual salary for Teachers rose from \$38,700 to \$40,000 or 3.4%. The difference between this increase and the increase to salaries for Teachers employed continuously during the plan year arises due to the corrected salary information for approximately 2,500 employees and due to new hires earning lower salaries than the Teachers who left employment. The average age for Teachers increased from 43.6 years to 44.2 years. Average years of service stayed approximately the same.

Missing data was estimated by using averages for similar employees with available data. For example, a person missing a date of hire, would be given an estimated date of hire based upon his date of birth compared to other similar employees. For active employees missing salaries, employee contribution balances and prior salary history were used to calculate estimated salaries. For active State Employees there were 28 missing salaries, 11 missing dates of birth, and 37 missing dates of hire. For active Teachers there were approximately 228 missing salaries, 220 missing dates of hire and 255 missing dates of birth. The greater number of missing figures for Teachers can be attributed to the greater difficulty in obtaining their data. However, compared with last year the data process has been greatly improved resulting in the significant decrease in missing data items for this year. In our opinion, in light of the large populations we are dealing with and the reliability of our estimating techniques, the amount of missing data that required estimation does not have a material impact on the results of the valuation.

Tables 1A and 1B provide a distribution of employees by age and service for state employees and teachers, respectively.

Retirees and Beneficiaries

The data provided for analysis of retiree and beneficiary liability included dates of hire and retirement, sex, monthly benefit, type of benefit, and payment option. The more significant statistics for retirees and beneficiaries are summarized as follows:

SECTION II - Employee Data (cont'd)

	State Employees		Teachers	
	June 30, 1993	June 30, 1992	June 30, 1993	June 30, 1992
Pensioners				
Number	7,860	7,875	4,706	4,657
Average Age	70.9	70.5	70.0	69.3
Average Monthly Benefit	\$917	\$880	\$1,815	\$1,715
Beneficiaries				
Number	619	582	215	169
Average Age	71.7	71.8	70	68.6
Average Monthly Benefit	\$669	\$650	\$1,097	\$847

Data for pensioners remained relatively stable with a slight growth in the number of pensioners for the Teachers' Plan and a small decrease in number for the State Plan. Average benefits grew slightly reflecting the impact of the Cost of Living Adjustments.

Tables 2A and 2B show distributions for pensions in payment status as of June 30, 1993 by age and pension type. These tables also indicate total monthly pension payments by age, average payments by age, and total monthly payments by type.

Table 1A - Distribution of State Employees in Active Service

Years of Service and Average Annual Earnings

<u>Age</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40+</u>	<u>Total</u>
0-19	5 19,552									5 19,552
20-24	280 22,634	19 22,079								299 22,599
25-29	810 25,796	384 25,665	20 24,401							1,214 25,742
30-34	604 27,498	722 28,271	309 28,178	52 26,692						1,687 27,928
35-39	534 27,478	566 30,250	469 30,835	514 29,293	68 28,268					2,151 29,398
40-44	405 27,897	526 29,930	397 32,277	636 33,928	410 31,950	41 31,485				2,415 31,397
45-49	396 28,321	467 28,998	359 21,877	481 34,097	482 39,204	147 36,608	7 33,311			2,339 32,968
50-54	240 27,216	367 27,817	294 30,519	302 32,319	253 32,551	126 38,996	31 37,999	4 35,221		1,617 30,879
55-59	134 25,573	292 27,658	272 29,570	288 31,065	242 30,056	75 33,765	30 43,912	11 36,468	4 35,552	1,348 29,783
60-64	74 26,862	206 26,693	198 27,935	234 30,240	179 30,711	66 34,314	21 38,491	12 45,335	5 36,583	995 29,539
65-69	25 30,241	72 26,741	90 25,752	91 32,253	48 26,322	23 32,261	14 40,881	3 64,769	7 34,849	373 29,357
70-74	6 17,047	21 18,857	24 24,875	26 30,588	13 21,662	9 26,314	1 34,862	1 22,369	1 28,854	102 24,461
75+	4 20,484	6 11,228	11 8,122	11 22,985	2 22,593				1 37,141	37 18,789
TOTAL	3,517 \$26,731	3,648 \$28,307	2,443 \$30,072	2,635 \$31,951	1,697 \$33,303	487 35,650	105 \$40,306	32 \$41,751	18 \$34,629	14,582 \$29,831

Table 1B - Distribution of Teachers in Active Service

Years of Service and Average Annual Earnings

Age	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40+</u>	<u>Total</u>
										0
0-19										72
20-24	72 18,844									18,844
25-29	544 25,022	109 31,088								653 26,035
30-34	338 28,587	342 34,086	48 39,196	1 44,099						729 31,887
35-39	505 29,927	397 36,858	267 41,248	217 41,886	11 43,365					1,397 36,025
40-44	459 31,530	499 38,806	212 42,127	791 41,851	977 43,858	11 44,767				2,949 40,427
45-49	288 34,599	370 40,281	160 43,446	291 43,786	1,466 44,496	563 45,143	3 43,786			3,141 43,090
50-54	129 36,718	182 39,892	94 42,966	171 43,959	345 44,250	499 45,614	138 46,849	3 44,209		1,561 43,675
55-59	38 36,528	66 43,187	40 43,342	86 44,196	156 45,096	114 46,308	82 49,126	22 45,161	14 44,197	618 44,878
60-64	17 35,520	25 42,751	25 45,359	40 43,258	91 44,759	47 45,341	28 45,736	17 51,200	10 43,624	300 44,427
65-69	3 42,521	4 41,259	9 44,737	21 43,818	40 44,049	32 44,681	9 45,146	9 45,767	16 44,954	143 44,368
70-74		1 42,950		4 48,818	5 41,136	3 53,447	3 49,351	3 51,187	3 46,915	22 47,573
75+	1 3,158	1 40,061			1 43,683					3 28,967
TOTAL	2,394	1,996	855	1,622	3,092	1,269	263	54	43	11,588
Average Pay	\$29,674	\$37,763	\$42,206	\$42,628	\$44,289	\$45,443	\$47,379	\$47,045	\$44,408	\$39,969

48.

Table 2A - Distribution of Pensioners - State Employees

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type					Total by Age	Percent of Pensioners/ Average Pension
	Service Retirements	Beneficiaries	Legislator's Pension	Accidental Disabilities	Ordinary Disabilities		
< 30	0	2	0	4	0	6	0.07%
	\$ 0	\$ 1,457	\$ 0	\$ 5,717	\$ 0	\$ 7,174	\$ 1,195.67
30-39	0	6	0	7	7	20	0.24%
	0	4,266	0	9,905	2,934	17,105	855.25
40-49	51	25	7	17	51	151	1.78%
	94,110	13,169	7,000	16,123	24,468	154,870	1,025.63
50-54	146	17	4	5	35	207	2.44%
	336,474	14,606	3,813	3,122	17,578	375,593	1,814.46
55-59	296	37	17	13	55	418	4.93%
	723,030	30,690	14,423	11,179	29,373	808,695	1,934.68
60-64	787	53	35	18	83	976	11.51%
	1,072,700	40,503	30,305	15,974	39,815	1,199,297	1,228.79
65-69	1,635	89	33	26	87	1,870	22.05%
	1,571,399	55,952	31,794	19,602	34,066	1,712,813	915.94
70-74	1,670	112	29	18	72	1,901	22.42%
	1,294,479	78,691	28,992	10,330	31,237	1,443,729	759.46
75-79	1,285	120	31	7	58	1,501	17.70%
	891,425	71,462	30,058	3,445	20,893	1,017,283	677.74
80-84	758	74	12	9	26	879	10.37%
	484,129	51,997	11,365	6,415	7,610	561,516	638.81
85-89	326	60	7	2	3	398	4.69%
	187,781	34,329	6,800	1,541	864	231,315	581.19
90-94	102	23	3	0	0	128	1.51%
	64,854	16,052	2,709	0	0	83,615	653.24
95-99	19	1	0	0	0	20	0.24%
	8,123	918	0	0	0	9,041	452.05
100+	4	0	0	0	0	4	0.05%
	2,770	0	0	0	0	2,770	692.50
Total	7,079	619	178	126	477	8,479	
	\$ 6,731,274	\$ 414,092	\$ 167,259	\$ 103,353	\$ 208,838	\$ 7,624,816	\$ 899.26

Table 2B - Distribution of Pensioners - Teachers

Number of Pensioners and Total Monthly Pensions Paid by Age

Age	Pension Type				Total by Age	Percent of Pensioners/ Average Pension
	Service Retirements	Beneficiaries	Accidental Disabilities	Ordinary Disabilities		
< 30	0	3	0	0	3	0.06%
	\$ 0	\$ 2,658	\$ 0	\$ 0	\$ 2,658	\$ 886.00
30-39	0	3	0	0	3	0.06%
	0	1,748	0	0	1,748	582.67
40-49	50	17	4	17	88	1.79%
	112,133	20,266	7,314	15,977	155,690	1,769.20
50-54	274	9	5	14	302	6.14%
	748,135	12,521	8,434	13,469	782,559	2,591.26
55-59	518	16	3	24	561	11.40%
	1,520,029	17,193	6,117	29,574	1,572,913	2,803.77
60-64	712	20	6	22	760	15.44%
	1,641,937	25,452	9,340	22,852	1,699,581	2,236.29
65-69	792	32	5	25	854	17.35%
	1,452,169	42,725	6,850	22,530	1,524,274	1,784.86
70-74	655	29	2	16	702	14.27%
	951,403	34,625	2,915	12,298	1,001,241	1,426.27
75-79	564	27	3	11	605	12.29%
	733,444	28,575	3,987	9,024	775,030	1,281.04
80-84	489	27	0	4	520	10.57%
	629,767	28,894	0	2,974	661,635	1,272.38
85-89	353	21	0	3	377	7.66%
	421,679	14,477	0	2,804	438,960	1,164.35
90-94	104	9	0	1	114	2.32%
	118,395	5,538	0	652	124,585	1,092.85
95-99	25	2	0	0	27	0.55%
	28,946	1,100	0	0	30,046	1,112.81
100+	5	0	0	0	5	0.10%
	6,692	0	0	0	6,692	1,338.40
Total	4,541	215	28	137	4,921	
	\$ 8,364,729	\$ 235,772	\$ 44,957	\$ 132,154	\$ 8,777,612	\$ 1,783.70

SECTION III - PLAN ASSETS

Market Value of Assets

The Employees' Retirement Fund receives all member and employer contributions. The assets are invested by the State Investment Commission, with the income being added to the Fund and available for reinvestment. Payments from the Fund are primarily for refunds of employee contributions, lump sum death benefits, pension payments, and administrative expenses. Contribution refunds occur when an employee terminates employment before completing ten years of service and elects to take a refund, or when he dies after retirement without having received payments from the Fund equal to his total contributions.

Table 4 shows a summary of income and expenditures for the years ended June 30, 1993 and 1992. Due to a greater than assumed return on assets, for the plan year ending June 30, 1993, the Employees' Retirement Fund showed a net income of \$154,543,485.

The total market value of assets as of June 30, 1993 was \$2,811,948,047. This is divided among the plans as follows (pro-rata based on the Book Value of assets as supplied by the State of Rhode Island Treasurer's Office).

State Employees	\$ 1,187,407,910	42.2%
Teachers	1,539,966,825	54.8%
Teachers' Survivors	<u>84,573,312</u>	<u>3.0%</u>
Total	\$ 2,811,948,047	100.0%

Table 5 shows the composition of the investments of the fund.

Table 6 shows the allocation of reserves to the State Employees Plan, Teachers Plan, and Teacher's Survivors Plan as of June 30, 1993 and 1992. The reserve allocations are based on the book value of assets.

SECTION III - Plan Assets (cont'd)

Actuarial Value of Assets

As of the June 30, 1991 valuation, a new method to calculate the actuarial value of assets was employed. The new method allows for a three year spread of gains and losses in the Market Value. Table 3 shows the development of the actuarial value of assets. The actuarial value of assets returned approximately 11% compared with an 8% assumed return. The actuarial asset value gain of 3% comprises one third of the 1992-93 asset gain or 1% plus one third of the 1991-92 asset gain or 2%. The total Actuarial Value of Assets at June 30, 1993, was \$2,726,033,873 and is divided among the plans based on a prorata share of the market value of assets as follows:

State Employees	\$ 1,151,128,730	42.2%
Teachers	1,492,915,822	54.8%
Teachers' Survivors	<u>81,989,321</u>	<u>3.0%</u>
Total	\$ 2,726,033,873	100.0%

Table 3 - Calculation of Actuarial Asset Value at June 30, 1993

1.	Actuarial Asset Value at June 30, 1992 (equal to market)		\$	2,483,738,322
2.	Contributions			
	(a) Employees			73,940,463
	(b) State			65,277,609
	(c) Municipal			44,041,493
	(d) Miscellaneous			<u>713,449</u>
	(e) Total		\$	<u>183,973,014</u>
3.	Benefit Payments and Other Disbursements		\$	
	(a) Pension Benefit			167,686,235
	(b) Cost of Living Adjustments			27,455,591
	(c) Death Benefits			2,887,220
	(d) Refund of Contributions and other payments			3,902,970
	(e) Medical Premiums and other Miscellaneous expenses			<u>1,992,888</u>
	(f) Total		\$	<u>203,924,904</u>
4.	Assumed Return at 8.00%:			
	(a) On Assets		\$	198,699,066
	(b) On Contributions (assume midyear)			7,358,921
	(c) On Benefit Payments			<u>(8,156,996)</u>
	(d) Total		\$	<u>197,900,991</u>
5.	Tentative Actuarial Asset Value on June 30, 1993 [1. + 2.(e) - 3.(e) + 4.(d)]			2,661,687,423
6.	Market Value on June 30, 1993			2,811,948,047
7.	Excess of Market over Tentative Actuarial Asset Value			150,260,624
8.	Prior year adjustments not recognized			
	1992 \$42,778,725 x 2			85,557,450
	1991 0 x 1			
9.	Current Year Experience 7. - 8.			64,703,174
10.	Current Year Adjustment to be recognized (1/3 of Experience)			21,567,725
11.	Cumulative Adjustment			
	1993 21,567,725			
	1992 42,778,725			64,346,450
	1991 0			
12.	Actuarial Asset Value on June 30, 1993 5. + 11.		\$	2,726,033,873

Table 4 - Summary Statement of Income and Expenses

	1993	1992
Employer contributions	\$ 110,032,552	\$ 69,491,591
Member contributions	<u>73,940,463</u>	<u>68,546,610</u>
Total contributions	\$ 183,973,015	\$ 138,038,201
Investment income:		
Dividends	\$ 36,604,988	\$ 29,898,970
Interest	86,198,288	90,238,234
Capital gains (and losses)	57,781,462	150,068,320
Other	119,000	14,500
Expenses	<u>(6,203,338)</u>	<u>(6,985,357)</u>
Net investment income	<u>174,500,400</u>	<u>263,234,667</u>
Total income available for benefit payments	\$ 358,473,415	\$ 401,272,868
Benefit payments:		
Pension benefits	\$ 195,141,826	\$ 187,506,237
Death benefits	2,887,220	2,597,835
Contribution refunds and other payments	<u>5,895,858</u>	<u>6,614,199</u>
Total benefit payments	<u>203,924,904</u>	<u>196,718,271</u>
Excess of income over expenses	\$ <u>154,548,511</u>	\$ <u>204,554,596</u>

Note: Detail figures may not add to totals shown because of rounding.

Table 5 - Composition of Assets as of June 30, 1993

	<u>Market Value</u>	<u>Percent of Holdings</u>
Cash/Short Term Investments		
Short Term Investment Fund		
Money Market Instruments	\$ 288,963,297	10.2%
Equities - Domestic	1,166,906,689	41.5%
Equities - International	97,138,927	3.5%
Fixed Income - Government	915,091,893	32.5%
Fixed Income - Corporate	123,158,538	4.4%
Fixed Income - In State	27,266,528	1.0%
Real Estate	88,578,590	3.2%
Venture Capital	<u>104,843,585</u>	<u>3.7%</u>
Total Fund Investments	\$ 2,811,948,047	100.0%

Table 6 - Allocation of Book Value Assets by Plan - Reserve Values

	1993	1992
State Employees:		
Employer reserves	\$ 746,948,542	\$ 716,504,362
Member reserves	<u>232,564,339</u>	<u>208,611,783</u>
Total State Employees reserves	\$ 979,512,881	\$ 925,116,145
Teachers:		
Employer reserves	\$ 938,869,036	\$ 875,761,020
Member reserves	<u>331,475,661</u>	<u>299,102,622</u>
Total Teacher reserves	1,270,344,697	1,174,863,642
Teachers Survivors:		
Employer reserves	\$ 59,068,371	\$ 54,870,562
Member reserves	<u>10,697,584</u>	<u>10,226,071</u>
Total Teachers Survivors reserves	69,765,955	65,096,633
Unallocated:		
Unclaimed benefit reserve	<u>233,076</u>	<u>231,679</u>
Total Book Value of Assets	\$ <u>2,319,856,609</u>	\$ <u>2,165,308,100</u>

Note: Detail figures may not add to totals shown because of rounding.

SECTION IV - RESULTS OF THE VALUATION

The funding statute calls for the contribution requirement to be calculated as the normal cost of the plan plus the total of the amortization payment for each unfunded cost element. The table below shows the development of the contribution requirement for the State Employees' Plan and the Teachers' Plan.

	<u>State Employees' Plan</u>	<u>Teachers' Plan</u>
Normal Cost	12.21%	14.78%
Less Employee Contributions	<u>7.75%</u>	<u>8.50%</u>
Employer Normal Cost	4.46%	6.28%
Unfunded Cost due to:		
Original Unfunded	6.30%	9.44%
1989 Assumption Changes	(0.64%)	0.00%*
1989 Early Retirement Incentive	0.62%	None
1990 Early Retirement Incentive	0.60%	1.70%
1991 Assumption and Method Changes	(1.50%)	(2.27%)
Fiscal 1990-91 Deferral	0.33%	0.29%
Fiscal 1991-92 Deferral	<u>0.28%</u>	<u>0.27%</u>
Total Unfunded	5.99%	9.43%
Total Cost as a percentage of payroll	10.45%	15.71%

* The effect of the 1989 assumption changes in the Teachers Plan was less than the minimum threshold for setting up a separate base. Thus, the effect was aggregated with the existing unfunded. See Exhibit III for a description of the amortization method.

The contributions are assumed to be made on a monthly basis. The amounts of the unfunded liabilities in respect of each of the above cost elements together with the remaining amortization period are shown in detail in Exhibit I, parts A3 and B3.

The Teachers' Plan cost is paid 60% by the cities and towns and 40% by the State. However the State will pay the total cost of 0.56% for the contribution deferrals. This results in a contribution requirement for cities and towns of 9.09% and a contribution requirement for the State of 6.62%.

As described in Section I, certain towns elected not to participate in the 1990 early retirement incentive program. The contribution requirement for these towns is 8.07% and for the State is 5.94%.

SECTION IV - Results of the Valuation (cont'd)

The State Employee's Plan fiscal 1996 contribution requirement of 10.45% compares to the fiscal 1995 contribution requirement of 11.32%. The decrease in the contribution requirement is discussed in Section I and a complete development of the fiscal 1996 contribution is shown in Exhibit I, parts A1, A2 and A3.

The Teachers' Plan fiscal 1996 contribution requirement of 15.71% compares to the fiscal 1995 contribution requirement of 16.02%. The decrease in the contribution requirement is discussed in Section I and a complete development of the contribution for Teachers for fiscal 1996 is shown in Exhibit I, parts B1, B2 and B3.

Teacher Survivors Plan

We are in the process of preparing a separate valuation of the liabilities of the Teacher Survivors Plan. The purpose of the review is to assess whether the current assets (\$84.6 million), together with future contributions and investment income will be sufficient to meet future benefit payments.

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

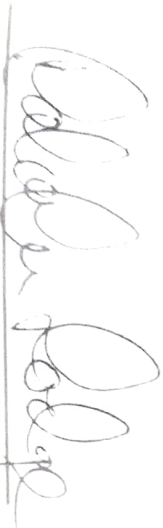
CERTIFICATE OF ACTUARIAL VALUATION

This is to certify that we have prepared an actuarial valuation of the plan as of June 30, 1993.

This certificate contains the following attached exhibits:

- Exhibit I - Actuarial Cost Development of Fiscal Year 1995-96 Contribution Percentage
 - A. State Employees
 - B. Teachers
- EXHIBIT II - Pension Benefit Obligation, Vested Benefit Liability
- EXHIBIT III - Actuarial Method and Assumptions
- EXHIBIT IV - Summary of Plan Provisions

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and in our opinion each individual assumption used (a) is reasonably related to the experience of the plan and to reasonable expectations and (b) represents our best estimate of anticipated experience under the plan.



Malcolm C. Hodge, F.F.A., A.S.A.
Associate



Barry M. Gilman, F.S.A., M.A.A.A.
Principal

EXHIBIT I - DEVELOPMENT OF CONTRIBUTION PERCENTAGES

A1. State Employees - Development of Normal Cost

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- 14,582 active participants (including 7,372 fully vested)
- 2,279 inactive participants
- 8,479 pensioners (including 619 beneficiaries of deceased pensioners and active employees)

The actuarial factors as of the valuation date are as follows:

1. Actuarial present value of benefits	
(a) Active employees	\$ 1,137,927,000
(b) Inactive employees	32,644,000
(c) Retirees and beneficiaries	887,297,000
(d) Total	\$ 2,057,868,000
2. Actuarial value of assets	1,151,128,700
3. Frozen Initial Liability (unfunded liability)	434,225,700
4. Present value of future employee contributions	299,424,000
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	173,089,600
6. Actuarial present value of future compensation	3,863,536,000
7. Covered Payroll - Employees under Retirement Age	425,743,000
8. Employer Normal Cost, (5. x 7. + 6.)	\$ 19,073,600

EXHIBIT I - Development of Contribution Percentages (cont'd)

A2. State Employees - Development of Employer Cost

1.	Total Covered Payroll for fiscal 1994	\$	444,572,000
2.	Employer Normal Cost		19,073,600
3.	Amortization of Frozen Initial Liability		27,934,900
4.	Projected 1995-96 Covered Payroll		485,483,700
5.	1995-96 Employer Normal Cost ((2. + 1.) x 4.)		20,828,800
6.	Total annual cost if paid on July 1, 1995 (3. + 5.)		48,763,700
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	\$	50,714,200
8.	a. Employer Normal Cost percentage		4.46%
	b. Employer Unfunded Cost percentage		5.99%
	c. Employer fiscal 1996 Cost (7. + 4.)		10.45%

EXHIBIT 1 - Development of Contribution Percentages (cont'd)

A3. State Employees - Determination of Frozen Initial Liability

	Base	Amortization		Payment
		Period		
1. Bases at July 1, 1991				
(a) Original	\$ 453,587,400	24	\$ 26,901,800	
(b) 1989 Base	(50,535,100)	28	(2,718,600)	
(c) 1989 Early Retirement Window	50,325,900	29	2,650,700	
(d) New 1991 Bases	(74,440,900)	30	(3,843,000)	
(e) 1990-91 Deferral	23,409,900	24	1,388,400	
(f) 1991-92 Deferral	20,264,600	24	1,201,900	
(g) Total	\$ 422,611,800		\$ 25,581,200	
2. Bases at July 1, 1992				
(a) Original	\$ 460,820,400	23	\$ 28,112,200	
(b) 1989 Base	(51,641,800)	27	(2,841,000)	
(c) 1989 Early Retirement Window	51,489,200	28	2,770,000	
(d) New 1991 Bases	(76,245,700)	29	(4,015,900)	
(e) 1990/91 Deferral	23,783,200	23	1,450,900	
(f) 1991/92 Deferral	20,587,700	23	1,255,900	
(g) Total	\$ 428,793,000		\$ 26,732,100	
3. Bases at July 1, 1993				
(a) Original	\$ 467,324,900	22	\$ 29,377,000	
(b) 1989 Base	(52,704,900)	26	(2,968,800)	
(c) 1989 Early Retirement Window	52,616,700	27	2,894,600	
(d) New 1991 Bases	(130,014,300)	28	(6,994,400)	
- Assumption and Method changes				
- 1990 Early Retirement Window	52,006,100	28	2,797,800	
(e) 1990/91 Deferral	24,118,900	22	1,516,200	
(f) 1991/92 Deferral	20,878,300	22	1,312,500	
(g) Total	\$ 434,225,700		\$ 27,934,900	

Notes: (1) Following the funding method, if the change in unfunded liability is greater than 10% of the existing amount of unfunded liability, the change in unfunded liability is separately amortized over a 30-year period.

(2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together.

EXHIBIT I - Development of Contribution Percentages (cont'd)

B1. Teachers - Development of Normal Cost

The valuation was made with respect to the following data supplied to us by the Retirement Board:

- 11,588 active participants (including 7,335 fully vested)
- 1,156 inactive participants
- 4,921 pensioners (including 215 beneficiaries of deceased pensioners and active employees)

The actuarial factors as of the valuation date are as follows:

1. Actuarial present value of benefits	
(a) Active employees	\$ 1,835,623,000
(b) Inactive employees	34,357,000
(c) Retirees and beneficiaries	1,040,002,000
(d) Total	\$ 2,909,982,000
2. Actuarial value of assets	1,492,915,800
3. Frozen Initial Liability (unfunded liability)	745,698,400
4. Present value of future employee contributions	386,659,700
5. Present value of future employer normal costs (1.(d) - 2. - 3. - 4.)	284,708,100
6. Actuarial present value of future compensation	4,548,398,000
7. Covered Payroll - Employees under Retirement Age	456,863,000
8. Normal Cost, (5. x 7. ÷ 6.)	\$ 28,597,500

EXHIBIT I - Development of Contribution Percentages (cont'd)

B2. Teachers - Development of Employer Cost

1.	Total Covered payroll for fiscal 1994	\$	473,295,000
2.	Employer Normal Cost		28,597,500
3.	Amortization of Frozen Initial Liability		46,876,100
4.	Projected 1995-96 Covered Payroll		516,850,000
5.	1995-96 Employer Normal Cost ((2. + 1.) x 4.)		31,229,200
6.	Total annual cost if paid on July 1, 1995 (3. + 5.)		78,105,300
7.	Total annual cost if paid in uniform installments throughout the year (6. plus one-half year's interest)	\$	81,229,500
8.	a. Employer Normal Cost percentage		6.28%
	b. Employer Unfunded Cost percentage		9.43%
	c. Employer fiscal 1996 Cost (7. ÷ 4.)		15.71%

EXHIBIT I - Development of Contribution Percentages (cont'd)

B3. Teachers - Determination of Frozen Initial Liability

	<u>Base</u>	<u>Amortization Period</u>	<u>Payment</u>
1. Bases at July 1, 1991			
(a) Original	\$ 724,324,800	24	\$ 42,958,900
(b) New 1991 Bases	(43,847,500)	24	(2,600,500)
(c) 1990/91 Deferral	22,297,000	24	1,322,400
(d) 1991/92 Deferral	21,003,500	24	1,245,700
(e) Total	\$ 723,777,800		\$ 42,926,500
2. Bases at July 1, 1992			
(a) Original	\$ 735,875,200	23	\$ 44,891,800
(b) New 1991 Bases	(44,546,800)	23	(2,717,600)
(c) 1990/91 Deferral	22,652,600	23	1,381,900
(d) 1991/92 Deferral	21,338,400	23	1,301,700
(e) Total	\$ 735,319,400		\$ 44,857,800
3. Bases at July 1, 1993			
(a) Original	\$ 746,262,100	22	\$ 46,911,600
(b) New 1991 Bases			
- Assumption and Method changes	(179,171,400)	22	(11,263,100)
- 1990 Early Retirement Window	133,995,700	22	8,423,200
(c) 1990/91 Deferral	22,972,400	22	1,444,100
(d) 1991/92 Deferral	21,639,600	22	1,360,300
(e) Total	745,698,400		46,876,100

Notes: (1) If the change in the unfunded liability is less than 10% of the existing unfunded liability, the change in the unfunded liability is amortized over the remaining amortization period of the original unfunded liability.

(2) The contribution deferral amounts are being separately amortized over the remaining amortization period of 24 years. This is an exception to the normal funding method where the contribution deferral amounts would be added to the other 1991 bases and then amortized together with the original unfunded.

EXHIBIT II - PENSION BENEFIT OBLIGATION, VESTED BENEFIT LIABILITY

Pension Benefit Obligation

The value of the pension benefit obligation required for disclosure by Statement No. 5 of the Governmental Accounting Standards Board is shown below as of June 30, 1993.

	<u>Pension Benefit Obligation</u>	
	<u>State</u>	<u>Teachers</u>
	<u>Employees</u>	
Participants currently receiving benefits and terminated employees not yet receiving benefits	\$ 919,941,000	\$ 1,074,359,000
Current employees		
Accumulated employee contributions	232,564,300	331,475,700
Employer-financed vested	268,681,700	535,617,500
Employer-financed nonvested	<u>165,353,000</u>	<u>273,367,000</u>
Total pension benefit obligation	\$ 1,586,540,000	\$ 2,214,819,200
Assets at Market Value	\$ <u>1,187,407,900</u>	\$ <u>1,539,966,800</u>
Unfunded Liability	\$ 399,132,100	\$ 674,852,400
Funded Level	74.84%	69.53%

EXHIBIT II - Pension Benefit Obligation, Vested Benefit Liability (cont'd)

Vested Benefit Liability

The value of vested benefits represents the current value of all benefits accrued by present and former employees which are not conditional on the future employment of the employee for payment. The benefits valued include benefits payable to current retirees and beneficiaries deferred pensions and benefits accrued by active participants with at least ten years of service. For active employees with less than ten years of service, only the accumulated employee contributions are included.

The value of vested benefits as of June 30, 1993 is as follows:

	<u>Vested Benefit Liability</u>	
	<u>State</u>	<u>Teachers</u>
	<u>Employees</u>	
Active participants	\$ 501,246,000	\$ 867,093,200
Inactive participants	32,644,000	34,357,000
Retired members	<u>887,297,000</u>	<u>1,040,002,000</u>
Total Value of Vested Benefits	\$ 1,421,187,000	\$ 1,941,452,200
Assets at Market Value	\$ <u>1,187,407,900</u>	\$ <u>1,539,966,800</u>
Unfunded Liability	\$ 233,779,100	\$ 401,485,400
Vested Benefits Funding Level	83.55%	79.32%

EXHIBIT III - ACTUARIAL METHOD AND ASSUMPTIONS

a. Actuarial Funding Method

Actuarial Funding Method - Frozen initial liability method. This method is alternatively referred to as the entry age normal cost method with frozen initial liability.

Entry Age - The employee's age at the time he or she would have commenced participation if the plan had always been in existence.

Frozen actuarial liability - At the time this funding method was introduced June 30, 1985 the unfunded liability was calculated and called the Frozen Actuarial Liability. This amount was originally to be funded over a 30 year period by the sum-of-the-digits amortization method. Effective from 1989, however the outstanding balance, referred to as the Unfunded Liability, is to be amortized over the remaining amortization period using a level percent of salary funding. (ref. General Laws section 36-10-2 and 36-10-2:1). Subsequent changes to the Unfunded Liability due to changes to benefits or actuarial assumptions are amortized either over a new 30-year period or over the remaining initial amortization period depending on how large the total change to the unfunded liability for each fiscal year is relative to the existing unfunded liability. The following table illustrates the amortization method:

<u>Change in Unfunded Liability</u>	<u>Amortization Period</u>
Less than 1% of existing Unfunded	No new base set up (existing Unfunded not changed)
Between 1% and 10% of existing Unfunded	The change to Unfunded is amortized over current remaining period i.e., aggregated with existing Unfunded
Over 10% of existing Unfunded	A separate base equal to change in Unfunded is set up and amortized over a new 30 year period

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

b. Actuarial Assumptions Concerning Future Events

Mortality - 1971 Group Annuity Mortality Table with Mortality for disabled persons set equal to the age 65 mortality under 1971 Group Annuity Mortality Table.

<u>Age</u>	<u>Sample Rates</u>		<u>Expected Life</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
20	.050%	.026%	55.3 yrs.	61.6 yrs.
25	.062	.035	50.4	56.7
30	.080	.047	45.6	51.8
35	.112	.065	40.8	47.0
40	.163	.094	36.1	42.1
45	.292	.140	31.4	37.4
50	.529	.215	26.9	32.6
55	.852	.326	22.8	28.0
60	1.312	.549	18.8	23.5
65	2.126	.956	15.2	19.3
70	3.611	1.648	11.9	15.3

Investment Return - 8.0%, compounded annually.

Salary Increases - Salaried will increase at a rate of 4.5%, compounded annually.

Retirement Age - State employees are assumed to retire at the later of age 62-1/2 or completion of the service requirements. Teachers are assumed to retire at the later of age 61 or completion of the service requirements.

Disability - Disability is assumed to occur in accordance with the following table with 15% of disabilities being occupational.

<u>Disability - Sample Rates</u>	
<u>Age</u>	<u>Rate of Disability</u>
20	.06%
25	.09
30	.11
35	.15
40	.22
45	.36
50	.61
55	1.01
60	--

EXHIBIT III - Actuarial Method and Assumptions (cont'd)

Withdrawal - Termination of service for reasons other than death, retirement, or disability will be in accordance with the following tables.

Sample Withdrawal Rates

<u>Age</u>	<u>State Employees</u>	<u>Teachers</u>
20	21.20%	12.39%
25	15.80%	9.70%
30	11.60%	7.50%
35	8.40%	5.66%
40	6.20%	4.14%
45	4.20%	2.75%
50	2.60%	1.35%
55	--	--
60	--	--

Cost of Living Adjustments - 3% compound annually beginning on the January 1st following a participant's third anniversary of retirement.

Actuarial Value of Assets - The actuarial value of assets was set equal to the market value of assets as of June 30, 1991 as reported to Mercer by the Treasury Department in December 1991. Investment gains and losses relative to the expected return on assets from this date onward will be recognized over a 3-year smoothing period.

Estimation of Unknown Employee Characteristics - Missing dates for participants are estimated using a band-type averaging method assigning band grouped average dates to those individuals with missing dates of birth or hire. For example, an employee missing a date of hire is given an estimated date of hire based on the average of known dates of hire for persons in his age band. For Employees who are missing salaries, salaries are estimated based on employee contributions for the year ending June 30, 1993 and with regard to employee salary history, where this information was insufficient, average salaries were used. For State Employees this is \$29,800, and for Teachers it is \$40,000 for the salary year July 1, 1992 to June 30, 1993.

EXHIBIT IV - SUMMARY OF PLAN PROVISIONS

PLAN NAME Employees' Retirement System of the State of Rhode Island

FINAL AVERAGE SALARY Final average salary is the three highest consecutive years of earned salary exclusive of overtime, bonuses, or severance pay.

NORMAL RETIREMENT Age and Service Requirements

General Employees and Teachers may retire with full accrued benefits at age 60 with 10 years of service or after 28 years of service regardless of age.

Correctional Officers may retire with unreduced accrued benefits at age 50 with 20 years of service.

Legislators may retire with unreduced accrued benefits at age 55 with 8 years of service or after 20 years of service with no restriction on age.

Amount of Retirement Benefits

For State Employees and Teachers:

1.7% of final average salary times service up to 10 years, plus

1.9% of final average salary times service in excess of ten years through 20 years, plus

3.0% of final average salary times service in excess of 20 years up to the 34th year of service, plus

2.0% of final average salary for the 35th year.
Maximum benefit is 80% of final average salary.

EXHIBIT IV - Summary of Plan Provisions (cont'd)

For Correctional Officers:

- 2.0% of final average salary for the first 30 years of service, plus
 - 6.0% of final average salary for the 31st year, plus
 - 5.0% of final average salary for the 32nd year, plus
 - 4.0% of final average salary for the 33rd year, plus
 - 3.0% of final average salary for the 34th year, plus
 - 2.0% of final average salary for the 35th year.
- Maximum benefit is 80% of final average salary.

For Legislators:

- \$600 per year of service.
- Maximum benefit is \$10,000.

DISABILITY BENEFIT

Non-occupational

Service Requirement: 5 years

Amount of Benefit: Regular pension benefit based on service to disability and final average salary at time of disability. The minimum benefit is 17% of final average salary.

Occupational

There is no age or service requirements for the occupational disability benefit.

Amount of Benefit: Two thirds of final salary at time of disability, payable immediately.

VESTING

Employees are vested in their retirement benefits on completion of 10 years of service.

EXHIBIT IV - Summary of Plan Provisions (cont'd)

**PRE-RETIREMENT DEATH
BENEFITS**

Lump Sum Benefit

There are no age or service requirements for this benefit.

Amount of Benefit:

- (a) \$800 per year of service with a minimum of \$4,000 and a maximum of \$16,000, plus
- (b) Refund of employee contributions.

Joint and Survivor Benefit (optional)

Service Requirement: 10 years for General Employees and Correctional officers, 8 years for Legislators.

Amount of Benefit: Benefit employee would have received had he/she retired the day before he/she died and chosen the joint and survivor option.

Occupational Death Benefit

This benefit has no age or service requirement.

Amount of benefit:

- (a) 50% of salary to spouse or children of employees under age 18, less workmen's compensation, plus
 - (b) refund of employee contributions.
-

EXHIBIT IV - Summary of Plan Provisions (cont'd)

POST-RETIREMENT DEATH BENEFITS	Lump sum in the amount of:
(a)	100% of employee contributions less benefits paid, plus
(b)	Pre-retirement death benefit, reduced 25% per year of retirement, with a minimum of \$4,000.

EMPLOYEE CONTRIBUTIONS	State Employees: 7.75%
	Teachers: 8.50%
	Legislators: 30.00%

AVAILABLE BENEFIT OPTIONS	Joint and Survivor: Actuarially Equivalent Benefit paying either 100% or 50%, depending on option selected, of retirement benefit to surviving beneficiary.
	Social Security: Pays an increased benefit until age 62 and a reduced benefit thereafter to provide a level benefit when Social Security payments are accounted for.

POST-RETIREMENT COST OF LIVING ADJUSTMENT	Retirees' benefits are adjusted annually by 3%, compounded, to allow for increases in cost of living.
	Cost of living adjustments begin on the January 1st following the third anniversary of an employee's retirement.

**APPENDIX - Model Letter to Cities and Towns Participating in the
Teacher's Retirement Plan**

The (city) (town) of _____ provides retirement benefits to its public school teachers through its participation in the Rhode Island Retirement System. The system is a statutory, mandatory, state-wide, multiple retirement system, which first covered Rhode Island teachers on July 1, 1949. It is administered by the State Retirement Board, the composition of which is set forth in the pertinent state statute. The assets are held in the custody of the State Treasurer as an undivided single fund.

The actuarial costs of the retirement benefits are partially funded by teacher contributions of 8-1/2 percent of pay effective July 1, 1986. The net employer actuarial costs are determined annually by the actuary and, as provided by statute, are certified by the Retirement Board to the Department of Administration. Contributions are reported as a percent of payroll, payable in part by the State of Rhode Island and in part by the (city) (town). The split between the State and Municipality is specified in the statute. For fiscal year 1995-96, by statute the State will pay 40% and the Municipality will pay 60%.

The actuarial valuation prepared by William M. Mercer, Incorporated uses the entry age normal cost method with the frozen initial liability. The valuation assumes an 8 percent interest return on assets and assumes an annual salary increase of 4.5%. In addition, other actuarial assumptions are made for post-retirement increases and other contingencies as set forth in the published annual reports of the Retirement Board. Following are comparative highlights of the last three years for the Teachers system as a whole:

	Year Beginning July 1,		
	<u>1993</u>	<u>1992</u>	<u>1991</u>
Active participants	11,588	11,594	11,420
Pensioners and beneficiaries	4,921	4,826	4,834
Inactive participants	1,156	954**	2,294
Liability for accrued vested benefits	\$1,941,452,200	\$1,806,755,500	\$1,672,008,200
Net assets at actuarial value	1,492,915,800	1,352,892,300	1,261,831,500
As shown in State's financial statements:			
	<u>1993</u>	Year Ended June 30,	<u>1991</u>
		<u>1992</u>	
Employer contributions	\$ 72,206,480	\$ 49,361,171	\$ 47,201,290
Member contributions	<u>40,405,816</u>	<u>38,883,346</u>	<u>36,701,446</u>
Total contributions	\$ 112,612,296	\$ 88,244,517	\$ 83,902,936
Net miscellaneous income	327,868	388,422	478,768
Investment income	<u>95,137,618</u>	<u>141,936,132</u>	<u>74,965,344</u>
Total income available for benefit payments	\$ 208,077,782	\$ 230,569,071	\$ 159,347,048
Benefit payments	<u>104,236,082</u>	<u>100,009,279</u>	<u>100,362,397</u>
Excess of income over expenses	\$ <u>103,841,700</u>	\$ <u>130,559,792</u>	\$ <u>58,984,651</u>

Note: Detail figures may not add to totals shown because of rounding.

** The database as of June 30, 1992 reflects the withdrawal of inactive participants' contribution balances.

Actuarial costs and liabilities, as shown in the summary presentation, are determined in the aggregate for the Teachers System. Accordingly, employer contributions are first determined in the aggregate for all participating employers in this multiple employer system and are then expressed as a percentage of the aggregate participating payroll. Each participating City or Town for 1996 fiscal year will apply 60% of this factor to its participating payroll (the remaining forty percent of the employer cost is contributed by the State as well as the full cost of deferred contributions by the State).

Employer contributions by the (city) (town) of _____ for each of the last 2 years (together with the amount for the current year, based on the promulgated rate percent of 9.09%*) are as follows:

Year Ended June 30,	1991	1992	1993
Participating payroll			
Employer contributions			

With respect to the Teachers Retirement System, William M. Mercer, Incorporated, independent actuaries advising the Retirement Board, have stated:

"We believe that the funding program set forth in the state statute is a reasonable basis for funding the Rhode Island Teachers Retirement System. If the statutory funding program is followed without change, the System will be fully funded - that is, the assets will equal the actuarial liability on June 30, 2022. In the interim the assets are projected to be sufficient at all times to meet the cash requirements for projected benefit payments."

According to the statutory funding schedule, the combined contributions required each year by the (city) (town) of _____ and the State will remain relatively level as a percent of payroll as the System moves toward funding the full actuarial liability. Ultimately,

however, because the actuarial funding results in the accumulation of reserves that are invested, the required appropriation will be significantly less than would be required if this System were on a pay-as-you-go basis.

- The promulgated rate percent for certain towns which did not participate in the 1990 early retirement incentive program is 8.07%. These towns are listed below:

Code	2003	Burlilville
	2009	East Greenwich
	2018	Little Compton
	2025	North Smithfield