

MILLIMAN & ROBERTSON, INC.
CONSULTING ACTUARIES

THREE CORPORATE PLACE
BLOOMFIELD, CONNECTICUT 06002
203/243-1138

February 21, 1985

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM

Actuarial Valuation

This is to certify that we have prepared an actuarial valuation of the Connecticut State Employees Retirement System as of December 31, 1984.

The valuation was made with respect to the following Members:

- a. 15,679 pensioners (including 524 beneficiaries of deceased Members).
- b. 47,924 active Members with total annual salaries of 1,081,650,994.
- c. 476 inactive employees with vested rights.

Based on the above data and the attached actuarial method and assumptions, we determined cost factors as of the valuation date as follows:

1. Accrued liability--	
a. Active Members	2,140,665,203
b. Retired Members and Beneficiaries	1,258,424,360 + 10%
c. Vested former Members	8,382,316 + 10%
d. Total	3,407,471,879 10%
2. Assets in fund (at adjusted cost value)	\$ 957,179,954
3. Unfunded liability (Item 1d less Item 2)	2,450,291,925
4. Present Value of Vested Benefits	2,381,158,132

Based on the valuation as of December 30, 1984, projected costs were developed for the fiscal year beginning July 1, 1985, as follows:

1. Employer Normal Cost	
Tier 0 and Tier I	98,454,196
Tier II	11,917,718
Total	<u>110,371,914</u>

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PATRICK J. GRANNAN, F.C.A.S. *Close to 17,000*
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BRUCE L. WORKMAN, F.C.A.

WENDELL MILLIMAN, F.S.A. 1976
JAMES H. RIGGS, F.S.A. 1976

2. Payment on Unfunded Liability*

Tier 0 and Tier I	166,878,529
Tier II	962,166
Total	<u>167,840,695</u>

3. Total Employer Cost

Tier 0 and Tier I	265,332,725	252,066,089
Tier II	12,879,884	
Total	<u>278,212,609</u>	

* Based on forty year amortization of the Unfunded Accrued Liability as of June 30, 1985. (40 year amortization of the increase in Tier II liability).

In accordance with Connecticut statutes, the actual contribution for the fiscal year 1985-86 will be 95% of Tier 0 and Tier I costs and 100% of Tier II costs; the 95% will be increased to 100% for fiscal year 1986-87 and thereafter.

MILLIMAN & ROBERTSON, INC.

James A. Gobes
 James A. Gobes, F.S.A., M.A.A.A.
 Consulting Actuary

264,945,973
 39,000,000
 225,945,973
 190,700,000
35,245,972

225,681,973
 190,700,000
34,981,973

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM

Actuarial Assumptions

Mortality 1971 Group Annuity Mortality Table with ages set back 6 years for females.

Investment Return 6½% compounded annually.

Salary Scale	<u>Age</u>	<u>Annual Rate of Increase</u>
	20	5.34%
	25	5.26
	30	5.10
	35	4.90
	40	4.58
	45	4.22
	50	3.95
	55	3.83
	60	3.66

Turnover Estimated by excluding participants with less than one year of service and assuming that all other employees terminate at the following rates.

<u>Age</u>	<u>Annual Rate of Withdrawal</u>
20	5.44%
25	5.29
30	5.07
35	4.70
40	4.19
45	3.54
50	2.47
55	.94
60	--

Retirement Ages Hazardous Duty, Tier 0 and Tier I: Age 53 and 25 years of service.
All other, Tier 0 and Tier I: Age 61 and 10 years of service.
Tier II: Age 65 and 10 years of service or age 70 and 5 years of service, or for Hazardous Duty Members, 25 years of service.

Social Security Wage Base Increases 3½% compounded annually.

Disability

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

Service-connected are assumed to comprise 50% of total disabilities for Hazardous Duty and 20% for others.

Cost-of-Living Increases

3% per year for retirees on or after 1-1-80. 4½% per year for retirees prior to 1-1-80.

Asset Valuation

Adjusted cost value: assets are written up (or down) by 20% of the difference between market value and adjusted cost value, plus an additional write-up (or write-down) as necessary so that the resulting adjusted cost value is within 20% of market value.

MILLIMAN & ROBERTSON, INC.
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203/243-1138

September 10, 1984

JoAnn Mogenson
Director, Retirement Division
State of Connecticut
30 Trinity Street
Hartford, CT 06115

RE: 1985-86 Pension Cost

Dear JoAnn:

Based on the December 31, 1983 valuation, as revised by my June 19, 1984 letter, and the actual 1983-84 covered payroll of \$989,921,662 projected with 5% average annual increase, we estimate the total (100%) pension cost for the 1985-1986 fiscal year will be:

Tier I	\$226,000,000
Tier II	<u>15,000,000</u>
Total	\$241,000,000

This supersedes my July 19, 1984 letter, which was based on the 1983 valuation payroll.

Please call if you have any questions.

Best personal regards.

Sincerely,


James A. Gobes

JAG/kms

cc: Sharon Frisk ✓

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BRUCE L WORKMAN, F.C.A.

WENDELL MILLIMAN, F.S.A. (1976)
JAMES H RIGGS, F.S.A. (1978)

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STATE OF CONNECTICUT

★ A Problem Solving Idea Can Win An Award ★

Please send your ideas to: *Employees' Suggestion Awards Program, 165 Capitol Ave., Hartford, 06106.*

Interdepartment Message

SAVE TIME: *Handwritten messages are acceptable.*

STO-201 REV. 10/83 STATE OF CONNECTICUT
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Use carbon if you really need a copy. If typewritten, ignore faint lines.

To	NAME Walter Olender	TITLE Director of Special Services	DATE Sept. 11, 1984
	AGENCY Office of the Comptroller	ADDRESS	
<i>From</i>	NAME JoAnn S. Mogensen	TITLE Director, Retirement Division	TELEPHONE 5639
	AGENCY Office of the Comptroller	ADDRESS	
SUBJECT State Employees Retirement System (SERS) Funding Requirement for the 1985-86 Fiscal Year.			

The estimated net SERS funding requirement for the 1985-86 fiscal year is \$184,477,014. This amount was determined based upon information supplied by both the Accounting Systems Division and the state retained actuarial firm of Milliman and Robertson, Inc.

Tier I at 95% = (\$226,000,000 x 95%) =	\$214,700,000
Tier I at 100% =	15,000,000
Gross Funding Requirement	<u>\$229,700,000</u>
Estimated Reimbursement from Federal and State funds other than General Fund	45,222,986
Net funding requirement	<u><u>\$184,477,014</u></u>

JSm/MFP

Attachments

cc: Nicholas Wayne
Sharon Frisk