

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

ACTUARIAL FUNDING REPORT

AS OF JULY 1, 1979

January 25, 1980

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
I	INTRODUCTION	1
II	ACTUARIAL BALANCE SHEET	2
III	FUNDING THE SYSTEM	3
IV	CONTRIBUTIONS	5
V	ACTUARIAL COST METHODS AND ASSUMPTIONS	8
VI	CERTIFICATION	13
 <u>EXHIBITS</u>		
A	SUMMARY OF DATA	14
B	DEVELOPMENT OF ADJUSTED ASSET VALUE	17
C	DEVELOPMENT OF NORMAL COST	18
D	OUTLINE OF PRINCIPAL PROVISIONS	19
E	ADDITIONAL DISTRIBUTIONS OF ACTIVE DATA	22
	1. Grouping by Attained Age and Service	
	2. Grouping by Entry Age and Service	
	3. Summary by Year of Birth	
	4. Summary by Years of Total Service	

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January 25, 1980

Hon. Rosalyn Schoonmaker
Chairman
Connecticut Teachers' Retirement Board
Hartford, CT

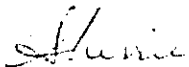
Madam:

We are pleased to provide our actuarial study concerning the advance funding of the complete Teachers' Retirement System. The report includes the calculation of the Unfunded Past Service Liability, a recommended annual Normal Cost contribution, and information on transitional funding in accordance with PA 79-436.

Since that bill becomes effective on July 1, 1980, contributions for the 1979-80 plan year continue to be on the current terminal funding plus cash payment basis. Because of the grading schedule approved, this same basis will continue to be the basis of contribution to the system for several more years. The chart in Section IV shows a projection of contribution amounts and the basis for these deposits.

We look forward to meeting with you and the Board to review the report and answer questions on its contents.

Sincerely,



Sherrie B. Desmond

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SECTION I

Introduction

The Connecticut Teachers' Retirement Board has long considered the advance funding of the State Teachers' Retirement System to be in the best interest of Connecticut's Teachers. A transition to advance funding was enacted by the 1979 Connecticut State Legislature.

We have been requested to value the assets and liabilities of the System and to calculate the Unfunded Accrued Liability and the annual Normal Cost of the System as of June 30, 1979. The figures include the total liabilities for both active and retired teachers, terminated teachers with vested rights, and survivors and dependents. In addition to retirement benefits including the cost-of-living provision, the system provides disability benefits, pre-retirement death benefits, and the return of employee contributions for pre-retirement death and non-vested termination.

The Actuarial Balance Sheet is developed in Section II, Funding is discussed in Section III, and the expected required contributions are developed in Section IV. The actuarial assumptions on which the figures are based are detailed in Section V. The results are certified in Section VI.

Supporting exhibits summarize the data used, develop the asset adjustment and the normal cost, and provide a plan summary.

SECTION II

ACTUARIAL BALANCE SHEET

The essential elements of the actuarial valuation process are shown by the actuarial balance sheet. The description of the funding method in Section V defines and explains the terms used in this actuarial balance sheet.

July 1, 1979

Actuarial Liabilities

Present Value of Future Pension
Benefits (including future cost
of living increases) for:

Active Employees \$2,472,254,000

Retired Employees

Pensions (including cost of
living and legislative in-
creases to 6-30-79):

\$616,328,000

5% Annuities

123,357,000

1% and Voluntary Annuities

4,985,000

\$ 744,670,000

Terminated Vested Employees 22,098,000

Survivors and Dependents 12,475,000

TOTAL \$3,251,497,000

Source of Funds

Unfunded Accrued Liability \$1,531,356,000

Adjusted Asset Value (see Exhibit B) 1,010,152,000

Present Value of Future Employee
Contributions 301,192,000

Present Value of Future State Normal
Cost Contributions (see Exhibit C) 408,797,000

TOTAL \$3,251,497,000

SECTION III

FUNDING THE SYSTEM

In 1979, the legislature enacted PA 79-436 which amended the statutes to provide for eventual advance funding of the State Teachers' Retirement System. The transition is to begin on a graduated basis in fiscal year 1981-82 by payment of 35 percent of the sum of the normal cost and a 40 year amortization of the unfunded accrued liability. In fiscal year 1994-95 the transition period will be complete and the full normal cost plus a 40 year amortization of unfunded liability will be paid.

Currently, benefits under the System, other than the cost-of-living provisions and survivors' and dependents' benefits, are funded on a "terminal funding" basis. Under this funding method, moneys are drawn from the State each year to cover all expected future pension payments (excluding cost-of-living increases) to Members retiring in that year. Cost-of-living and legislative increases are on a pay-as-you-go basis. Survivors' and dependents benefits have been funded primarily from forfeitures of members 1% contributions and interest, with additional state appropriations when necessary.

Since 1971 recommendations have been made by commissions, actuaries, legislators and the Teachers' Retirement Board to advance fund this System. Advance funding means any of several methods of setting aside funds for the retirement years while an employee is still an active Member. Advance funding is in accord with accepted actuarial practices while terminal funding and pay-as-you-go are not. In fact, both terminal funding and pay-as-you-go are specifically prohibited under ERISA (Employee Retirement Income Security Act of 1974), federal pension legislation covering non-governmental plans.

There are two important difficulties with this type of funding.

The first is the tendency for annual costs to increase sharply over the years. In essence this causes a budgeting difficulty for the State. Under accrual accounting principles expenses should be charged when they are incurred. Pensions that are based on wages and service are closely related to salaries in the year earned. It seems then that pensions should be charged over an employee's years of active service, and if possible, be a function of his salary. Terminal funding charges too little to the present and defers too much to the future. That is, a charge relating to today's payroll is being deferred to the future.

The second problem is the security of the teachers' benefits. While it is unlikely that the State would cut all funds to the System over a period of years, pressing needs elsewhere may cause the Legislature to balk at some point. Under the present system of funding there are no assets covering the accrued benefits of presently active teachers. Even an employee who has vested rights under the plan has no funds set aside to provide his benefits.

Currently the average completed years of service for Connecticut teachers is 11.2. Since a Member is vested with 10 years of Service, this means that a very large proportion of the members are vested in their accrued benefits. In other words, if these members left their jobs, the State would still be liable for the value of their accrued benefits in spite of the fact that replacements would be hired who would also be accruing benefits. For employee security then, it would be optimal to build a fund over the years to at least the level of the present value of the vested benefits.

Advance funding will eventually provide the funds to cover the present value of vested benefits and will also more appropriately relate the costs of the System to each fiscal year. In addition, advance funding will have a stabilizing effect on the costs; once the transition period is over, the appropriation should be more nearly a level percentage of payroll.

In the interim, however, the necessary State appropriation can be expected to rise sharply for two reasons. First, the legislated percentage of the normal cost and amortization payment rises by 5% each year. Secondly, the increasing percentage will be applied each year to an ever increasing amount. Because only a percentage of the normal cost and amortization payment is being paid during the transition period, the unfunded accrued liability will grow each year due to the percentage which is not being paid in previous years.

SECTION IV

CONTRIBUTIONS

Based on the employee data and asset information furnished us and the actuarial assumptions shown in Section V, we have determined the normal cost and unfunded accrued liability as of July 1, 1979. The calculations are based on the plan provisions outlined in Exhibit D.

Normal Cost as of 7-1-79	\$ 42,359,000
% of Covered Payroll	6.473%
Unfunded Accrued Liability as of 7-1-79	\$1,531,356,000

If the State were presently on an advance funding basis of normal cost plus a 40 year amortization of the unfunded accrued liability, the contribution for fiscal year 1979-80 would be \$153,371,000. The appropriated amount on a terminal funding basis is somewhat less than half of that - \$70,319,000 - with \$73,783,000 as a budget estimate for fiscal year 1980-81, the final year of purely terminal funding.

The contribution shown in this report is not directly comparable to those projected in our previous report, or even the figures provided for cost estimates for PA 79-436. Changes have been made in two areas which are explained more fully in Section V following. Essentially, the cost method used for funding some ancillary benefits was changed from a term basis to a regular funding basis and the survivors and dependents benefits were added to the costs. Also several slight changes were made in the actuarial assumptions.

The gradual transition to advance funding is to begin with fiscal year 1981-82, starting with 35% of the normal cost plus a 40 year amortization of the unfunded liability and increasing 5% per year until 100% is reached in fiscal year 1994-95. The statute provides, however, that the terminal funding amount shall be appropriated if larger. Since the terminal funding contribution is already larger than the initial 35%, it will be several years before the advance funding transitional amounts become operative.

The following chart presents a projection of estimated normal costs, the estimated unfunded accrued liability and the estimated required contribution for the years of the transition period. Projections of this sort are difficult to do with any certainty. Economic factors, declining school enrollments, and inflation affect both the numbers of teachers and their annual salary increases.

For purposes of this projection we have assumed a "mature" population of teachers. That is, those terminating, dying, or retiring are replaced annually with new teachers such that on the average the same position on the salary scale is maintained. That is, each year all teachers receive a salary increase as assumed by our actuarial assumptions, but new teachers are hired at the low end of the salary scale to replace those leaving at the upper levels. Assuming our split salary scale of 5% per year for those teachers still within the step rate ladder and 2 1/2% per year for those at their maximum produces an overall increase in covered salaries of 4.2% per year.

The estimated unfunded accrued liability grows each year with interest plus the addition of the normal cost plus interest and is reduced by the estimated contribution.

Estimated Projected Contributions

<u>Fiscal Year Beginning</u>	<u>Estimated Normal Cost</u>	<u>Estimated Unfunded Accrued Liability</u>	<u>Contribution Basis</u>	<u>Estimated Required Contribution</u>
7-1-79	\$42,359,000	\$1,531,356,000	Terminal Funding	\$ 70,319,000
7-1-80	44,138,000	1,605,687,000	Terminal Funding	73,783,000
7-1-81	45,992,000	1,683,281,000	35%	77,000,000*
7-1-82	47,924,000	1,764,676,000	40	80,000,000*
7-1-83	49,936,000	1,850,419,000	45	83,500,000*
7-1-84	52,034,000	1,940,378,000	50	96,295,000
7-1-85	54,219,000	2,025,624,000	55	110,519,000
7-1-86	56,496,000	2,104,514,000	60	125,368,000
7-1-87	58,869,000	2,176,108,000	65	140,748,000
7-1-88	61,342,000	2,239,503,000	70	156,555,000
7-1-89	63,918,000	2,293,845,000	75	172,677,000
7-1-90	66,603,000	2,338,341,000	80	188,992,000
7-1-91	69,400,000	2,372,273,000	85	205,375,000
7-1-92	72,315,000	2,395,007,000	90	221,697,000
7-1-93	75,352,000	2,406,001,000	95	237,824,000

*Estimate of terminal funding basis, since % of advance funding is less.

SECTION V

ACTUARIAL COST METHODS AND ASSUMPTIONS

A. Actuarial Cost Methods

1. Pre-retirement Death Benefits and Medical Benefits

The actuarial cost method used for determining pre-retirement death benefit and medical benefit costs is the one year term cost method.

2. Retirement Benefits

The actuarial method used to develop the other results in this valuation report (including disability benefits and return of contributions upon death or non-vested termination) is the Frozen Initial Liability Cost Method. The essential elements of this method are explained below.

Unfunded Frozen Initial Liability

The Unfunded Frozen Initial Liability may be thought of as the present value of future contributions to be made for costs allocated to the past. We have also referred to this liability as the "Unfunded Past Service Liability".

In the first year of its use, the Unfunded Frozen Initial Liability is set equal to the accrued liability in accordance with the Entry Age Normal Cost Method less the Adjusted Asset Value on that date.

In subsequent years, the Unfunded Frozen Initial Liability at the end of a year is determined by adding to the beginning of the year value the beginning of the year Normal Cost, interest (at the valuation assumption rate) on that sum for the year, all reduced by the contributions made including interest, if any, to the end of the year. In the event of a change of plan or of assumptions, an appropriate adjustment is made.

Normal Cost

To calculate the Normal Cost it is first necessary to calculate the total current cost of all estimated benefits. (This is labeled "Present Value of Future Pension Benefits" in the Actuarial Balance Sheet and is itemized for active, retired, and terminated vested employees and survivors and dependents.) This is then reduced by the Unfunded Frozen Initial Liability, the Adjusted Asset Value and the Present Value of Future Employee Contributions. The result is the amount which is to be funded by future State Normal Costs ("Present Value of Future State Normal Cost Contribution" in the Actuarial Balance Sheet) and is therefore spread over the expected future service of all eligible active employees to determine the State Normal Cost as a level percentage of expected future payroll.

Gains and Losses

In the Frozen Initial Liability Cost Method, all gains and losses (the financial effect of the difference between the actual experience of a prior year and the result expected by the actuarial assumptions for that prior year) appear in the Present Value of Future Normal Costs and are thus spread over future Normal Costs.

B. Actuarial Assumptions

Investment Return: 6 1/2% compounded annually.

Mortality: 1971 Group Annuity Mortality Table. For females, ages are set back 6 years.

Employee Turnover: The following termination rates are assumed:

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	10.0%	15.0%
30	7.5	10.0
35	5.0	7.5
40	3.0	5.0
45	1.5	2.5
50	0	0

Proportionate rates apply to intermediate ages.

Expense Loading: No loading for expenses has been included; all administrative expenses are assumed paid separately; investment expenses are taken into account in the determination of investment return.

Retirement Age: Determined according to Retirement Age Group based on entry age (defined as attained age less service).

<u>Retirement Age Group</u>	<u>Entry Age</u>	<u>Retirement Age</u>
1	Less than 25	Entry age plus 35 years.
2	25 but less than 40.	Age 60.
3	40 but less than 61.	Entry age plus 20 years, maximum age 70.
4	61 or greater.	Excluded from costs.

Salary Scale:

Based on entry age (defined as attained age less service).

<u>Entry Age</u>	<u>Salary</u>
Less than 25	5% through age 39 and then 2 1/2% from age 40 through age 59.
25 but less than 40	5% through age 45 and then 2 1/2% from age 46 through age 59.
40 but less than 61	5% through age 57 and then 2 1/2% from age 58 through age 64.

Asset Valuation:

Market value of assets are adjusted to recognize 25% of accumulated unrealized gains (or losses).

Cost of Living:

Active: 3% per year compounded annually.

Retired: 5% per year compounded annually.

Disability:

Incidence:

1952 Intercompany Disability Study, period 2, Benefit 5.

Mortality:

Same as non-disabled.

C. Choice of Actuarial Assumptions

We have made a change in two of the actuarial assumptions from those used in our last report. Changes were made in the cost of living assumption and in the rate of disability. These are the last two items shown below. All other actuarial assumptions remain the same as those used to develop figures for the July 1, 1976 actuarial report.

Since the entire plan is to be funded with Normal Cost contributions to be made annually, we have used "best estimate" assumptions rather than the conservative estimates used in the past to determine the experience gain or loss under the terminal funding. A combination of "best estimate" assumptions has been incorporated in this valuation. Comments on the various items shown the Section V B follows:

Investment Return: The expected investment income reflects the current bond and equity markets. It includes both realized and unrealized annual appreciation. The substantial size of the teachers' fund allows great diversity of investments and need not be as conservatively invested as a small fund. A 6 1/2% per year return can be expected over the long term.

Mortality: The longer people live, the longer their retirement benefits are payable. For this reason a "conservative" mortality table for annuities expects lives to live longer. We have used the newest published standard mortality table, which reflects the fact that annuitant mortality has decreased.

Employee Turnover: The withdrawal table we have chosen assumes a moderate rate of turnover at each age but drops off quickly to reflect the fact that Teachers' are vested in their Accrued Benefits after 10 years of service.

Expense Loading: Annual Treasurer's Reports and reports of the Teachers' Retirement Board indicate no administrative expenses have been withdrawn from the Funds. We expect this practice to continue.

Retirement Age: Since the retirement eligibility rules are a function of service as well as age, the data was broken down into four groups depending on age at hire. Those Teachers' in the first group were hired at young ages and are eligible to retire under age 60. Likewise, the next two Retirement Age Groups reflect the age when the teachers would first be eligible to retire. The retirement age used then is the first age at which the employee fulfills the earlier of:

- a) 35 years of service or,
- b) the later of age 60 or 20 years of service, maximum age 70.

This grouping was important because of the salary scale assumption below.

Salary Scale: We chose a salary scale that reflects the 15 year step-rate salary schedules in use by Connecticut cities and towns. The two part scale reflects the 15 year step-rate increases as well as inflation in the first 5% portion. Only inflation is recognized in the later 2 1/2% part. We therefore have used the average entry age for each Retirement Age Group to find the average age at which we can expect annual salary increases to decline because the individuals have reached the salary maximums. The use of the Retirement Age Groupings allows us to recognize length of service.

The overall effect of this type of salary scale is to lower Normal Cost and increase the Past Service Liabilities since, as a percentage of salary, the first 15 years are given more weight. This also allows the greatest flexibility in funding because of the large size of the Unfunded Past Service Liability (see Section IV).

Asset Valuation: Since market values fluctuate rapidly, the use of these values alone is not reasonable for long range financial planning. On the other hand, some recognition should be made of unrealized appreciation or depreciation on Fund values. The method chosen reflects a portion of the market fluctuations yet produces reasonably smooth results. Exhibit B shows the development of the adjusted value.

Cost of Living: We expect the Consumer Price Index to increase at least 5% over the short range future and therefore have used 5% for the present group of retired lives. The 5% reflects the maximum allowed per year. However, for the long term, we feel 3% per year is more appropriate and have used 3% for the active lives. Our last report used 5% for all Cost of Living liabilities.

In the past year the Connecticut Teachers System was chosen to be included in a study considering the effects of universal Social Security coverage. For the study plans integrated with Social Security were designed and costed. A specific inflation percentage was chosen to project wage base increases as well as cost of living. To be more consistent with those figures, we have chosen to use a 3% cost of living index for valuing this liability.

Disability: This table of the incidence of disability is a commonly used one which reflects a relatively modest incidence of disability. Since we expect that a large proportion of disabilities among teachers would not be of the type which would affect their life expectancy, we have used the same mortality as for non-disabled lives. The rate of disability used in the last valuation seemed too high, at least for the near future.

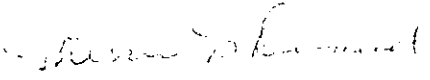
SECTION VI

CERTIFICATION

The results in this valuation report are based on the law in effect as of June 30, 1979, the census of retired, active terminated vested, and survivors' and dependents' data received from the State Teachers' Retirement Board, and the information on assets received from the Board and the Treasurer's department. Neither the census data nor the financial information has been audited by us.

In my opinion this report presents fairly the financial and actuarial position of Connecticut Teachers' Retirement System as of July 1, 1979 in accordance with generally accepted actuarial principles.

HOOKER & HOLCOMBE, INC.


Sherrie B. Desmond, F.S.A.

January 25, 1980

EXHIBIT A

SUMMARY OF DATA AS OF JUNE 30, 1979

ACTIVE TEACHERS

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Number	16,341	25,246	41,587
Service as of 6-30-79			
Average Connecticut	11.2 yrs.	9.7 yrs.	11.0 yrs.
Average Other	<u>.2</u>	<u>.2</u>	<u>.2</u>
Average Total	13.4	9.9	11.2
Average Salary as of 6-30-79	\$17,527	\$14,578	\$15,737

TERMINATED VESTED TEACHERS

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Number	217	485	702
Average Service	15.7	13.8	14.4
Average Salary	\$15,561	\$12,911	\$13,761
Estimated benefit	406 mo.	300 mo.	336 mo.

SURVIVORS AND DEPENDENTS

	<u>Number</u>	<u>Average Monthly Benefit</u>
Widows	235	\$300
Widowers	35	300
Children	254*	140
Dependent Parents	3	300
Mothers	<u>1</u>	300
	527	

*Including 5 disabled children

RETIRED TEACHERS

	<u>Male</u>			<u>Female</u>			<u>Total</u>		
	<u>#</u>	<u>Average Monthly Annuity</u>	<u>Pension*</u>	<u>#</u>	<u>Average Monthly Annuity</u>	<u>Pension*</u>	<u>#</u>	<u>Average Monthly Annuity</u>	<u>Pension*</u>
Plan A	211	\$105	\$461	2,295	\$ 77	\$403	2,506	\$ 80	\$407
Plan B	375	101	507	3,414	75	439	3,789	77	445
Plan C	468	117	557	457	81	439	925	99	499
Plan C - Beneficiaries							109	82	406
Plan D	336	118	576	106	79	443	442	108	544
Plan D - Beneficiaries							141	54	201
Plan N	79	167	666	363	120	551	442	128	571
Plan S	<u>16</u>	<u>81</u>	<u>227</u>	<u>105</u>	<u>48</u>	<u>185</u>	<u>121</u>	<u>52</u>	<u>191</u>
Total	1,485	-	-	6,740	-	-	8,475	84	444

*Including cost-of-living and legislative increases to 6-30-79.

RETIRED TEACHERS

Average amounts of Retirement Income for new retirees.

<u>Year</u>	<u>Average Salary Base</u>	<u>Average Retirement Allowance</u>
1972-73	\$13,206	\$7,325
1973-74	14,043	7,529
1974-75	14,684	7,577
1975-76	15,843	7,987
1976-77	15,754	8,126
1977-78	17,198	8,513
1978-79	17,927	8,510

Average age at retirement:

<u>Year</u>	<u>Average Retirement Age</u>
1971-72	63.0
1972-73	62.7
1973-74	62.8
1974-75	62.5
1975-76	60.5
1976-77	61.7
1977-78	61.5
1978-79	61.6

EXHIBIT B

DEVELOPMENT OF ADJUSTED ASSET VALUE

AS OF JUNE 30, 1979

A. Development of Adjustment Ratio

Book Value	\$1,031,227,262
Market Value	946,928,119
Difference	(84,299,143)
Adjusted Value = Market Value less 75% Difference	1,010,152,476

EXHIBIT C

DEVELOPMENT OF NORMAL COST

The development of the Normal Cost as of July 1, 1979 flows from the actuarial balance sheet item labeled "Present Value of Future State Normal Cost Contributions" in the following manner:

Present Value of Future State Normal Cost Contributions	\$ 408,797,000
divided by Present Value of Future Salaries of presently active teachers	<u>6,314,779,000</u>
Normal Cost as a percentage of Covered Payroll	6.473%
times Covered Payroll	<u>\$ 654,398,000</u>
Total State Normal Cost	\$ 42,359,000

Note: Even though we term costed pre-retirement death benefits and medical benefits, we developed a Present Value of Future Term Costs for these benefits which is included in the Present Value of State Normal Cost Contributions, so that the term cost flows through the development and need not be added in separately at the end.

EXHIBIT D

OUTLINE OF PRINCIPAL PROVISIONS

<u>Item</u>	<u>Description</u>
Covered Employees:	Any teacher, principal, superintendent or supervisor engaged in service of public schools.
Salary:	Amount paid to a teacher as specified in a contract of employment excluding amounts paid for extra duty assignments, coaching, unused sick time, unused vacation or terminal pay.
Average Annual Salary:	Average annual salary received during three years of highest salary.
Credited Service:	One month for each month of service as a teacher in Connecticut public schools, maximum 10 months for each school year. Certain other types of teaching service, State employment, or war-time military service may be purchased if the member pays contributions (5% of first Connecticut salary for each year) plus interest.
Normal Retirement:	
Eligibility:	Age 60 and 20 years of service in Connecticut or 35 years of service including at least 25 years of service in Connecticut.
Benefit:	2% times years of credited service times average annual salary (maximum percentage is 75%) plus any additional amounts derived from 6th% and voluntary contribution by the teacher.
Early Retirement:	
Eligibility:	At any age after the completion of 25 years of service including 20 years of Connecticut service (the last 5 years in Connecticut).
Benefit:	Actuarially reduced normal retirement benefit.

<u>Item</u>	<u>Description</u>
Pro-ratable Retirement:	
Eligibility:	Age 60 and 10 years of service (the last 5 years in Connecticut).
Benefit:	2% less .1% for each year less than 20 years times years of Connecticut service plus 1% times years of other service times average salary.
Disability Retirement:	
Eligibility:	Disability prior to age 60 and after 10 years of service in Connecticut if not incurred in performance of duty and without regard to service if incurred in performance of duty.
Benefit:	3% times credited service to date of disability times average annual salary, maximum 1 2/3% times credited service projected to 60 times average annual salary.
Termination of Employment:	
With less than 5 years:	Return of 5% contribution with interest.
With 5 years but less than 10 years:	Return of 5% contributions with interest and 1% contributions without interest.
With 10 or more years:	100% vested. Members may elect return of all contributions with interest in lieu vested benefit.

<u>Item</u>	<u>Description</u>
Pre-retirement Death Benefits:	
Lump Sum:	\$1,000 for the first 5 years of Connecticut service plus \$200 per year for each year of service from 6 to 10 years of service. Maximum benefit: \$2,000.
Survivor's Benefit:	<p>\$200 per month to a single dependent child under age 18 or over age 18 if disabled. \$300 per month divided equally among 2 or more such children in a family.</p> <p>\$300 per month to a surviving spouse or dependent former spouse receiving child support.</p> <p>\$300 per month to a dependent parent over age 65 if there is no surviving spouse.</p>
Form of Annuity:	
Normal:	Partial Refund Option: 75% of total benefit is paid as a life annuity. If 25% of benefits paid prior to death, do not exceed 5% contributions plus interest, the difference is paid to beneficiary.
Optional Forms:	5, 10, 15, 20, or 25 year certain and life. 25%, 50%, 66 2/3%, 75%, or 100% co-participant.
Cost of Living Allowance:	Pension benefit adjustments are made in accordance with increases and decreases in the consumer price index, but not in excess of 5% per annum.
Teachers' Required Assessments:	Each teacher is assessed 6% of annual salary, of which 5% was formerly allocated to the Annuity Fund and 1% to the Survivorship and Dependency Fund.
Medical Benefits:	The System pays 10% of the cost of group health insurance if the employee elects to have premiums withheld from pension checks.

EXHIBIT E

ADDITIONAL DISTRIBUTIONS OF ACTIVE DATA

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

GROUPING BY ATTAINED AGE AND SERVICE AS OF 7/1/79

MALES

S E R V I C E G R O U P I N G S

ATTND	AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	50	297515	5950	181	1732818	9574	87	887727	10204	25	255580	10223	1	11862	11862	0	0	0
25-29	50	319417	6388	310	3140548	10131	292	3133328	10731	251	2826270	11260	217	2508158	11558	0	0	0
30-34	40	291726	7293	152	1886980	12414	114	1473555	12926	118	1554839	13177	132	1825232	13828	0	0	0
35-39	12	69238	5770	42	671238	15982	35	631150	18033	40	625655	15641	34	511908	15056	0	0	0
40-44	10	123215	12322	14	304856	21775	14	200670	14334	18	403374	22410	22	437868	19903	0	0	0
45-49	5	61610	12322	16	272526	17033	9	127454	14162	13	271176	20860	10	206495	20650	0	0	0
50-54	2	29554	14777	14	205688	14692	5	97260	19452	10	193303	19330	6	51385	17128	0	0	0
55-59	1	9165	9365	2	129310	14768	3	43615	14538	0	0	0	0	0	0	0	0	0
60-64	2	17409	8705	9	39075	19538	0	0	0	1	30000	30000	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	172	1219049	7087	741	8393041	11327	559	6594759	11797	476	6160197	12942	425	5691097	13391	0	0	0

ATTND	AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	TOTAL
0-19	1	10002	10002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	344	318502	9260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	1120	11927721	10650	826	10497673	12709	0	0	0	0	0	0	0	0	0	0	0	0
30-34	556	7032332	12648	1590	28631898	14388	1205	19236070	15964	1	16746	16746	0	0	0	0	0	0
35-39	163	2509189	15394	541	8887044	16427	1553	28199805	18158	590	11614212	19685	0	0	0	0	0	0
40-44	78	1469983	18846	108	3353446	18426	453	8771757	19364	1049	21245972	20254	339	7243905	21368	0	0	0
45-49	53	939281	17722	108	2017888	18686	252	4961984	19690	534	10882618	20342	948	20244299	21355	0	0	0
50-54	34	577190	16976	80	1431204	17890	168	3401629	20248	225	4588928	20395	457	9522783	20838	0	0	0
55-59	19	320479	16867	50	897679	17954	96	1885910	19645	109	2273573	20858	179	3713423	20745	0	0	0
60-64	5	86484	17297	18	323311	17962	33	606921	18452	38	767867	20207	53	1076612	20313	0	0	0
65-69	0	0	0	2	27045	13523	12	228984	19082	5	98264	19653	17	359672	21157	0	0	0
70-74	0	0	0	0	0	0	0	0	0	1	19945	19945	1	24144	24144	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2373	28058143	11824	3797	56066788	14766	3772	67295060	17841	2552	51488125	20176	1994	42184838	21156	0	0	0

ATTND	AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	168	3731420	22211	1	24144	24144	0	0	0	0	0	0	0	0	0	0	0	0
50-54	644	14333150	22256	131	2980184	22749	0	0	0	0	0	0	0	0	0	0	0	0
55-59	297	6367365	21439	339	7747638	22854	41	1000815	24410	0	0	0	0	0	0	0	0	0
60-64	69	1442801	20910	81	1813369	22387	39	929631	23837	3	74437	24812	1130	24206882	21432	0	0	0
65-69	9	184700	20522	12	252803	21087	6	143785	23964	12	269306	22442	75	1565559	20861	0	0	0
70-74	1	17791	17791	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1188	26077227	21951	564	12818138	22727	86	2074231	24119	15	343743	22916	16341	286406293	17527	0	0	0

ALL AGE AND SERVICE ITEMS ARE IN COMPLETED YEARS

CONNECTICUT TEACHERS' RETIREMENT SYSTEM
 GROUPING BY ATTAINED AGE AND SERVICE AS OF 7/ 1/79
 FEMALES

S E R V I C E G R O U P I N G S

ATTND AGE	0				1				2				3				4			
	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG		
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
25-29	171	995023	5819	681	6394562	9390	336	3320869	9884	97	1016063	10475	1	11862	11862	0	0	0		
30-34	170	1096300	6414	672	6761509	10092	663	7123472	10744	666	7278515	10929	630	7185088	11405	0	0	0		
35-39	92	629632	6844	285	3250942	11407	206	2378797	11548	163	1962619	12041	166	2013543	12170	0	0	0		
40-44	65	429304	6605	253	2817258	11135	189	2311795	12232	153	1872460	12238	121	1603967	13256	0	0	0		
45-49	51	316089	6198	151	1700298	11260	127	1511421	11901	104	1287736	12382	106	1342849	12668	0	0	0		
50-54	28	173750	6205	89	977909	10988	67	803675	11995	48	615353	12820	74	980501	13250	0	0	0		
55-59	8	63189	7899	38	445475	11723	18	209857	11659	28	405735	14491	21	308399	14686	0	0	0		
60-64	4	39861	9965	2	27027	13514	6	53549	8925	9	112822	12536	13	165732	12749	0	0	0		
65-69	1	9270	9270	1	9100	9100	5	66111	13222	0	0	0	0	0	0	0	0	0		
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	590	3746418	6350	2172	22404080	10315	1617	17779546	10995	1268	14551303	11476	1135	13650880	12027	0	0	0		

ATTND AGE	0-4				5-9				10-14				15-19				20-24			
	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG		
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20-24	1286	11738379	9128	2280	28460719	12483	1576	24291841	15414	1	16406	16406	0	0	0	0	0	0		
25-29	2801	29458884	10517	2704	37109810	13724	1267	21508353	16976	479	8746218	18259	300	5730624	19102	0	0	0		
30-34	912	10235533	11223	791	11778890	14891	680	11520472	16942	491	9119899	18574	377	7042014	18679	0	0	0		
35-39	781	9034784	11568	723	10816286	14960	802	13720694	17108	448	8150815	18154	308	5644494	18326	0	0	0		
40-44	539	6150393	11426	586	8680714	14814	655	11259496	17108	467	8608637	18434	306	5614546	18348	0	0	0		
45-49	306	3551188	11605	391	5886698	15055	413	7225144	17494	359	6746823	18925	149	2801183	18800	0	0	0		
50-54	113	1432855	12678	164	2507913	15292	138	2417735	17520	175	3319660	18925	37	6527223	17641	0	0	0		
55-59	74	798991	11735	33	532134	16125	24	442854	18452	33	568897	17239	0	0	0	0	0	0		
60-64	10	123420	12342	4	62222	15556	3	39766	13255	0	0	0	0	0	0	0	0	0		
65-69	0	0	0	1	14060	14060	0	0	0	0	0	0	0	0	0	0	0	0		
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	6782	72132227	10636	7677	105849446	13788	5558	92426355	16629	2453	45269665	18455	1477	27485584	18609	0	0	0		

ATTND AGE	25-29				30-34				35-39				40+				TOTAL			
	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG		
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1286	11738379	9128		
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5081	57919603	11399			
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5193	71653590	13798			
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3318	51068245	15391			
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2733	43345674	15860			
45-49	213	4106403	19279	1	20021	20021	0	0	0	0	0	0	0	0	2733	45271849	16556			
50-54	245	4725287	19287	143	2840019	19860	0	0	0	0	0	0	0	0	2322	40397286	17398			
55-59	166	3162858	18692	133	2569172	19317	57	1143050	20054	0	0	0	0	0	1632	29308497	17959			
60-64	105	1902992	18124	63	1155324	18338	51	1015653	19934	25	498284	19931	749	13759685	18371	0	0	0		
65-69	28	496205	17722	21	3798889	18090	11	190940	17358	33	666348	20192	191	3460078	18116	0	0	0		
70-74	0	0	0	0	0	0	0	0	0	4	69433	17358	8	123259	15407	0	0	0		
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	757	14333745	18935	361	6964425	19292	119	2350643	19753	62	1234065	19904	25246	368046145	14578	0	0	0		

ALL AGE AND SERVICE ITEMS ARE IN COMPLETED YEARS

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

GROUPING BY ENTRY AGE AND SERVICE AS OF 7/ 1/79

MALES

S E R V I C E G R O U P I N G S

ENTRY AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG
0-19	0	0	1	10002	10002	0	2	2445576	10319	201	2187474	10883	0	4	2142398	11457	0	0
20-24	58	359992	6207	274	2639003	9631	237	2445576	10319	201	2187474	10883	187	2142398	11457	0	0	0
25-29	52	341813	6573	268	2870161	10710	206	2356091	11437	163	2020138	12393	149	1967087	13202	0	0	0
30-34	30	206853	6895	115	1479139	12862	73	1066040	14603	62	941828	15191	45	692054	15379	0	0	0
35-39	13	83638	6434	32	531395	16606	19	351127	18480	20	415259	20763	22	405287	18422	0	0	0
40-44	10	133880	13338	17	366262	21545	10	153180	15318	14	292389	20885	12	268725	22394	0	0	0
45-49	4	37045	9261	13	195063	15005	10	160104	16010	13	241434	18572	4	77357	19339	0	0	0
50-54	2	29554	14777	14	191496	13678	3	51236	17079	2	31675	15838	3	71039	23680	0	0	0
55-59	1	9365	9365	6	97095	16183	1	11405	11405	1	30000	30000	3	67150	22383	0	0	0
60-64	2	17409	8705	1	13425	13425	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	172	1219049	7087	741	8393041	11327	659	6594759	11797	476	6160197	12942	425	5691097	13391	0	0	0

ENTRY AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG
0-19	1	10002	10002	0	2	29219	14610	2	32837	16419	0	0	0	0	0	0	0	0
20-24	957	9774443	10214	2073	28323158	13663	2145	36366620	16954	1101	219882318	19966	667	14425609	21628	0	0	0
25-29	838	9555290	11402	1102	16641166	15101	860	15086954	18473	850	17277692	20327	913	19203632	21034	0	0	0
30-34	325	4385914	13495	281	4899479	17436	334	6445943	19299	339	6886524	20314	270	5546050	20541	0	0	0
35-39	106	1786706	16856	139	2548310	18333	211	4292721	20345	166	3436093	20699	100	2120845	21208	0	0	0
40-44	63	1213936	19269	103	1935046	18787	130	2608632	20066	72	1440670	20009	32	624211	19507	0	0	0
45-49	44	711003	16159	60	1057201	17420	66	1213701	18389	19	371846	19571	12	264491	22041	0	0	0
50-54	24	375000	15625	28	459222	16401	16	308329	19271	3	60145	20048	0	0	0	0	0	0
55-59	12	215015	17918	11	203206	18473	8	142941	17868	0	0	0	0	0	0	0	0	0
60-64	3	30834	10278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2373	28058143	11824	3797	56066788	14766	3772	67295060	17841	2552	51488125	20176	1994	42184838	21156	0	0	0

ENTRY AGE	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG	EES SALARIES	AVRG
0-19	0	0	25-29	22538	0	2	50207	25104 <th>1</th> <th>17915</th> <th>17915 <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> </th>	1	17915	17915 <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th>	0	0	0	0	0	0	0
20-24	445	10029454	22538	292	6797175	23278	56	1381133	24663	8	193112	24139	8	140180	17523	0	0	0
25-29	548	11973164	21849	231	5144798	22272	26	604697	23258	7	150631	21519	575	96438024	17942	0	0	0
30-34	161	3383431	21015	35	742902	21226	3	70486	23495	0	0	0	1748	32360729	18513	0	0	0
35-39	30	606437	20215	4	83056	20764	0	0	0	0	0	0	756	14874168	19675	0	0	0
40-44	4	84741	21185	0	0	0	0	0	0	0	0	0	404	7907236	19572	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0	0	201	3618242	18001	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0	0	0	71	1202696	16979	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0	0	31	561162	18102	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0	0	3	30834	10278	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1188	26077227	21951	564	12818138	22727	86	2074231	24119	15	343743	22916	16341	286406293	17527	0	0	0

ALL AGE AND SERVICE ITEMS ARE IN COMPLETED YEARS

CONNECTICUT TEACHERS' RETIREMENT SYSTEM
 GROUPING BY ENTRY AGE AND SERVICE AS OF 7/ 1/79
 FEMALES

S E R V I C E G R O U P I N G S

ENTRY AGE	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	204	1205925	5911	921	8730509	9479	743	7555725	10169	652	7026863	10777	584	6630371	11353	0	0	0	0	0	0	0
25-29	148	951533	6429	511	5363971	10497	361	4102395	11364	217	2526569	11643	204	2459259	12055	0	0	0	0	0	0	0
30-34	88	601095	6831	261	2973504	11393	186	2196385	11809	156	1697970	12166	115	1527707	13250	0	0	0	0	0	0	0
35-39	64	426178	6659	242	2684319	11092	162	1974437	12188	123	1536564	12492	101	1310327	12974	0	0	0	0	0	0	0
40-44	49	298006	6082	132	1458228	11047	106	1250079	11793	73	892434	12225	92	1182013	12848	0	0	0	0	0	0	0
45-49	24	151361	6307	74	821777	11105	44	539220	12255	30	445769	14859	23	340532	14806	0	0	0	0	0	0	0
50-54	8	63189	7899	29	347555	11985	7	76112	10873	14	173566	12398	12	150162	12514	0	0	0	0	0	0	0
55-59	4	39861	9965	2	24217	12109	8	85193	10649	3	51568	17189	4	54509	13627	0	0	0	0	0	0	0
60-64	1	9270	9270	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	590	3746418	6350	2172	22404080	10315	1617	17779546	10995	1268	14551303	11476	1135	13650880	12027	0	0	0	0	0	0	0

ENTRY AGE	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	3104	31149393	10035	4264	55823593	13092	2393	38295790	16003	751	13843106	18433	505	9620085	19050	0	0	0	0	0	0	0
25-29	1441	15403727	10690	1137	16163766	14216	698	11798359	16903	403	7397340	18356	301	5501444	18277	0	0	0	0	0	0	0
30-34	806	9192661	11405	722	10819191	14985	727	12455596	17133	448	8139754	18168	316	5764340	18242	0	0	0	0	0	0	0
35-39	692	7931825	11462	677	9972969	14731	816	13918073	17056	444	8305183	18705	241	4485208	18611	0	0	0	0	0	0	0
40-44	452	5080760	11241	515	7619908	14796	558	9565729	17143	301	5640873	18740	98	1835507	18730	0	0	0	0	0	0	0
45-49	195	2298659	11708	258	3875884	15023	270	4669386	17383	90	1675015	18611	16	279000	17438	0	0	0	0	0	0	0
50-54	70	810584	11580	87	1296684	14904	86	1531112	17804	15	252378	16825	0	0	0	0	0	0	0	0	0	0
55-59	21	255348	12159	16	263391	16462	10	168310	16831	0	0	0	0	0	0	0	0	0	0	0	0	0
60-64	1	9270	9270	1	14060	14060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6782	72132227	10636	7677	105849446	13708	5558	92426355	16629	2453	45269655	18455	1477	27485584	18609	0	0	0	0	0	0	0

ENTRY AGE	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	EES	SALARIES	AVRG	TOTAL
0-19	2	40065	20033	2	39833	19917	0	0	0	0	0	0	6	132432	22072	11	228736	20794	0	0	0	0
20-24	353	6812890	19470	212	4196976	19797	80	1605206	20065	48	938940	19561	11710	162345979	13864	0	0	0	0	0	0	0
25-29	177	3315104	18729	98	1832603	18700	35	674025	19258	8	162693	20337	4298	62249061	14483	0	0	0	0	0	0	0
30-34	140	2598531	18561	76	661999	18789	4	71412	17853	0	0	0	3199	49703084	15537	0	0	0	0	0	0	0
35-39	74	1314141	17759	13	235014	17924	0	0	0	0	0	0	2957	46160413	15611	1935	29935791	15471	0	0	0	0
40-44	11	193014	17547	0	0	0	0	0	0	0	0	0	829	12821944	15467	829	12821944	15467	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0	0	258	3890758	15080	258	3890758	15080	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0	0	0	47	687049	14618	47	687049	14618	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0	0	2	23330	11665	2	23330	11665	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	757	14333745	18935	361	6964425	19292	119	2350643	19753	62	1234065	19904	25246	368046145	14578	0	0	0	0	0	0	0

ALL AGE AND SERVICE ITEMS ARE IN COMPLETED YEARS

SUMMARY OF DATA-BY-YEAR OF BIRTH - MALE

YOB	COUNT	AVE C S	AVE O S	AVE T S	AVE SAL	TOT T S	TOT SAL	TOT ECC
1908	1	22.60	0.00	22.60	24144.00	22.60	24144	22565
1909	7	27.50	.35	27.89	20594.06	195.20	144164	172087
1910	12	27.81	2.63	30.44	19098.17	365.30	229178	299646
1911	14	25.79	.93	26.72	20883.07	374.10	292363	320738
1912	12	26.03	.83	26.86	21166.92	322.30	254003	278282
1913	16	23.66	.94	24.58	21032.75	393.30	336524	353206
1914	29	23.64	.25	23.91	21974.21	693.50	637252	640380
1915	38	23.18	.76	23.94	18960.34	909.70	720493	750009
1916	46	23.16	1.23	24.39	20272.61	1122.00	932540	985495
1917	77	24.78	1.04	25.82	21959.91	1987.80	1690913	1854053
1918	108	24.18	.60	24.77	21024.76	2675.60	2271754	2368925
1919	123	24.81	.77	25.59	21139.02	3147.00	2597639	2768247
1920	176	24.26	.47	24.73	21136.03	4353.10	3719942	3913580
1921	190	24.80	.82	25.62	21138.82	4867.70	4016376	4358705
1922	242	24.10	.73	24.84	21536.64	6010.70	5211868	5431893
1923	278	23.97	.72	24.69	21438.76	6862.80	5959976	6182804
1924	312	23.35	.59	23.94	21458.69	7468.80	6695111	6788813
1925	299	22.53	.72	23.24	21385.41	6949.50	6334238	6255167
1926	337	22.98	.48	23.46	21391.94	7906.80	7209085	7103217
1927	346	21.02	.47	21.49	21089.55	7434.20	7296984	6582784
1928	388	20.85	.27	21.11	20942.83	8192.50	8125818	7189302
1929	401	19.74	.30	20.03	20995.47	8033.60	8419182	7084475
1930	411	19.66	.36	20.02	21015.75	8228.80	8637473	7268512
1931	454	18.56	.36	18.92	20341.21	8590.20	9234909	7462323
1932	411	18.53	.29	18.82	20947.73	7733.00	8609515	6821918
1933	390	17.44	.24	17.68	20852.76	6894.10	8132575	6011061
1934	383	16.81	.23	17.05	20511.16	6529.40	7855774	5606836
1935	417	16.42	.19	16.61	20541.56	6924.70	8565829	5947016
1936	405	15.65	.15	15.79	19826.84	6396.80	8029872	5302448
1937	416	14.99	.19	15.18	20271.13	6314.70	8432790	5314186
1938	440	14.14	.07	14.21	19721.52	6253.00	8677470	5083013
1939	448	14.08	.09	14.17	19397.95	6347.80	8690283	5052822
1940	415	13.01	.07	13.08	19032.02	5427.80	7898289	4287295
1941	521	12.29	.09	12.37	18660.26	6447.10	9721995	4993833
1942	572	11.44	.05	11.49	17920.46	7720.90	12042551	5780692
1943	719	10.70	.04	10.74	17289.01	7722.50	12430798	5618339
1944	616	9.75	.02	9.77	16456.52	6020.60	10137218	4217844
1945	755	8.91	.02	8.93	15709.65	6714.30	11860785	4600834
1946	775	8.26	.01	8.27	15015.95	6410.00	11617360	4239360
1947	896	7.66	.01	7.66	14373.17	6867.00	12878363	4409735
1948	690	6.68	.01	6.69	13588.02	4613.90	9375736	2835447
1949	598	5.71	.01	5.72	12983.82	3421.80	7764322	2030083
1950	532	4.81	.01	4.82	12181.46	2562.80	6480537	1465325
1951	432	4.14	0.00	4.14	11569.80	1786.80	4998155	987280
1952	375	3.23	0.00	3.23	10974.59	1211.20	4115471	642840
1953	268	2.41	0.00	2.41	10298.79	646.40	2760076	324001
1954	207	1.89	0.00	1.89	9935.72	352.10	2056694	193631
1955	157	1.39	0.00	1.39	9483.51	217.50	1488911	103264
1956	81	.92	0.00	.92	8254.50	74.40	668647	34233
1957	9	.85	0.00	.85	8586.50	3.40	34346	1449
1961	1	1.00	0.00	1.00	10002.00	1.00	10002	400
TOTALS	16341	13.20	.19	13.39	17526.85	218792.10	286406293	178340395

CONNECTICUT TEACHERS' RETIREMENT SYSTEM
 SUMMARY OF DATA BY YEAR OF BIRTH - FEMALE

7/1/79 VALN

YOB	COUNT	AVE C S	AVE O S	AVE T S	AVE SAL	TOT T S	TOT SAL	TOT ECC
1908	4	29.85	0.00	29.85	16080.00	119.40	64320	77796
1909	8	25.85	0.00	25.85	17072.50	206.80	140619	140619
1910	24	28.63	.32	28.95	18938.21	694.80	454517	520785
1911	31	27.49	.97	28.46	17588.06	882.20	545230	635894
1912	46	27.23	.71	27.94	18662.13	1285.30	858458	981628
1913	48	23.12	.44	23.56	17477.96	1130.90	838942	815371
1914	81	23.98	.83	24.81	18048.65	2010.00	1461941	1468480
1915	111	22.46	.60	23.06	18296.55	2559.30	2030917	1953262
1916	118	22.02	.80	22.83	18921.47	2693.60	2232734	2103514
1917	165	20.83	.43	21.26	18009.78	3507.50	2971614	2652311
1918	187	19.95	.67	20.61	18484.05	3854.70	3456518	3030650
1919	227	18.76	.71	19.47	18095.42	4420.50	4107661	3459609
1920	318	18.98	.40	19.37	18247.21	6160.90	5802614	4716871
1921	321	18.48	.49	18.97	18052.86	6090.40	5794969	4751813
1922	314	17.82	.48	18.30	17885.51	5746.20	5616051	4432317
1923	348	17.27	.47	17.74	17618.37	6173.00	6200794	4747203
1924	395	17.29	.41	17.70	17679.31	6990.30	6983326	5372057
1925	407	17.18	.41	17.59	17866.13	7159.80	7271513	5353174
1926	445	15.87	.43	16.30	17530.73	7253.30	7801173	5199064
1927	492	14.90	.28	15.18	17236.12	7469.40	8480171	5678344
1928	509	15.22	.35	15.57	17176.03	7924.90	8742600	5990359
1929	531	14.27	.30	14.57	16866.61	7737.80	8956172	5839012
1930	567	13.98	.36	14.26	16980.77	8082.60	9628096	6072226
1931	563	13.36	.30	13.67	16775.31	7694.00	9444501	5826728
1932	527	12.28	.30	12.58	16267.42	6628.50	8572929	4919433
1933	532	12.47	.33	12.80	16214.36	6807.70	8626041	5059881
1934	537	11.55	.18	11.73	16135.44	6297.20	8664732	4639044
1935	581	11.30	.19	11.49	16052.53	6677.40	9326522	4984389
1936	545	10.93	.15	11.08	15855.88	6037.40	8641454	4436142
1937	540	10.55	.15	10.70	15960.47	5780.70	8618656	4268575
1938	516	10.15	.11	10.25	15723.89	5290.70	8113529	3870397
1939	550	9.75	.11	9.86	15650.65	5424.90	8607859	3940328
1940	548	9.27	.07	9.34	15242.07	5117.90	8352652	3674228
1941	597	9.50	.12	9.61	15798.39	5739.20	9431640	4128306
1942	712	9.20	.06	9.26	15416.62	6596.10	10976632	4649932
1943	794	9.25	.05	9.31	15388.84	7389.20	12218737	5114463
1944	770	8.70	.06	8.76	14810.68	6747.40	11404225	4540771
1945	822	8.63	.02	8.64	14664.74	7103.90	11890013	4678378
1946	1039	8.31	.03	8.34	14163.14	8663.00	14715500	5600570
1947	1217	7.76	.02	7.78	13789.33	9465.30	16781612	5981115
1948	1158	7.12	.01	7.13	13331.93	8253.40	15438377	5074971
1949	1133	6.21	.00	6.21	12780.69	7038.10	14480519	4177938
1950	1105	5.37	.01	5.38	12220.54	5947.30	13512537	3411160
1951	1189	4.51	.00	4.51	11684.90	5367.90	13893343	2970790
1952	1088	3.51	.00	3.51	10955.15	3818.70	11919205	2013517
1953	828	2.64	.00	2.64	10396.92	2189.70	8608652	1110979
1954	721	1.98	.00	1.98	9719.11	1426.90	7007475	693700
1955	583	1.46	.00	1.46	9261.63	849.30	5399528	407230
1956	332	.94	.00	.94	8436.44	313.20	2800898	142177
1957	21	.82	.00	.82	7210.67	17.20	151424	7254
1958	1	1.00	.00	1.00	10042.00	1.00	10042	502
TOTALS	25246	9.71	.15	9.86	14578.39	248836.80	368046145	176846228

SUMMARY OF DATA BY YEAR OF TOTAL SERVICE - MALE

SERV	COUNT	AVE A A	AVE C S	AVE O S	AVE SAL
0	172	30.29	.60	0.00	7087.49
1	741	29.47	1.16	0.00	11326.64
2	559	29.45	2.15	0.00	11797.42
3	476	30.88	3.15	0.00	12941.59
4	425	31.56	4.18	0.00	13390.82
5	643	31.53	5.13	.01	13243.54
6	758	32.47	6.11	.01	14179.77
7	754	33.51	7.10	.01	14649.84
8	709	34.65	8.11	.01	15152.97
9	933	36.24	9.10	.02	16091.63
10	992	36.16	10.06	.04	16524.52
11	836	37.89	11.04	.06	17474.45
12	711	39.53	12.03	.07	18127.05
13	631	40.11	13.06	.05	18637.06
14	602	40.98	13.98	.12	19345.16
15	545	41.93	14.91	.18	19779.50
16	529	43.13	15.99	.12	19870.77
17	526	44.41	16.94	.19	20193.45
18	499	45.58	17.83	.28	20394.07
19	453	46.53	18.93	.20	20746.72
20	480	47.63	19.84	.30	20494.72
21	441	48.45	20.66	.48	21204.02
22	384	49.47	21.76	.39	21402.89
23	344	50.27	22.66	.52	21455.86
24	345	51.56	23.66	.52	21440.22
25	298	52.00	24.48	.72	21353.33
26	244	53.12	25.70	.53	21994.01
27	250	53.83	26.62	.65	22105.41
28	225	54.95	27.58	.72	22157.12
29	171	55.20	28.43	.89	22430.94
30	173	56.02	29.76	.61	22074.48
31	149	56.93	30.68	.65	23145.90
32	97	57.61	32.04	.36	22910.97
33	80	58.35	31.78	1.56	22801.11
34	65	59.06	32.68	1.70	23139.40
35	25	59.63	34.11	1.28	22816.72
36	30	59.96	35.31	1.07	25039.47
37	19	62.69	36.07	1.03	23851.11
38	7	61.88	35.51	2.73	22486.57
39	5	61.89	39.00	0.00	28410.40
40	3	67.39	37.67	2.33	19806.00
41	4	66.21	41.28	0.00	25305.25
42	5	66.77	42.26	0.00	24676.60
43	1	69.50	36.00	7.00	18641.00
45	1	69.34	36.00	10.00	20080.00
47	1	69.92	44.30	2.70	21000.00
TOTALS	16341	40.34	13.20	.19	17526.85

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

SUMMARY OF DATA BY YEAR OF TOTAL SERVICE - FEMALE

7/1/79 VALN

SERV	COUNT	AVE. A. A.	AVE. C. S.	AVE. O. S.	AVE. SAL.
0	590	30.92	.61	0.00	6349.86
1	2172	30.25	1.16	0.00	10314.95
2	1617	30.81	2.17	0.00	10995.39
3	1268	31.46	3.17	.00	11475.79
4	1115	32.65	4.24	.01	12027.21
5	1499	33.01	5.15	.01	12475.53
6	1614	33.68	6.16	.00	13143.27
7	1436	35.13	7.15	.01	13707.42
8	1458	36.42	8.13	.04	14372.24
9	1670	38.05	9.10	.04	15147.79
10	1587	39.32	10.07	.05	15671.32
11	1283	41.79	11.05	.08	16267.15
12	1008	43.01	12.09	.07	16935.62
13	922	44.11	13.01	.15	17456.61
14	758	44.94	14.01	.16	17835.26
15	590	46.00	14.94	.23	18117.91
16	555	47.94	15.79	.39	18522.92
17	500	48.52	16.74	.43	18624.50
18	436	49.93	17.75	.44	18394.49
19	372	50.28	18.79	.43	18730.17
20	367	50.34	19.70	.48	18505.89
21	315	50.86	20.57	.66	18531.97
22	318	52.17	21.55	.61	18760.96
23	256	52.44	22.48	.71	18583.24
24	221	52.81	23.16	1.01	18701.62
25	188	53.47	24.20	1.01	18602.05
26	179	54.18	25.42	.79	18735.17
27	153	54.19	25.77	1.45	18956.16
28	129	54.31	27.34	.90	19299.05
29	108	55.34	28.28	.99	19380.50
30	104	56.13	29.22	.98	19181.58
31	85	56.60	30.55	.68	19164.68
32	69	57.52	31.14	1.08	19547.14
33	47	57.92	32.96	.42	18780.45
34	56	58.53	33.14	1.18	19005.52
35	34	58.73	34.57	.74	20402.03
36	23	61.31	35.20	1.22	19544.04
37	34	61.29	36.32	.89	19610.62
38	14	61.68	38.07	.18	19660.21
39	14	62.65	39.14	0.00	18961.21
40	11	63.05	39.28	.94	19717.91
41	11	64.37	39.72	1.36	18174.18
42	4	66.73	39.78	2.50	22733.75
43	7	65.34	43.07	0.00	19670.71
44	13	66.14	43.82	.23	21167.46
45	6	67.11	45.28	0.00	18775.67
46	2	67.92	46.30	0.00	21542.50
47	1	70.42	47.00	0.00	16150.00
48	1	67.75	48.00	0.00	15420.00
49	3	69.22	49.17	0.00	22239.00
50	3	70.11	50.13	0.00	19806.33
TOTALS	25246	38.95	9.71	.15	14578.39