William M. Mercer– Meidinger Incorporated

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

REPORT ON THE ACTUARIAL VALUATION AS OF JUNE 30, 1984

January, 1985

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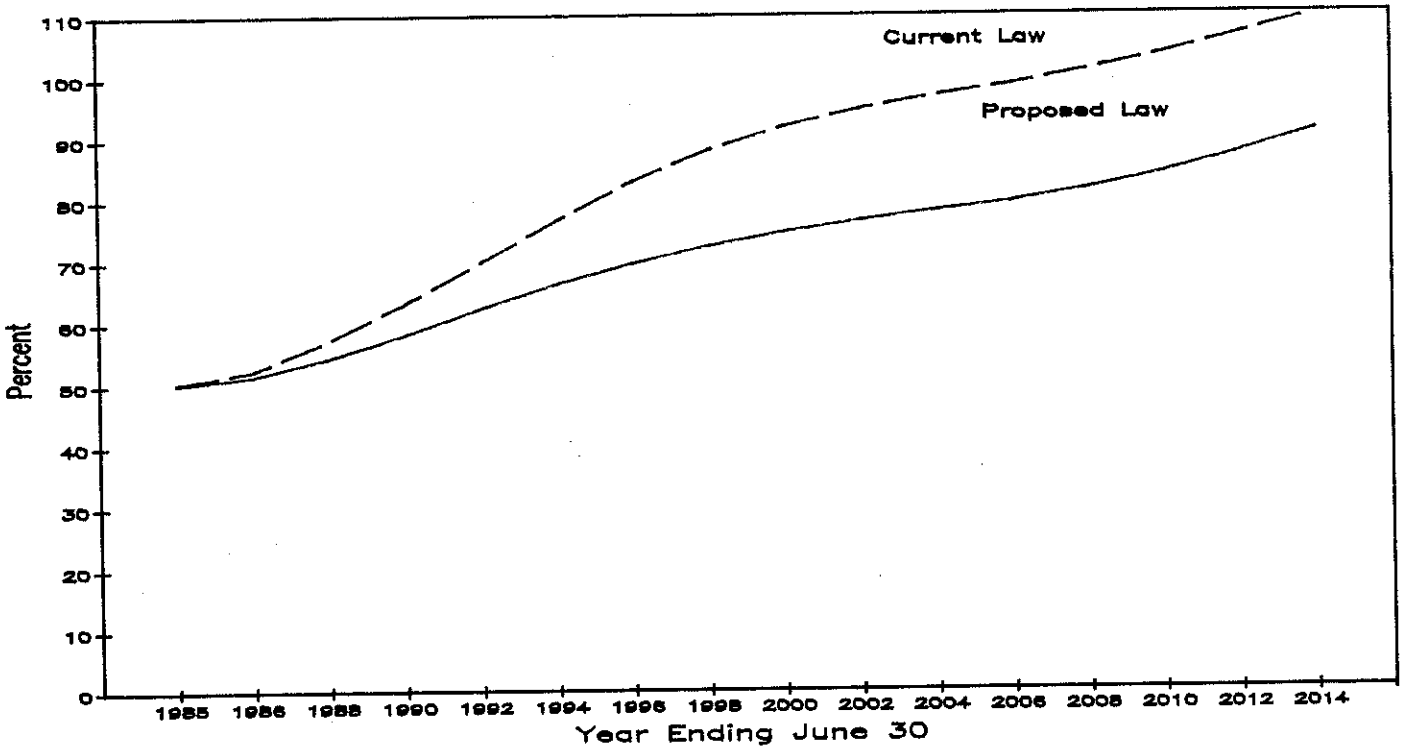
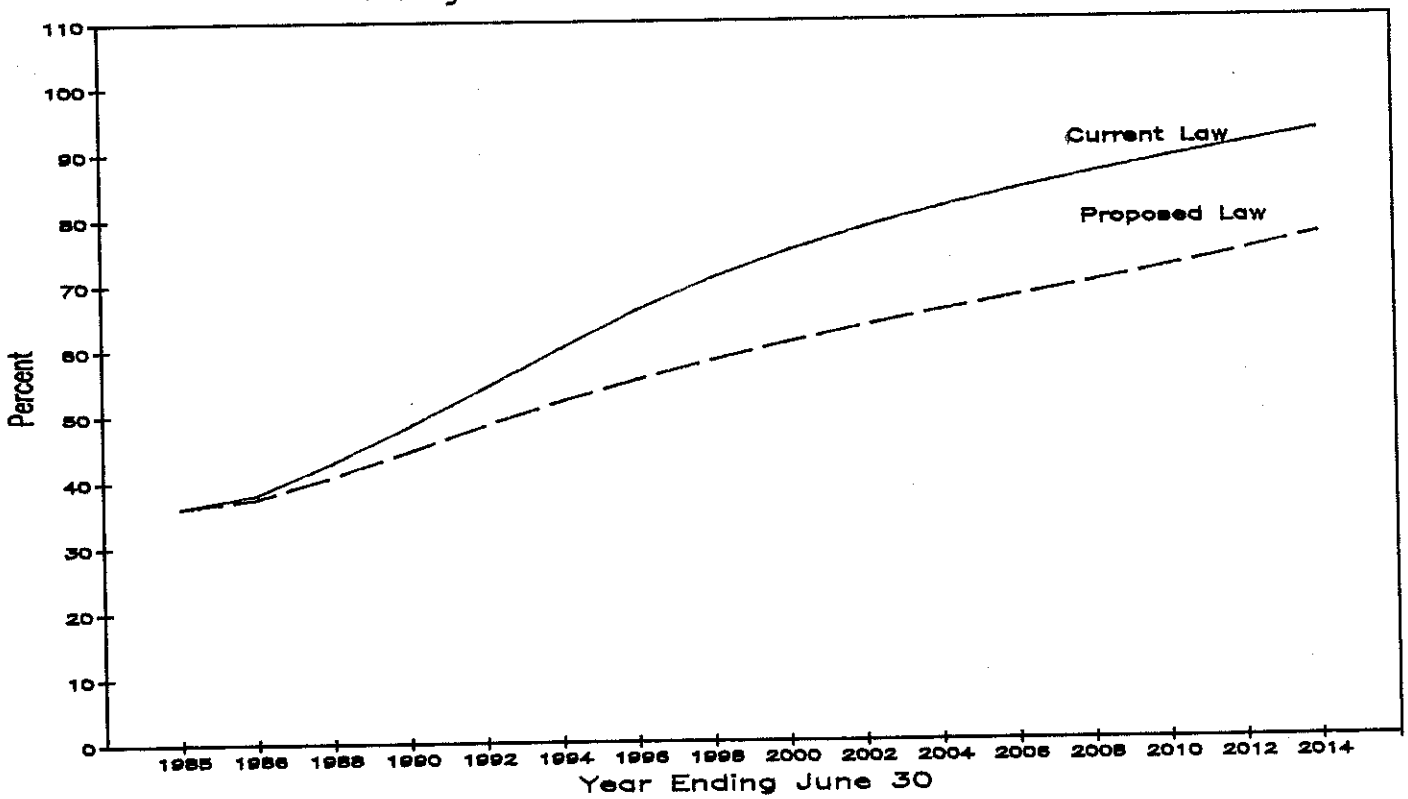
Projected Funded Status of the System

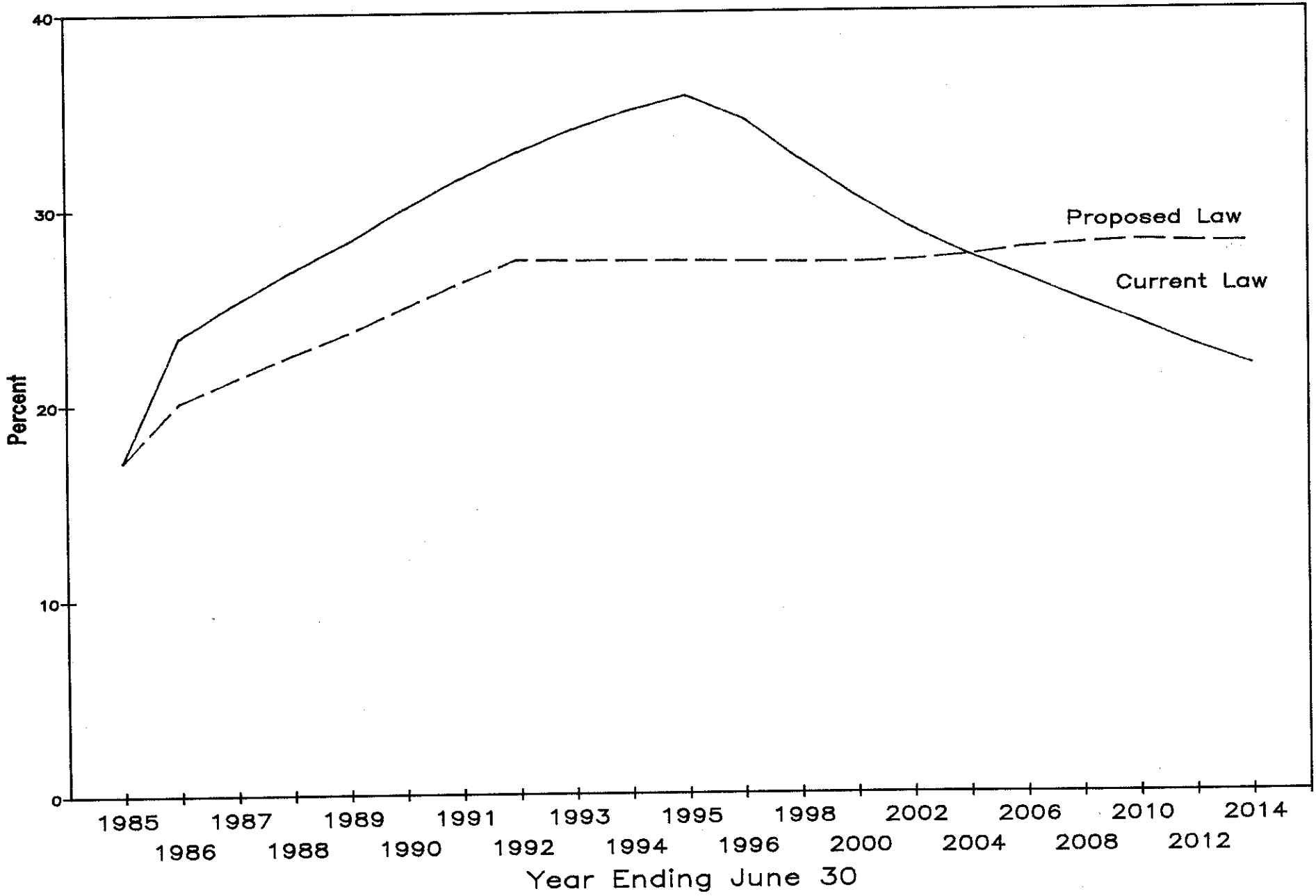
Earned Benefit Measure



Projected Benefit Measure



State Contributions as a Percent of Payroll



SECTION I

REPORT SUMMARY AND ACTUARIAL CERTIFICATION

William M. Mercer-Meidinger, Inc. was retained by the Connecticut Teachers' Retirement Board to prepare an actuarial valuation of the assets and liabilities of the Connecticut Teachers' Retirement System as of June 30, 1984. The purpose of the valuation was to determine:

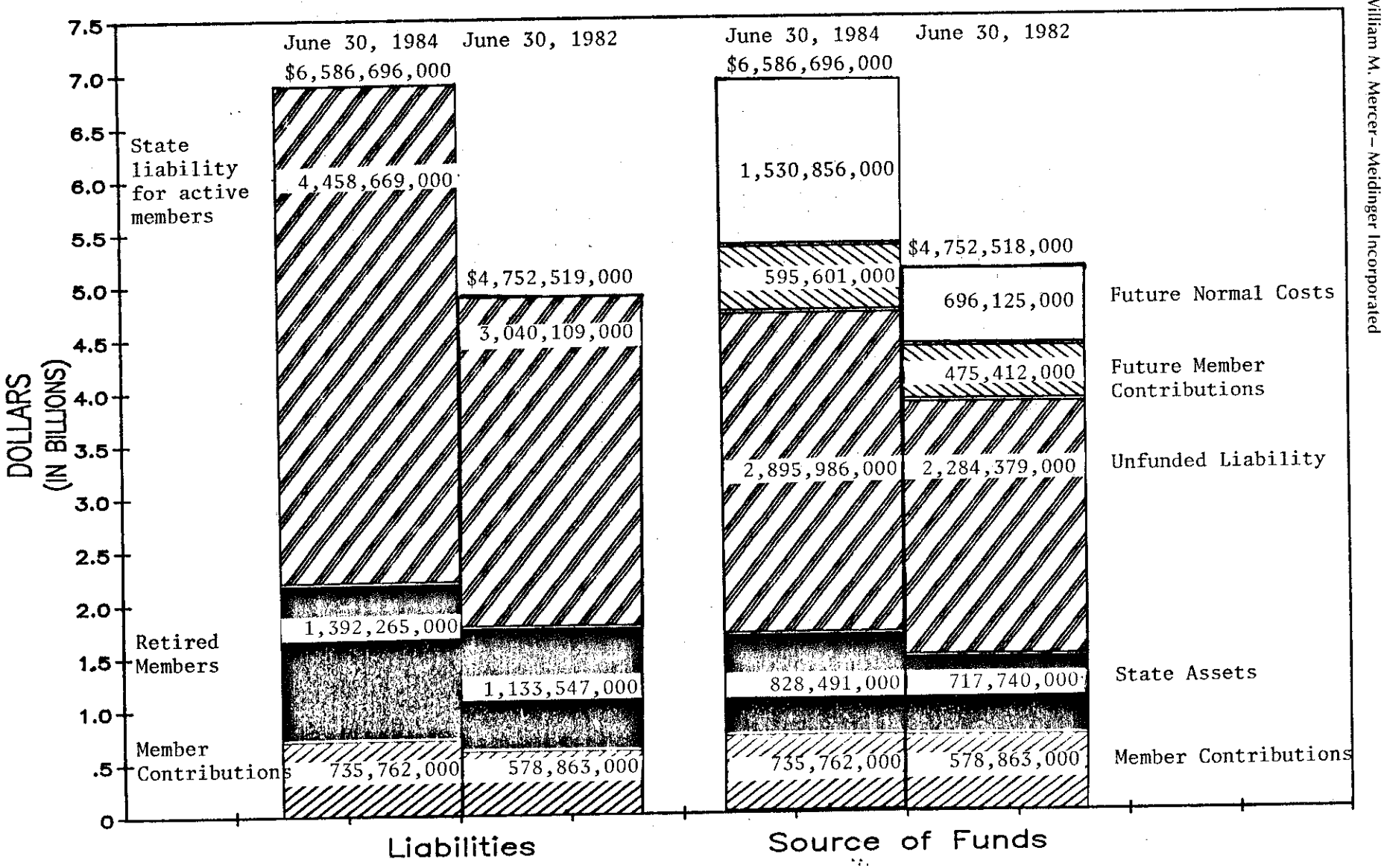
1. the normal cost to meet the actuarial cost of current service;
2. the unfunded actuarial accrued liability;
3. the funded status of benefits earned to date.

A. Report Summary

	Current Valuation (6/30/84)	Prior Valuation (6/30/82)	Percent Change
1. Normal Cost	$138,192,000	$ 69,601,000	98.5%
2. Unfunded actuarial accrued liability	2,895,986,000	2,284,380,000	26.8%
3. Assets			
a. Market value	1,696,074,000	1,154,963,000	46.9%
b. Valuation assets	1,564,253,000	1,296,603,000	20.6%
4. Actuarial present value of benefits earned to date			
a. At current average salary	3,138,296,000	2,600,567,000	20.7%
b. At projected final average salary	4,398,687,000	3,244,804,000	35.6%
5. Current annual salaries	886,409,000	769,500,000	15.2%
6. Number of members			
a. Active members	38,418	39,489	(2.7%)
b. Pensioners, beneficiaries and survivors receiving benefits	11,624	10,772	7.9%
c. Terminated vested members not yet receiving benefits	548	739	(25.8%)
d. Total	50,590	51,000	(0.8%)

CONNETICUT TEACHERS RETIREMENT SYSTEM

Actuarial Balance Sheet



William M. Mercer–Meidinger Incorporated

C. Actuarial Certification

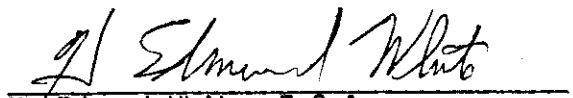
The information and valuation results shown in this report are, to the best of my knowledge, complete and accurate and are based upon:

1. Member census data as of June 30, 1984 submitted by the Board. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.

2. Financial data as of June 30, 1984 submitted by the State Treasurer's Office. This data was not audited by us, but appears to be sufficient and reliable for purposes of the report.

3. Actuarial assumptions which, in the aggregate, are reasonably related to the experience of the plan and to reasonable expectations and which represent my best estimate of anticipated experience under the plan.

4. Actuarial methods as stated in the report and my interpretation of plan provisions as summarized in the report.



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SECTION II

COMMENTS ON THE VALUATION

A. Changes in plan provisions, actuarial assumptions and cost methods from June 30, 1982 valuation:

1. Plan Changes. No plan changes since the June 30, 1982 valuation affect the calculated cost of the plan.

2. Actuarial Assumptions

a. Inflation assumption. This assumption is not explicitly included in the statement of assumptions, but it does underlie the interest, salary increase, and cost-of-living increase assumptions. It was changed from 6% to 5% to produce a more realistic relationship to the interest assumption, which remains 8%.

b. Salary increase assumption. Salary increases for the period July 1, 1980 - June 30,1984 were compared with cost-of-living increases for that period. The comparison showed that salary increases were about four percentage points more than expected in relation to inflation. The Board concluded that this in part compensated for small salary increases in the past and in part was the result of salary increases that are more economically competitive. This pattern of the past few years is expected to continue a few more years. Thus, economically competitive increases of inflation plus 3 points for the first 15 years of a teacher's career and inflation plus 1/2 point thereafter are assumed. Furthermore, all salary increases for July 1, 1984 through June 30, 1988 are assumed to be an additional 2 points higher.

c. Interest Assumption. Based on historical rates of return and on the asset allocations targeted to be achieved by June 30, 1989, the expected return of the portfolio is 3.72 points above inflation. Thus, an investment return assumption of inflation plus 3 points should prove conservative over the next 10 years.

d. Termination assumption. Experience for the past two years showed significantly higher turnover rates after 10 years of service than prior studies. This is expected to continue. Accordingly, the assumption was changed from a 1% to a 2% annual rate of termination after ten years.

e. Disability incidence assumption. Experience for the past two years showed a much lower incidence of disability than had been assumed. Accordingly, rates were modified to be intermediate between this experience and the prior assumption.

B. Analysis of Increase in Unfunded Actuarial Accrued Liability and Normal Cost:

		Unfunded Liability (1,000s)	Normal Cost (1,000s)
1.	June 30, 1982	$2,284,380	$ 69,601
2.	Expected increase in unfunded liability because required contribution was less than full actuarial cost	187,794	-
3.	Expected increase in normal cost from pay increases	-	8,603
4.	Increase from Public Act 82-91	27,389	
5.	Expected 6/30/84 amounts	2,499,563	78,204
6.	Increase from experience	-*	40,224 *
7.	Increase from assumption changes	396,423	19,764
8.	Actual 6/30/84 amounts	2,895,986	138,192

* Pay increases for the two year period were roughly 9.5% more than assumed in the 1982 valuation.

The effect of this was to increase the present value of benefits for active members by roughly 9.5%, or $450,000,000 (see page 9, items 1.a plus 1.e). Since all of the increase is funded through the normal cost under the actuarial cost method being used, it is increased roughly by $40,000.

SECTION III

ACTUARIAL VALUATION RESULTS

This section of the report provides further information with respect to the valuation of plan assets and liabilities. First, a financial summary of the assets is shown for the period covered by this report. This is followed by an exhibit showing the development of assets used for purposes of the valuation. Next, detailed information is shown with respect to the determination of the unfunded actuarial accrued liability and the normal cost. Finally, information is presented regarding the funded status of the System.

The valuation of the benefits of a retirement plan involves a determination of the present value of the future benefit amounts that will be paid under the plan. The usual technique, and the one employed in this valuation, is to determine this present value with respect to only present members -- active, retired, survivor and terminated with vested rights. No specific allowance is made for future entrants to the plan. This valuation technique does, however, require a projection of the future amounts that may become payable to each member, a determination of the probability that each such payment will have to be made, and a computation of the discounted value of all probable future payments.

Once the discounted value of all probable future payments for current members has been calculated, the actuarial cost method used allocates a portion of the discounted value to the past and labels it "actuarial accrued liability" and allocates the remainder of the discounted value to the future and labels it the "actuarial cost of current and future service." Once the actuarial cost of current and future service has been calculated the next calculation is to determine the portion of this actuarial cost which is the normal cost for the current fiscal year.

The normal cost for death benefits for active members is handled in a manner different from the method explained above. This normal cost is simply the lump sum value of benefits from expected deaths of active members during the fiscal year.

A. Financial Summary

1. Reconciliation

	1982-1983	1983-1984
a. Market value of fund beginning of year	$1,154,963,000	$1,635,035,000
b. Contributions		
. State (excluding Health Insurance)	96,798,000	120,163,000
. Teacher (and Health Insurance)	53,166,000	56,385,000
c. Benefit Payments		
. Pensions	(103,791,000)	(114,558,000)
. Refund of contributions	(10,824,000)	(9,730,000)
. Survivorship benefits	(2,293,000)	(2,735,000)
d. Net investment results	447,016,000	11,514,000
e. Market value of fund, end of year	$1,635,035,000	$1,696,074,000

2. Net rate of return at market — 37.8% — 0.7%

3. Change in CPI for Social Security (1st quarter to 1 quarter) — 3.5% — 3.6%

4. Summary of Investments (Amounts in Millions)

	Market Value 6/30/82		Market Value 6/30/84		6/30/89 Objective
	Amount	%	Amount	%	%
a. Equity Fund	410.3	35.5%	581.1	34.3%	40%
b. Real Estate Fund	34.0	2.9	120.8	7.1	15
c. Total Equity	444.3	38.4	701.9	41.4	55
d. Fixed Income Fund	613.2	53.1	598.5	35.3	25
e. G.I.C.s	31.8	2.7	44.0	2.6	3
f. Yankee Mac Fund	60.8	5.3	186.5	11.0	12
g. Real Estate Fund	1.8	0.2	2.9	0.1	
h. Total Fixed	707.6	61.3	831.9	49.0	40
i. Cash and STIF	3.1	0.3	150.9	8.9	5
j. Total Investments	1,155.0	100.0	1,684.7	99.3	100
k. Accrued Income	N/A	-	11.4	0.7	N/A
l. Total Market Value	1,155.0	100.0%	1,696.1	100.0%	100%

B. Development of Valuation Assets

		1982 - 1983	1983 - 1984
1.	Valuation assets beginning of year	$1,296,603,000	$1,401,881,000
2.	Contributions	149,964,000	176,548,000
3.	Benefit payments	116,908,000	127,023,000
4.	Net of transactions	33,056,000	49,525,000
5.	Expected rate of return (change in CPI for Social Security +2.0%)	5.5%	5.6%
6.	Expected investment results = (5)x((1)+1/2(4))	72,222,000	79,892,000
7.	Expected valuation assets end of year (1)+(4) +(6)	$1,401,881,000	$1,531,298,000
8.	Market value June 30, 1984		1,696,074,000
9.	Valuation assets = .8x(7) + .2x(8)		1,564,253,000

C. Determination of Unfunded Actuarial Accrued Liability

1.	Unfunded actuarial accrued liability beginning of year	$2,284,380,000	$2,410,980,000
2.	Plus normal cost	69,601,000	73,777,000
3.	Plus interest on (1) and (2) for one year at 5.5%/5.6%	129,469,000	139,146,000
4.	Less contributions	96,798,000	120,163,000
5.	Less interest on contributions to end of year	3,305,000	4,177,000
6.	Additional unfunded actuarial accrued liability effective July 1, 1983 on account of Public Act No. 82-91	27,633,000	-
7.	Increase due to change in assumptions	-	396,423,000
8.	Unfunded actuarial accrued liability end of year	$2,410,980,000	$2,895,986,000

D. Determination of the Normal Cost

1. Present value of retirement, termination and disability benefits

a.	Member contributions	$ 735,762,000 *	
b.	Retired members	1,378,738,000	
c.	Survivors of deceased members	9,902,000	
d.	Terminated members	13,527,000	
e.	Active members	4,448,767,000	
f.	Total		$6,586,696,000

2. Actuarial Accrued liability

a.	Valuation assets	$1,564,253,000	
b.	Unfunded actuarial accrued liability	2,895,986,000	
c.	Total = actuarial accrued liability		$4,460,239,000

3.	Discounted value of future member contributions	595,601,000
4.	Actuarial cost of present and future service for active members (1) - (2) - (3)	$1,530,856,000
5.	Present value of future salaries of current members	9,926,680,000
6.	Normal cost accrual rate: (4) / (5)	15.4216%
7.	Current annual salaries of members	886,409,000
8.	Normal cost for retirement, termination and disability benefits: (6) x (7)	136,699,000
9.	Normal cost for death benefits for active members	1,493,000
10.	Total normal cost: (8) + (9)	$ 138,192,000

* Shown separately in this report for consistency with presentation of liability numbers in the next section. In previous reports, member contributions were included in the terminated and active member items.

E. Analysis of Funded Status of System

In evaluating the funded status of a public system, two measures are generally looked at:

- What percentage of the liabilities are covered by the assets, and are coverage ratios improving satisfactorily? (There is not a consensus as to what the coverage ratios ought to be.)

- What is the ratio of unfunded liabilities to payroll? The point of this test is that a plan can be financially healthy even if the unfunded liability is increasing in dollars, provided it is not increasing as a percentage of payroll of plan members. The reason is that payroll of plan members is one measure of the State's ongoing ability to pay the required contributions. As indicated on page 12, in reviewing these ratios, one has to know whether pay increases are more, less or the same as inflation and whether the number of members is stable, increasing or decreasing.

1. Liability Coverage Percentages

Liabilities of public plans are calculated in three separate ways:

a. Level Percentage of Pay Measure:

For purposes of determining contributions to public plans, the actuarial liability is traditionally calculated as the reserve that is accumulated by contributing every year for every teacher the level percentage of pay that is required for each teacher to fully fund his/her pension on the date he/she retires. Thus, the $4,460,239,000 actuarial accrued liability shown on the previous page as item D.2.c. is shown on the following page as the 6/30/84 total liability under the level Percentage of Pay Measure.

b. For purposes of evaluating how well funded is a public plan, a different calculation is used. For this purpose, the value of normal retirement benefits earned to date is used (whether or not these benefits are vested). Two primary variations of this calculation are used:

- Earned Benefit Measure: The value of the normal retirement benefit earned to date is based on actual pay history.

- Projected Benefit Measure: The value of the normal retirement benefit earned to date is based on projected pay at retirement.

The following table shows the percentage of liabilities (for all three liability measurements) covered by plan assets. The percentages are shown for the plan as a whole, and separately for the primary classes of liabilities. These classes are member contributions, retired members, and active members. Two sets of numbers are shown for 1984 for the Level Percentage and Projected Measures because they are affected by the assumption change in 1984. The Earned Benefit Measure numbers are not affected by the change.

Level Percentage of Pay Measure

Date	Liabilities (Millions) Members Contribution (1)	(2) Retired Members	(3) Active Members	Total	Assets (4) (Millions)	Coverage Ratios Members Contribution	Retired Members	Active Members	Total
6/30/80	$490.8	$ 904.3	$1,472.7	$2,867.9	$1,049.3				37%
6/30/82	578.9	1,133.5	1,868.6	3,581.0	1,296.6				36%
6/30/84 (Old Assump.)	735.8	1,392.3	1,935.8	4,063.8	1,564.3				38%
6/30/84 (New Assump.)	735.8	1,392.3	2,332.2	4,460.3	1,564.3				35%

Earned Benefit Measure

6/30/80	$490.8	$ 904.3	$ 665.0	$ 2,060.1	$1,049.3	100%	62%	0%	51%
6/30/82	578.9	1,133.5	888.2	2,600.6	1,296.6	100%	63%	0%	50%
6/30/84	735.8	1,392.3	1,010.3	3,138.3	1,564.3	100%	60%	0%	50%

Projected Benefit Measure

6/30/80	$490.8	$ 904.3	$1,208.6	$ 2,603.7	$1,049.3	100%	62%	0%	40%
6/30/82	578.9	1,133.5	1,532.4	3,244.8	1,296.6	100%	63%	0%	40%
6/30/84 (Old Assump.)	735.8	1,392.3	1,906.3	4,034.3	1,564.3	100%	60%	0%	39%
6/30/84 (New Assump.)	735.8	1,392.3	2,270.7	4,398.7	1,564.3	100%	60%	0%	36%

(1) Contributions of active members and members with deferred benefits.
(2) Retired members, beneficiaries, co-participants, and survivors.
(3) State liability for active members and members with deferred benefits.
(4) Assets shown are the valuation assets as used in the actuarial valuation to determine contributions.

Comment: Total funded ratios were expected to stay level for the time period shown above because contributions for 1983-1984 were still only 45% of full actuarial cost.

In the future, ratios should increase each year more then they did in the prior year, because the contribution percentage increases each year.

2. Ratio of Unfunded Liability to Member Payroll

Level Percentage of Pay Measure

Date	Member Payroll (Millions)	Unfunded Liability (Millions)	Ratio
6/30/80	$692.5	$1,818.6	263%
6/30/82	769.5	2,284.4	297%
6/30/84 (Old Assump.)	886.4	2,499.6	282%
6/30/84 (New Assump.)	886.4	2,896.0	327%

Earned Benefit Measure

6/30/80	$692.5	$1,010.8	146%
6/30/82	769.5	1,304.0	169%
6/30/84	886.4	1,574.0	178%

Projected Benefit Measure

6/30/80	$692.5	$1,554.4	224%
6/30/82	769.5	1,948.2	253%
6/30/84 (Old Assump.)	886.4	2,470.0	279%
6/30/84 (New Assump.)	886.4	2,834.4	320%

Comment: The increasing percentages reflect both the increase in unfunded liabilities at a rate greater than inflation and the decrease in the number of active members. Because of these factors, the above ratios don't give a precise picture of the financial health of the System. Even so, the significant increase in ratios suggests that State contributions, as a percent of payroll, are not high enough yet.

SECTION IV

ACTUARIAL ASSUMPTIONS AND METHODS, PLAN SUMMARY AND PARTICIPANT DATA

This section of the report presents the actuarial assumptions and methods used in the valuation, a summary of the major provisions of the plan, and a reconciliation of member data used in the calculations.

The actuarial assumptions used in this valuation are the same as in the previous valuation except for the termination of employment, salary increase and disability increase assumptions. The changes and their reasons are discussed in "Comments on the Valuation", Section II of this report.

A. Actuarial Assumptions

1. Investment return — 8%, compounded annually

2. Mortality — The Unisex Pension Table for 1984, set back five years in age for females.

3. Termination of employment rates, based on prior System experience, as follows:

Years of Service	Rate
1-5	10%
6-10	6%
11 and over	2%

4. Salary increases — Annual increases of 8% for first 15 years of service; annual increases of 5-1/2% thereafter, plus an additional 2% for all years of service July 1, 1984 through June 30, 1988.

5. Cost-of-living increases — Annual increases of 5% in pensions after retirement.

6. Retirement age — It is assumed that teachers will retire when first eligible for normal retirement benefits as follows:

- after 35 years of service if before age 60
- at age 60 if after 20 years of service and before 35 years of service
- at 20 years of service if after age 60 and before age 70
- at age 70 if after 10 years of service and before 20 years of service
- if currently eligible to retire on the valuation date under one of the age and service combinations cited above, it is assumed that the teacher will retire on the following June 30th.

7.	Disability incidence	Based on experience of System. Sample rate are: Age 30 .00059 Age 40 .00105 Age 50 .00262
8.	Active member death benefit	85% of males are married with a spouse 3 years younger, 50% of females are married with a spouse 3 years older; wives have one child at age 25 and second child at age 27.
9.	Expenses	Paid directly by the State.
10.	Valuation of assets	The valuation assets are updated with actual contributions and benefit payments, and with interest at a rate equal to the Cost-of-Living Adjustment to Social Security benefits (as determined under prior law for June adjustments), plus two percentage points, for the two year period. This tentative amount is compared with the market value of assets and 20% of the difference is recognized. The starting value used with this technique is the market value of assets as of June 30, 1980.

B. Actuarial Cost Method

The actuarial cost method used in the valuation is known as the frozen entry age actuarial cost method. To determine the initial unfunded actuarial accrued liability as of June 30, 1980 under this method, a normal cost was first determined for each member which is the level percentage of the member's salary needed annually as a contribution from entry age to retirement age to fund her projected benefits. The initial unfunded actuarial accrued liability is the accumulated value of such normal costs for each member from entry age to initial valuation date, less any plan assets. This initial unfunded actuarial accrued liability is redetermined only for changes in plan benefits or actuarial assumptions and so is labeled the "frozen" initial actuarial accrued liability.

The unfunded actuarial accrued liability in subsequent valuations is the prior unfunded plus normal cost less contributions, with interest at a rate equal to the Cost-of-Living Adjustment to Social Security benefits plus two percentage points. For the purpose of determining required contributions by the State, the unfunded actuarial accrued liability is projected forward using the valuation rate of interest.

The normal cost rate is (a) the discounted value of projected benefits less the unfunded actuarial accrued liability, the actuarial value of assets and the discounted value of future member contributions, divided by (b) the present value of future salaries for current members. The normal cost is the normal cost rate multiplied by current salaries of members under assumed retirement age.

Actuarial gains and losses from sources other than inflation are automatically spread over the future service of current members under this method. Actuarial gains and losses from inflation are funded through the unfunded actuarial accrued liability.

The active member's death benefit was valued on a one year term cost basis which produced an annual cost equal to the lump sum value of benefits from expected deaths of active members during the fiscal year.

C. Summary of Major Plan Provisions

An actuarial valuation involves the projection of the amount and timing of future benefit payments. Summarized below are the principal provisions of the plan which were used to estimate future benefit payments.

1. Covered Employees

Any teacher, principal, superintendent or supervisor engaged in service of public schools plus professional employees at state schools of higher education if they choose to be covered.

2. 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.

3. Average Annual Salary

Average of annual salary received during three years of highest salary.

4. 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 military service may be purchased at retirement if the member pays one-half of the cost.

5. 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.

6. Early Retirement

Eligibility: At any age after the completion of 25 years of service including 20 years of Connecticut service or at or after age 55 after the completion of 20 years of service including 15 years of Connecticut service, with the last 5 years in Connecticut.

Benefit: Actuarially reduced normal retirement benefit.

7. 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.

8. Disability Retirement

Eligibility: Disability prior to age 60 and after 5 years of service in Connecticut if not incurred in performance of duty and without regard to service if incurred in performance of duty.

Benefit: Lesser of:

- 3% times credited service to date of disability times average annual salary;
- 1 2/3% times credited service projected to 60 times average annual salary;
- 50% times average annual salary;
- 75% times average annual salary less initial Social Security benefit.

9. Termination of Employment

With less than 5 years: Return of 5% contribution with interest.

With 5 or more 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 plus interest on 5% contributions in lieu of vested benefit. Benefit is payable at age 60, but actuarially reduced if normal retirement age is later.

10. Pre-retirement Death Benefits

Lump Sum: $1,000 for 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: $200 per month to a single dependent child under age 18 or over 18 if disabled. $300 per month divided equally among 2 or more such children in a family.

$300 per month to a surviving spouse or dependent former spouse receiving child support.

$300 per month to a dependent parent over age 65 if there is no surviving spouse.

11. 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. 33 1/3%, 50%, 66 2/3%, 75%, or 100% co-participant (if co-participant dies first, benefit reverts to unreduced amount).

12. Cost of Living Allowance

Pension benefit adjustments are made in accordance with increases in the consumer price index, with a minimum of 3% and a maximum of 5% per annum.

13. Contributions

Each is required to contribute 6% of annual salary. The 6th% is refundable to teacher if termination is by reason other than death. The state funds the balance of the liability for benefits with annual contributions determined in accordance with Section 10-183z.

D. Participant Data

1. Retired members, co-participants and beneficiaries

Age	June 30, 1984 Number	June 30, 1984 Ave. Mon. Benefit	June 30, 1982 Number	June 30, 1982 Ave. Mon. Benefit
- 49	54	$ 637	50	$571
50 - 54	151	720	131	633
55 - 59	649	995	547	901
60 - 64	1,792	1,028	1,571	896
65 - 69	2,077	963	2,001	880
70 - 74	2,151	945	2,238	847
75 - 79	1,906	933	1,744	819
80 - 84	1,504	827	1,208	673
85 - 89	498	768	484	493
90 -	298	657	234	493
	11,080	$ 927	10,208	$814

2. Terminated members with rights to future benefits	548	$ 372	739	$379
3. Survivors and dependents	544	$ 248	539	$232
4. Active members				
a. Number	38,418		39,849	
b. Average service	13.1		12.8	
c. Average salary	$23,070		$19,490	

The following three pages give the distribution of active members by age at hire and by years of completed service. The next three pages give the distribution by attained age and years of completed service. The average salary numbers shown are tens of dollars (i.e., female average salary of 2,140 equals $21,400).

FEMALES - DISTRIBUTION BY ENTRY AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	68	1285	74	1340	67	1461	89	1492	64	1518	22	1572	3	1542	5	1652	1	1563	1	3748	394	1439
1	1	1196	269	1249	255	1344	184	1487	185	1429	123	1497	34	1479	24	1488	8	1921	1	2206	0	0	1084	1389
2	0	0	215	1327	217	1404	157	1547	156	1643	102	1625	34	1538	24	1800	4	1703	0	0	0	0	909	1493
3	0	0	289	1372	213	1502	165	1677	174	1759	116	1703	45	1900	18	2161	3	1669	0	0	0	0	1023	1589
4	0	0	285	1486	299	1498	198	1717	194	1771	104	1842	58	1817	17	1836	7	2001	0	0	0	0	1162	1633
5	0	0	368	1527	329	1586	194	1775	166	1848	101	1981	42	1991	17	1892	4	2204	1	971	0	0	1222	1686
6	0	0	429	1589	310	1742	168	1930	154	1894	84	1975	58	1911	22	2017	3	2123	1	2587	0	0	1229	1764
7	0	0	383	1680	258	1788	142	1854	133	2071	73	1951	29	2006	6	1996	5	2210	0	0	0	0	1029	1814
8	0	0	377	1759	178	1818	132	1924	106	2076	60	2068	22	2414	10	2090	4	2182	2	1709	0	0	891	1876
9	0	0	362	1837	191	1983	110	2138	88	2077	77	2101	23	2361	13	1994	4	2444	0	0	0	0	868	1974
10	0	0	546	1904	220	2006	130	2289	117	2204	80	2213	45	2262	14	2423	1	1720	0	0	0	0	1153	2039
11	0	0	613	2047	215	2192	140	2296	135	2250	72	2261	48	2145	15	2467	1	2121	1	2476	0	0	1240	2144
12	0	0	553	2143	236	2228	110	2349	124	2407	85	2443	51	2380	9	2379	1	2644	0	0	0	0	1169	2242
13	0	0	601	2257	205	2400	140	2431	134	2402	95	2379	36	2445	7	2359	2	2404	0	0	0	0	1220	2333
14	0	0	659	2368	213	2505	163	2500	145	2516	124	2523	47	2601	9	2649	0	0	0	0	0	0	1360	2445
15	0	0	622	2447	189	2521	173	2573	167	2547	127	2576	27	2780	5	2804	1	3644	0	0	0	0	1311	2508
16	0	0	449	2520	153	2554	134	2552	164	2634	113	2482	51	2572	11	2390	0	0	0	0	0	0	1075	2543
17	0	0	339	2559	116	2599	140	2619	126	2617	82	2606	20	2605	4	2823	0	0	0	0	0	0	827	2591
18	0	0	303	2599	107	2615	113	2520	142	2574	68	2584	26	2654	4	2704	0	0	0	0	0	0	763	2586
19	0	0	285	2615	105	2510	101	2610	101	2648	57	2595	18	2392	2	2730	0	0	0	0	0	0	669	2595
20	0	0	189	2615	75	2582	98	2554	89	2627	42	2663	7	2895	0	0	0	0	0	0	0	0	500	2608
21	1	2825	166	2649	71	2567	99	2606	83	2659	25	2650	10	2747	0	0	0	0	0	0	0	0	455	2631
22	0	0	137	2701	79	2684	93	2651	68	2656	21	2825	3	2729	0	0	0	0	0	0	0	0	401	2685
23	0	0	110	2655	80	2663	62	2610	54	2574	27	2755	4	2444	0	0	0	0	0	0	0	0	337	2641
24	0	0	117	2712	57	2663	61	2589	40	2621	17	2712	3	3140	0	0	0	0	0	0	0	0	295	2669
25	0	0	109	2760	70	2525	64	2674	24	2787	5	2519	0	0	0	0	0	0	0	0	0	0	272	2677
26	0	0	99	2751	61	2528	49	2577	19	2674	3	2439	0	0	0	0	0	0	0	0	0	0	231	2645
27	0	0	95	2752	64	2635	47	2733	19	2581	9	2640	0	0	0	0	0	0	0	0	0	0	234	2698
28	0	0	86	2695	46	2651	35	2690	11	2792	1	2880	0	0	0	0	0	0	0	0	0	0	179	2690
29	0	0	78	2732	38	2803	22	2644	6	2756	2	2682	0	0	0	0	0	0	0	0	0	0	146	2738
30	0	0	73	2711	32	2582	11	3008	3	2266	0	0	0	0	0	0	0	0	0	0	0	0	119	2693
31	0	0	70	2777	28	2761	17	2682	6	2253	0	0	0	0	0	0	0	0	0	0	0	0	121	2734
32	0	0	63	2799	23	2841	5	2662	3	2751	0	0	0	0	0	0	0	0	0	0	0	0	94	2801
33	0	0	51	2751	19	2788	5	2882	1	4930	0	0	0	0	0	0	0	0	0	0	0	0	76	2797
34	1	2492	43	2823	17	2772	3	2751	1	3047	0	0	0	0	0	0	0	0	0	0	0	0	65	2804
35	0	0	30	2824	13	3017	2	2663	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	2873
36	0	0	22	2694	5	2822	3	2613	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	2707
37	0	0	15	2653	3	2468	1	2435	1	3384	0	0	0	0	0	0	0	0	0	0	0	0	20	2651
38	0	0	10	2688	1	2400	1	2807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2674
39	0	0	7	2738	3	2981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2811
40	0	0	4	2864	3	2838	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2853
41	0	0	4	2793	1	3624	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2959
42	0	0	9	2749	1	2724	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2747
43	0	0	5	3309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3309
44	0	0	4	2584	2	2929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2699
45	0	0	1	2763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2763
46	0	0	3	2695	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2695
47	0	0	1	2330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2330
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	1	3543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3543
TOTAL	3	2171	9618	2136	4875	2054	3539	2194	3228	2193	1959	2180	763	2189	234	2092	53	2059	7	1889	1	3748	24280	2140

MALES - DISTRIBUTION BY ENTRY AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	12	1196	18	1359	26	1566	21	2998	10	2544	3	2350	5	1635	2	2974	1	2365	0	0	98	1954
1	0	0	53	1308	83	1388	70	1657	39	1933	28	2127	13	2347	7	2304	5	3352	1	1932	0	0	299	1675
2	0	0	51	1402	60	1512	50	1821	36	2153	15	2691	2	2294	4	3693	2	2014	0	0	0	0	220	1793
3	0	0	89	1444	75	1644	71	2058	23	2331	18	2664	9	2664	4	3217	1	1302	0	0	0	0	290	1854
4	0	0	78	1528	96	1653	70	2102	30	2513	12	2887	10	2783	4	1875	0	0	0	0	0	0	300	1901
5	1	1595	83	1581	106	1656	67	2161	28	2857	9	2970	13	3010	3	2166	0	0	0	0	0	0	310	1954
6	0	0	109	1685	150	1794	78	2116	21	2426	9	2748	8	3298	8	2089	2	1807	0	0	0	0	385	1923
7	0	0	124	1832	143	1912	49	2406	17	2787	6	2288	5	2668	3	2717	1	1948	0	0	0	0	348	2020
8	0	0	117	1907	117	2081	45	2410	13	3175	11	2652	7	2829	2	2508	0	0	0	0	0	0	312	2149
9	0	0	130	1986	120	2153	30	2444	15	2661	6	2487	4	3084	1	2118	2	2058	0	0	0	0	308	2154
10	0	0	239	2079	173	2297	49	2518	12	2689	11	2557	8	2482	5	2481	0	0	0	0	0	0	497	2234
11	0	0	264	2204	234	2402	46	2675	27	2689	13	2516	6	2471	1	2619	1	2207	0	0	0	0	592	2351
12	0	0	306	2266	196	2520	55	2712	29	2963	15	2881	8	2650	2	2089	1	2457	0	0	0	0	612	2440
13	0	0	313	2372	187	2580	49	2656	22	2698	25	2913	8	3198	5	2581	0	0	0	0	0	0	609	2505
14	0	0	404	2467	234	2680	57	2793	35	2611	29	2845	20	2640	6	2560	0	0	0	0	0	0	785	2580
15	0	0	498	2596	187	2700	65	2775	27	3032	28	2687	10	2875	1	2586	0	0	0	0	0	0	816	2655
16	0	0	396	2638	196	2824	65	2781	36	2976	24	2821	8	2866	1	2200	1	2510	0	0	0	0	727	2726
17	0	0	318	2702	190	2745	61	2852	42	2992	23	2891	5	3211	2	2612	0	0	0	0	0	0	641	2759
18	0	0	281	2704	142	2796	56	2854	40	2840	13	2515	6	2575	1	2614	0	0	0	0	0	0	539	2748
19	0	0	303	2810	120	2782	52	2671	28	2999	16	3286	6	2733	0	0	0	0	0	0	0	0	525	2814
20	0	0	246	2798	136	2813	49	2769	33	2923	7	2859	3	3203	0	0	0	0	0	0	0	0	474	2811
21	0	0	224	2871	154	2856	62	2947	24	2695	9	2830	1	2361	0	0	0	0	0	0	0	0	474	2865
22	0	0	207	2872	180	2943	48	2883	18	2773	3	2951	1	2843	0	0	0	0	0	0	0	0	457	2897
23	0	0	171	2966	175	2868	62	2816	23	2933	8	2797	0	0	0	0	0	0	0	0	0	0	439	2901
24	0	0	147	3000	180	2853	64	2940	14	2835	4	2885	0	0	0	0	0	0	0	0	0	0	409	2919
25	0	0	143	3019	201	2896	55	2871	9	2639	4	2568	0	0	0	0	0	0	0	0	0	0	412	2927
26	0	0	138	3068	178	3076	36	3023	8	2672	3	2967	0	0	0	0	0	0	0	0	0	0	363	3058
27	0	0	109	3037	153	3061	32	3052	5	3099	1	3023	0	0	0	0	0	0	0	0	0	0	300	3052
28	0	0	103	3118	137	3001	37	2890	3	3080	0	0	1	3420	0	0	0	0	0	0	0	0	281	3031
29	0	0	99	3138	149	2977	27	2952	12	3411	0	0	0	0	0	0	0	0	0	0	0	0	287	3048
30	0	0	84	3105	125	3039	23	2990	2	2535	0	0	0	0	0	0	0	0	0	0	0	0	234	3053
31	0	0	83	3286	84	3075	15	2930	4	2955	0	0	0	0	0	0	0	0	0	0	0	0	186	3155
32	0	0	91	3251	77	3050	12	2897	2	2919	1	2757	0	0	0	0	0	0	0	0	0	0	183	3137
33	0	0	60	3228	61	3012	9	3307	1	4289	0	0	0	0	0	0	0	0	0	0	0	0	131	3141
34	0	0	64	3174	44	3116	5	3243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	3154
35	0	0	38	3254	28	2984	4	3064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	3136
36	0	0	27	3235	27	3266	3	2704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	3222
37	0	0	10	3466	11	2740	1	4165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	3135
38	0	0	9	3151	7	2908	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	3045
39	0	0	3	2894	2	3068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2963
40	0	0	2	3865	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3865
41	0	0	7	3130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3130
42	0	0	0	0	1	3640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3640
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	1	4347	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4347
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	1595	6235	2564	4937	2603	1655	2573	699	2738	361	2727	165	2770	65	2431	18	2494	2	2149	0	0	14138	2593

M & F - DISTRIBUTION BY ENTRY AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	80	1271	92	1343	93	1490	110	1780	74	1657	25	1665	8	1600	7	2030	2	1964	1	3748	492	1542
1	1	1196	322	1259	338	1355	254	1534	224	1517	151	1614	47	1719	31	1672	13	2472	2	2069	0	0	1383	1451
2	0	0	266	1342	277	1428	207	1613	192	1738	117	1762	36	1580	28	2071	6	1807	0	0	0	0	1129	1552
3	0	0	378	1389	288	1539	236	1792	197	1826	134	1832	54	2027	22	2353	4	1577	0	0	0	0	1313	1648
4	0	0	363	1495	395	1536	268	1818	224	1870	116	1950	68	1959	21	1843	7	2001	0	0	0	0	1462	1688
5	1	1595	451	1537	435	1603	261	1874	194	1994	110	2062	55	2232	20	1933	4	2204	1	971	0	0	1532	1740
6	0	0	538	1608	460	1759	246	1989	175	1958	93	2050	66	2079	30	2036	5	1997	1	2587	0	0	1614	1802
7	0	0	507	1717	401	1832	191	1996	150	2152	79	1976	34	2104	9	2236	6	2166	0	0	0	0	1377	1866
8	0	0	494	1794	295	1922	177	2047	119	2196	71	2158	29	2514	12	2159	4	2182	2	1709	0	0	1203	1946
9	0	0	492	1877	311	2049	140	2203	103	2162	83	2129	27	2468	14	2003	6	2315	0	0	0	0	1176	2021
10	0	0	785	1957	393	2134	179	2352	129	2249	91	2254	53	2295	19	2438	1	1720	0	0	0	0	1650	2097
11	0	0	877	2095	449	2301	186	2390	162	2323	85	2300	54	2181	16	2476	2	2164	1	2476	0	0	1832	2211
12	0	0	859	2187	432	2361	165	2470	153	2513	100	2509	59	2416	11	2326	2	2550	0	0	0	0	1781	2310
13	0	0	914	2297	392	2486	189	2489	156	2444	120	2490	44	2582	12	2451	2	2404	0	0	0	0	1829	2390
14	0	0	1063	2406	447	2596	220	2576	180	2534	153	2584	67	2613	15	2613	0	0	0	0	0	0	2145	2494
15	0	0	1120	2513	376	2610	238	2628	194	2614	155	2596	37	2806	6	2768	1	3644	0	0	0	0	2127	2565
16	0	0	845	2575	349	2706	199	2627	200	2696	137	2542	59	2612	12	2374	1	2510	0	0	0	0	1802	2617
17	0	0	657	2628	306	2690	201	2690	168	2710	105	2668	25	2726	6	2753	0	0	0	0	0	0	1468	2664
18	0	0	584	2649	249	2718	169	2630	182	2633	81	2573	32	2639	5	2686	0	0	0	0	0	0	1302	2653
19	0	0	588	2715	225	2655	153	2631	129	2724	73	2746	24	2477	2	2730	0	0	0	0	0	0	1194	2691
20	0	0	435	2719	211	2731	147	2626	122	2707	49	2691	10	2987	0	0	0	0	0	0	0	0	974	2707
21	1	2825	390	2776	225	2765	161	2737	107	2667	34	2698	11	2714	0	0	0	0	0	0	0	0	929	2751
22	0	0	344	2804	259	2864	141	2730	86	2681	24	2840	4	2757	0	0	0	0	0	0	0	0	858	2798
23	0	0	281	2844	255	2804	124	2713	77	2681	35	2764	4	2444	0	0	0	0	0	0	0	0	776	2788
24	0	0	264	2872	237	2807	125	2769	54	2676	21	2745	3	3140	0	0	0	0	0	0	0	0	704	2814
25	0	0	252	2907	271	2800	119	2765	33	2747	9	2541	0	0	0	0	0	0	0	0	0	0	684	2827
26	0	0	237	2935	239	2936	85	2766	27	2673	6	2703	0	0	0	0	0	0	0	0	0	0	594	2897
27	0	0	204	2904	217	2935	79	2862	24	2689	10	2679	0	0	0	0	0	0	0	0	0	0	534	2897
28	0	0	189	2926	183	2913	72	2793	14	2853	1	2880	1	3420	0	0	0	0	0	0	0	0	460	2898
29	0	0	177	2959	187	2941	49	2814	18	3193	2	2682	0	0	0	0	0	0	0	0	0	0	433	2944
30	0	0	157	2922	157	2945	34	2996	5	2374	0	0	0	0	0	0	0	0	0	0	0	0	353	2932
31	0	0	153	3053	112	2996	32	2798	10	2534	0	0	0	0	0	0	0	0	0	0	0	0	307	2989
32	0	0	154	3066	100	3002	17	2828	5	2818	1	2757	0	0	0	0	0	0	0	0	0	0	277	3023
33	0	0	111	3009	80	2959	14	3155	2	4610	0	0	0	0	0	0	0	0	0	0	0	0	207	3015
34	1	2492	107	3033	61	3020	8	3059	1	3047	0	0	0	0	0	0	0	0	0	0	0	0	178	3026
35	0	0	68	3065	41	2995	6	2930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115	3033
36	0	0	49	2992	32	3197	6	2658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	3044
37	0	0	25	2978	14	2682	2	3300	1	3384	0	0	0	0	0	0	0	0	0	0	0	0	42	2904
38	0	0	19	2907	8	2845	1	2807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	2886
39	0	0	10	2785	5	3016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	2862
40	0	0	6	3198	3	2838	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	3078
41	0	0	11	3007	1	3624	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3059
42	0	0	9	2749	2	3182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2828
43	0	0	5	3309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3309
44	0	0	5	2937	2	2929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2934
45	0	0	1	2763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2763
46	0	0	3	2695	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2695
47	0	0	1	2330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2330
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	1	3543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3543
TOTAL	4	2027	15853	2304	9812	2330	5194	2315	3927	2290	2320	2266	928	2292	299	2166	71	2169	9	1947	1	3748	38418	2307

FEMALES - DISTRIBUTION BY ATTAINED AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	55	1275	81	1345	63	1475	90	1477	71	1485	22	1603	5	1576	3	1702	3	1572	1	3748	394	1439
1	1	1196	184	1222	295	1330	181	1469	192	1425	145	1492	45	1521	28	1479	10	1586	3	1990	0	0	1084	1389
2	0	0	57	1318	289	1359	175	1519	149	1538	148	1656	53	1553	28	1773	10	1729	0	0	0	0	909	1493
3	0	0	2	1482	381	1388	165	1572	173	1749	160	1711	98	1720	28	1983	14	2243	2	1530	0	0	1023	1589
4	0	0	0	0	336	1489	279	1516	202	1723	174	1777	102	1825	49	1887	14	1793	6	2150	0	0	1162	1633
5	0	0	0	0	341	1528	345	1571	194	1789	171	1844	103	1963	43	1939	20	2007	4	2204	1	971	1222	1686
6	0	0	0	0	269	1594	423	1662	169	1892	173	1925	99	1991	63	1912	25	1934	7	2066	1	2587	1229	1764
7	0	0	0	0	98	1699	476	1711	149	1822	145	1996	89	2025	51	1984	13	2018	4	1855	4	2482	1029	1814
8	0	0	0	0	4	1757	463	1748	116	1931	145	1964	96	2063	40	2247	16	2274	9	2021	2	1709	891	1876
9	0	0	0	0	0	0	399	1846	161	1993	115	2146	90	2062	70	2165	16	2261	14	2051	3	2329	868	1974
10	0	0	0	0	0	0	517	1906	243	1984	129	2284	120	2206	80	2193	49	2296	14	2423	1	1720	1153	2039
11	0	0	0	0	0	0	456	2063	342	2090	139	2308	141	2249	89	2241	56	2234	20	2288	3	2515	1240	2144
12	0	0	0	0	0	0	230	2164	476	2152	147	2291	115	2434	103	2393	72	2406	25	2398	1	2644	1169	2242
13	0	0	0	0	0	0	17	2119	682	2275	150	2443	147	2419	129	2403	68	2330	22	2572	5	2292	1220	2333
14	0	0	0	0	0	0	0	0	704	2383	195	2452	153	2542	152	2506	108	2552	42	2568	6	2724	1360	2445
15	0	0	0	0	0	0	0	0	613	2446	193	2519	171	2570	168	2554	130	2567	30	2767	6	2944	1311	2508
16	0	0	0	0	0	0	0	0	376	2532	195	2518	129	2537	162	2624	126	2563	68	2468	19	2526	1075	2543
17	0	0	0	0	0	0	0	0	179	2545	229	2584	115	2608	147	2597	102	2629	50	2638	5	2693	827	2591
18	0	0	0	0	0	0	0	0	15	2560	345	2614	93	2528	122	2561	121	2581	53	2549	14	2696	763	2586
19	0	0	0	0	0	0	0	0	0	0	302	2616	104	2502	100	2627	99	2637	55	2570	9	2293	669	2595
20	0	0	0	0	0	0	0	0	0	0	184	2621	75	2603	98	2525	90	2610	46	2694	7	2895	500	2608
21	0	0	0	0	0	0	0	0	1	2825	130	2636	95	2624	85	2591	96	2645	33	2653	15	2714	455	2631
22	0	0	0	0	0	0	0	0	0	0	78	2697	103	2694	87	2652	84	2658	40	2770	9	2673	401	2685
23	0	0	0	0	0	0	0	0	0	0	12	2671	125	2660	70	2580	68	2680	46	2640	16	2576	337	2641
24	0	0	0	0	0	0	0	0	0	0	0	0	122	2705	62	2650	60	2587	33	2674	18	2755	295	2669
25	0	0	0	0	0	0	0	0	0	0	0	0	107	2755	69	2544	63	2674	28	2745	5	2519	272	2677
26	0	0	0	0	0	0	0	0	0	0	0	0	82	2725	61	2624	52	2584	30	2599	6	2507	231	2645
27	0	0	0	0	0	0	0	0	0	0	0	0	54	2790	78	2713	58	2628	33	2665	11	2599	234	2698
28	0	0	0	0	0	0	0	0	0	0	0	0	11	2895	93	2668	43	2626	27	2741	5	2913	179	2690
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	2748	34	2774	20	2626	7	2759	146	2738
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	2713	32	2584	11	2923	4	2554	119	2693
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	2831	39	2682	21	2691	7	2405	121	2734
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	2778	47	2791	12	2912	3	2751	94	2801
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2856	55	2748	13	2870	2	3520	76	2797
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2492	47	2822	14	2760	3	2833	65	2804
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	2824	13	3017	2	2663	45	2873
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	2685	4	3039	5	2536	30	2707
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2654	6	2651	5	2645	20	2651
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2738	8	2675	2	2603	12	2674
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2696	2	3272	10	2811
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2864	3	2838	7	2853
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2759	2	3259	5	2959
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2767	3	2699	10	2747
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3565	3	3138	5	3309
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2699	6	2699
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2763	1	2763
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2695	3	2695
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2330	1	2330
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3543	1	3543
TOTAL	1	1196	298	1252	2094	1455	4183	1760	5226	2137	3875	2257	2859	2364	2610	2470	2002	2552	893	2603	239	2646	24280	2140

MALES - DISTRIBUTION BY ATTAINED AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	7	1088	22	1351	23	1536	24	2763	11	2636	3	2350	2	1185	5	2351	1	2365	0	0	98	1954
1	0	0	34	1305	85	1364	68	1599	50	1803	33	2099	11	2066	10	2408	7	3373	1	1932	0	0	299	1675
2	0	0	5	1388	73	1423	64	1655	42	2084	23	2407	6	2177	4	3967	3	1990	0	0	0	0	220	1793
3	0	0	0	0	115	1472	72	1739	61	2174	18	2260	13	2995	8	2612	2	4321	1	1302	0	0	290	1854
4	0	0	0	0	93	1532	91	1696	64	2135	30	2542	10	3079	10	2734	2	1234	0	0	0	0	300	1901
5	0	0	1	1595	74	1565	112	1655	70	2149	28	2857	9	2970	13	3010	3	2166	0	0	0	0	310	1954
6	0	0	0	0	64	1654	174	1750	92	2087	25	2320	10	2901	7	2497	9	2895	4	1856	0	0	385	1923
7	0	0	0	0	33	1806	185	1858	86	2138	26	2788	9	2225	3	1938	3	3610	3	2263	0	0	348	2020
8	0	0	0	0	1	2013	159	1932	92	2189	33	2479	11	3093	10	2618	6	2958	0	0	0	0	312	2149
9	0	0	0	0	0	0	152	1994	105	2210	25	2360	14	2675	7	2771	2	3079	2	1866	1	2502	308	2154
10	0	0	0	0	0	0	229	2066	180	2299	49	2477	15	2768	10	2576	9	2470	5	2481	0	0	497	2234
11	0	0	0	0	0	0	172	2165	300	2362	68	2614	27	2586	15	2612	5	2437	4	2469	1	2207	592	2351
12	0	0	0	0	0	0	89	2249	363	2366	89	2610	36	2901	20	2893	10	2768	3	2632	2	2243	612	2440
13	0	0	0	0	0	0	1	3996	408	2412	115	2629	35	2571	21	2875	19	2878	9	3139	1	2200	609	2505
14	0	0	0	0	0	0	0	0	456	2484	198	2710	47	2739	39	2696	23	2761	18	2690	4	2524	785	2580
15	0	0	0	0	0	0	0	0	485	2594	199	2692	63	2758	29	3074	29	2711	10	2875	1	2586	816	2655
16	0	0	0	0	0	0	0	0	286	2613	280	2758	76	2894	43	2879	26	2875	12	2712	4	2748	727	2726
17	0	0	0	0	0	0	0	0	113	2601	344	2754	92	2793	43	2835	31	3046	14	3077	4	2647	641	2759
18	0	0	0	0	0	0	0	0	5	2707	354	2723	90	2803	43	2884	34	2746	10	2589	3	2625	539	2748
19	0	0	0	0	0	0	0	0	0	0	331	2806	99	2773	52	2788	23	2859	16	3286	4	2633	525	2814
20	0	0	0	0	0	0	0	0	0	0	241	2791	140	2825	49	2786	34	2889	7	2859	3	3203	474	2811
21	0	0	0	0	0	0	0	0	0	0	154	2865	202	2857	74	2958	31	2735	11	2860	2	2374	474	2865
22	0	0	0	0	0	0	0	0	0	0	82	2928	244	2883	91	2952	30	2795	9	2804	1	2843	457	2897
23	0	0	0	0	0	0	0	0	0	0	5	3032	247	2934	128	2851	36	2846	19	2879	4	2890	439	2901
24	0	0	0	0	0	0	0	0	0	0	0	0	189	2965	150	2846	56	2983	12	2844	2	2766	409	2919
25	0	0	0	0	0	0	0	0	0	0	0	0	142	3015	193	2908	62	2839	11	2726	4	2568	412	2927
26	0	0	0	0	0	0	0	0	0	0	0	0	100	3032	191	3119	56	2946	13	2866	3	2967	363	3058
27	0	0	0	0	0	0	0	0	0	0	0	0	39	3153	183	3050	59	2911	17	3354	2	2780	300	3052
28	0	0	0	0	0	0	0	0	0	0	0	0	3	3421	172	3089	88	2933	15	2817	3	3315	281	3031
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	3073	120	3007	28	3093	7	3104	287	3048
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	3065	130	3063	27	3010	2	2535	234	3053
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	3326	106	3120	23	2960	5	3003	186	3155
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	3280	130	3151	31	3035	5	2927	183	3137
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3539	89	3128	35	3056	5	3810	131	3141
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	3170	38	3145	3	2886	113	3154
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	3256	35	3037	4	3064	70	3136
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	3101	37	3287	4	3100	57	3222
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	3098	2	3505	22	3139
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2675	11	3168	4	2797	16	3045
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2894	2	3068	5	2963
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3865	0	0	2	3865
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3193	3	3046	7	3130
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3640	1	3640
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4347	1	4347
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	47	1288	560	1508	1591	1900	3282	2402	2761	2720	1982	2875	1898	2963	1398	2985	521	2986	98	2920	14138	2593

CONNECTICUT TEACHERS' RETIREMENT SYSTEM

Comments on June 30, 1984 Valuation

A. Analysis of Increase in Normal Cost Resulting from Pay Increase:

1.	Present value of retirement, termination and disability benefits for active members if pay increases had been as expected	$4,734,730
2.	Additional present value from pay increases 9.5% greater than expected: equals 9.5% times item (1)	449,799
3.	Total present value	$5,184,529
4.	Less portion funded by member contributions to date	-735,762
5.	Portion to be funded by State and future member contributions	$4,448,767
6.	Estimated normal cost resulting because all of item (2) is paid for through normal costs: equals 8.93% of item (2) (8.93% equals item (7) ÷ item (5) on page 9)	$ 40,167

B. Funded Status of System (Earned Benefit Measure)

	Liabilities (Millions)					Coverage Ratios			
Date	Member Contribution	Retired Members	Active Members	Total	Assets (Millions)	Member Contribution	Retired Members	Active Members	Total
6/30/80	$490.8	$ 904.3	$ 665.0	$2,060.1	$1,049.3	100%	62%	0%	51%
6/30/82	578.9	1,133.5	888.2	2,600.6	1,296.6	100%	63%	0%	50%
6/30/84	735.8	1,392.3	1,010.3	3,138.3	1,564.3	100%	60%	0%	50%

M & F - DISTRIBUTION BY ATTAINED AGE AND SVC

	<= 19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		>= 65		TOTAL	
SVC	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL	NO.	SAL
0	0	0	62	1253	103	1346	86	1491	114	1748	32	1640	25	1693	7	1464	8	2108	4	1770	1	3748	492	1542
1	1	1196	218	1235	380	1337	249	1504	242	1503	178	1604	56	1628	38	1723	17	2322	4	1976	0	0	1383	1451
2	0	0	62	1323	362	1372	239	1556	191	1658	171	1757	59	1616	32	2047	13	1789	0	0	0	0	1129	1552
3	0	0	2	1482	496	1407	237	1623	234	1860	178	1767	111	1869	36	2123	16	2502	3	1454	0	0	1313	1648
4	0	0	0	0	429	1498	370	1560	266	1822	204	1890	112	1937	59	2031	16	1723	6	2150	0	0	1462	1688
5	0	0	1	1595	415	1534	457	1592	264	1885	199	1986	112	2044	56	2188	23	2028	4	2204	1	971	1532	1740
6	0	0	0	0	333	1605	597	1688	261	1961	198	1975	109	2075	70	1970	34	2188	11	1990	1	2587	1614	1802
7	0	0	0	0	131	1726	661	1752	235	1937	171	2117	98	2043	54	1981	16	2316	7	2030	4	2482	1377	1866
8	0	0	0	0	5	1808	622	1795	238	2045	178	2059	107	2169	50	2321	22	2460	9	2021	2	1709	1203	1946
9	0	0	0	0	0	0	551	1887	266	2079	140	2185	104	2145	77	2220	18	2352	16	2028	4	2372	1176	2021
10	0	0	0	0	0	0	746	1955	423	2118	178	2337	135	2269	90	2236	58	2323	19	2438	1	1720	1650	2097
11	0	0	0	0	0	0	622	2091	642	2217	207	2408	168	2304	104	2295	61	2251	24	2318	4	2438	1832	2211
12	0	0	0	0	0	0	319	2188	839	2244	236	2411	151	2545	123	2474	82	2450	28	2423	3	2376	1781	2310
13	0	0	0	0	0	0	18	2224	1090	2326	265	2523	182	2448	150	2469	87	2450	31	2737	6	2277	1829	2390
14	0	0	0	0	0	0	0	0	1160	2422	393	2582	200	2588	191	2545	131	2589	60	2605	10	2644	2145	2494
15	0	0	0	0	0	0	0	0	1098	2511	392	2607	234	2621	197	2630	159	2594	40	2794	7	2893	2127	2565
16	0	0	0	0	0	0	0	0	662	2567	475	2659	205	2669	205	2678	152	2616	80	2504	23	2564	1802	2617
17	0	0	0	0	0	0	0	0	292	2567	573	2686	207	2690	190	2651	133	2726	64	2734	9	2673	1468	2664
18	0	0	0	0	0	0	0	0	20	2597	699	2669	183	2663	165	2646	155	2617	63	2556	17	2684	1302	2653
19	0	0	0	0	0	0	0	0	0	0	633	2716	203	2634	152	2683	122	2679	71	2732	13	2398	1194	2691
20	0	0	0	0	0	0	0	0	0	0	425	2718	215	2748	147	2612	124	2686	53	2716	10	2987	974	2707
21	0	0	0	0	0	0	0	0	1	2825	284	2760	297	2782	159	2762	127	2667	44	2705	17	2674	929	2751
22	0	0	0	0	0	0	0	0	0	0	160	2815	347	2827	178	2806	114	2694	49	2776	10	2690	858	2798
23	0	0	0	0	0	0	0	0	0	0	17	2777	372	2842	198	2755	104	2737	65	2710	20	2639	776	2788
24	0	0	0	0	0	0	0	0	0	0	0	0	311	2863	212	2788	116	2778	45	2719	20	2756	704	2814
25	0	0	0	0	0	0	0	0	0	0	0	0	249	2903	262	2812	125	2756	39	2740	9	2541	684	2827
26	0	0	0	0	0	0	0	0	0	0	0	0	182	2894	252	2999	108	2772	43	2680	9	2661	594	2897
27	0	0	0	0	0	0	0	0	0	0	0	0	93	2942	261	2950	117	2771	50	2899	13	2627	534	2897
28	0	0	0	0	0	0	0	0	0	0	0	0	14	3008	265	2941	131	2832	42	2768	8	3063	460	2898
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217	2946	154	2956	48	2899	14	2931	433	2944
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	2893	162	2969	38	2985	6	2548	353	2932
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	3074	145	3002	44	2832	12	2654	307	2989
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	2952	177	3055	43	3001	8	2861	277	3023
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	3027	144	2983	48	3005	7	3727	207	3015
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2492	119	3033	52	3042	6	2860	178	3026
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	3044	48	3031	6	2930	115	3033
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	2865	41	3263	9	2787	87	3044
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2654	26	2995	7	2891	42	2904
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2717	19	2961	6	2733	28	2886
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2750	4	3170	15	2862
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3198	3	2838	9	3078
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3007	5	3131	12	3059
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2767	4	2934	11	2828
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3565	3	3138	5	3309
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2934	7	2934
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2763	1	2763
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2695	3	2695
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2330	1	2330
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3543	1	3543
TOTAL	1	1196	345	1257	2654	1466	5774	1798	8508	2239	6636	2449	4841	2573	4508	2678	3400	2730	1414	2744	337	2726	38418	2307