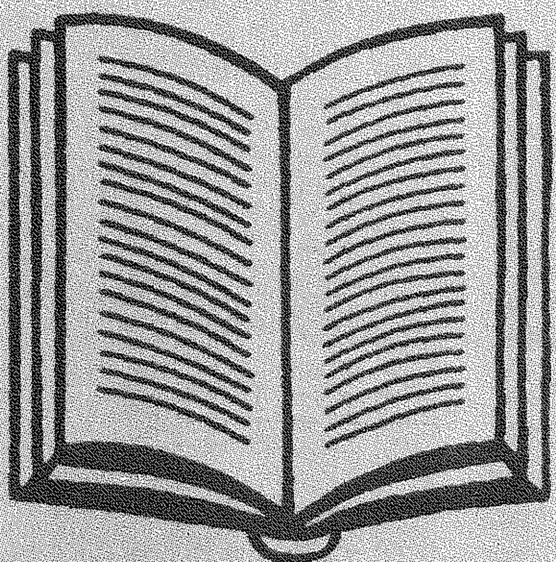
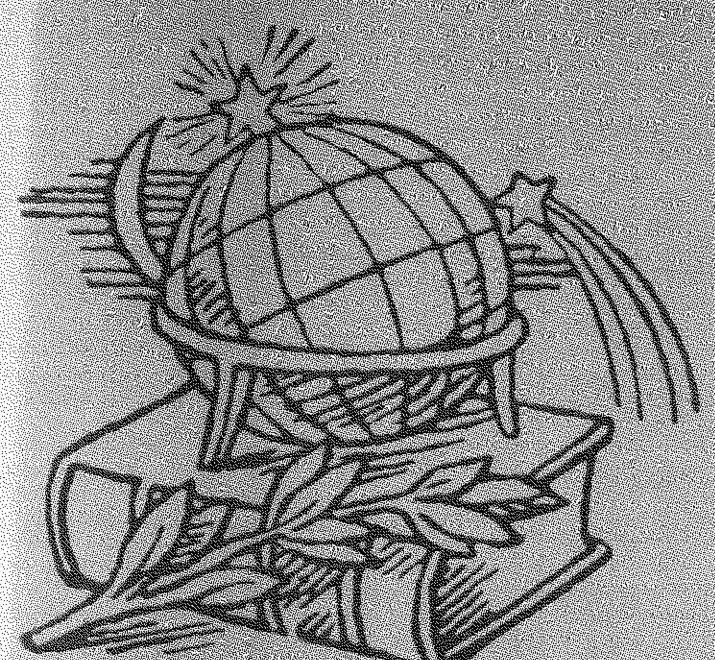


Connecticut State Teachers' Retirement System

REPORT ON THE ACTUARIAL VALUATION AS OF JUNE 30, 1994



Wyatt

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

REPORT ON THE
ACTUARIAL VALUATION AS OF JUNE 30, 1994

January 4, 1995

Wyatt

The Wyatt Company
Consultants and Actuaries
1055 Washington Boulevard
Stamford, Connecticut 06901
Telephone 203 356 1220
Fax 203 964 9282

Wyatt

January 4, 1995

State Teachers' Retirement Board
State of Connecticut
165 Capitol Avenue
Hartford, CT 06106

Re: Actuarial Valuation of the State Teachers' Retirement System as of June 30, 1994

Dear Members of the Board:

Under the supervision and direction of the undersigned, The Wyatt Company has prepared an actuarial valuation of the State Teachers' Retirement System as of June 30, 1994, in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the results set forth in this report are complete and accurate. The contribution requirement for the State of Connecticut developed for the fiscal year ending June 30, 1996 as well as the actuarial present value of accrued and projected benefits shown herein fairly reflect the status of the System at the times indicated.

In preparing this report, we have relied upon the following:

- Member census data as of June 30, 1994 submitted by the Board. This data was not audited by us, but was checked for reasonableness and appears to be sufficient for the purposes of this report.

- Financial data as of June 30, 1994 provided by the State Treasurer's Office and the Board. This data was not audited by us, but appears to be sufficient for the purposes of this report.

- Actuarial assumptions which, in the aggregate, are reasonably related to the past experience of the System and to expected future results. These are the assumptions most recently approved by the Board.

- Actuarial methods and the provisions of the System which are summarized in this report.

Wyatt

We will be pleased to respond to any questions which may arise in connection with this report.

Respectfully submitted,

THE WYATT COMPANY

Robert A. Rosati

Robert A. Rosati
Consulting Actuary

Robert L. Mishler

Robert L. Mishler
Consulting Actuary

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STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

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STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

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STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

PURPOSE AND SCOPE

This report has been prepared by The Wyatt Company to:

- Provide the principal results of the actuarial valuation of the State Teachers' Retirement System as of June 30, 1994, based on the actuarial assumptions and methods approved by the Board;

- Compare these results with those from the previous valuation;

- Provide to the State Teachers' Retirement Board the contribution requirement for the State under Public Act 79-436 (as amended) for the fiscal year ending June 30, 1996; and

- Provide information about the financial status of the System, including a measure of the extent to which benefits have been funded.

The introduction to this document presents a summary of the principal results of the June 30, 1994 actuarial valuation, including the State contribution requirement for the fiscal year ending June 30, 1996 and the funded status of the System as of June 30, 1994. A comparison of these results with those from the previous valuation is also included.

Exhibit 1 shows the determination of the unfunded actuarial accrued liability and the normal cost for the year. In Exhibit 2, we develop the State contribution requirement for the fiscal years ending June 30, 1996 and June 30, 1997, in accordance with Public Act 79-436 (as amended).

Exhibit 3 consists of two sets of projections of the State's future contribution requirements. The supplemental chart compares the history of prior required contributions with the actual state contributions to the TRS.

Exhibit 4 is an historical review of the funded status of the System.

Exhibit 5 consists of a reconciliation of the market value of assets from July 1, 1992 to June 30, 1994. In Exhibit 6 we develop the actuarial value of assets to be used in determining the State contribution requirement. Exhibit 7 shows the reconciliation of the Excess Earnings Account which is used in the development of the actuarial value of assets.

In Exhibit 8 and the accompanying charts, we present information regarding the census data for the Members of the System. The supplemental charts show the increase in membership since July 1986. The number of retired members has increased by 50% while the number of active members has remained relatively constant.

The principal provisions of the System are outlined in Exhibit 9, while the actuarial assumptions and cost methods used in this valuation are summarized in Exhibit 10.

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

SUMMARY OF PRINCIPAL ACTUARIAL RESULTS

A. Modification to Benefit Provisions

The Connecticut State Teachers' Retirement System was modified during the 1991-1992 session of the State Legislature. No major changes to the Retirement System were implemented during the two years ending June 30, 1994. Cost of living adjustments were given to retiree pensions, as scheduled on each July 1 and January 1.

B. Contribution Requirement

The State contribution requirement for the fiscal year ending June 30, 1996 was determined in accordance with Public Act 79-436 (as amended), was based on the actuarial assumptions and methods approved by the Board. The contribution requirement for the fiscal year ending June 30, 1997 assumes active members receive a 6% increase in the current fiscal year.

Contribution Requirement for the

1. Fiscal Year Ending June 30, 1996	$ 164,650,000
2. Fiscal Year Ending June 30, 1997	$ 173,982,000

A detailed development of this contribution requirement is included as Exhibit 2.

C. Funded Status of the System

The following table compares the book value and the market value of assets with both the pension benefit obligation (i.e. the actuarial present value of credited projected benefits) and the accumulated benefit obligation (i.e. the actuarial present value of accrued benefits) as of June 30, 1994. The pension benefit obligation (PBO) was based on the Members' service as of the valuation date with salary projected to retirement, while the accumulated benefit obligation (ABO) was based on the Members' service and salary as of the valuation date. Funded ratios were calculated by dividing asset values by the pension benefit obligation.

Summary of Funding Status

Book Value Basis	As of June 30, 1994
1. Accumulated Benefit Obligation	$5,867,693,000
2. Pension Benefit Obligation	$7,489,933,000
3. Book Value of Assets	$4,915,779,000
4. Funded Ratio on a Book Value Basis: Item 3 ÷ Item 2	65.6%

Market Value Basis	As of June 30, 1994
1. Accumulated Benefit Obligation	$5,867,693,000
2. Pension Benefit Obligation	$7,489,933,000
3. Market Value of Assets	$5,985,275,000
4. Funded Ratio on a Market Value Basis: Item 3 ÷ Item 2	79.9%

D. Membership Information

The TRB provided us with the necessary information for members in the System as of June 30, 1994. Section 4 contains exhibits and charts that summarize demographic information of the members. Updated salary information was not provided for 37 towns. For each of these towns we assumed that active members as of the prior valuation were still active members, unless the member was reported as a retired member. The compensation for each of these active members was assumed to increase in accordance with the average increase for all continuing active members. Information for these towns for teachers hired after July 1, 1993 was not provided by TRB. The impact of the above upon the required contribution is not significant.

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

COMPARISON OF PRINCIPAL ACTUARIAL RESULTS

	Actuarial Results as of	
	June 30, 1992	June 30, 1994
A. Summary of Data		
1. Number of Members		
a. Active	38,260	39,511
b. Terminated Vested and Inactive	1,794	1,700
c. Retired and Beneficiaries	16,058	16,923
d. Survivors and Dependents	530	535
e. Total	56,642	58,669
2. Characteristics of Active Members		
a. Total Compensation	\$1,841,880,000	\$2,030,410,000
b. Average Annual Compensation	\$48,141	\$51,388
c. Average Age	44.8	45.3
d. Average Service	15.2	17.9

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

COMPARISON OF PRINCIPAL ACTUARIAL RESULTS

	Actuarial Results as of	
	June 30, 1992	June 30, 1994
B. Summary of Costs		
1. Normal Cost		
a. Amount	$ 41,678,000	$ 50,001,000
b. As a Percent of Covered Compensation	2.3%	2.5%
2. Actuarial Accrued Liability	$7,278,246,000	$8,222,661,000
3. Valuation Assets	$4,847,986,000	$5,602,141,000
4. Unfunded Actuarial Accrued Liability	$2,430,260,000	$2,620,520,000
5. State Contribution Requirement for Fiscal Year Ending 6/30/94, 6/30/96, Respectively	$ 145,786,000	$ 164,650,000

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

COMPARISON OF PRINCIPAL ACTUARIAL RESULTS

	Actuarial Results as of	
	June 30, 1992	June 30, 1994
C. Assets and Actuarial Present Values		
1. Assets		
a. Book Value	$4,315,424,000	$4,915,779,000
b. Actuarial Value	$4,847,986,000	$5,602,141,000
c. Market Value	$5,059,740,000	$5,985,275,000
2. Actuarial Present Value of Credited Projected Benefits		
a. Member Contributions	$1,561,329,000	$1,900,089,000
b. Retired Members, Beneficiaries, Survivors, Dependents, and Other Inactive Teachers	3,458,968,000	$3,817,486,000
c. Other Members	1,876,418,000	1,772,358,000
d. Total	$6,896,715,000	$7,489,933,000

Exhibit 1

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

DETERMINATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY AND THE NORMAL COST

The actuarial cost method used to determine the State contribution to the System is the entry age actuarial cost method. Under this method, the normal cost for retirement benefits for each Member is defined as the level percent of the Member's salary needed as an annual contribution from entry age to retirement age to fund the Member's projected benefit. The actuarial accrued liability is the accumulated value of such normal costs for each Member from entry age to the date of the current valuation. (Note: Under this actuarial cost method, the actuarial accrued liability does not represent the liability for benefits accrued as of the valuation date.) The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of the System's assets.

A. Unfunded Actuarial Accrued Liability

1. Actuarial Accrued Liability for Retirement Benefits	
a. Member Contributions	$1,900,089,000
b. Active Teachers	2,505,086,000
c. Terminated Vested and Other Inactive Teachers	(7,507,000)
d. Retired Teachers and Beneficiaries	3,811,685,000
e. Survivors and Dependents	13,308,000
f. Total	$8,222,661,000
2. Actuarial Value of Assets	5,602,141,000
3. Unfunded Actuarial Accrued Liability: Item 1f. – Item 2	$2,620,520,000

B. Normal Cost

1. Gross Normal Cost	$ 171,826,000
2. Expected Member Contributions	121,825,000
3. Normal Cost as of July 1, 1994	50,001,000
4. Annual Compensation of Active Teachers	2,030,410,000
5. Normal Cost as a Percent of Annual Compensation	2.5%

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

DEVELOPMENT OF THE STATE CONTRIBUTION REQUIREMENT FOR THE FISCAL YEARS ENDING JUNE 30, 1996 and JUNE 30, 1997

The State contribution requirement for the fiscal year ending June 30, 1996 was determined in accordance with Public Act 79-436 (as amended) and was based on the expected unfunded actuarial accrued liability as of June 30, 1995 and an estimate of the July 1, 1995 normal cost. This estimate was based on the July 1, 1994 normal cost and an estimate of future salary increases.

To develop the expected unfunded actuarial accrued liability as of June 30, 1995, the actual unfunded actuarial accrued liability as of June 30, 1994 was added to the normal cost as of July 1, 1994 and this sum was adjusted for one year's interest at the valuation rate of 8.5% per annum. This result was then reduced by the State contribution adjusted with interest. The expected unfunded actuarial accrued liability was then amortized in accordance with Public Act 79-436 (as amended) which requires that changes after 1980 be funded separately by contributions of normal cost plus 30-year amortization of the applicable unfunded actuarial accrued liability.

The state contribution requirement for the fiscal year ending June 30, 1997 was determined in the same manner as the contribution for the previous fiscal year.

As shown on the following pages, the expected unfunded actuarial accrued liability and the contribution for the amendments to the System resulting from Public Acts 82-91, 87-381, and 92-205 were developed separately.

The State contribution requirement for the fiscal years ending June 30, 1996 and June 30, 1997 are $164,650,000 and $173,982,000, respectively.

State of Connecticut
State Teachers' Retirement System

Development of the State Contribution Requirement
For Fiscal Year Ending June 30, 1996

		Provisions In Effect June 30, 1991	Public Act 82-91	Public Act 87-381	Public Act 92-205	Total
1.	Unfunded Actuarial Accrued Liability as of 6/30/94	$4,136,564,000	32,725,000	1,781,000	(1,550,550,000)	$2,620,520,000
2.	Normal Cost as of 7/1/94	50,001,000	0	0	0	50,001,000
3.	Interest at 8.5% on (Item 1 + Item 2)	355,858,000	2,782,000	151,000	(131,797,000)	226,994,000
4.	State Contributions	(209,548,000)	(2,258,000)	(104,000)	79,406,000	(132,504,000)
5.	Interest to End of Year on Item 4	(11,019,000)	(119,000)	(5,000)	4,175,000	(6,968,000)
6.	Expected Unfunded Actuarial Accrued Liability as of 6/30/95	4,321,856,000	33,130,000	1,823,000	(1,598,766,000)	2,758,043,000
7.	Level Percent Amortization Payment (37/18/23/28 Years)	185,084,000	2,311,000	106,000	(81,271,000)	106,230,000
8.	Estimated Normal Cost	53,501,000	0	0	0	53,501,000
9.	Total: Item 7 + Item 8	238,585,000	2,311,000	106,000	(81,271,000)	159,731,000
10.	State Contribution Requirement: Item 10 Adjusted with Interest for Payment Quarterly in Advance	$245,933,000	$2,382,000	$109,000	($83,774,000)	$164,650,000

State of Connecticut
State Teachers' Retirement System

Development of the State Contribution Requirement
For Fiscal Year Ending June 30, 1997
(Rolled Forward from Prior Fiscal Year)

		Provisions In Effect June 30, 1991	Public Act 82-91	Public Act 87-381	Public Act 92-205	Total
1.	Unfunded Actuarial Accrued Liability as of 6/30/95	$4,321,856,000	$33,130,000	$1,823,000	($1,598,766,000)	$2,758,043,000
2.	Normal Cost as of 7/1/95	53,501,000	0	0	0	53,501,000
3.	Interest at 8.5% on (Item 1 + Item 2)	371,905,000	2,816,000	155,000	(135,895,000)	238,981,000
4.	State Contributions	(245,933,000)	(2,382,000)	(109,000)	83,774,000	(164,650,000)
5.	Interest to End of Year on Item 4	(12,932,000)	(125,000)	(6,000)	4,405,000	(8,658,000)
6.	Expected Unfunded Actuarial Accrued Liability as of 6/30/96	4,488,397,000	33,439,000	1,863,000	(1,646,482,000)	2,877,217,000
7.	Level Percent Amortization Payment (36/17/22/27 Years)	195,264,000	2,439,000	112,000	(85,741,000)	112,074,000
8.	Estimated Normal Cost	56,711,000	0	0	0	56,711,000
9.	Total: Item 7 + Item 8	251,975,000	2,439,000	112,000	(85,741,000)	168,785,000
10.	State Contribution Requirement: Item 10 Adjusted with Interest for Payment Quarterly in Advance	$259,735,000	$2,514,000	$115,000	($88,382,000)	$173,982,000

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

PROJECTED CONTRIBUTIONS BASED ON THE JUNE 30, 1994 ACTUARIAL RESULTS

The following tables contain projections of the State contribution requirements under two alternative assumptions regarding the future growth of teachers' salaries.

For the purpose of these illustrations, we have developed 40-year projections based on aggregate salary increases of 6% and 8% per year, assuming the number of active teachers will remain at 39,511. Results shown for 1980 - 1994 (which correspond to contributions for fiscal years 1982 - 1996) are based on actual results for the System. Results shown for the projection period from 1995 to 2033 (which correspond to contributions for fiscal years from 1997 to 2035) are based on estimates of future results.

Each line of the tables contains the normal cost and unfunded actuarial accrued liability as of a particular valuation date followed by contribution information related to the appropriate fiscal year. The full contribution amount and the required contribution amount under PA 79-436 (as amended) are included both as a dollar figure and as a percentage of the historical or estimated future teachers' payroll, as applicable.

For example, the June 30, 1989 valuation generated a normal cost of $127,787,000 and an unfunded actuarial accrued liability of $4,343,412,000. Together, those results were used in calculating both the full contribution of $337,934,000 and the required contribution of $304,331,000 for the fiscal year ending June 30, 1991. The above contribution requirements represent 20.3% and 18.3%, respectively, of the teachers' payroll of $1,663,765,000 for the fiscal year ending June 30, 1990.

The following differences exist between the required contributions as recommended by the Board and as shown on the tables and the actual contribution amounts appropriated to the System:

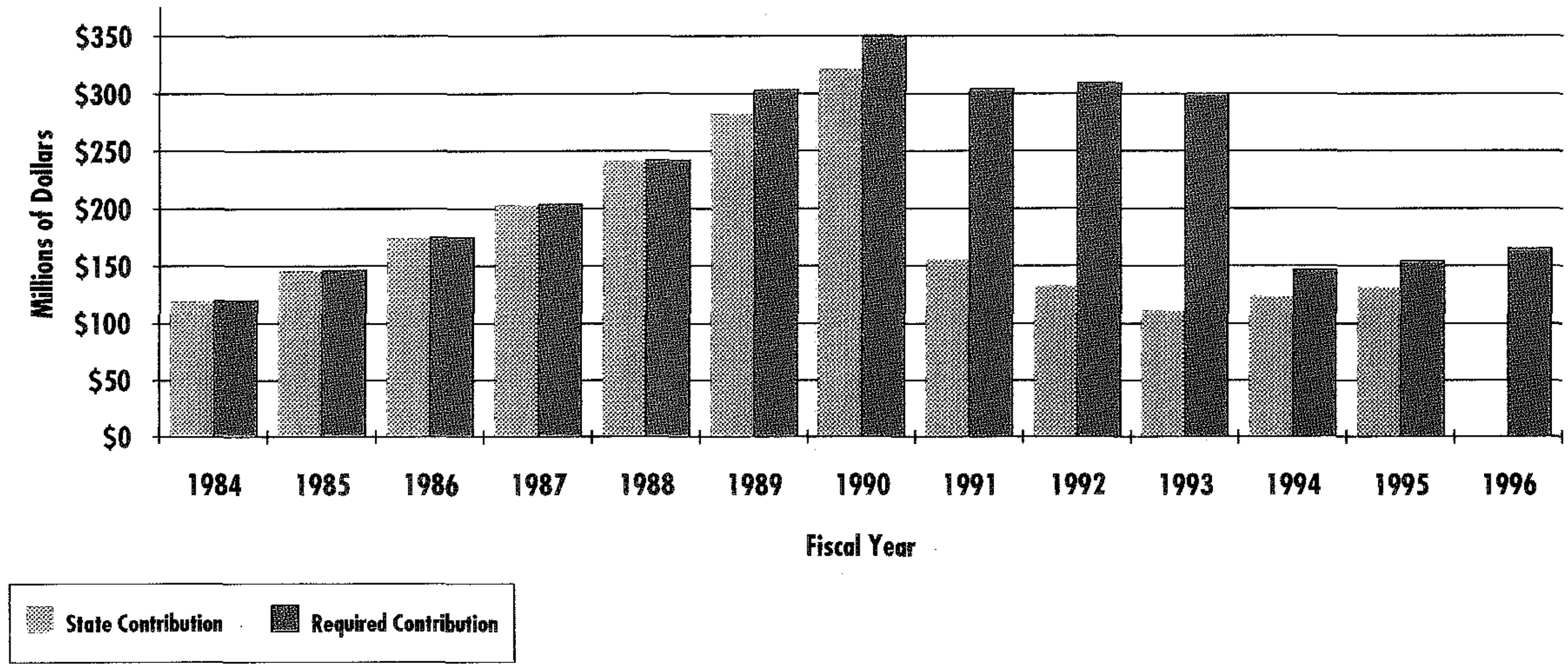
Fiscal Year Ending June 30,	Required Contribution	Actual Contribution
1989	$302,917,000	$282,917,000
1990	$348,639,000	$321,639,000
1991	$304,331,000	$156,638,000
1992	$308,724,000	$133,057,000
1993	$299,589,000	$111,600,000
1994	$145,786,000	$124,254,000
1995	$154,036,000	*

For consistency with other numbers shown, the tables contain the required amounts but the projections take the actual amounts into consideration.

* At the time this report was written, the State had contributed $66,252,000 for the fiscal year ending June 30, 1995. The projections are based on the assumption that an additional contribution of $66,252,000 will be made.

State Teachers' Retirement System

Comparison of State Contribution with Required Contribution



STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

Table 1

PROJECTED CONTRIBUTIONS BASED ON THE ACTUARIAL RESULTS AS OF JUNE 30, 1994
(in thousands of dollars)

Teachers Payroll is Assumed to Increase 6% per Annum Starting July 1, 1994

Actuarial Results as of June 30,	Normal Cost	Unfunded Actuarial Accrued Liability	Contribution Amounts for the Fiscal Year Ending June 30,	Full Contribution	Percent of Payroll	Funding Percent	Required Contribution	Percent of Payroll	Teachers' Payroll for Fiscal Year	
1984	107,293	3,261,067	1986	269,102	27.6%	65%	175,312	18.0%	1984-85	975,248
1985	117,505	3,500,185	1987	290,771	27.3%	70%	203,987	19.2%	1985-86	1,065,077
1986	132,310	3,818,585	1988	321,551	26.9%	75%	241,563	20.2%	1986-87	1,193,463
1987	151,005	4,611,656	1989	378,216	27.6%	80%	302,917	22.1%	1987-88	1,369,950
1988	173,335	4,788,106	1990	409,844	26.6%	85%	348,639	22.6%	1988-89	1,540,789
1989	127,787	4,343,412	1991	337,934	20.3%	90%	304,331	18.3%	1989-90	1,663,765
1990	126,755	3,960,871	1992	324,866	18.1%	95%	308,724	17.2%	1990-91	1,792,500
1991	127,422	3,460,650	1993	299,589	16.3%	100%	299,589	16.3%	1991-92	1,841,880
1992	41,678	2,430,260	1994	145,786	7.5%	100%	145,786	7.5%	1992-93	1,952,393
1993	44,595	2,564,584	1995	154,036	7.6%	100%	154,036	7.6%	1993-94	2,030,411
1994	50,001	2,680,430	1996	164,650	7.7%	100%	164,650	7.7%	1994-95	2,152,236
1995	53,501	2,758,043	1997	173,982	7.6%	100%	173,982	7.6%	1995-96	2,281,370
1996	56,711	2,877,217	1998	183,844	7.6%	100%	183,844	7.6%	1996-97	2,418,252
1997	60,114	3,000,180	1999	194,266	7.6%	100%	194,266	7.6%	1997-98	2,563,347
1998	63,721	3,126,910	2000	205,277	8.5%	100%	205,277	8.5%	1998-99	2,418,252
1999	67,544	3,257,353	2001	216,917	8.5%	100%	216,917	8.5%	1999-00	2,563,347
2004	90,390	3,961,752	2006	285,809	8.3%	100%	285,809	8.3%	2004-05	3,430,337
2009	120,962	4,733,551	2011	376,628	8.2%	100%	376,628	8.2%	2009-10	4,590,565
2014	161,875	5,525,066	2016	489,421	8.0%	100%	489,421	8.0%	2014-15	6,143,211
2019	216,626	6,263,653	2021	644,765	7.8%	100%	644,765	7.8%	2019-20	8,221,002
2024	289,894	6,354,124	2026	1,267,610	11.5%	100%	1,267,610	11.5%	2024-25	11,001,555
2029	387,944	3,334,344	2031	1,666,620	11.3%	100%	1,666,620	11.3%	2029-30	14,722,562
2034	519,157	0	2036	567,254	2.9%	100%	567,254	2.9%	2034-35	19,702,109

Table 2

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

PROJECTED CONTRIBUTIONS BASED ON THE ACTUARIAL RESULTS AS OF JUNE 30, 1994
(in thousands of dollars)

Teachers Payroll is Assumed to Increase 8% per Annum Starting July 1, 1994

Actuarial Results as of June 30,			Contribution Amounts for the Fiscal Year Ending June 30,							
	Normal Cost	Unfunded Actuarial Accrued Liability		Full Contribution	Percent of Payroll	Funding Percent	Required Contribution	Percent of Payroll	Teachers' Payroll for Fiscal Year	
1984	107,293	3,261,067	1986	269,102	27.6%	65%	175,312	18.0%	1984-85	975,248
1985	117,505	3,500,185	1987	290,771	27.3%	70%	203,987	19.2%	1985-86	1,065,077
1986	132,310	3,818,585	1988	321,551	26.9%	75%	241,563	20.2%	1986-87	1,193,463
1987	151,005	4,611,656	1989	378,216	27.6%	80%	302,917	22.1%	1987-88	1,369,950
1988	173,335	4,788,106	1990	409,844	26.6%	85%	348,639	22.6%	1988-89	1,540,789
1989	127,787	4,343,412	1991	337,934	20.3%	90%	304,331	18.3%	1989-90	1,663,765
1990	126,755	3,960,871	1992	324,866	18.1%	95%	308,724	17.2%	1990-91	1,792,500
1991	127,422	3,460,650	1993	299,589	16.3%	100%	299,589	16.3%	1991-92	1,841,880
1992	41,678	2,430,260	1994	145,786	7.5%	100%	145,786	7.5%	1992-93	1,952,393
1993	44,595	2,564,584	1995	154,036	7.6%	100%	154,036	7.6%	1993-94	2,030,411
1994	50,001	2,680,430	1996	164,650	7.5%	100%	164,650	7.5%	1994-95	2,192,844
1995	53,501	2,758,043	1997	175,085	7.4%	100%	175,085	7.4%	1995-96	2,368,272
1996	57,781	2,877,217	1998	186,203	7.3%	100%	186,203	7.3%	1996-97	2,557,734
1997	62,403	3,000,180	1999	198,053	7.2%	100%	198,053	7.2%	1997-98	2,762,353
1998	67,395	3,126,910	2000	210,681	8.2%	100%	210,681	8.2%	1998-99	2,557,734
1999	72,787	3,257,354	2001	224,147	8.1%	100%	224,147	8.1%	1999-00	2,762,353
2004	106,948	3,961,751	2006	306,107	7.5%	100%	306,107	7.5%	2004-05	4,058,803
2009	157,142	4,733,545	2011	419,399	7.0%	100%	419,399	7.0%	2009-10	5,963,713
2014	230,892	5,525,061	2016	569,590	6.5%	100%	569,590	6.5%	2014-15	8,762,651
2019	339,256	6,263,650	2021	785,749	6.1%	100%	785,749	6.1%	2019-20	12,875,209
2024	498,478	6,354,121	2026	1,505,794	8.0%	100%	1,505,794	8.0%	2024-25	18,917,906
2029	732,427	3,334,341	2031	2,058,116	7.4%	100%	2,058,116	7.4%	2029-30	27,796,610
2034	1,076,176	0	2036	1,198,064	2.9%	100%	1,198,064	2.9%	2034-35	40,842,340

Wyatt

Exhibit 4

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

THE FUNDED STATUS OF THE SYSTEM

As noted in the Summary of Principal Actuarial Results, we have compared the market value of assets with the actuarial present value of credited projected benefits (Pension Benefit Obligation) to obtain one measure of how the System is meeting its obligation to fund benefits payable to its Members.

The actuarial present value of credited projected benefits was based on Members' service as of the valuation date and upon salary projected to retirement. In attempting to compare the current results with those of prior years, it is crucial to keep in mind that the actuarial basis for the calculations has been changed from time to time. Therefore, the actuarial present value of benefits as of June 30, 1989 (and as of June 30, 1991) is not comparable to results from prior years. The increase in the funded ratio to 58.3% and the decrease of the unfunded ratio to 191.7% are primarily due to changes in the measurement scale (i.e., the actuarial assumptions).

As of June 30	Market Value of Assets	Pension Benefit Obligation	Funded Ratio	Unfunded Pension Benefit Obligation	Annual Compensation	Unfunded Ratio
1980	$ 1,049,306,000	$ 2,603,702,000	40.3%	$ 1,554,396,000	$ 692,547,000	224.4%
1982	1,154,963,000	3,244,804,000	35.6%	2,089,841,000	769,500,000	271.6%
1984	1,696,074,000	4,398,687,000	38.6%	2,702,613,000	886,409,000	304.9%
1985	2,157,914,000	4,882,540,000	44.2%	2,724,626,000	975,248,000	279.4%
1986	2,728,837,000	5,305,841,000	51.4%	2,577,004,000	1,065,077,000	242.0%
1987	3,188,223,000	6,293,712,000	50.7%	3,105,489,000	1,193,463,000	260.2%
1988	3,422,467,000	6,856,672,000	49.9%	3,434,205,000	1,369,950,000	250.7%
1989	4,136,564,000	7,090,175,000	58.3%	2,953,611,000	1,540,789,000	191.7%
1990	4,789,238,000	7,425,158,000	64.5%	2,635,920,000	1,663,765,000	158.4%
1991	4,952,089,000	7,408,412,000	66.8%	2,456,323,000	1,792,500,000	137.0%
1992	5,305,850,000	6,896,715,000	76.9%	1,836,975,000	1,841,880,000	99.7%
1994	5,985,275,000	7,489,333,000	79.9%	1,540,809,000	2,030,410,000	75.9%

Analysis of the funded ratio over time indicates how the System is meeting its obligation to fund benefits. Generally, the greater this ratio, the stronger and more well-funded the System.

We have also compared the unfunded pension benefit obligation with annual compensation to remove the effects of inflation and to aid in the analysis of the System's progress in accumulating sufficient assets to pay benefits when due. Generally, the smaller the unfunded percentage, the stronger the System.

Exhibit 5

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

RECONCILIATION OF THE MARKET VALUE OF ASSETS

A. Reconciliation of Market Value of Assets from July 1, 1992 to June 30, 1994

1.	Market Value of Assets as of July 1, 1992	$ 5,305,850,000
2.	Contributions from July 1, 1992 to June 30, 1993 (from State and Members),	238,188,000
3.	Benefit Payments from July 1, 1992 to June 30, 1993:	
	a. Pension Payments	(332,139,000)
	b. Refund of Member Contributions	(11,351,000)
	c. Survivorship Benefits	(1,503,000)
4.	Net Investment Income for July 1, 1992 to June 30, 1993	647,398,000
5.	Market Value of Assets as of June 30, 1993	$5,846,443,000
6.	Contributions from July 1, 1993 to June 30, 1994 (from State and Members)	257,779,000
7.	Benefit Payments from July 1, 1993 to June 30, 1994:	
	a. Pension Payments (including Suvivorship Benefits)	(354,188,000)
	b. Refund of Member Contributions	(6,409,000)
8.	Net Investment Income for July 1, 1993 to June 30, 1994	241,650,000
9.	Market Value of Assets as of June 30, 1994	$5,985,275,000

B. Net Rate of Return on Market Value of Assets
(prior to adjustment for Excess Earnings Account)

1.	For Period Ending June 30, 1993	12.2%
2.	For Period Ending June 30, 1994	4.1%

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

DEVELOPMENT OF THE ACTUARIAL VALUATION ASSETS

Actuarial Value of Assets

In order to reduce potential volatility in the market value of the System's assets, a smoothing technique is used to develop an actuarial value of assets. This value is then used to determine the unfunded actuarial accrued liability.

To develop the actuarial value of assets as of June 30, 1994, the actuarial value of assets as of July 1, 1992 was increased by contributions to the System and reduced by benefit payments made to former Members and their Beneficiaries. These amounts were then adjusted with interest to the end of the year, using the expected rate of return on assets. The resulting figure represents the expected actuarial value of assets, provided the assumed rate of return will be realized.

The expected actuarial value of assets at year end was then compared with the market value of assets as of June 30, 1993 and 20% of the difference was recognized. The resulting value would have been further adjusted if it had been less than 80% or greater than 120% of the market value of assets. The same procedure is then used to determine the actuarial value as of June 30, 1994. Finally, the actuarial value of assets in Item B.12. is reduced by the value of the Excess Earnings Account as of June 30, 1994.

A. Development of the Actuarial Value of Assets as of June 30, 1993

1.	Adjusted Actuarial Value of Assets as of July 1, 1992	$4,847,986,000
2.	Value of Excess Earnings Account as of July 1, 1992	246,110,000
3.	Actuarial Value of Assets as of July 1, 1992 Item 1 + Item 2	5,094,096,000
4.	Contributions for period July 1, 1992 to June 30, 1993	238,188,000
5.	Benefit Payments for period July 1, 1992 to June 30, 1993	344,993,000
6.	Net Transactions: Item 4 - Item 5	(106,805,000)
7.	Expected Rate of Return	8.5%
8.	Expected Investment Return: Item 7 x (Item 3 + ½ Item 6)	428,459,000
9.	Expected Actuarial Value of Assets as of June 30, 1993: Item 3 + Item 6 + Item 8	5,415,750,000
10.	Market Value of Assets as of June 30, 1993	5,846,443,000
11.	Adjustment: 20% of the Difference between Item 10 and Item 9	86,139,000

12. Preliminary Actuarial Value of Assets as of June 30, 1993: Item 9 + Item 11	5,501,889,000
13. Limiting Values:	
a. 80% of Item 10	4,677,154,000
b. 120% of Item 10	7,015,732,000
14. Actuarial Value of Assets as of June 30, 1993: Item 12, but not less than Item 13.a. or greater than Item 13.b.	5,501,889,000

B. Development of Actuarial Value of Assets as of June 30, 1994

1. Actuarial Value of Assets as of June 30, 1993	$5,501,889,000
2. Contributions for period July 1, 1993 to June 30, 1994	257,779,000
3. Benefit Payments for period July 1, 1993 to June 30, 1994	360,597,000
4. Net Transactions: Item 2 - Item 3	(102,818,000)
5. Expected Rate of Return	8.5%
6. Expected Investment Return: Item 5 x (Item 1 + ½ Item 4)	463,291,000
7. Expected Actuarial Value of Assets as of June 30, 1994: Item 1 + Item 4 + Item 6	5,862,363,000
8. Market Value of Assets as of June 30, 1994	5,985,275,000
9. Adjustment: 20% of the Difference between Item 8 and Item 7	24,582,000
10. Preliminary Actuarial Value of Assets as of June 30, 1994: Item 7 + Item 9	5,886,945,000
11. Limiting Values:	
a. 80% of Item 8	4,788,220,000
b. 120% of Item 8	7,182,330,000
12. Actuarial Value of Assets as of June 30, 1994: Item 10, but not less than Item 11.a. or greater than Item 11.b.	5,886,945,000
13. Value of Excess Earnings Account as of June 30, 1994	284,804,000
14. Adjusted Actuarial Value of Assets as of June 30, 1994: Item 12 – Item 13	$ 5,602,141,000

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

RECONCILIATION OF THE EXCESS EARNINGS ACCOUNT

A. Excess Earnings Account

The Excess Earnings Account was established on January 1, 1992, pursuant to PA 92-205. After 1992 the Excess Earnings Account will be debited for the actuarial present value of cost-of-living adjustments to pensions of retired members whose dates of retirement are after September 1, 1992 and will be credited with excess investment earnings for any year in which the rate of investment return exceeds 11.5%. The value of the Excess Earnings Account as of June 30, 1994 is shown below:

1. Excess Earnings Account, January 1, 1992[1]	$	248,449,000
2. Excess Investment Earnings for 1992		0
3. Excess Earnings Account, December 31, 1992		248,449,000
4. Excess Investment Earnings for 1993		40,450,000
5. Actuarial Liability for COLA, June 30, 1993		56,000
6. Actuarial Liability for COLA, December 31, 1993		242,000
7. Excess Earnings Account, December 31, 1993		288,601,000
8. Actuarial Liability for COLA, June 30, 1994		3,798,000
9. Excess Earnings Account, June 30, 1994		284,804,000

B. Excess Investment Earnings - 1992

1. Market Value of Assets, December 31, 1991	[2]
2. Net Cash Flow for calendar year	[2]
3. Average Market Value of Assets, Item B.1. + 1/2 x Item B.2.	[2]
4. Rate of Investment Return, 1992	3.64%
5. Excess of Item B.4. over 11.5%	0.00%
6. Excess Investment Earnings	0

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[1] Reestablished, based on financial statement provided by Boston Safe Deposit and Trust Company.

[2]Not shown since rate of return was less than 11.5%.

C. Excess Investment Earnings - 1993

1.	Market Value of Assets, December 31, 1992	$ 5,503,881,000
2.	Net Cash Flow for calendar year	(115,203,000)
3.	Average Market Value of Assets, Item C.1. + 1/2 x Item C.2.	5,466,279,000
4.	Rate of Investment Return, 1993	12.24%
5.	Excess of Item B.4. over 11.5%	0.74%
6.	Excess Investment Earnings	40,450,000

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

CENSUS DATA FOR MEMBERS IN THE SYSTEM

We were provided with census data on each active teacher who was in the System as of June 30, 1994. The data included name, sex, date of birth, service, salary, and the Member's contributions. Pertinent data was also provided for each retiree, beneficiary, survivor, and dependent as of June 30, 1994, including name, sex, date of birth, date of retirement, amount and form of monthly benefit, and beneficiary information, where applicable. In addition, we received data on former teachers who were no longer active in the System.

The table below gives a comparison of certain characteristics of Members in the System between this year and June 30, 1992.

		June 30, 1992	June 30, 1994
1.	Active Teachers		
	a. Number	38,260	39,511
	b. Average Age	44.8	45.3
	c. Average Service	15.2	17.9
	d. Average Annual Compensation	$ 48,141	$ 51,388
2.	Terminated Vested Teachers		
	a. Number[1]	535	972
	b. Average Monthly Deferred Benefit	$ 456	$ 626
3.	Survivors and Dependents		
	a. Number	530	535
	b. Average Monthly Benefit	$ 262	$ 264
4.	Retired Teachers and Beneficiaries		
	a. Number	16,058	16,923
	b. Average Monthly Benefit	$ 1,700	$ 1,881

[1] Excludes non-vested other inactive members.

State of Connecticut
State Teachers' Retirement System

Chart 1

Age and Service Distribution as of July 1, 1994
Number of Active Members

Service	*0*	*1*	*2*	*3*	*4*	*5 - 9*	*10 - 14*	*15 - 19*	*20 - 24*	*25 - 29*	*30 - 34*	*35 - 39*	*Over 39*	*Total*
Age														
20 - 24	36	197	55	1	0	0	0	0	0	0	0	0	0	289
25 - 29	92	557	483	250	311	428	0	0	0	0	0	0	0	2,121
30 - 34	45	213	211	146	201	1,624	357	1	0	0	0	0	0	2,798
35 - 39	41	189	160	92	141	1,121	1,375	738	0	0	0	0	0	3,857
40 - 44	43	224	204	123	185	1,138	833	2,778	1,848	1	0	0	0	7,377
45 - 49	31	130	138	103	132	1,004	615	907	4,823	2,613	1	0	0	10,497
50 - 54	9	43	48	30	50	467	403	489	894	3,457	1,227	0	0	7,117
55 - 59	6	14	17	8	12	166	174	311	464	645	1,547	388	0	3,752
60 - 61	0	2	1	4	1	31	38	81	106	102	130	249	2	747
62 - 64	0	3	3	0	1	35	34	77	110	89	67	138	77	634
65 - 69	1	0	1	0	0	11	16	21	43	61	27	40	56	277
70 & up	0	0	0	0	0	0	2	3	12	6	9	3	10	45
Total	304	1,572	1,321	757	1,034	6,025	3,847	5,406	8,300	6,974	3,008	818	145	39,511

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State of Connecticut
State Teachers' Retirement System

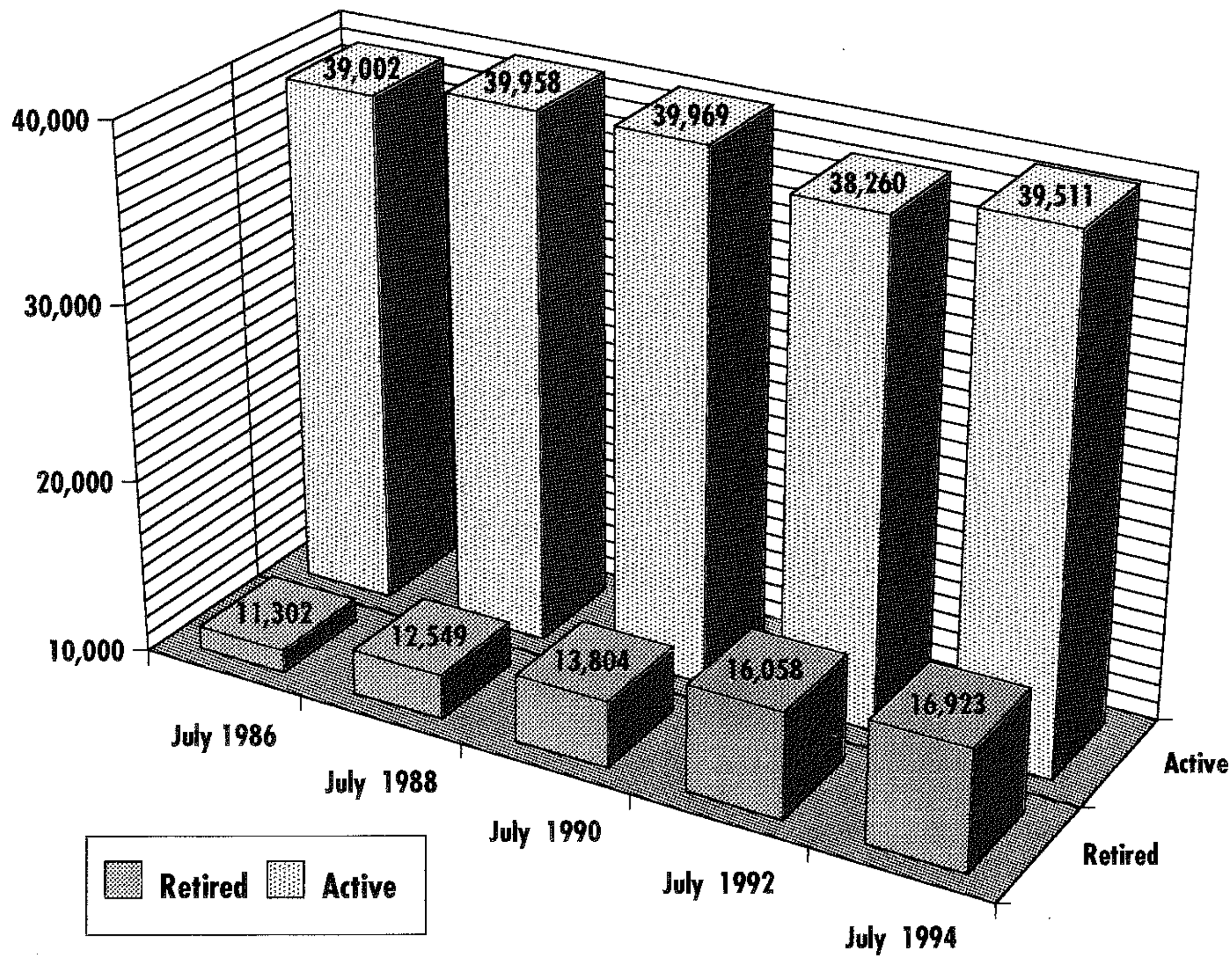
Chart 2

Age and Service Distribution as of July 1, 1994
Average Current Salary

Service	*0*	*1*	*2*	*3*	*4*	*5 - 9*	*10 - 14*	*15 - 19*	*20 - 24*	*25 - 29*	*30 - 34*	*35 - 39*	*Over 39*	*Total*
Age														
20 - 24	31,882	31,541	31,127	37,267	0	0	0	0	0	0	0	0	0	31,524
25 - 29	30,086	32,372	32,664	33,126	34,802	37,292	0	0	0	0	0	0	0	33,777
30 - 34	30,433	33,861	34,637	35,750	37,496	40,814	44,156	47,412	0	0	0	0	0	39,578
35 - 39	31,778	35,158	36,160	36,165	40,312	43,603	47,870	51,723	0	0	0	0	0	45,532
40 - 44	32,998	35,793	36,812	39,750	41,027	45,796	50,312	53,145	55,509	46,462	0	0	0	50,660
45 - 49	34,482	37,462	40,731	41,011	41,932	47,787	52,168	55,976	55,574	56,789	60,853	0	0	54,171
50 - 54	26,579	40,208	43,622	44,659	47,919	48,878	53,357	57,275	58,437	57,486	58,529	0	0	56,614
55 - 59	37,283	47,783	49,220	54,168	51,827	48,715	51,975	58,036	58,702	59,511	59,791	58,224	0	58,282
60 - 61	0	30,000	54,418	44,200	81,833	49,871	55,895	56,544	59,577	60,869	61,232	58,032	63,104	58,478
62 - 64	0	37,378	51,162	0	42,850	51,861	53,899	58,504	59,258	60,672	58,348	59,116	58,057	58,229
65 - 69	36,980	0	29,328	0	0	50,934	53,044	58,139	58,181	58,418	60,403	60,167	58,605	58,054
70 & up	0	0	0	0	0	0	42,405	56,886	60,672	56,669	58,995	59,728	61,500	58,860
Overall	31,499	34,071	35,489	36,894	38,986	44,158	49,653	54,229	56,163	57,509	59,310	58,416	58,576	51,388

Connecticut State Teachers' Retirement System

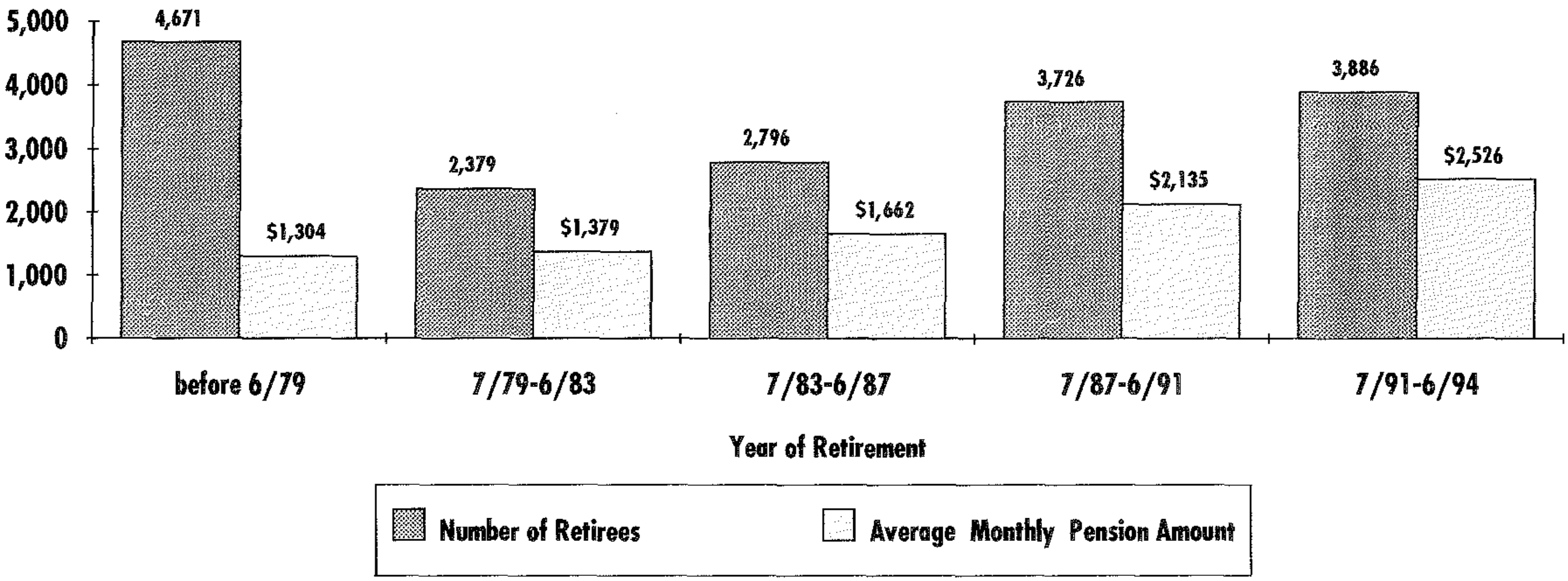
Plan Membership - Active and Retired



Connecticut State Teachers' Retirement System

Retired Members as of July 1994

Distribution by Year of Retirement



STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

OUTLINE OF THE PRINCIPAL PROVISIONS OF THE SYSTEM

Outlined below are the principal provisions of the System which were reflected in the results shown in this report.

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. Ten months of credited service constitutes one year of Credited Service. Certain other types of teaching service, State employment, or war-time military service may be purchased at retirement, if the Member pays one-half of the cost.

5. <u>Normal Retirement</u>

Eligibility: Age 60 and 20 years of Credited Service in Connecticut or 35 years of Credited Service including at least 25 years of service in Connecticut.

Benefit: 2% times years of Credited Service times Average Annual Salary (maximum percent is 75%)

plus

any additional amounts derived from the accumulation of 6th percent contributions made prior to July 1, 1989 and voluntary contributions by the teacher.

Minimum Benefit: Effective January 1, 1988, Public Act 87-381 provides a minimum monthly retirement benefit of $800 to teachers who retire under the Normal Retirement provisions and who complete at least 25 years of full time Connecticut service at retirement.

6. <u>Early Retirement</u>

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

Benefit: Reduced normal retirement benefit. The early retirement factors currently in effect are 6% per year for the first five years by which early retirement precedes the minimum normal retirement age and 4% per year for the next five years by which early retirement precedes the minimum normal retirement age.

7. Proratable Retirement

Eligibility: Age 60 and 10 years of Credited Service with the last 5 years in Connecticut.

Benefit: 2% less .1% for each year less than 20 years times years of Credited Service in Connecticut plus 1% times years of additional Credited Service times Average Annual Salary.

8. Disability Retirement

Eligibility: Disability prior to age 60 and after 5 years of Credited Service in Connecticut if not incurred in the performance of duty and without regard to service if incurred in the 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 age 60 times Average Annual Salary;
- 50% times Average Annual Salary.

Not less than 15% times Average Annual Salary.

9. Termination of Employment

With less than 5 years of Credited Service: Return of 6% contributions with interest.

With 5 or more years of Credited Service: Return of 6% contributions with interest and 1% contributions made prior to July 1, 1989 without interest.

With 10 or more years of Credited Service: 100% vested. Member may elect return of all contributions plus interest on 6% contributions in lieu of vested benefit.

10. Pre-Retirement Death Benefits

A lump sum plus one of the following: survivor's benefit, return of all contributions with interest, surviving spouse's benefit, or automatic surviving spouse's benefit.

- Lump Sum: $1,000 for the first 5 years of Connecticut service plus $200 per year thereafter. Maximum benefit: $2,000.

- Survivor's Benefit: $300 per month to a surviving spouse or dependent former spouse (receiving child support), or to a dependent parent over age 65 if there is no surviving spouse or dependent child, or to a legal guardian if there is no surviving spouse, dependent former spouse, or dependent parent. $200 per month to a single dependent child under age 18 or over 18 if disabled. $300 per month divided equally among two or more such children in a family.

- Accumulated contributions with interest plus dependent children's benefits as described in the "Survivor's Benefit" paragraph.

- Surviving Spouse's Benefit: the 50% co-participant option plus dependent children's benefits as described in the "Survivor's Benefit" paragraph.

- Automatic Surviving Spouse's Benefit: Prefiled co-participant option with the percent continued chosen from 33-1/3%, 50%, 66-2/3%, 75%, or 100%.

11. Form of Annuity

Normal: Partial Refund Option - 75% of total benefit is paid as a life annuity. If 25% of the benefits paid prior to death do not exceed the Member's 6% contributions plus interest frozen at the date of benefit commencement, the difference is paid to the Member's beneficiary.

Optional Forms: 5-, 10-, 20-, or 25-year certain and life. 33-1/3%, 50%, 66-2/3%, 75%, or 100% co-participant annuity (if co-participant dies first, benefit reverts to unreduced amount).

12. Cost-of-Living Allowance

For teachers who retired prior to September 1, 1992, 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. Benefit adjustments for teachers who retire on or after September 1, 1992, will be provided through the Excess Earnings Account. The amount of such adjustments will depend upon the adequacy of the Excess Earnings Account as well as the investment returns of the Teachers' Retirement Fund.

13. Teachers' Required Contribution

Effective July 1, 1992, each teacher is required to contribute 6% of annual salary for the pension benefit. An additional 1% of annual salary is contributed for health insurance of retired teachers, except for the first $500,000 of such total.

14. State Contribution

The State's contribution requirement to fund the balance of the liability for benefits with annual contributions (currently paid in installments at the beginning of each quarter) is determined in accordance with Section 10-183(z) (which reflects Public Act 79-436 as amended).

STATE OF CONNECTICUT
STATE TEACHERS' RETIREMENT SYSTEM

SUMMARY OF ACTUARIAL ASSUMPTIONS AND ACTUARIAL COST METHODS

The following is a summary of the actuarial assumptions and the actuarial cost methods used in this valuation of the State Teachers' Retirement System.

A. Actuarial Assumptions

1. Investment Return: 8.5% per annum, compounded annually.

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

3. Termination of Employment:

Years of Service	Rate
1 - 5	9%
6 - 10	5%
11 - 20	2%
21 and above	1%

4. Salary Increases:

Years of Service	Rate
0 - 15	8.0%
16 and above	5.5%

5. Cost of Living Increases: Annual increases in pensions of 4% after retirement for teachers who retired prior to September 1, 1992. Increases for teachers who retire on or after September 1, 1992 will be provided through the Excess Earnings Account.

6. Retirement Age:

Age	Percent Expected to Retire
55	1%
56-59	5%
60-64	15%
65	20%
66	24%
67	28%
68	32%
69	36%
70	40%
71	52%
72	64%
73	76%
74	88%
75	100%

7. Disability Incidence:

Sample Rates:

Age	Rate
30	.059%
40	.105%
50	.262%

8. Active Member Marriage Assumptions:

85% of all Members are assumed to be married. Females are assumed to be 3 years younger than their spouse and have one child at age 25 and another at age 27.

9. Expenses:

Paid directly by the State.

B. Actuarial Cost Methods; Asset Valuation Method

1. Actuarial Cost Methods:

The entry age actuarial cost method was used to determine liabilities related to the State's contribution requirement.

The unit credit actuarial cost method was used to determine the actuarial present value of accrued benefits, which is used to measure the funded status of the System.

2. Valuation of Assets:

The valuation assets are updated with actual contributions and benefit payments, and with interest at a rate equal to the valuation rate of 8.5%. This preliminary value is compared with the market value of assets and 20% of the difference is recognized. The actuarial value of assets is further adjusted if necessary to lie between 80% and 120% of the market value of assets. Finally, the actuarial value of assets is reduced by the value of Excess Earnings Account as of the valuation date.