

*ACTUARIAL VALUATION*  
*CONNECTICUT STATE EMPLOYEES*  
*RETIREMENT SYSTEM*

*AT JUNE 30, 2000*

MILLIMAN & ROBERTSON, INC.

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
TABLE OF CONTENTS*

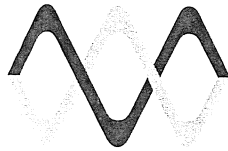
---

*SECTION*

- *Letter of Transmittal*
- I *Executive Summary*
- II *SERS Assets*
- III *SERS Liabilities*
- IV *SERS Contributions*
- V *GASB Accounting Information*

*APPENDICES*

- A *Summary Statistics on SERS Membership*
- B *Summary of Plan Provisions*
- C *Actuarial Method and Assumptions*
- D *Actuarial Surplus Test*



**MILLIMAN & ROBERTSON, INC.**

Actuaries & Consultants

*Internationally WOODROW MILLIMAN*

80 Lambertson Road, Windsor, Connecticut 06095-2126

Telephone: 860/687-2110

Fax: 860/687-2111

November 14, 2000

State of Connecticut  
State Employees Retirement Commission  
55 Elm Street  
Hartford, CT 06106

Re: Connecticut State Employees Retirement System  
June 30, 2000 Actuarial Valuation

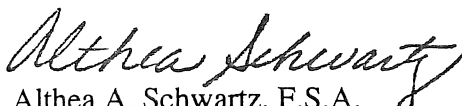
Members of the Commission:

At your request, we have made an actuarial valuation of the Connecticut State Employees Retirement System (SERS) as of June 30, 2000. The results of the valuation are contained in the following report.

Section I contains an Executive Summary in which we present the principal results of this valuation. Details regarding SERS assets, liabilities, and costs are found in Sections II, III, and IV, respectively. Section V contains the disclosure information required by GASB #25. The Appendices contain information regarding SERS membership, an outline of the benefit provisions, a description of the actuarial methods and assumptions employed in this valuation, and details on the Actuarial Surplus as of June 30, 2000.

As developed in Section IV, the actuarially determined contribution for the fiscal year beginning July 1, 2001 is \$415,492,599. For the fiscal year beginning July 1, 2002, the actuarially determined contribution is \$425,902,474.

Respectfully submitted,

  
Althea A. Schwartz, F.S.A.  
Principal and Consulting Actuary



Rebecca A. Sielman, F.S.A.  
Principal and Consulting Actuary

aas/ras 10 CSE00MainVal&Report

SECTION I

*EXECUTIVE SUMMARY*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

**CERTIFICATION**

We have performed an actuarial valuation of the Connecticut State Employees Retirement System as of June 30, 2000 to determine the contributions for the Fiscal Years beginning July 1, 2001 and July 1, 2002. The actuarial valuation was performed using employee census data and financial information as of the valuation date, furnished by the State. Although we have not performed a detailed audit of the data provided, we have reviewed the data for reasonableness and consistency.


The results of this valuation, along with supporting data, are set forth in the following report. Appendix B describes the principal provisions of the System upon which the valuation is based.


On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, all costs, liabilities, and other factors under the System were determined in accordance with generally accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, amplifying Opinions and supporting Recommendations of the American Academy of Actuaries. We further certify that, in our opinion, each actuarial assumption, method, and technique used (a) is reasonable taking into account the experience of the System and reasonable expectations or (b) would, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption, method or technique were reasonable.

Since the results of the determination are dependent on the actuarial assumptions used, actual results can be expected to differ from the figures indicated in this report to the extent that future plan experience differs from that assumed. To the best of our knowledge, the report is complete and accurate and the information presented herein, in our opinion, fully and fairly discloses the actuarial position of the System.

If this report is distributed to other parties, we request that it be copied in its entirety.

MILLIMAN & ROBERTSON, INC.

  
Althea A. Schwartz, F.S.A.  
Principal and Consulting Actuary

  
Rebecca A. Sielman, F.S.A.  
Principal and Consulting Actuary

November 15, 2000

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

***PURPOSE OF REPORT***

This report presents the results of the June 30, 2000 actuarial valuation of the Connecticut State Employees Retirement System (SERS). The primary purposes for performing the valuation are:

- to determine the Employer contribution for the Fiscal Year beginning July 1, 2001;
- to determine the Employer contribution for the Fiscal Year beginning July 1, 2002;
- to disclose asset and liability measures as of June 30, 2000; and
- to analyze and report on trends in SERS contributions, assets, and liabilities over the past several years.

***ORGANIZATION OF THE EXECUTIVE SUMMARY***

Starting with the June 30, 1998 valuation, complete actuarial valuations are performed only every other year. Membership and asset information was collected as of June 30, 1999 and has been shown where appropriate in this report for informational purposes.

The executive summary contains the following information:

- ***Major Findings...*** shows graphically, key results for each of the last eight actuarial valuations.
- ***Discussion of Results...*** highlights the major events influencing this valuation.
- ***Principal Results...*** contains a summary of comparative statistics for the current and prior valuations.

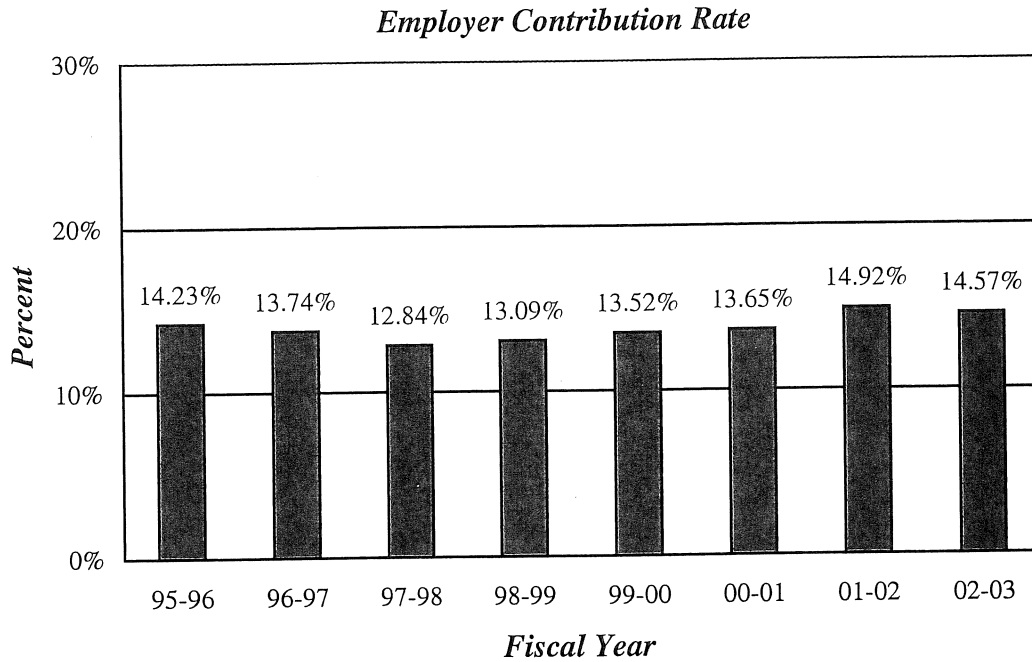
---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

---

**MAJOR FINDINGS**

The major findings of this valuation are summarized and compared in the following charts:



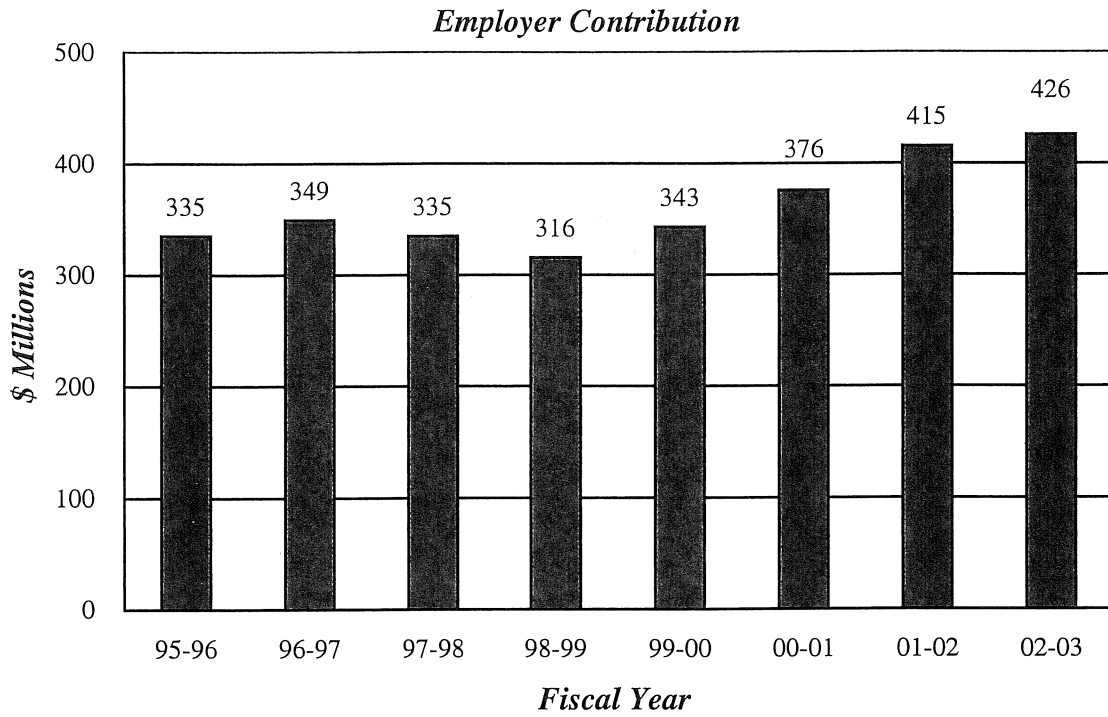
*The bar graph depicts the Employer's contribution rate. The contribution rates have remained relatively stable over the past several years.*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

---

**MAJOR FINDINGS**



*The dollar amount of the Employer's contribution equals the contribution rate shown on the prior table multiplied by the projected payroll. The increases shown for FY 01-02 and 02-03 are in large measure attributable to anticipated growth in payroll.*

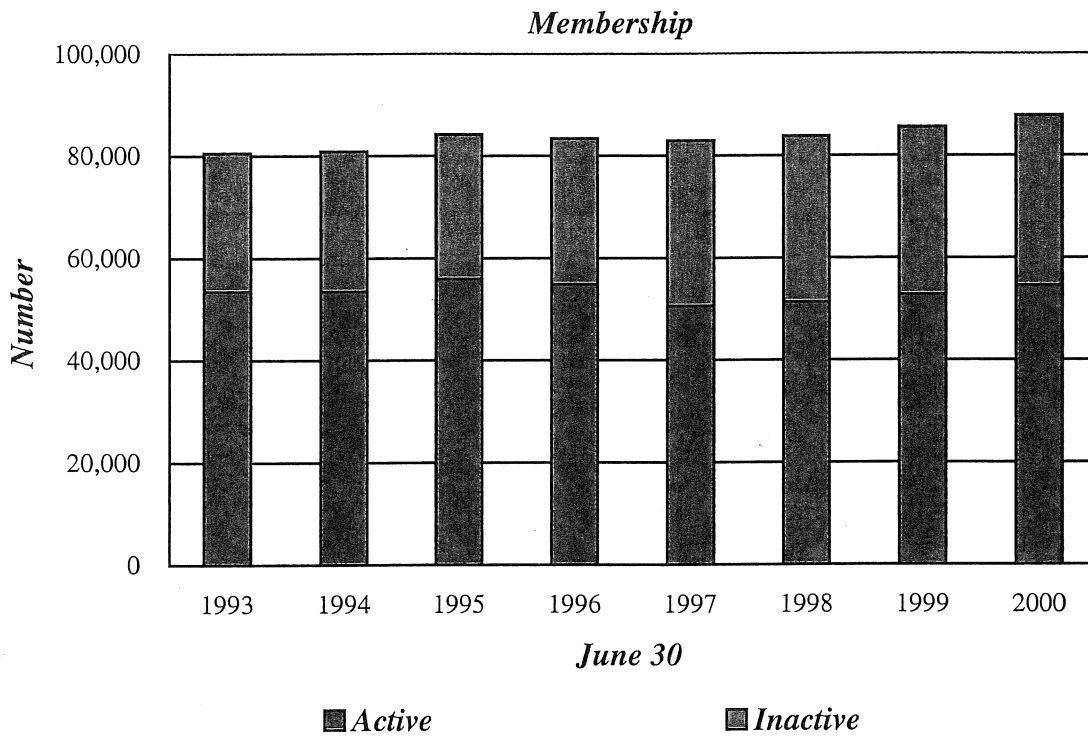


---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

**MAJOR FINDINGS**



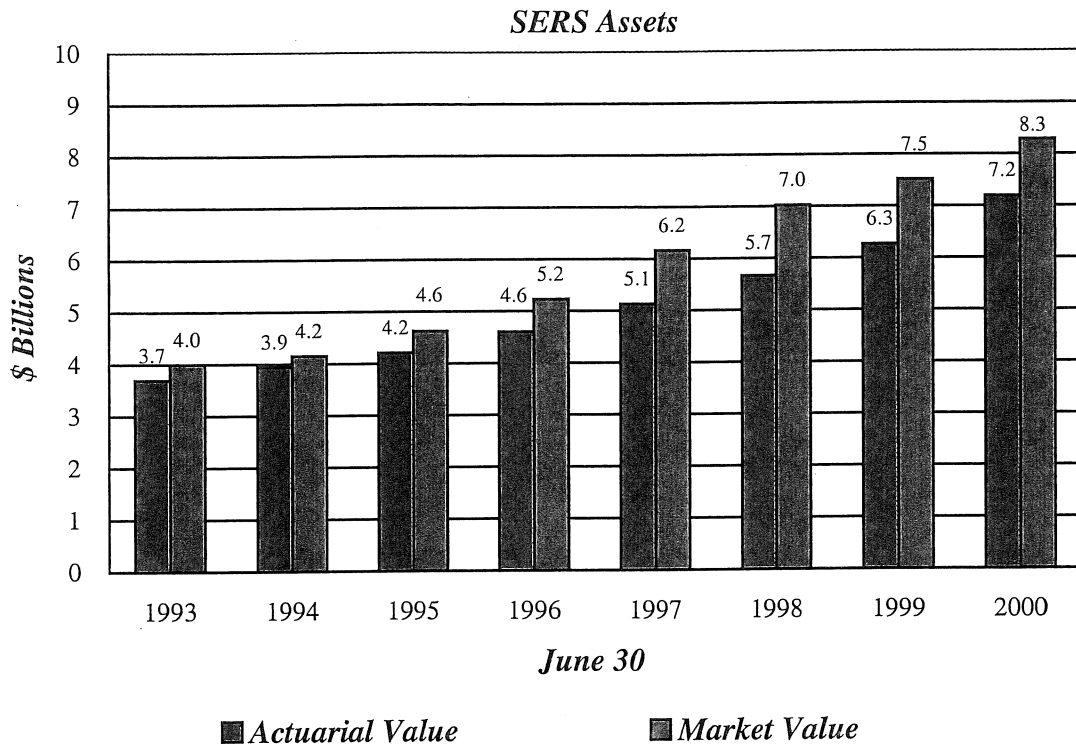
*SERS membership has grown since the last valuation. There were more than 5,000 new members who entered the new Tier IIA group within the past fiscal year. Overall, there are over 3,200 more active members than the last valuation, and nearly 800 more inactive members.*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

---

**MAJOR FINDINGS**



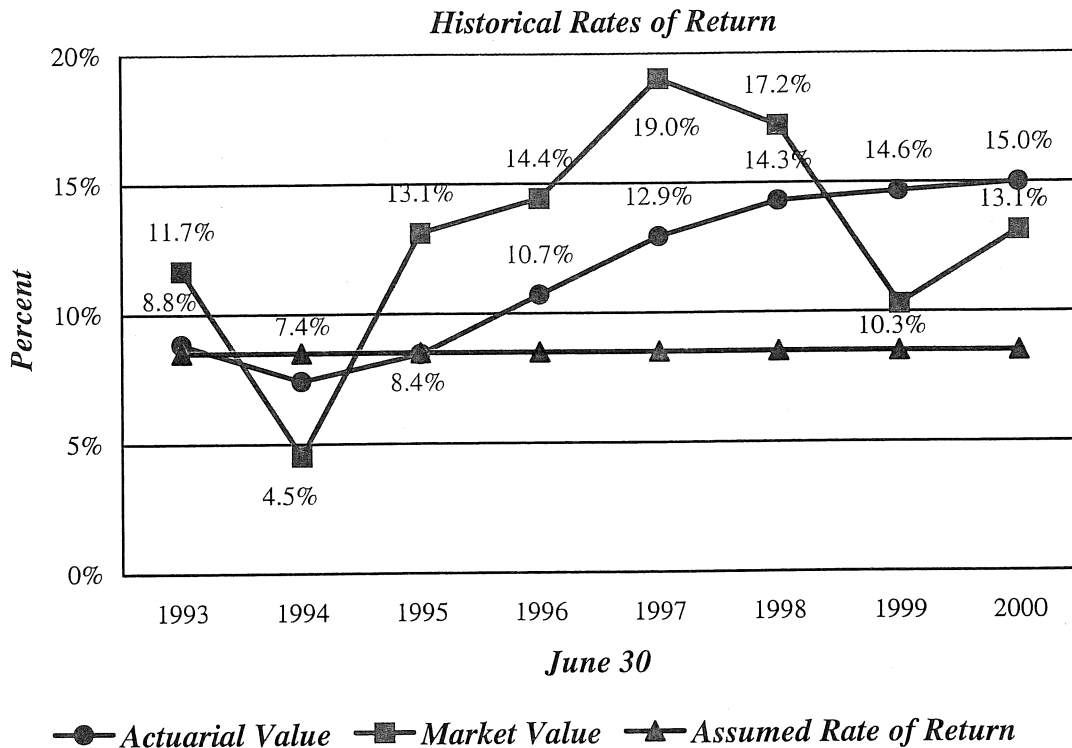
*The SERS assets have grown over the years due to investment results and continued funding. The rate of return on a Market Value for the past fiscal year was more than 13%. There have been double-digit returns in 7 of the last 8 fiscal years. Because of such sustained performance over such a long period, there is a wide gap between Actuarial Value and Market Value. As described in Section II, we have implemented a new method for determining the Actuarial Value, effective June 30, 2000.*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

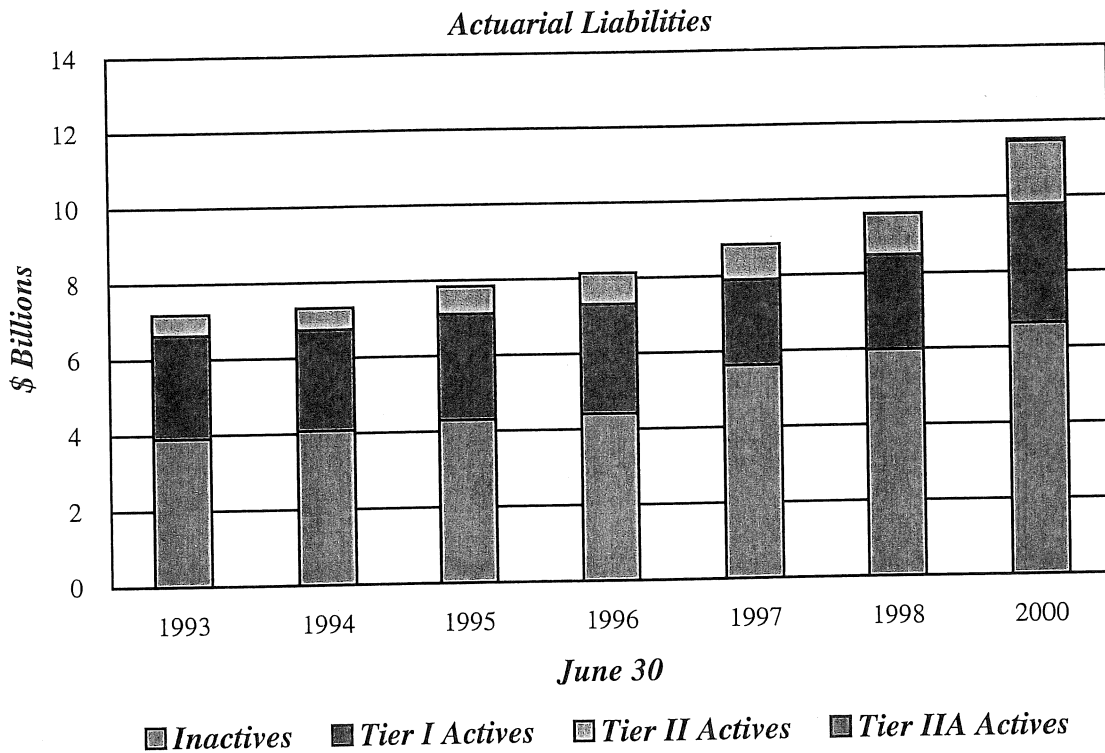
**MAJOR FINDINGS**



*This graph shows the historical rates of return on a market value basis, the impact of "smoothing" (the rates shown on an actuarial value basis), and the "benchmark" (our assumed 8.5% rate of return). For the past five years, both the market value rate and the actuarial value rate have exceeded the assumed rate, reflecting the very strong market conditions during that period.*

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

**MAJOR FINDINGS**



*This graph shows the Actuarial Liability by group. The growth in inactive liability from 1996 to 1997 reflects the impact of the 1997 early retirement incentive program.*

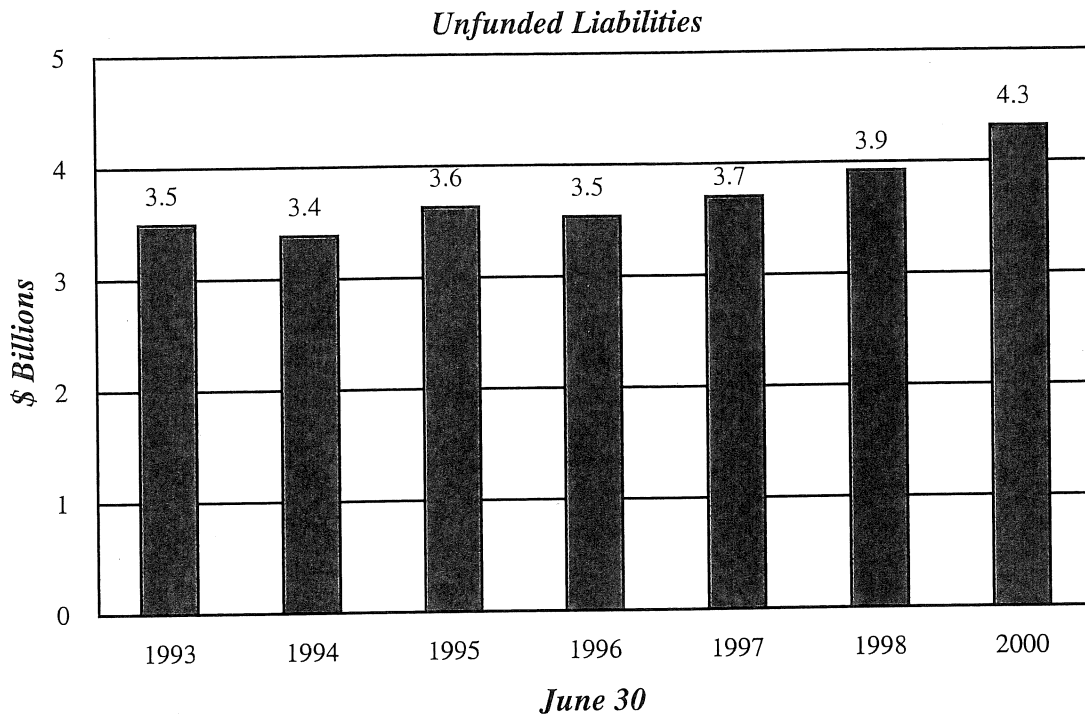
*No value is shown above for 1999 since a complete actuarial valuation was not performed as of that date.*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

**MAJOR FINDINGS**

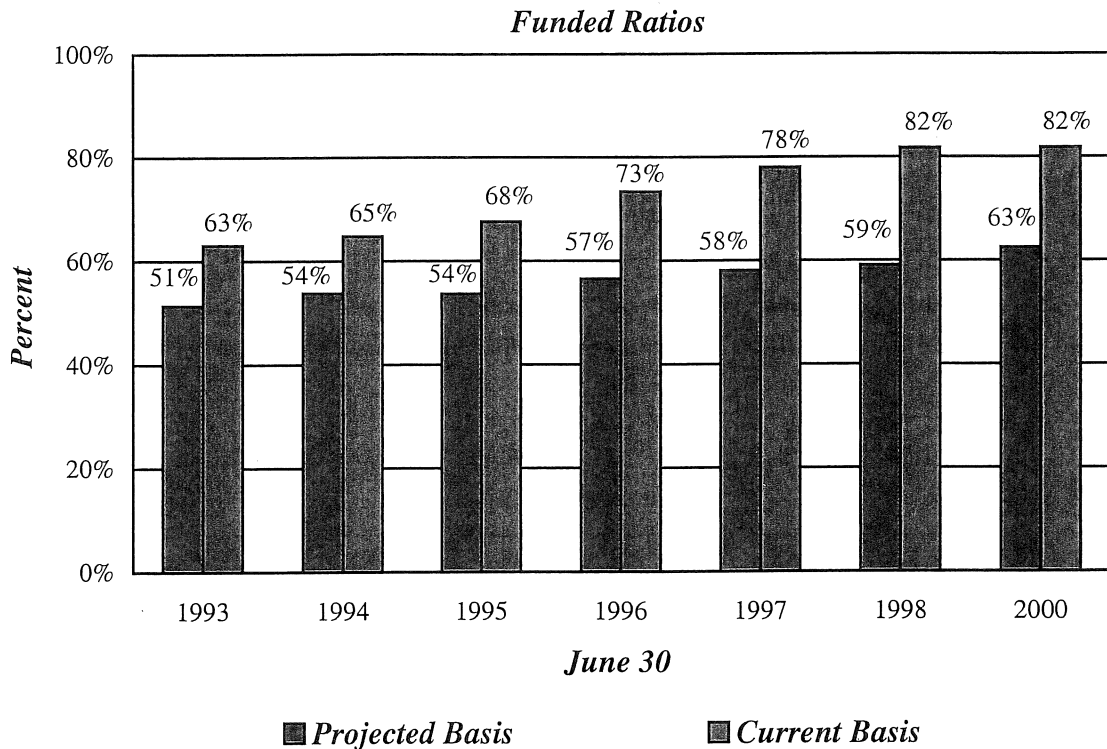


*Unfunded actuarial liabilities have increased with this valuation. This pattern is a normal outgrowth of the method of paying off this liability: a number of years of increase followed by a gradual decline.*

*No value is shown above for 1999 since a complete actuarial valuation was not performed as of that date.*

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

**MAJOR FINDINGS**



The System's Funded Ratio tracks the relationship between the System's assets and liabilities. The Employer's contribution is based on projected liabilities (the Actuarial Liability) and smoothed assets (the Actuarial Value of Assets); the **Funded Ratio - Projected Basis** tracks these amounts and indicates the progress that has been made over the years in funding the System's long-term obligations.

The **Funded Ratio - Current Basis** looks at the SERS liability for benefits already earned (the Present Value of Accrued Benefits) compared to the assets currently available (the Market Value of Assets). This ratio indicates the System's ability to fund current benefits.

No value is shown above for 1999 since a complete actuarial valuation was not performed as of that date.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

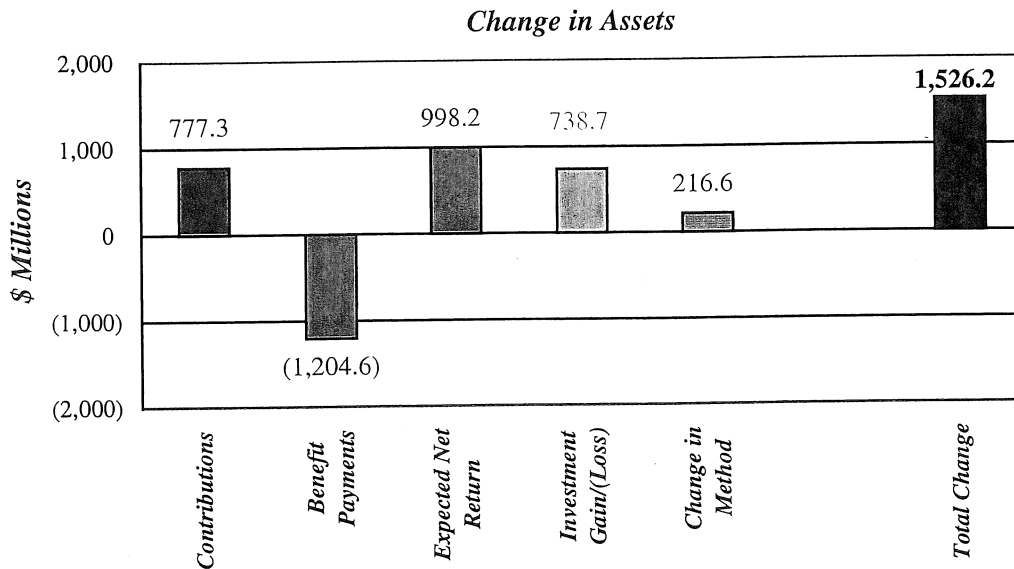
**DISCUSSION OF RESULTS**

In this section of the Executive Summary, we will discuss the significant events impacting the June 30, 2000 actuarial valuation.

**I. Investment Experience**

The investment performance was strong during the past year. The actual return was 13.1% on a market value basis compared to 10.3% for the prior fiscal year. On a smoothed actuarial basis, the rate was 15.0% compared to 14.6% for the prior valuation, reflecting continuing recognition of previous years' market gains. The assumed rate is 8.5%.

Between June 30, 1998 and June 30, 2000, the actuarial value of assets (measured on a five year smoothing basis) increased by \$1,526.2 million. This change was attributable to the following:



The expected total return on investments shown above is based on an assumed rate of return of 8.50%. However, the actual investment earnings of \$1,736.9 million over the two year period resulted in a significant actuarial gain of \$738.7 million. More details on SERS assets are presented in Section II of this report.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

**DISCUSSION OF RESULTS**

**II. Membership**

System membership has grown during the two years since the last valuation:

	<i>Active</i>	<i>Deferred Vested</i>	<i>Retired</i>	<i>Disabled</i>	<i>Benefic.</i>	<i>Total Members</i>
<b>Count on June 30, 1998</b>	51,383	828	27,468	1,606	2,557	83,842
Left System	(5,263)	(27)	(1,808)	(159)	(256)	(7,513)
Terminated Vested	(292)	292	0	0	0	0
Retired	(1,282)	(131)	1,433	(20)	0	0
Disabled	(94)	0	(61)	155	0	0
Died w/beneficiary	(7)	0	(1)	0	8	0
Rehired	33	(24)	(7)	(2)	0	0
New	10,138	199	581	46	561	11,525
<b>Count on June 30, 2000</b>	54,616	1,137	27,605	1,626	2,870	87,854

As expected, we have seen a shift in the active population from the closed Tier I and Tier II groups, with new employees entering the new Tier IIA group:

	<i>Tier I</i>	<i>Tier II</i>	<i>Tier IIA</i>	<i>Total</i>
<b>Count on June 30, 1998</b>	15,086	33,408	2,889	51,383
<i>percentage of total</i>	29%	65%	6%	
<b>Count on June 30, 1999</b>	14,501	31,959	6,378	52,838
<i>percentage of total</i>	27%	61%	12%	
<b>Count on June 30, 2000</b>	14,087	30,691	9,838	54,616
<i>percentage of total</i>	26%	56%	18%	

More information on SERS membership can be found in Appendix A.

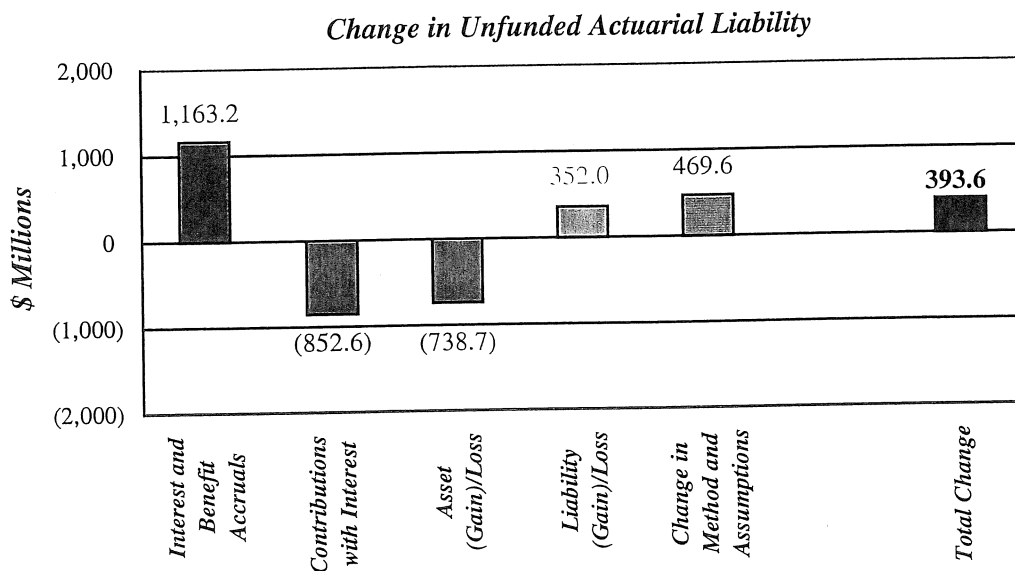


**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

**DISCUSSION OF RESULTS**

**III. Unfunded Actuarial Liability**

The unfunded actuarial liability is the shortfall between SERS projected liabilities and assets. Since the last actuarial valuation two years ago, the unfunded actuarial liability increased from \$3.9 billion to \$4.3 billion. Each year the unfunded liability increases because of interest and expected benefit accruals and decreases by contributions made to the fund. Asset and liability gains and losses also impact the unfunded liability, as do plan changes and experience. The following chart shows the development of the unfunded actuarial liability from 1998 to 2000:



The liability loss of \$352.0 million over the two year period is modest (3.1%) when compared to the total SERS liability of \$11,512.2 million. It is attributable to the difference between actual and expected experience with respect to the number of retirements, employment terminations, disabilities and deaths. Salary increases and new employees also contribute to experience gains and losses.

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**EXECUTIVE SUMMARY**

---

**DISCUSSION OF RESULTS**

**IV. Changes in Actuarial Methods and Assumptions**

In 1999, we performed a study of the System's experience during the period 1994-1998. As a result of that study, we have made changes in certain of the actuarial methods and assumptions used to determine the System's funded status and contribution requirements. The changes are highlighted below, and are described more fully in Appendix C.

- **Demographic Assumptions** - the new turnover assumption is restructured in terms of how age, service, gender, and hazardous/nonhazardous classification affect turnover patterns; the new retirement assumption generally assumes that more members will retire when they first become eligible for either early retirement or normal retirement, but that members who do *not* retire at those times will generally delay retirement longer than had previously been assumed; the rate of disability has generally been lowered; and the mortality assumption has been updated to reflect continued improvements in longevity.
- **Economic Assumptions** - the individual member salary growth assumption has been restructured with somewhat lower rates in the first fifteen years of employment but somewhat higher rates thereafter; the assumption about growth in the overall payroll has been decreased; and a slightly higher inflation assumption has increased the level of assumed cost of living adjustments under the new COLA formula.
- **Projection Method** - we perform each valuation based on information as of June 30, and then project our results forward to the start of the following fiscal year and to the start of the fiscal year after that in order to calculate the contribution requirements for the two years in the biennial budget cycle. In our new projection method, we use our valuation assumptions to project changes in the current population over the next several years. We build a demographic profile of new employees based on the demographic profile of employees hired in the past year, such that the total population remains constant in number and the total payroll increases according to our payroll growth assumption. From this constructed hypothetical future population, we calculate normal costs for each Tier/Group within the System directly. This incorporates the expectation that new members will join the lower cost Tier IIA plan.

We similarly project future Actuarial Liabilities. The Actuarial Value of Assets is projected separately, assuming no future investment gains or losses but grading in prior years' gains or losses. We then calculate future Unfunded Actuarial Liabilities directly from the projected liability and asset figures.

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY*

---

*DISCUSSION OF RESULTS*

*IV. Changes in Actuarial Methods and Assumptions (continued)*

- *Asset Smoothing Method* - the prior method smoothed only capital gains and losses, so assets that produce mainly cash flow (interest and dividends) were treated differently from assets that produce mainly appreciation (realized and unrealized gains and losses). This meant that some of the sources of investment gains and losses and fluctuations were being smoothed while others were not. The new method smoothes all sources of investment gains and losses.

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY*

---

*DISCUSSION OF RESULTS*

*V. SERS Contributions*

The primary purpose of our actuarial valuation is to take the asset and membership information discussed on the previous pages, apply our actuarial methods and assumptions, and determine a contribution amount that will continue the System on a sound funding basis. The resulting contributions for the two fiscal years in the coming biennial budget cycle are:

<i>(\$ millions)</i>	<i>Fiscal Year</i>	
	<i>July 1, 2001 to June 30, 2002</i>	<i>July 1, 2002 to June 30, 2003</i>
Employer Normal Cost	\$254.9	\$265.9
Net Amortization Payment Towards Unfunded Actuarial Liability	160.6	160.0
Total Employer Cost	415.5	425.9
Total Employer Cost as a Percent of Payroll	14.92%	14.57%

More details on the development of the contributions can be found in Section IV.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
EXECUTIVE SUMMARY**

**PRINCIPAL RESULTS**

	<u>June 30, 1998</u>	<u>June 30, 2000</u>
<b><u>SERS Membership</u></b>		
Active Membership		
Number of Active Members	51,383	54,616
Payroll (\$millions)	\$2,338.9	\$2,652.0
Average Pay	45,520	48,555
Inactive Membership		
Number of Inactive Members	32,459	33,238
Annual Retired Members' Benefits (\$millions)	\$553.4	\$597.5
Average Annual Retired Members' Benefits	17,495	18,614
<b><u>Assets and Liabilities (\$ millions)</u></b>		
Assets		
Market Value	\$7,025.6	\$8,284.5
Actuarial Value	5,669.9	7,196.0
Liabilities		
Active Members	3,608.4	4,875.6
Inactive Members	5,984.0	6,636.5
Total Actuarial Liability	9,592.4	11,512.2
Unfunded Actuarial Liability	3,922.5	4,316.1
<b><u>Employer Contributions</u></b>		
First fiscal year in budget cycle	<b><i>FY 1999-00</i></b>	<b><i>FY 2001-02</i></b>
Normal Cost	\$208,183,674	\$254,856,678
Amortization Payment of Unfunded Liability	<u>134,576,657</u>	<u>160,635,921</u>
Total Employer Contribution	342,760,331	415,492,599
Total Contribution as a Percent of Payroll	13.52%	14.92%
Second fiscal year in budget cycle	<b><i>FY 2000-01</i></b>	<b><i>FY 2002-03</i></b>
Normal Cost	\$230,565,390	\$265,853,449
Amortization Payment of Unfunded Liability	<u>145,057,793</u>	<u>160,049,025</u>
Total Employer Contribution	375,623,183	425,902,474
Total Contribution as a Percent of Payroll	13.65%	14.57%

SECTION II

*SERS ASSETS*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SERS ASSETS**

---

In this section we present the values assigned to the assets held by SERS. These assets are valued on two different bases: the Actuarial Value and the Market Value.

**Actuarial Value of Assets**

For purposes of determining ongoing costs, the recognition of gains and losses is spread over five years. The resulting value is called the Actuarial Value of Assets and is further adjusted as necessary so that the final actuarial value is within 20% (plus or minus) of the market value of assets.

**Market Value of Assets**

The Market Value of Assets represents the "snapshot" or "cash-out" value of SERS assets as of the valuation date. In addition, the Market Value of Assets provides a reference point to compare to current accrued liabilities.

The following tables present information regarding the actuarial and market values of SERS assets as of June 30, 2000.

<b><u>Table</u></b>	<b><u>Contents</u></b>
II-1	Market Value - Summary of Fund Transactions
II-2	Market Value - Breakdown on Valuation Date
II-3	Development of Actuarial Value of Assets
II-4	Projection of Assets to Next Two Fiscal Years

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SERS ASSETS**

---

**TABLE II-1**

***Market Value of Assets***  
***Summary of Fund Transactions***

	<i>July 1, 1998</i> <i>to</i> <i>June 30, 1999</i>	<i>July 1, 1999</i> <i>to</i> <i>June 30, 2000</i>
<b><i>Market Value as of July 1</i></b>	\$7,025,610,619	\$7,519,733,915
<b><i>Contributions</i></b>		
State	227,723,785	240,583,331
Federal	124,140,475	145,925,437
Fringe Benefit Transfers	(36,302,475)	(43,748,438)
Employee	38,897,333	43,782,742
Total	354,459,118	386,543,072
<b><i>Investment Income Net of Expenses</i></b>		
Interest & Dividends	245,738,266	286,673,510
Realized Gains	1,350,241	299,651,657
Change in Unrealized Gains	464,840,425	388,495,390
Expenses	(261,329)	(265,326)
Total	711,667,603	974,555,231
<b><i>Disbursements</i></b>		
Benefit Payments	569,119,143	592,649,264
Employee Refunds	2,884,282	3,683,875
Total	572,003,425	596,333,139
<b><i>Market Value as of June 30</i></b>	7,519,733,915	8,284,499,079
<b><i>Approximate Net Rate of Return</i></b>	10.29%	13.14%



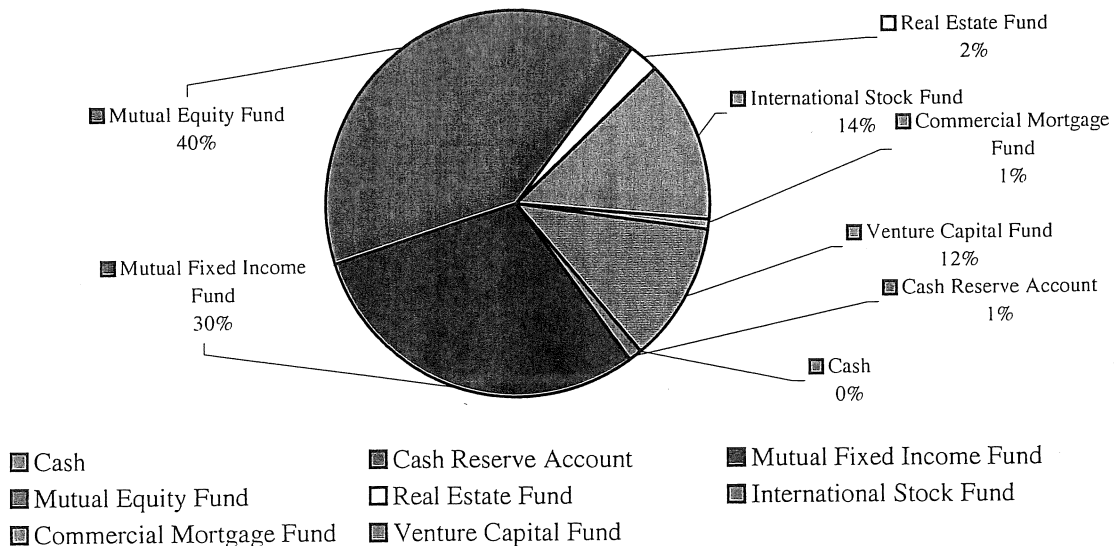
**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SERS ASSETS**

**TABLE II-2**

*Market Value of Assets*  
*Breakdown on June 30, 2000*

The following is the Market Value of the State Employees Retirement Fund assets as reported to us by the Retirement Division:

	<i>Amount</i>	<i>% of Total</i>
Cash	(\$439,267)	-0.01%
Accrued Interest	0	0.00%
Investments:		
Cash Reserve Account	85,561,732	1.03%
Mutual Fixed Income Fund	2,480,241,222	29.94%
Mutual Equity Fund	3,350,136,085	40.44%
Real Estate Fund	196,337,927	2.37%
International Stock Fund	1,129,319,968	13.63%
Commercial Mortgage Fund	67,632,427	0.82%
Venture Capital Fund	975,708,985	11.78%
Connecticut Programs Fund	0	0.00%
<b>Total Market Value as of June 30, 2000</b>	<b>8,284,499,079</b>	<b>100.00%</b>



**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS ASSETS**

**TABLE II-3**

*Development of Actuarial Value of Assets (New Method)*

	<i>1995-96</i>	<i>1996-97</i>	<i>1997-98</i>	<i>1998-99</i>	<i>1999-00</i>
1. Actuarial Value, beginning of year*	\$4,624,722,528	\$5,017,829,407	\$5,534,878,587	\$6,058,805,551	\$6,582,274,205
2. Contributions	371,031,788	400,531,356	370,255,185	390,761,593	386,543,072
3. Benefit Payments and Refunds	423,461,150	464,303,970	551,535,715	608,305,900	596,333,139
4. Expected Investment Income on (1)+(2)-(3)	391,088,914	424,067,588	463,506,227	506,648,034	551,440,515
5. Expected Actuarial Value, end of year: (1) + (2) - (3) + (4)	4,963,382,080	5,378,124,381	5,817,104,284	6,347,909,278	6,923,924,653
6. Actual Market Value, end of year	5,235,618,717	6,161,895,413	7,025,610,619	7,519,733,915	8,284,499,079
7. Actual MVA - Expected AVA	272,236,637	783,771,032	1,208,506,335	1,171,824,637	1,360,574,426
8. Preliminary Actuarial Value: (5) + 20% of (7)	5,017,829,407	5,534,878,587	6,058,805,551	6,582,274,205	7,196,039,538
9. Final Value: (8) within +/- 20% of (6)	5,017,829,407	5,534,878,587	6,058,805,551	6,582,274,205	7,196,039,538

\* Equal to Market Value as of June 30, 1995

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS ASSETS**

**TABLE II-4**

***Projection of Assets to Next Two Fiscal Years***

	<u>Market Value</u>	<u>Actuarial Value</u>
1. Value on June 30, 2000	\$8,284,499,079	\$7,196,039,538
2. Expected Contributions during 2000-01	417,607,717	417,607,717
3. Expected Benefit Payments during 2000-01	611,779,291	611,779,291
4. Expected Investment Income on (1)+(2)-(3)	696,729,146	604,210,085
5. Expected Value on June 30, 2001: (1)+(2)-(3)+(4)	8,787,056,651	7,606,078,049
6. Market Value - Actuarial Value on June 30, 2001	N/A	1,180,978,602
7. Preliminary Actuarial Value: (5) + 20% of (6)	N/A	7,842,273,769
8. Final Value on June 30, 2001: (7) within +/- 20% of Market Value	8,787,056,651	7,842,273,769
9. Expected Contributions during 2001-02	460,949,795	460,949,795
10. Expected Benefit Payments during 2001-02	646,813,500	646,813,500
11. Expected Investment Income on (8)+(9)-(10)	739,765,436	659,458,891
12. Expected Value on June 30, 2002: (8)+(9)-(10)+(11)	9,340,958,382	8,315,868,955
13. Market Value - Actuarial Value as of June 30, 2002	N/A	1,025,089,427
14. Preliminary Actuarial Value: (12) + 20% of (13)	N/A	8,520,886,840
15. Final Value on June 30, 2002: (14) within +/- 20% of Market Value	9,340,958,382	8,520,886,840

SECTION III

*SERS LIABILITIES*

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM*  
*SERS LIABILITIES*

---

In this section we present values assigned to the liabilities of SERS and then compare these liabilities to SERS assets.

The actuarial funding method used to determine SERS costs is based on the Projected Unit Credit method. A more detailed description of this method can be found in Appendix C.

The tables in this section present SERS liabilities as follows:

<u>Table</u>	<u>Contents</u>
III-1	SERS Liabilities on Valuation Date
III-2	Projection of Liabilities to Next Two Fiscal Years

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SERS LIABILITIES**

**TABLE III-1**

***SERS Liabilities on Valuation Date***

	<u>June 30, 1998</u>	<u>June 30, 2000</u>
<b><i>Tier I Actives</i></b>		
Hazardous Duty	\$397,506,411	\$436,212,671
Plan B	1,987,541,684	2,569,689,643
Plan C	120,879,990	143,428,013
<b><i>Total</i></b>	<u>2,505,928,085</u>	<u>3,149,330,327</u>
<b><i>Tier II Actives</i></b>		
Hazardous Duty	413,239,473	640,307,597
All Others	683,303,655	1,039,423,122
<b><i>Total</i></b>	<u>1,096,543,128</u>	<u>1,679,730,719</u>
<b><i>Tier IIA Actives</i></b>		
Hazardous Duty	1,631,997	17,056,369
All Others	4,289,744	29,493,801
<b><i>Total</i></b>	<u>5,921,741</u>	<u>46,550,170</u>
<b><i>Total Actives</i></b>	3,608,392,954	4,875,611,216
<b><i>Retirees</i></b>		
Pre-1980	516,256,663	500,980,489
1980-1997 Fixed COLA	4,481,117,278	5,694,884,504
1997+ Variable COLA	925,656,187	349,077,134
<b><i>Total</i></b>	<u>5,923,030,128</u>	<u>6,544,942,127</u>
<b><i>Deferred Vesteds</i></b>	60,984,654	91,601,549
<b><i>Total Actuarial Liability</i></b>	9,592,407,736	11,512,154,892

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS LIABILITIES**

**TABLE III-2**

*Projection of Liabilities to Next Two Fiscal Years*

	<u>June 30, 2001</u>	<u>June 30, 2002</u>
<b><i>Tier I Actives</i></b>		
Hazardous Duty	\$411,194,055	\$385,434,078
Plan B	2,611,998,022	2,691,120,572
Plan C	134,263,588	131,993,413
<b><i>Total</i></b>	<b>3,157,455,665</b>	<b>3,208,548,063</b>
<b><i>Tier II Actives</i></b>		
Hazardous Duty	749,009,297	870,474,836
All Others	1,135,546,587	1,239,567,448
<b><i>Total</i></b>	<b>1,884,555,884</b>	<b>2,110,042,284</b>
<b><i>Tier IIA Actives</i></b>		
Hazardous Duty	28,647,053	43,871,974
All Others	52,721,896	84,669,255
<b><i>Total</i></b>	<b>81,368,949</b>	<b>128,541,229</b>
<b><i>Total Actives</i></b>	<b>5,123,380,498</b>	<b>5,447,131,576</b>
<b><i>Retirees</i></b>		
Pre-1980	471,831,999	442,509,008
1980-1997 Fixed COLA	5,649,729,814	5,593,952,535
1997+ Variable COLA	735,845,958	1,114,890,578
<b><i>Total</i></b>	<b>6,857,407,771</b>	<b>7,151,352,121</b>
<b><i>Deferred Vesteds</i></b>	<b>117,894,337</b>	<b>147,066,915</b>
<b><i>Total Actuarial Liability</i></b>	<b>12,098,682,606</b>	<b>12,745,550,612</b>

**SECTION IV**

***SERS CONTRIBUTIONS***



---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS*

---

In this section we present the contributions required of the Employer in the upcoming fiscal year. Due to the timing of both the actuarial valuation process and the Employer's budget cycle, valuation results must be projected to the following two fiscal years in the biennial budget cycle in order to determine the Employer's required contribution.

In the following pages we present information on SERS contributions as follows:

<u><i>Table</i></u>	<u><i>Contents</i></u>
IV-1	Projected Unit Credit Normal Cost on the Valuation Date
IV-2	Projection of Normal Cost to Next Two Fiscal Years
IV-3	Projected Unit Credit Total Costs for First Fiscal Year
IV-4	Projected Unit Credit Total Costs for Second Fiscal Year

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS**

**TABLE IV-1**

*Projected Unit Credit Normal Cost on Valuation Date*

	<i>June 30, 1998</i>	<i>June 30, 2000</i>
<b><i>Normal Cost in Dollars</i></b>		
Tier I Hazardous Duty	\$15,640,846	\$15,013,357
Tier I Plan B	74,430,297	87,421,114
Tier I Plan C	3,513,337	3,557,648
Tier II Hazardous Duty	33,565,708	46,230,241
Tier II All Others	67,448,337	80,009,538
Tier IIA Hazardous Duty	621,852	3,933,716
Tier IIA All Others	1,741,874	5,443,678
<b><i>Total</i></b>	196,962,251	241,609,292
<b><i>Normal Cost as a Percent of Payroll</i></b>		
Tier I Hazardous Duty	17.19%	18.03%
Tier I Plan B	10.14%	11.68%
Tier I Plan C	8.94%	9.13%
Tier II Hazardous Duty	10.14%	12.95%
Tier II All Others	6.24%	7.21%
Tier IIA Hazardous Duty	6.75%	6.68%
Tier IIA All Others	3.22%	2.13%
<b><i>Total</i></b>	8.42%	9.11%

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS**

---

**TABLE IV-2**

*Projection of Normal Cost to Next Two Fiscal Years*

	<u>June 30, 2001</u>	<u>June 30, 2002</u>
<hr/> <b><i>Normal Cost in Dollars</i></b> <hr/>		
Tier I Hazardous Duty	\$13,757,991	\$11,943,562
Tier I Plan B	90,107,352	90,237,334
Tier I Plan C	3,522,650	3,408,435
Tier II Hazardous Duty	50,398,425	54,891,023
Tier II All Others	82,013,728	83,895,907
Tier IIA Hazardous Duty	5,543,044	7,327,417
Tier IIA All Others	9,513,488	14,149,771
<b><i>Total</i></b>	<hr/> 254,856,678	<hr/> 265,853,449
<hr/> <b><i>Normal Cost as a Percent of Payroll</i></b> <hr/>		
Tier I Hazardous Duty	18.12%	17.35%
Tier I Plan B	12.41%	12.76%
Tier I Plan C	10.02%	10.35%
Tier II Hazardous Duty	13.70%	14.49%
Tier II All Others	7.54%	7.81%
Tier IIA Hazardous Duty	6.89%	7.13%
Tier IIA All Others	2.32%	2.53%
<b><i>Total</i></b>	9.15%	9.09%

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS*

---

*TABLE IV-3*

*Projected Unit Credit Total Costs For Fiscal Year 2001-02*

1.	Actuarial Liability as of June 30, 2001	\$12,098,682,606
2.	Actuarial Value of Assets as of June 30, 2001	7,842,273,769
3.	Unfunded Actuarial Liability as of June 30, 2001: (1) - (2)	4,256,408,837
4.	Amortization Period	31 Years
5.	Amortization Payment Towards Unfunded Actuarial Liability	224,822,810
6.	SEBAC IV Asset Adjustment Amortization Payment	(26,606,725)
7.	SEBAC V Asset Adjustment Amortization Payment	(37,580,164)
8.	Net Amortization Payment: (5) + (6) + (7)	160,635,921
9.	Employer Normal Cost	254,856,678
10.	Total Employer Cost for Fiscal Year 2001-02: (8) + (9)	415,492,599
11.	Projected Payroll	2,784,495,788
12.	Total Employer Cost Percent: (10) / (11)	14.92%

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS*

---

*TABLE IV-4*

*Projected Unit Credit Total Costs For Fiscal Year 2002-03*

1.	Actuarial Liability as of June 30, 2002	\$12,745,550,612
2.	Actuarial Value of Assets as of June 30, 2002	8,520,886,840
3.	Unfunded Actuarial Liability as of June 30, 2002: (1) - (2)	4,224,663,772
4.	Amortization Period	30 Years
5.	Amortization Payment Towards Unfunded Actuarial Liability	227,445,258
6.	SEBAC IV Asset Adjustment Amortization Payment	(27,937,061)
7.	SEBAC V Asset Adjustment Amortization Payment	(39,459,172)
8.	Net Amortization Payment: (5) + (6) + (7)	160,049,025
9.	Employer Normal Cost	265,853,449
10.	Total Employer Cost for Fiscal Year 2002-03: (8) + (9)	425,902,474
11.	Projected Payroll	2,923,734,172
12.	Total Employer Cost Percent: (10) / (11)	14.57%

SECTION V

*GASB ACCOUNTING INFORMATION*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**GASB INFORMATION**

---

Government Accounting Standards Board Statement No. 25 requires that SERS disclose certain information on an annual basis regarding the funding of SERS. In this section we present this information. Additional information regarding SERS Assets, a Summary of Plan Provisions and the Actuarial Method and Assumptions can be found in Section II and Appendices B and C, respectively.

The following tables present the information required by GASB #25:

<u>Table</u>	<u>Contents</u>
V-1	Statement of Plan Net Assets
V-2	Statement of Changes in Plan Net Assets
V-3	Schedule of Funding Progress
V-4	Schedule of Employer Contributions
V-5	Summary of Membership

**Background Information**

The Connecticut State Employee Retirement System was created by the State of Connecticut to provide defined benefit pensions to its employees. SERS is described in Chapter 66, State Employees Retirement Act, in Sections 5-152 to 5-192 of Title 5 of the General Statutes of Connecticut.

The Employer's funding policy has been to contribute each year an amount equal to the normal cost plus an amount representing amortization of the unfunded actuarial liability over thirty years (ending June 30, 2022), less amounts reimbursed by the Federal Government. Pursuant to a collectively bargained agreement, as of June 30, 1992, the unfunded actuarial liability will be amortized over forty years (ending June 30, 2032). Per negotiations the past service payment is determined as a level percent of payroll. The actuarial assumptions used to calculate the figures reported herein are the same as those used to calculate the contribution level.

---

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM*  
*GASB INFORMATION*

---

*TABLE V-1*

*Statement of Plan Net Assets*

	<u><i>June 30, 1999</i></u>	<u><i>June 30, 2000</i></u>
Cash	\$ (4,560,029.96)	\$ (439,267.15)
Accrued Interest	0.00	0.00
Cash Reserve Account	51,957,827.72	85,561,732.09
Mutual Fixed Income Fund	2,358,990,115.15	2,480,241,222.20
Mutual Equity Fund	3,454,444,757.09	3,350,136,085.19
Real Estate Fund	164,875,482.80	196,337,926.88
International Stock Fund	951,753,246.04	1,129,319,968.33
Commercial Mortgage Fund	90,995,471.42	67,632,426.79
Venture Capital Fund	451,277,044.82	975,708,984.39
Connecticut Programs Fund	0.00	0.00
Total Assets	<u>7,519,733,915.08</u>	<u>8,284,499,078.72</u>
Liabilities	<u>0.00</u>	<u>0.00</u>
Net assets held in trust for pension benefits	7,519,733,915.08	8,284,499,078.72



**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**GASB INFORMATION**

**TABLE V-2**

*Statement of Changes in Plan Net Assets*

	<i>July 1, 1998 to June 30, 1999</i>	<i>July 1, 1999 to June 30, 2000</i>
<b><i>Additions</i></b>		
<b><i>Contributions</i></b>		
State	\$227,723,785	\$240,583,331
Federal	124,140,475	145,925,437
Fringe Benefit Transfers	(36,302,475)	(43,748,438)
Employee	38,897,333	43,782,742
Total Net Contributions	<u>354,459,118</u>	<u>386,543,072</u>
<b><i>Net Investment Income</i></b>		
Interest & Dividends	245,738,266	286,673,510
Net Appreciation/(Depreciation)	466,190,666	688,147,047
Expenses	(261,329)	(265,326)
Total Investment Income	<u>711,667,603</u>	<u>974,555,231</u>
Total Additions	1,066,126,721	1,361,098,303
<b><i>Deductions</i></b>		
Benefit Payments	569,119,143	592,649,264
Employee Refunds	2,884,282	3,683,875
Total Deductions	<u>572,003,425</u>	<u>596,333,139</u>
<b><i>Net Increase</i></b>	494,123,296	764,765,164
<b><i>Net assets held in trust for pension benefits</i></b>		
Beginning of year	7,025,610,619	7,519,733,915
End of year	7,519,733,915	8,284,499,079

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**GASB INFORMATION**

**TABLE V-3**

*Schedule of Funding Progress*

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Actuarial Valuation Date</i>	<i>Actuarial Value of Assets</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Unfunded AAL (UAAL) (2) - (1)</i>	<i>Funded Ratio (1) / (2)</i>	<i>Covered Payroll</i>	<i>Percentage of Covered Payroll [(2) - (1)] / (5)</i>
June 30, 1991	\$3,207,958,056	\$5,982,687,195	\$2,774,729,139	53.62%	\$1,956,585,318	141.81%
June 30, 1992	3,425,886,181	6,668,685,334	3,242,799,153	51.37%	1,931,381,254	167.90%
June 30, 1993	3,696,176,885	7,189,740,494	3,493,563,609	51.41%	2,144,793,466	162.89%
June 30, 1994	3,944,521,448	7,329,181,184	3,384,659,736	53.82%	2,155,860,555	157.00%
June 30, 1995	4,209,235,826	7,838,210,805	3,628,974,979	53.70%	2,325,787,000	156.03%
June 30, 1996	4,604,227,717	8,138,610,053	3,534,382,336	56.57%	2,385,532,750	148.16%
June 30, 1997	5,130,967,057	8,833,202,804	3,702,235,747	58.09%	2,225,185,096	166.38%
June 30, 1998	5,669,865,527	9,592,407,736	3,922,542,209	59.11%	2,338,957,445	167.70%
June 30, 2000	7,196,039,538	11,512,154,892	4,316,115,354	62.51%	2,651,892,121	162.76%

*No value is shown above for June 30, 1999 since an actuarial valuation was not performed as of that date.*

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
GASB INFORMATION**

**TABLE V-4**

*Schedule of Employer Contributions*

<i>Fiscal Year Ending June 30</i>	<i>Annual Required Contribution</i>	<i>Actual Contribution</i>	<i>Percent Funded</i>
1991	\$398,016,908	\$263,818,607	66.28%
1992	431,236,846	250,324,285	58.05%
1993	444,243,379	290,827,685	65.47%
1994	310,206,351	310,206,351	100.00%
1995	351,773,796	290,801,000	82.67%
1996	335,111,972	335,111,971	100.00%
1997	349,230,712	348,920,134	99.91%
1998	334,846,361	334,513,820	99.90%
1999	315,561,785	315,561,785	100.00%
2000	342,760,331	342,760,330	100.00%
2001	354,208,031	375,623,183 #N/A	#N/A
2002	415,492,599	#N/A	#N/A

*Correction  
1-17*

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**GASB INFORMATION**

**TABLE V-5**

***Summary of Membership***

	<b><i>June 30, 1999</i></b>	<b><i>June 30, 2000</i></b>
<b><i>Current Employees with Vested Benefits</i></b>		
Tier I, Hazardous Duty	1,306	1,202
Tier I, Plan B	12,293	11,739
Tier I, Plan C	708	678
Tier II, Hazardous Duty	6,027	6,294
Tier II, Other	20,752	21,087
Tier IIA, Hazardous Duty	5	11
Tier IIA, Other	49	122
<b>Total</b>	<b>41,140</b>	<b>41,133</b>
<b><i>Current Employees Not Yet Vested</i></b>		
Tier I, Hazardous Duty	12	41
Tier I, Plan B	169	410
Tier I, Plan C	13	17
Tier II, Hazardous Duty	1,012	602
Tier II, Other	4,168	2,708
Tier IIA, Hazardous Duty	840	1,556
Tier IIA, Other	5,484	8,149
<b>Total</b>	<b>11,698</b>	<b>13,483</b>
<b>Total Current Employees</b>	<b>52,838</b>	<b>54,616</b>
<b><i>Former Employees Currently Receiving Benefits</i></b>		
Retired Pre-1980	6,304	5,869
Retired 1980-1997, Fixed COLA	24,777	24,760
Retired 1997+, Variable COLA	750	1,472
<b>Total</b>	<b>31,831</b>	<b>32,101</b>
<b>Former Employees Entitled to Future Benefits</b>	<b>934</b>	<b>1,137</b>
<b>Total Former Employees</b>	<b>32,765</b>	<b>33,238</b>
<b>Total Members</b>	<b>85,603</b>	<b>87,854</b>

*APPENDIX A*

*SUMMARY STATISTICS ON SERS MEMBERSHIP*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

---

<u>Table</u>	<u>Contents</u>
A-1	Summary of Active Membership Data
A-2	Detail of Active Membership Data by Plan
A-3	Summary of Inactive Membership Data
A-4	Reconciliation of Changes in Membership
A-5	Analysis by Age and Service - Tier I - Hazardous Duty
A-6	Analysis by Age and Service - Tier I - Plan B
A-7	Analysis by Age and Service - Tier I - Plan C
A-8	Analysis by Age and Service - Tier II - Hazardous Duty
A-9	Analysis by Age and Service - Tier II - All Others
A-10	Analysis by Age and Service - Tier IIA- Hazardous Duty
A-11	Analysis by Age and Service - Tier IIA- All Others
A-12	Analysis of Retired Members by Current Age

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

---

**TABLE A-1**

*Summary of Active Membership Data*

We received data on a total of 54,938 eligible active members for our June 30, 2000 valuation. Of the active records submitted to us, 322 (0.6%) were rejected due to missing or invalid dates of birth and/or hire. Cost calculations were not revised to reflect these records. The following analysis compares this data with prior years' data.

	<u>June 30, 1998</u>	<u>June 30, 1999</u>	<u>June 30, 2000</u>
Total Employees	51,383	52,838	54,616
Total Earnings (\$ millions)	\$2,338.9	\$2,479.4	\$2,652.0
Average Earnings	\$45,520	\$46,924	\$48,555

Earnings figures as of July 1 are actual amounts paid during the previous July 1 to June 30 period, adjusted for anticipated increases and merit adjustments effective on the valuation date; new entrant earnings are annualized. Earnings for FY 1999-00 have been adjusted downward to remove the 27th paycheck paid during that period because the higher actual earnings are not an appropriate basis for projecting future earnings.

These figures are broken down by Plan on the following page.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-2a**

*Detail of Active Membership Data by Plan*

	<u>June 30, 1998</u>	<u>June 30, 1999</u>	<u>June 30, 2000</u>
<b><i>Number of Members</i></b>			
Tier I Hazardous Duty	1,474	1,318	1,243
Tier I Plan B	12,855	12,462	12,149
Tier I Plan C	757	721	695
Tier II Hazardous Duty	7,198	7,039	6,896
Tier II Others	26,210	24,920	23,795
Tier IIA Hazardous Duty	358	845	1,567
Tier IIA Others	2,531	5,533	8,271
Total	<u>51,383</u>	<u>52,838</u>	<u>54,616</u>
<b><i>Total Annual Compensation (\$ Millions)</i></b>			
Tier I Hazardous Duty	\$91.0	\$84.0	\$83.3
Tier I Plan B	733.9	743.8	748.5
Tier I Plan C	39.3	39.3	39.0
Tier II Hazardous Duty	331.1	338.9	357.1
Tier II Others	1,080.4	1,096.2	1,109.5
Tier IIA Hazardous Duty	9.2	28.8	58.9
Tier IIA Others	54.0	148.4	255.7
Total	<u>2,338.9</u>	<u>2,479.4</u>	<u>2,652.0</u>
<b><i>Average Compensation</i></b>			
Tier I Hazardous Duty	\$61,717	\$63,767	\$66,977
Tier I Plan B	57,093	59,683	61,611
Tier I Plan C	51,900	54,494	56,083
Tier II Hazardous Duty	46,003	48,146	51,778
Tier II Others	41,221	43,989	46,627
Tier IIA Hazardous Duty	25,752	34,066	37,607
Tier IIA Others	21,342	26,813	30,912
Total	<u>45,520</u>	<u>46,924</u>	<u>48,555</u>



---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

---

**TABLE A-2b**

*Detail of Active Membership Data by Plan*

	<i>June 30, 1998</i>	<i>June 30, 1999</i>	<i>June 30, 2000</i>
<i>Average Age</i>			
Tier I Hazardous Duty	45.9	46.6	47.5
Tier I Plan B	48.3	49.1	50.0
Tier I Plan C	51.5	52.1	53.0
Tier II Hazardous Duty	37.6	38.4	39.3
Tier II Others	42.1	43.1	44.0
Tier IIA Hazardous Duty	31.1	32.3	32.8
Tier IIA Others	35.4	36.2	37.7
Total	42.9	43.2	43.7
<i>Average Service</i>			
Tier I Hazardous Duty	18.3	19.0	20.0
Tier I Plan B	20.6	21.5	22.4
Tier I Plan C	21.2	22.1	23.1
Tier II Hazardous Duty	7.3	8.2	9.1
Tier II Others	8.4	9.4	10.3
Tier IIA Hazardous Duty	0.4	1.0	1.3
Tier IIA Others	0.6	1.0	1.4
Total	11.4	11.5	11.7

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

---

**TABLE A-3**

*Summary of Inactive Membership Data*

	<i>June 30, 1998</i>	<i>June 30, 1999</i>	<i>June 30, 2000</i>
<b><i>Retired Pre-1980</i></b>			
Number	6,781	6,304	5,869
Total Annual Benefits (\$ 000s)	\$73,362	\$71,571	\$69,277
Average Annual Benefit	10,819	11,353	11,804
<b><i>Retired 1980-1997, Fixed COLA</i></b>			
Number	21,879 *	24,777	24,760
Total Annual Benefits (\$ 000s)	\$407,933	\$486,203	\$501,184
Average Annual Benefit	18,645	19,623	20,242
<b><i>Retired 1997+, Variable COLA</i></b>			
Number	2,971 *	750	1,472
Total Annual Benefits (\$ 000s)	\$72,088	\$14,094	\$27,074
Average Annual Benefit	24,264	18,791	18,393
<b><i>Total Retired Members</i></b>			
Number	31,631	31,831	32,101
Total Annual Benefits (\$ 000s)	\$553,383	\$571,868	\$597,536
Average Annual Benefit	17,495	17,966	18,614
<b><i>Terminated Vested Members</i></b>			
Number	828	934	1,137
Total Annual Benefits (\$ 000s)	\$7,051	\$8,612	\$10,749
Average Annual Benefit	8,516	9,221	9,454

\* Many 1997-98 retirees were incorrectly classified as having elected variable COLAs.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-4**

***Reconciliation of Changes in Membership***

	<b>Active Members</b>	<b>Deferred Vested Members</b>	<b>Retired Members</b>	<b>Disabled Members</b>	<b>Beneficiaries</b>	<b>Total Members</b>
<b>Count as of June 30, 1998</b>	51,383	828	27,468	1,606	2,557	83,842
<b>Changed status within System</b>						
to active status	33	(24)	(7)	(2)	0	0
to deferred vested status	(292)	292	0	0	0	0
to retired status	(1,282)	(131)	1,433	(20)	0	0
to disabled status	(94)	0	(61)	155	0	0
to beneficiary status	(7)	0	(1)	0	8	0
<b>Left System</b>	(5,263)	(27)	(1,808)	(159)	(256)	(7,513)
<b>Entered System</b>	<u>10,138</u>	<u>199</u>	<u>581</u>	<u>46</u>	<u>561</u>	<u>11,525</u>
<b>Count as of June 30, 2000</b>	54,616	1,137	27,605	1,626	2,870	87,854

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-5**

*Analysis of Active Members by Age and Service - Tier I Hazardous Duty*

Age \ Service	Number of Members											All Years		
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up					
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	1	1	6	54	5	0	0	0	0	0	0	0	0	67
40 to 44	1	10	18	236	96	3	0	0	0	0	0	0	0	364
45 to 49	3	8	10	150	181	54	0	0	0	0	0	0	0	406
50 to 54	0	12	6	69	86	65	28	0	0	0	0	0	0	266
55 to 59	2	1	3	28	29	18	8	7	0	0	0	0	0	96
60 to 64	0	1	1	14	5	3	3	2	0	0	0	0	0	29
65 & Up	0	1	1	4	7	2	0	0	0	0	0	0	0	15
Totals	7	34	45	555	409	145	39	9	0	0	0	0	0	1,243

Age \ Service	Average Salaries											All Years		
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up					
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	69,213	61,151	53,998	64,423	65,950	0	0	0	0	0	0	0	0	63,626
40 to 44	49,637	62,319	60,419	66,397	70,378	62,049	0	0	0	0	0	0	0	66,958
45 to 49	66,236	57,461	68,383	61,582	70,461	74,711	0	0	0	0	0	0	0	67,407
50 to 54	0	55,843	54,487	60,854	65,661	79,403	74,380	0	0	0	0	0	0	67,995
55 to 59	61,721	47,218	58,710	56,668	65,675	65,635	73,929	87,363	0	0	0	0	0	64,817
60 to 64	0	45,137	28,266	64,208	63,669	64,646	64,937	85,438	0	0	0	0	0	63,803
65 & Up	0	52,856	57,542	70,881	75,699	83,444	0	0	0	0	0	0	0	72,713
Totals	63,000	57,628	59,649	63,701	69,044	75,338	73,561	86,935	0	0	0	0	0	66,977

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-6**

*Analysis of Active Members by Age and Service - Tier I Plan B*

Age \ Service	Number of Members											All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up				
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	1	0	0	0	0	0	0	0	0	1
35 to 39	10	14	10	355	92	0	0	0	0	0	0	0	481
40 to 44	39	46	54	851	1,088	53	0	0	0	0	0	0	2,131
45 to 49	55	76	91	605	1,619	738	57	0	0	0	0	0	3,241
50 to 54	42	64	68	504	1,171	1,061	617	47	0	0	0	0	3,574
55 to 59	13	34	33	299	555	366	390	101	2	0	0	0	1,793
60 to 64	6	9	8	122	223	99	141	64	13	0	0	0	685
65 & Up	0	3	5	38	71	38	38	28	22	0	0	0	243
Totals	165	246	269	2,775	4,819	2,355	1,243	240	37				12,149

Age \ Service	Average Salaries											All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up				
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	52,510	0	0	0	0	0	0	0	0	52,510
35 to 39	66,686	42,737	43,777	47,399	46,871	0	0	0	0	0	0	0	47,488
40 to 44	44,137	47,269	51,192	55,357	52,072	50,602	0	0	0	0	0	0	53,076
45 to 49	50,843	49,677	55,941	58,826	61,174	61,239	57,056	0	0	0	0	0	60,086
50 to 54	53,960	58,140	58,658	59,123	64,327	69,753	65,801	63,818	0	0	0	0	65,112
55 to 59	57,943	54,176	60,400	55,604	61,340	69,591	81,181	69,786	60,331	0	0	0	66,680
60 to 64	58,758	71,706	48,312	54,357	60,109	69,866	87,917	93,163	93,822	0	0	0	69,949
65 & Up	0	81,450	69,007	59,255	61,860	72,912	89,591	81,783	86,262	0	0	0	72,411
Totals	51,859	52,849	55,785	55,814	59,592	66,685	73,462	76,251	87,517				61,611

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-7**

*Analysis of Active Members by Age and Service - Tier I Plan C*

Age \ Service	Number of Members										
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up	All Years	
Under 20	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	9	5	0	0	0	0	14	0
40 to 44	3	1	2	30	43	2	0	0	0	81	0
45 to 49	3	2	3	24	88	31	6	0	0	157	0
50 to 54	3	2	3	31	51	54	37	2	0	183	0
55 to 59	1	0	2	23	45	29	24	2	0	126	0
60 to 64	1	0	3	19	29	13	5	6	0	76	0
65 & Up	1	0	1	7	16	15	7	5	6	58	0
Totals	12	5	14	143	277	144	79	15	6	695	0

*Average Salaries*

Age \ Service	Average Salaries										
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up	All Years	
Under 20	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	51,176	46,368	0	0	0	0	49,459	0
40 to 44	55,886	22,979	45,305	52,635	50,007	43,364	0	0	0	50,585	0
45 to 49	47,514	53,290	51,808	53,022	53,485	53,660	46,652	0	0	53,039	0
50 to 54	44,679	59,281	46,678	49,675	55,406	55,643	49,314	48,874	0	52,925	0
55 to 59	59,125	0	108,764	52,147	55,096	67,112	68,236	49,295	0	60,618	0
60 to 64	37,595	0	49,241	44,136	57,303	71,548	65,008	87,143	0	58,733	0
65 & Up	78,400	0	41,908	63,445	73,967	65,401	70,647	85,358	70,559	70,234	0
Totals	51,613	49,624	56,659	51,288	55,015	59,807	57,744	76,399	70,559	56,083	0

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-8**

*Analysis of Active Members by Age and Service - Tier II Hazardous Duty*

Age \ Service	Number of Members										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	10	1	0	0	0	0	0	0	0	0	0	11
25 to 29	167	327	7	0	0	0	0	0	0	0	0	501
30 to 34	170	1,044	468	12	0	0	0	0	0	0	0	1,694
35 to 39	85	681	920	178	1	0	0	0	0	0	0	1,865
40 to 44	66	441	502	176	3	0	0	0	0	0	0	1,188
45 to 49	50	281	250	127	12	1	0	0	0	0	0	721
50 to 54	35	190	225	80	0	2	0	0	0	0	0	532
55 to 59	12	94	102	36	3	1	4	1	0	0	0	253
60 to 64	6	40	36	20	0	0	0	0	0	0	0	102
65 & Up	3	9	13	3	1	0	0	0	0	0	0	29
Totals	604	3,108	2,523	632	20	4	4	1	0	0	0	6,896

Age \ Service	Average Salaries										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	34,546	46,254	0	0	0	0	0	0	0	0	0	35,610
25 to 29	43,328	46,889	55,665	0	0	0	0	0	0	0	0	45,825
30 to 34	46,888	48,753	53,065	49,561	0	0	0	0	0	0	0	49,763
35 to 39	47,936	47,784	56,368	58,849	56,202	0	0	0	0	0	0	53,086
40 to 44	44,959	49,219	54,582	59,468	55,343	0	0	0	0	0	0	52,782
45 to 49	48,755	49,707	55,326	58,459	61,133	56,683	0	0	0	0	0	53,331
50 to 54	46,005	52,002	54,935	58,677	0	67,440	0	0	0	0	0	53,910
55 to 59	46,311	50,255	55,201	57,238	66,170	48,428	83,732	47,371	0	0	0	53,755
60 to 64	27,425	53,496	59,617	54,865	0	0	0	0	0	0	0	54,391
65 & Up	13,872	54,621	46,169	79,079	53,928	0	0	0	0	0	0	49,123
Totals	45,371	48,818	55,114	58,623	60,413	59,998	83,732	47,371	0	0	0	51,778

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-9**

*Analysis of Active Members by Age and Service - Tier II All Others*

Age \ Service	Number of Members										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	3	0	0	0	0	0	0	0	0	0	0	3
20 to 24	92	9	0	0	0	0	0	0	0	0	0	101
25 to 29	369	413	30	0	0	0	0	0	0	0	0	812
30 to 34	514	1,414	1,114	86	0	0	0	0	0	0	0	3,128
35 to 39	456	1,293	2,272	785	8	0	0	0	0	0	0	4,814
40 to 44	377	1,035	1,879	897	33	2	0	0	0	0	0	4,223
45 to 49	339	1,016	1,528	761	35	15	7	0	0	0	0	3,701
50 to 54	267	880	1,402	732	44	39	36	0	0	0	0	3,400
55 to 59	172	569	899	416	23	18	14	1	0	0	0	2,112
60 to 64	81	282	463	188	7	6	5	1	0	0	0	1,033
65 & Up	58	135	174	90	10	1	0	0	0	0	0	468
Totals	2,728	7,046	9,761	3,955	160	81	62	2	0	0	0	23,795

*Average Salaries*

Age \ Service	Average Salaries										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	3,577	0	0	0	0	0	0	0	0	0	0	3,577
20 to 24	21,867	25,641	0	0	0	0	0	0	0	0	0	22,204
25 to 29	36,697	40,649	33,739	0	0	0	0	0	0	0	0	38,598
30 to 34	39,857	44,117	42,110	43,500	0	0	0	0	0	0	0	42,685
35 to 39	38,575	45,890	48,612	49,425	48,029	0	0	0	0	0	0	47,062
40 to 44	37,264	43,482	48,949	53,368	53,211	48,969	0	0	0	0	0	47,538
45 to 49	40,868	45,710	49,581	54,500	57,220	52,650	57,644	0	0	0	0	48,832
50 to 54	38,054	45,907	49,669	54,552	51,696	67,560	68,741	0	0	0	0	49,268
55 to 59	35,414	44,296	48,770	50,464	70,532	62,846	71,503	102,259	0	0	0	47,344
60 to 64	36,072	40,618	47,133	49,951	53,847	54,088	71,427	14,118	0	0	0	45,171
65 & Up	27,551	42,126	45,134	51,297	39,752	18,048	0	0	0	0	0	43,099
Totals	37,505	44,412	48,075	52,293	55,089	61,683	68,328	58,189	0	0	0	46,627



**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-10**

*Analysis of Active Members by Age and Service - Tier IIA Hazardous Duty*

Age \ Service	Number of Members										All Years
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up		
Under 20	0	0	0	0	0	0	0	0	0	0	0
20 to 24	178	0	0	0	0	0	0	0	0	0	178
25 to 29	512	4	0	0	0	0	0	0	0	0	516
30 to 34	376	2	0	0	0	0	0	0	0	0	378
35 to 39	176	1	0	0	0	0	0	0	0	0	177
40 to 44	141	0	1	0	0	0	0	0	0	0	142
45 to 49	81	0	0	0	0	0	0	0	0	0	81
50 to 54	59	1	0	0	0	0	0	0	0	0	60
55 to 59	26	0	0	0	0	0	0	0	0	0	26
60 to 64	6	0	0	0	0	0	0	0	0	0	6
65 & Up	2	0	0	0	1	0	0	0	0	0	3
Totals	1,557	8	1	0	1	0	0	0	0	0	1,567

Age \ Service	Average Salaries										All Years
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up		
Under 20	0	0	0	0	0	0	0	0	0	0	0
20 to 24	31,645	0	0	0	0	0	0	0	0	0	31,645
25 to 29	36,831	46,012	0	0	0	0	0	0	0	0	36,903
30 to 34	38,396	45,285	0	0	0	0	0	0	0	0	38,433
35 to 39	38,635	45,782	0	0	0	0	0	0	0	0	38,676
40 to 44	39,580	0	42,769	0	0	0	0	0	0	0	39,602
45 to 49	39,804	0	0	0	0	0	0	0	0	0	39,804
50 to 54	43,103	40,583	0	0	0	0	0	0	0	0	43,061
55 to 59	42,605	0	0	0	0	0	0	0	0	0	42,605
60 to 64	37,127	0	0	0	0	0	0	0	0	0	37,127
65 & Up	43,351	0	0	0	33,687	0	0	0	0	0	40,129
Totals	37,567	45,123	42,769	0	33,687	0	0	0	0	0	37,607

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-11**

*Analysis of Active Members by Age and Service - Tier IIA All Others*

Age \ Service	Number of Members										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	141	0	0	0	0	0	0	0	0	0	0	141
20 to 24	777	2	0	0	0	0	0	0	0	0	0	779
25 to 29	1,427	12	0	0	0	0	0	0	0	0	0	1,439
30 to 34	1,351	4	5	1	0	0	0	0	0	0	0	1,361
35 to 39	1,193	4	1	4	0	0	0	0	0	0	0	1,202
40 to 44	1,076	4	1	0	0	0	0	0	0	0	0	1,082
45 to 49	843	4	3	1	2	0	0	0	0	0	0	853
50 to 54	688	4	1	0	0	1	0	0	0	0	0	694
55 to 59	400	4	0	0	0	0	0	0	0	0	0	404
60 to 64	177	1	1	0	0	0	0	0	0	0	0	179
65 & Up	133	3	0	1	0	0	0	0	0	0	0	137
Totals	8,206	42	12	7	3	1	0	0	0	0	0	8,271

Age \ Service	Average Salaries										All Years	
	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 & Up			
Under 20	9,353	0	0	0	0	0	0	0	0	0	0	9,353
20 to 24	22,170	21,638	0	0	0	0	0	0	0	0	0	22,169
25 to 29	31,565	31,006	0	0	0	0	0	0	0	0	0	31,561
30 to 34	33,992	39,294	30,907	1,144	0	0	0	0	0	0	0	33,972
35 to 39	31,742	40,654	1,224	27,841	0	0	0	0	0	0	0	31,733
40 to 44	32,539	18,873	29,623	0	52,433	0	0	0	0	0	0	32,504
45 to 49	33,650	35,696	20,859	4,451	34,644	0	0	0	0	0	0	33,583
50 to 54	33,008	30,532	11,939	0	0	10,606	0	0	0	0	0	32,931
55 to 59	31,400	36,037	0	0	0	0	0	0	0	0	0	31,446
60 to 64	28,338	53,397	21,279	0	0	0	0	0	0	0	0	28,439
65 & Up	20,512	21,442	0	29,560	0	0	0	0	0	0	0	20,599
Totals	30,925	31,843	23,432	20,931	40,573	10,606	0	0	0	0	0	30,912

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY STATISTICS ON SERS MEMBERSHIP**

**TABLE A-12**

**Analysis of Retired Members and Beneficiaries by Current Age**

Current Age	NUMBER										AVERAGE BENEFIT																																																																	
	Service Retirement		Service Connected Disability		Non-Service Connected Disability		Hazardous Duty Retirement		Other		Service Retirement		Service Connected Disability		Non-Service Connected Disability		Hazardous Duty Retirement		Other																																																									
Under 40	0	21	9	1	187	0	17,461	14,778	30,474	13,127	0	15,598	14,915	33,430	18,512	0	16,516	18,243	33,887	20,009	25,420	27,210	17,162	23,054	37,302	20,778	27,374	17,476	21,827	37,849	14,465	25,692	16,216	16,345	34,326	12,406	21,819	12,475	14,394	29,846	10,704	18,504	9,994	9,815	26,764	10,700	15,862	8,058	9,146	23,895	11,430	13,327	9,015	9,599	21,135	10,035	12,040	10,715	10,191	21,256	11,165	11,643	7,793	7,858	16,367	12,491	11,959	7,861	7,042	8,195	12,980	19,042	14,263	15,386	33,223	12,712
Totals	22,463	679	947	2,130	5,882	19,042	14,263	15,386	33,223	12,712	11,959	7,861	7,042	8,195	12,980	19,042	14,263	15,386	33,223	12,712	11,959	7,861	7,042	8,195	12,980	19,042	14,263	15,386	33,223	12,712	11,959	7,861	7,042	8,195	12,980	19,042	14,263	15,386	33,223	12,712																																				

APPENDIX B

*SUMMARY OF PLAN PROVISIONS*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY OF PLAN PROVISIONS**

---

*Established September 1, 1939*

1. **Membership**

Tier I [Sec. 5-160]: Each state employee appointed to classified service shall become a member on the first day of the pay period following permanent appointment.

Each officer elected by the people and each appointee of such officer exempt from classified service may elect to become a member, effective on the first day of the pay period following receipt of such election.

Each other state employee exempt from classified service shall become a member on the first day of the pay period following six months of employment.

Except as noted below employees hired prior to January 1, 1984 could elect (no later than January 2, 1984) to be covered under either Plan B or Plan C. Employees under contracts with Union Independent and CSEA unions hired prior to October 1, 1982 had until October 1, 1984 to make such election.

Tier II [Sec. 5-192e]: Tier II consists of employees first joining the retirement system on or after January 1, 1984 plus employees hired between July 1, 1982 and January 1, 1984 who elected Tier II. Each state employee becomes a member on the first day of employment.

Tier IIA: Tier IIA consists of employees first joining the retirement system on or after July 1, 1997.

2. **Normal Retirement Eligibility**

Tier I - Hazardous Duty [Sec. 5-173]: 20 years of service.

Tier I - Plans B and C [Sec. 5-162]: Age 55 and 25 years of service, age 60 and 10 years of service, or age 70.

Tier II [Sec. 5-192i] and Tier IIA: Age 62 and 10 years of service (effective July 1, 1992) or age 60 and 25 years of service or age 70 and 5 years of service, except hazardous duty members may retire after 20 years.

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY OF PLAN PROVISIONS**

---

3. **Normal Retirement Benefit**

Tier I - Hazardous Duty [Sec. 5-173]: 50% of Final Average Earnings plus 2% for each year in excess of 20.

Tier I Plan B [Sec. 5-162]: Same as Plan C up to age 65; thereafter 1% of Final Average Earnings up to \$4,800 plus 2% of Final Average Earnings in excess of \$4,800 times years, reduced for retirement prior to age 65 with less than 25 years. Minimum benefit with 25 years, \$300 per month.

Tier I Plan C [Sec. 5-162]: 2% of Final Average Earnings times years of service, reduced for retirement prior to age 65 with less than 25 years. Minimum with 25 years, \$300 per month.

Tier II Hazardous Duty Members [Sec. 5-192n] and Tier IIA: 2½% of Final Average Earnings times up to 20 years of service plus 2% of Final Average Earnings times years of service in excess of 20 years, if any. Minimum with 25 years, \$300 per month (or less if retirement before July 1, 1987).

Tier II All Other [Sec. 5-192l] and Tier IIA: 1⅓% of Final Average Earnings plus ½% of Final Average Earnings in excess of the year's breakpoint\*, times up to 35 years of service from October 1, 1982 plus 1⅝% of Final Average Earnings times years of service in excess of 35 years, if any. Minimum with 25 years, \$300 per month (or less if retirement before July 1, 1987).

\* \$10,700 increased by 6% each year after 1982, rounded to the nearest \$100, but not greater than Social Security Covered Compensation.

4. **Early Retirement**

Tier I - Hazardous Duty: None.

Tier I [Sec. 5-162]: Age 55 and 10 years of service; Normal Retirement Benefit reduced actuarially for retirement prior to age 60.

Tier II [Sec. 5-192m] and Tier IIA: Age 55 and 10 years of service; Normal Retirement Benefit reduced ¼% (effective July 1, 1991) for each month prior to Normal Retirement Age; Minimum benefit with 25 years, \$300 per month (or less if retirement prior to July 1, 1987).

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY OF PLAN PROVISIONS**

---

5. **Deferred Retirement**

Tier I [Sec. 5-162]: May be deferred but not beyond age 70.

Tier II [Sec. 5-192l] and Tier IIA: May be deferred but not beyond age 70. Benefit is based on salary and service to actual retirement.

6. **Vesting**

Tier I [Sec. 5-166]: Ten years of service; actuarially reduced benefit payable at age 55; in addition employees are always fully vested in their own contributions (after January 1, 1983, Tier I, contributions with 5% interest from January 1, 1982).

Tier I - Hazardous Duty [Sec. 5-173(f)]: As above.

Tier II [Sec. 5-192o] and Tier IIA: Effective July 1, 1997, five years of service or age 70 and 5 years; benefit payable at Normal Retirement Age or early retirement benefit payable at age 55; minimum benefit with 25 years, payable after age 55, \$300 per month (or less if retirement before July 1, 1987).

7. **Member Contributions**

Tier I - Hazardous Duty [Sec. 5-161]      4% of earnings up to Social Security Taxable Wage Base plus 5% above that level.

Tier I - Plan B [Sec. 5-161]                      2% of earnings up to Social Security Taxable Wage Base plus 5% above that level.

Tier I - Plan C [Sec. 5-161]                      5% of earnings.

Tier II - All Other [Sec. 5-192u]                None.

Tier II - Hazardous Duty [Sec. 5-192u]        4% of earnings.

Tier IIA - All other                                2% of earnings.

Tier IIA - Hazardous Duty                      5% of earnings.

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SUMMARY OF PLAN PROVISIONS**

---

8. **Cost of Living**

[Sec. 5-162b, 5-162d]: Annual adjustment each July 1 of up to 5% for retirements prior to July 1, 1980; 3% for retirements after July 1, 1980. For members (or beneficiaries) not covered by Social Security and age 62 and over, the maximum increase is 6%. If an actuarial surplus (as defined in the law) exists, the Commission may further increase retired benefits.

For employees retiring after June 30, 1999, the annual adjustment will be 60% of the increase in the CPI up to 6% and 75% of the increase in the CPI over 6%. This adjustment will be no less than 2.5% and no greater than 6%. Employees retiring between July 1, 1997 and June 30, 1999 will have the irrevocable choice between this formula and a fixed 3% annual adjustment.

*Tier IIA*: An employee must have at least ten years of actual state service or directly make the transition into retirement in order to be eligible for annual adjustments.

9. **Death Benefits**

Tier I - State Police [Sec. 5-146]: Survivor benefits to spouse of \$670 per month plus \$300 to a surviving dependent child (or \$700 to surviving dependent children).

Tier I [Sec. 5-165a]: If eligible for early or normal retirement, spouse benefit equal to 50% of average of Life Benefit and 50% Joint & Survivor Benefit the member would have received. If not eligible to retire but 25 years, same benefit calculated as though age 55 using service and earnings at death.

[Sec. 5-168]: If not eligible for retirement, return of contributions (after October 1, 1982, Tier I, with interest from January 1, 1982 at 5%).

Tier II [Sec. 5-192r] and Tier IIA: If eligible for early or normal retirement, spouse benefit equal to 50% of member's benefit under a 50% Joint & Survivor Annuity. If not eligible to retire but 25 years, same benefit calculated as though age 55 using service and earnings at death.

[Sec. 5-192t]: If death is due to employment, a spouse with dependent children under 18 will be paid \$7,500 in not less than 60 installments while living and not remarried; also \$20 per month per child under 18. If no children under 18, spouse [or dependent parent(s), if no spouse] will be paid \$4,000 in not less than 60 installments.



---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SUMMARY OF PLAN PROVISIONS**

---

**10. Disability Benefits**

Tier I [Sec. 5-142, 5-169, 5-173]: For non-service disabilities occurring prior to age 60 and after 5 years of service, benefit equals 3% times base salary times years of service (Maximum  $1\frac{2}{3}\%$  times service to 65). If disability occurs prior to age 60 and is due to service, benefit equals  $1\frac{2}{3}\%$  of salary times service projected to 65 (maximum 30 years) and is payable regardless of length of service. Exception: State Police benefit is accrued benefit if more than 20 years of service. State Police receive an additional benefit of \$360 per month plus \$300 to spouse plus \$300 to a surviving dependent child (or \$700 to surviving dependent children).

Maximum disability benefit is lesser of: 100% of salary less Workers Compensation and Social Security and less non-rehabilitation earnings, or 80% of salary less Workers Compensation and Social Security. Social Security is primary plus family.

Tier II [5-192p] and Tier IIA: Prior to age 65 and due to service or after 10 years of service, benefit is  $1\frac{1}{3}\%$  of final average earnings, plus  $\frac{1}{2}\%$  of excess earnings times service projected to 65 (maximum 30 years of service to Date of Disability if greater than 30 years). Same maximum as Tier I.

Minimum disability benefit including Workers Compensation and Social Security is 60% of salary.

**11. Optional Forms of Payment**

Tier I [Sec. 5-165]: 50% Qualified Joint and Survivor (Normal Form if married at least 12 months).

Tier II [Sec. 5-192q] and Tier IIA: 50% or 100% Joint and Survivor (Normal Form if married at least 12 months). Ten years certain and life. Twenty years certain and life. Life (Normal Form if not married at least 12 months).

**12. Part-Time Employment**

[Sec. 5-162g & Sec. 5-192k]: Service treated as if full-time for eligibility. If consistent part-time for all periods, treat as full-time. If varying schedule or some part-time, some full-time, service and salary proportionately adjusted.

APPENDIX C

*ACTUARIAL METHOD AND ASSUMPTIONS*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL METHODS AND ASSUMPTIONS**

---

**A. Funding Method**

The actuarial valuation method used is the ***Projected Unit Credit Cost Method***. Recommended annual contributions until the actuarial liability is completely funded will consist of two pieces: Normal Cost plus a payment towards the Unfunded Actuarial Liability.

The ***Accrued Liability*** is determined directly as the present value of benefits accrued to date, where the accrued benefits for each Member is the pro-rata portion (based on service to date) of the ***projected*** benefit payable at death, disability, retirement or termination. The Normal Cost is then similarly determined as the present value of the portion of the ***projected*** benefit attributable to the current year.

The ***Actuarial Value of Assets*** is determined by first projecting the Actuarial Value forward from the beginning of the prior fiscal year based on the actual cash flow during the fiscal year and the assumed interest rate. The difference between this expected actuarial value and the actual market value is recognized over a five year period, subject to the Actuarial Value remaining within +/- 20% of the Market Value.

The ***Unfunded Actuarial Liability*** is the Actuarial Liability less the Actuarial Value of Assets.

These elements are projected from June 30, 2000 to June 30, 2001 as follows:

- The actuarial assumptions are used to project changes in the membership from June 30, 2000 to June 30, 2001. A demographic profile of new members is constructed based on the demographic profile of employees hired in the 1999-2000 fiscal year, such that the total active member population remains constant in number and the total payroll increases according to the payroll growth assumption. From this constructed hypothetical population, the projected Normal Cost and projected Actuarial Liability as of June 30, 2001 is determined.
- The Market Value of Assets is similarly projected forward from June 30, 2000 to June 30, 2001, and is used to determine the projected Actuarial Value of Assets as of June 30, 2001.
- The Unfunded Accrued Liability as of June 30, 2001 is then determined as the difference between the Actuarial Liability and Actuarial Value of Assets projected to that date. This amount is amortized over the 32 years remaining in the amortization schedule, with the amortization payment calculated on a level percent of payroll basis.
- The Normal Cost and Past Service Amortization payment amounts are adjusted to reflect payment in twelve equal installments at the end of each month.

The methodology described above is repeated in order to project costs to June 30, 2002 for the second year in the biennial budget cycle.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
ACTUARIAL METHODS AND ASSUMPTIONS**

**B. Actuarial Assumptions**

Many of the actuarial assumptions have been changed on the basis of the 1999 study of the System's experience during the period 1994-1998. The table below shows the details of both the prior and current assumptions.

<b>Assumption / Method</b>	<b>PRIOR</b>		<b>CURRENT</b>	
	<u>YEARS OF SERVICE</u>	<u>Rate</u>	<u>YEARS OF SERVICE</u>	<u>Rate</u>
<b>Salary Scale</b>	0 1 2 3 4 5 10 15 20 25	14.00 12.00 10.00 9.00 8.20 7.50 5.45 4.45 3.75 3.25	0 1 2 3 4 5 10 15 20 25	15.00 15.00 10.00 7.00 6.50 6.00 5.50 4.25 4.25 4.25
<b>COLA</b>	<u>Group</u> Pre July 1, 1980 Retirees 1980 - 1997 Retirees Post July 1, 1997 Retirees	<u>Rate</u> 4.00 3.00 2.50	<u>Group</u> Pre July 1, 1980 Retirees 1980 - 1997 Retirees Post July 1, 1997 Retirees	<u>Rate</u> 3.75 3.00 2.75
<b>Payroll Growth Rate</b>	6.00%		5.00%	
<b>Disabled Mortality</b>	1965 Railroad Retirement Board Mortality		Males 80% of PBGC Disabled Mortality with Social Security for Males  Females 60% of PBGC Disabled Mortality with Social Security for Females	

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
ACTUARIAL METHODS AND ASSUMPTIONS**

<i>Assumption / Method</i>	<i>PRIOR</i>	<i>CURRENT</i>																																																																																																																																				
<i>Healthy Mortality</i>	1983 Group Annuity Mortality Table	1994 Group Annuity Mortality Table																																																																																																																																				
<i>Percent Married</i>	100%	80%																																																																																																																																				
<i>Disability</i>	Rates developed in previous experience study. Service connected disabilities are assumed to comprise 50% of total disabilities for hazardous employees and 20% for other employees.	<i>Service</i> <i>Hazardous employees</i> 0.07% at all ages <i>Other employees</i> 0.02% at all ages <i>Non-service</i> 25% of United Auto Workers Disability Table																																																																																																																																				
<i>Turnover</i>	Three year select and ultimate rates as shown below for non-hazardous male employees; the same table with rates multiplied by a factor of 110% for female employees and by a factor of 60% for hazardous employees.	Ten year select and ultimate rates as shown below for non-hazardous employees; the same table with rates multiplied by a factor of 40% for hazardous employees.																																																																																																																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th colspan="4" style="text-align: center;"><u>Years of Participation</u></th> </tr> <tr> <th></th> <th style="text-align: center;">0</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3+</th> </tr> </thead> <tbody> <tr><td>20</td><td>30</td><td>30</td><td>20</td><td>10</td></tr> <tr><td>25</td><td>17</td><td>15</td><td>10</td><td>8</td></tr> <tr><td>30</td><td>15</td><td>11</td><td>8</td><td>5</td></tr> <tr><td>35</td><td>13</td><td>10</td><td>8</td><td>3</td></tr> <tr><td>40</td><td>10</td><td>9</td><td>7</td><td>3</td></tr> <tr><td>45</td><td>5</td><td>8</td><td>6</td><td>2</td></tr> <tr><td>50</td><td>3</td><td>6</td><td>4</td><td>2</td></tr> <tr><td>55</td><td>2</td><td>4</td><td>2</td><td>0</td></tr> <tr><td>60</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>	<u>Age</u>	<u>Years of Participation</u>					0	1	2	3+	20	30	30	20	10	25	17	15	10	8	30	15	11	8	5	35	13	10	8	3	40	10	9	7	3	45	5	8	6	2	50	3	6	4	2	55	2	4	2	0	60	0	0	0	0	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th colspan="6" style="text-align: center;"><u>Years of Participation</u></th> </tr> <tr> <th></th> <th style="text-align: center;">0-1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3-4</th> <th style="text-align: center;">5</th> <th style="text-align: center;">6-9</th> <th style="text-align: center;">10+</th> </tr> </thead> <tbody> <tr><td>20</td><td>40</td><td>30</td><td>20</td><td>15</td><td>5</td><td>5.0</td></tr> <tr><td>25</td><td>30</td><td>20</td><td>10</td><td>8</td><td>5</td><td>5.0</td></tr> <tr><td>30</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>4.2</td></tr> <tr><td>35</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>3.0</td></tr> <tr><td>40</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>2.6</td></tr> <tr><td>45</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>2.0</td></tr> <tr><td>50</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>1.2</td></tr> <tr><td>55</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>0.0</td></tr> <tr><td>60</td><td>25</td><td>20</td><td>10</td><td>8</td><td>5</td><td>0.0</td></tr> </tbody> </table>	<u>Age</u>	<u>Years of Participation</u>							0-1	2	3-4	5	6-9	10+	20	40	30	20	15	5	5.0	25	30	20	10	8	5	5.0	30	25	20	10	8	5	4.2	35	25	20	10	8	5	3.0	40	25	20	10	8	5	2.6	45	25	20	10	8	5	2.0	50	25	20	10	8	5	1.2	55	25	20	10	8	5	0.0	60	25	20	10	8	5	0.0
<u>Age</u>	<u>Years of Participation</u>																																																																																																																																					
	0	1	2	3+																																																																																																																																		
20	30	30	20	10																																																																																																																																		
25	17	15	10	8																																																																																																																																		
30	15	11	8	5																																																																																																																																		
35	13	10	8	3																																																																																																																																		
40	10	9	7	3																																																																																																																																		
45	5	8	6	2																																																																																																																																		
50	3	6	4	2																																																																																																																																		
55	2	4	2	0																																																																																																																																		
60	0	0	0	0																																																																																																																																		
<u>Age</u>	<u>Years of Participation</u>																																																																																																																																					
	0-1	2	3-4	5	6-9	10+																																																																																																																																
20	40	30	20	15	5	5.0																																																																																																																																
25	30	20	10	8	5	5.0																																																																																																																																
30	25	20	10	8	5	4.2																																																																																																																																
35	25	20	10	8	5	3.0																																																																																																																																
40	25	20	10	8	5	2.6																																																																																																																																
45	25	20	10	8	5	2.0																																																																																																																																
50	25	20	10	8	5	1.2																																																																																																																																
55	25	20	10	8	5	0.0																																																																																																																																
60	25	20	10	8	5	0.0																																																																																																																																

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
ACTUARIAL METHODS AND ASSUMPTIONS**

<b>Assumption / Method</b>	<b>PRIOR</b>			<b>CURRENT</b>		
	<u>Age</u>	<u>First Year Eligible</u>	<u>All Other Ages</u>	<u>Age</u>	<u>First Year Eligible</u>	<u>All Other Ages</u>
<b>Retirement</b>	<i>Hazardous employees</i>			<i>Hazardous employees</i>		
	47	40	30	Thru 44	25	15
	50	40	30	45-48	25	20
	55	60	30	49-53	10	20
	60	80	50	54-55	10	25
	62	100	100	56-59	10	40
	65	100	100	60-69	25	40
	70	100	100	70	100	100
	<i>Other employees</i>			<i>Other employees</i>		
	47	0	0	55	17.5	12.5
50	0	0	56-60	15.0	12.5	
55	20	0	61	25.0	15.0	
60	20	15	62	40.0	30.0	
62	40	40	63	35.0	25.0	
65	80	60	64	45.0	25.0	
70	100	100	65	65.0	40.0	
			66-69	60.0	40.0	
			70	100.0	100.0	

APPENDIX D

*ACTUARIAL SURPLUS TEST*

---

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL SURPLUS TEST AS OF JUNE 30, 2000**

---

**APPENDIX D**

***Actuarial Surplus Test as of June 30, 2000***

Section 5-162(h) of the General Statutes of Connecticut provides that the Retirement Commission may grant additional cost of living adjustments for retired employees if an actuarial surplus exists. An actuarial surplus is deemed to exist if three criteria are met:

- I. *Investment Income:*** The actual rate of return for the Fiscal Year ending on the determination date must exceed the actuarial interest rate assumption.

Market Value of Assets on June 30, 1999 (A)	\$6,161,895,413
Market Value of Assets on June 30, 2000 (B)	8,284,499,079
Investment Income for FY 1999-00 (I)	711,667,603
Actual Rate of Return for FY 1999-00: $2I / (A + B - I)$	10.36%
Actuarial Interest Rate Assumption	8.50%

*Actual return of 10.36% is more than assumed 8.50%, so the first criterion is met.*

- II. *Assets Versus Liabilities:*** Market value of assets must exceed 50% of specified liabilities.

Market Value of Assets on June 30, 2000 (B)	\$8,284,499,079
Specified Liabilities on June 30, 2000	
Liability for Retired Members	6,544,942,127
Liability for Terminated Vested Members	91,601,549
Active Member Contributions with Interest	477,505,074
Total	<u>7,114,048,750</u>
50% of Specified Liabilities	3,557,024,375

*Market Value exceeds 50% of specified liabilities, so the second criterion is met.*

- III. *Unfunded Liability:*** Actual unfunded liability must be less than the projected unfunded liability five years from the determination date.

Actual Unfunded Liability on June 30, 2000	\$4,316,115,354
Projected Unfunded Liability on June 30, 2005 (see page D-2)	2,563,966,000

*Actual Unfunded Liability does not exceed Projected Unfunded Liability so the third criterion is not met and there is no actuarial surplus.*



**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**ACTUARIAL SURPLUS TEST AS OF JUNE 30, 2000**

**APPENDIX D**

***Actuarial Surplus Test as of June 30, 2000 - Projection of Unfunded Liability***

Section 5-162-h(b)(2) of the General Statutes of Connecticut specifies the means of calculating the Projected Unfunded Liability used in the third criterion of the Actuarial Surplus Test. The projection reflects the actual unfunded liability as of December 31, 1983 adjusted for changes in actuarial assumptions and cost methods through the determination date. No provision is made in the Statute for reflecting the impact of plan changes. The projection below reflects the following changes: data correction (June 30, 1987); change in actuarial assumptions (June 30, 1987); change in actuarial cost method (June 30, 1988); change in actuarial assumptions - interest rate only (June 30, 1989); change in actuarial cost method - amortization period only (June 30, 1992); change in actuarial assumptions (June 30, 1993); change in actuarial cost method - level percent amortization (June 30, 1997); change in actuarial methods and assumptions (June 30, 2000).

<i>Year</i>	<i>(\$000)</i> <i>June 30</i> <i>Unfunded</i> <i>Liability</i>	<i>Year</i>	<i>(\$000)</i> <i>June 30</i> <i>Unfunded</i> <i>Liability</i>	<i>Year</i>	<i>(\$000)</i> <i>June 30</i> <i>Unfunded</i> <i>Liability</i>
1987	\$2,524,556	2002	\$2,360,589	2017	\$3,045,305
1988	1,954,257	2003	2,429,273	2018	3,029,807
1989	1,432,333	2004	2,497,197	2019	2,999,274
1990	1,939,758	2005	2,563,966	2020	2,951,743
1991	1,930,524	2006	2,629,135	2021	2,885,049
1992	1,920,505	2007	2,692,205	2022	2,796,806
1993	1,794,192	2008	2,752,616	2023	2,684,388
1994	1,787,586	2009	2,809,741	2024	2,544,908
1995	1,780,419	2010	2,862,879	2025	2,375,189
1996	1,772,643	2011	2,911,249	2026	2,171,741
1997	1,764,205	2012	2,953,982	2027	1,930,734
1998	1,835,087	2013	2,990,111	2028	1,647,961
1999	1,907,249	2014	3,018,563	2029	1,318,808
2000	2,222,296	2015	3,038,148	2030	938,216
2001	2,291,494	2016	3,047,548	2031	500,639
				2032	0