

ACTUARIAL VALUATION
CONNECTICUT STATE EMPLOYEES
RETIREMENT SYSTEM
AT JUNE 30, 2004

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
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November 16, 2004

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

Re: Connecticut State Employees Retirement System
June 30, 2004 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, 2004. 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, 2004.

As developed in Section IV, the actuarially determined contribution for the fiscal year beginning July 1, 2005 is \$623,062,748. For the fiscal year beginning July 1, 2006, the actuarially determined contribution is \$663,926,351.

Respectfully submitted,

Handwritten signature of Althea A. Schwartz in cursive.

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

Handwritten signature of Rebecca A. Sielman in cursive.

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

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SECTION I

EXECUTIVE SUMMARY

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY

We have performed an actuarial valuation of the Connecticut State Employees Retirement System as of June 30, 2004 to determine the contributions for the Fiscal Years beginning July 1, 2005 and July 1, 2006. 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.

In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the State of Connecticut. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

The calculations reported herein have been made on a basis consistent with our understanding of the Connecticut General Statutes with guidance from the Retirement Commission. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices based on the actuarial methods and assumptions adopted by the System. Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. Actual experience will not conform exactly to the assumptions made for this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

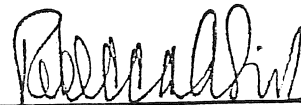
This report may not be used for purposes other than those listed on the following page without Milliman's prior written consent. If this report is distributed to other parties, we request that it be copied in its entirety, including this section.

MILLIMAN INC.

November 16, 2004



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



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

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY

PURPOSE OF REPORT

This report presents the results of the June 30, 2004 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, 2005;
- to determine the Employer contribution for the Fiscal Year beginning July 1, 2006;
- to disclose asset and liability measures as of June 30, 2004; 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 July 1, 2003 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 several years.
- ***Discussion of Results...*** highlights the major events influencing this valuation.
- ***Principal Results...*** Contains a summary of comparative statistics for the current and prior valuations.

SPECIAL NOTE

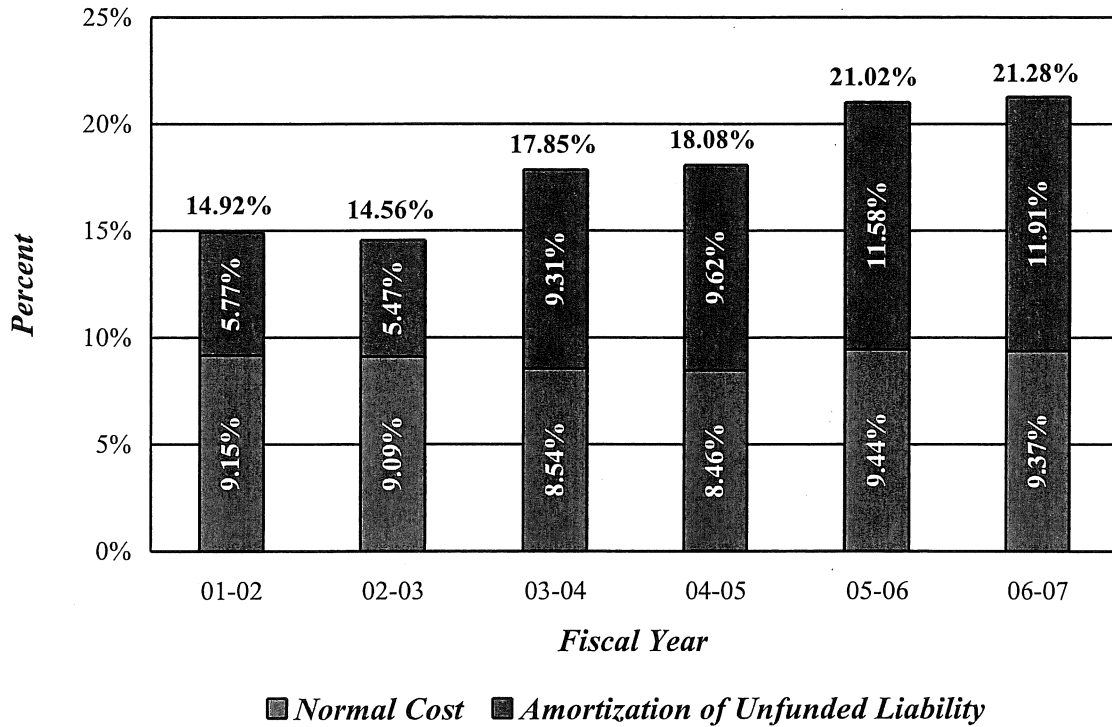
This valuation reflects the market value of assets as of June 30, 2004 reported to us by the State Treasurer on November 5, 2004. It is our understanding that these amounts are estimates and may be subject to further refinement. Any changes should be minor and will be reflected in the next valuation.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

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

Employer Contribution Rate

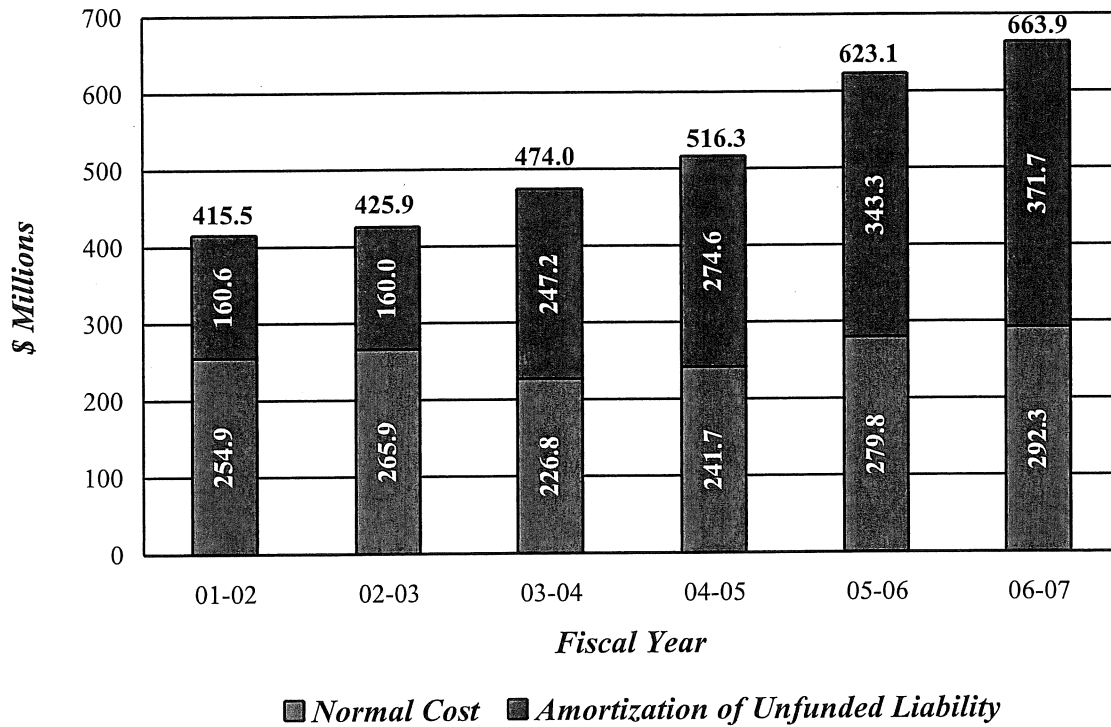


The bar graph depicts the Employer's contribution rates. The normal cost rates have grown due to the aging of the membership and the return to active service in Tiers I and II for a number of former members. The amortization payment continues to grow due to the growth in the Unfunded Actuarial Liability.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

Employer Contribution

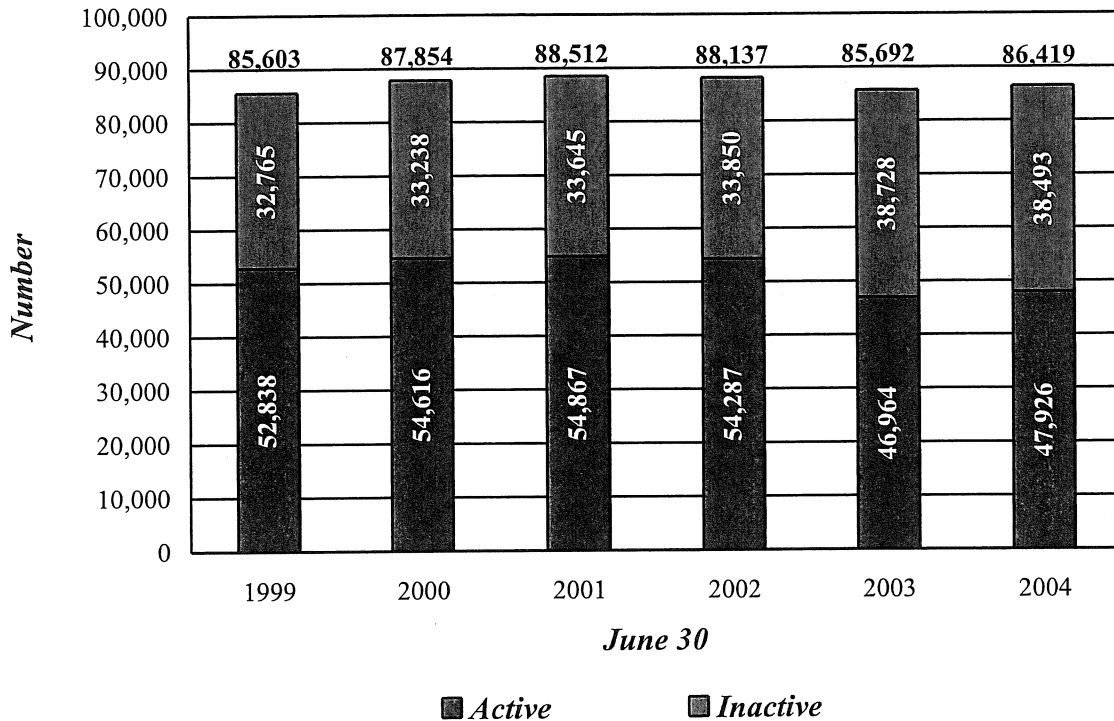


The dollar amount of the Employer's contribution equals the contribution rate shown on the prior table multiplied by the projected payroll. The Normal Cost contribution has remained relatively steady with increases reflecting payroll growth. The amortization component has grown considerably reflecting the growth in the System's Unfunded Actuarial Liability.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

Membership

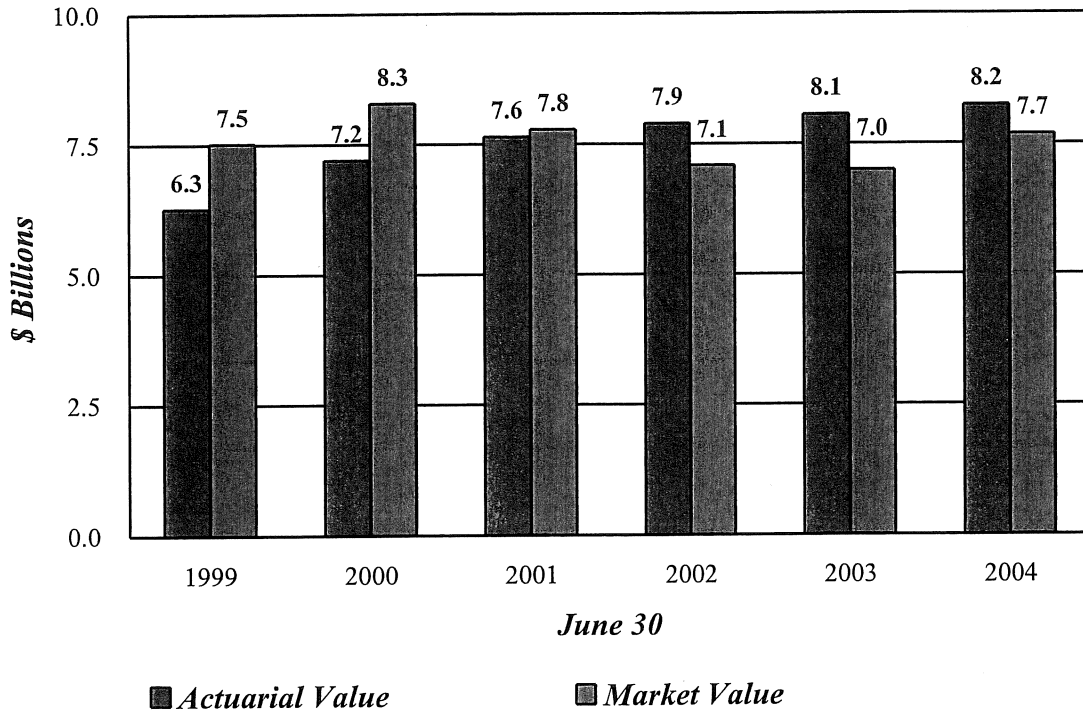


The total number of members has remained relatively steady over the period shown above. However, the composition of the membership has changed significantly. For the years from 1999 through 2002, 62% of the membership was active; now, as a result of the 2003 ERIP, many more members are retired and only 55% of the membership is active. Between 2003 and 2004, the active membership grew by 962 members. Normally, we would expect new members to enter Tier IIA. During the past year, however, over half of the net growth in active membership represents members who were inactive last year and have now returned to active service in Tiers I and II.

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY

MAJOR FINDINGS

SERS Assets

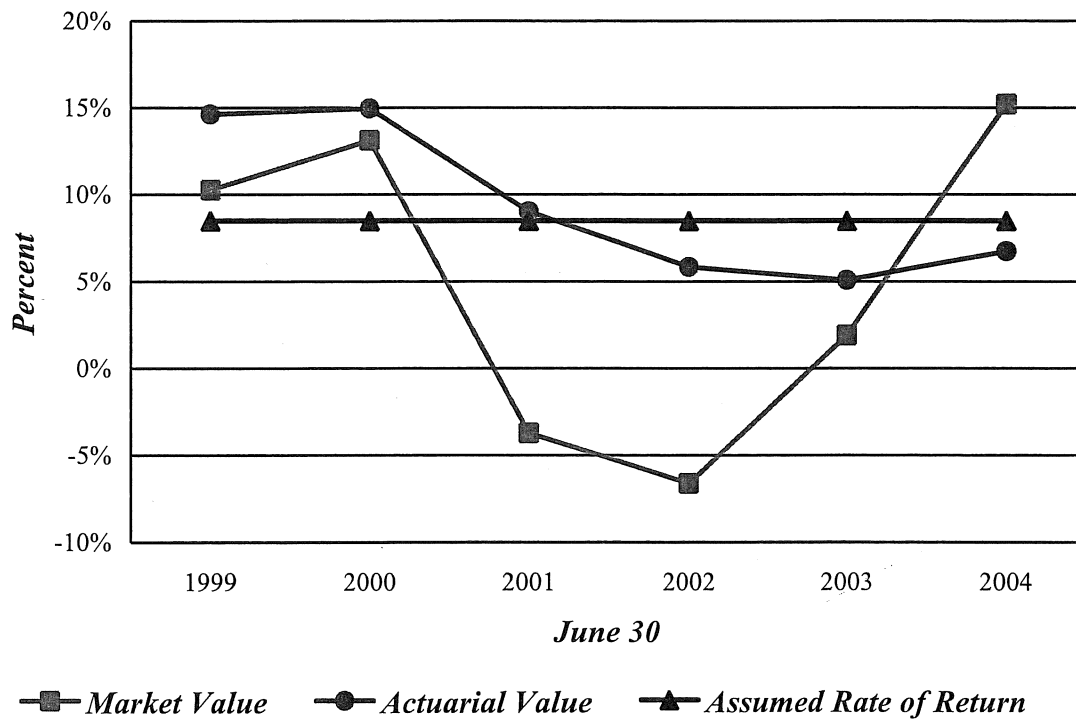


FY04 was a good year. The market value grew from \$7.0 billion to \$7.7 billion. This is welcome news after 3 years of sub-par performance. Contributions during the past year were \$517 million; benefit payments totaled \$869 million. The actuarial value remained steady at \$8.2 billion, compared to \$8.1 billion last year.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

Historical Rates of Return

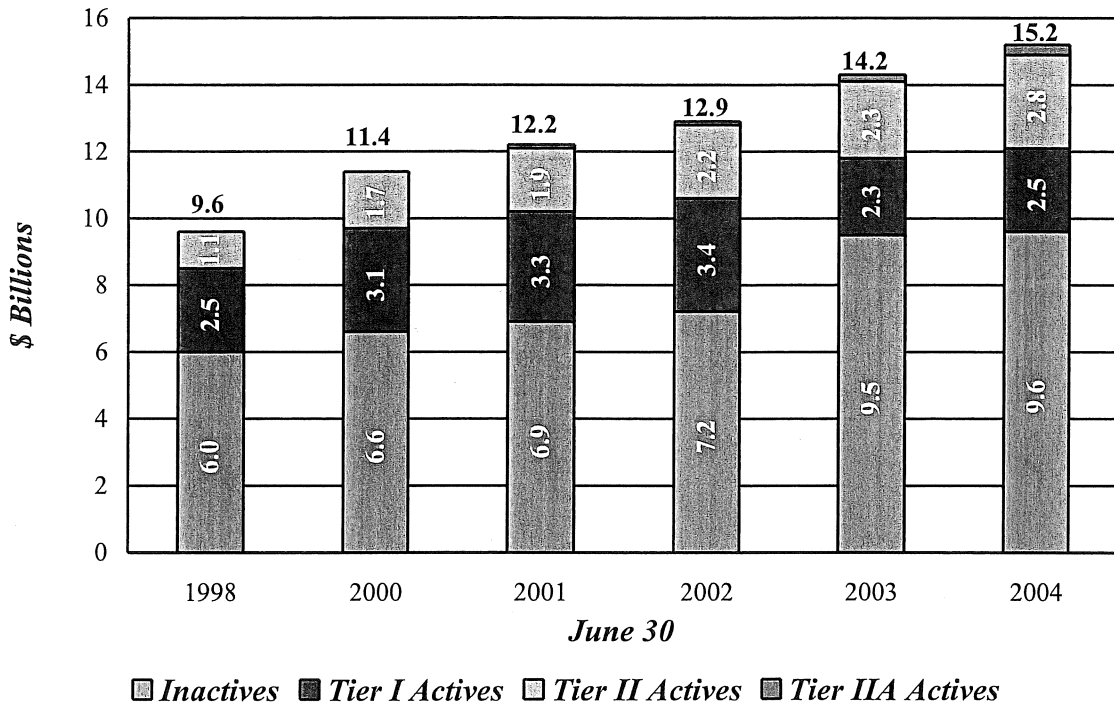


This graph shows the historical rates of return on a market value basis, the impact of 'smoothing' (the rates shown on an actuarial value basis), and the 'benchmark' (our assumed rate of return). During FY04, the rate of return on a Market Value basis was 15.2%. The corresponding rate of return on an Actuarial Value basis was 6.7%, reflecting the gradual recognition of losses in prior years. This graph demonstrates that our smoothing technique works well in dampening market volatility.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

Actuarial Liabilities

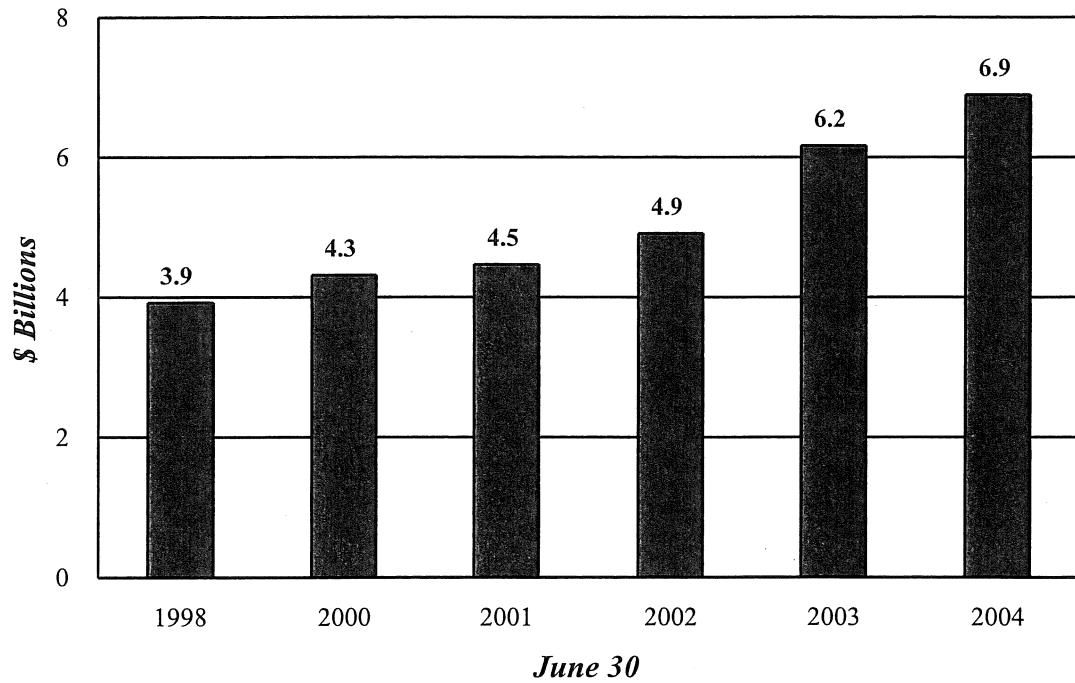


This graph shows the Actuarial Liability by group. No value is shown above for 1999 since a complete actuarial valuation was not performed as of that date. The 2003 Early Retirement Incentive Program caused a noticeable shift of Actuarial Liability from Active to Inactive. The inactive liability remained largely unchanged from last year. However, the active liability grew for all Tiers. During the past year, we observed that more members in Tiers I and II remained employed (instead of retiring) than anticipated by our actuarial assumptions. Also, a significant number of members were rehired into Tiers I and II after being inactive members the prior year.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

MAJOR FINDINGS

Unfunded Liabilities



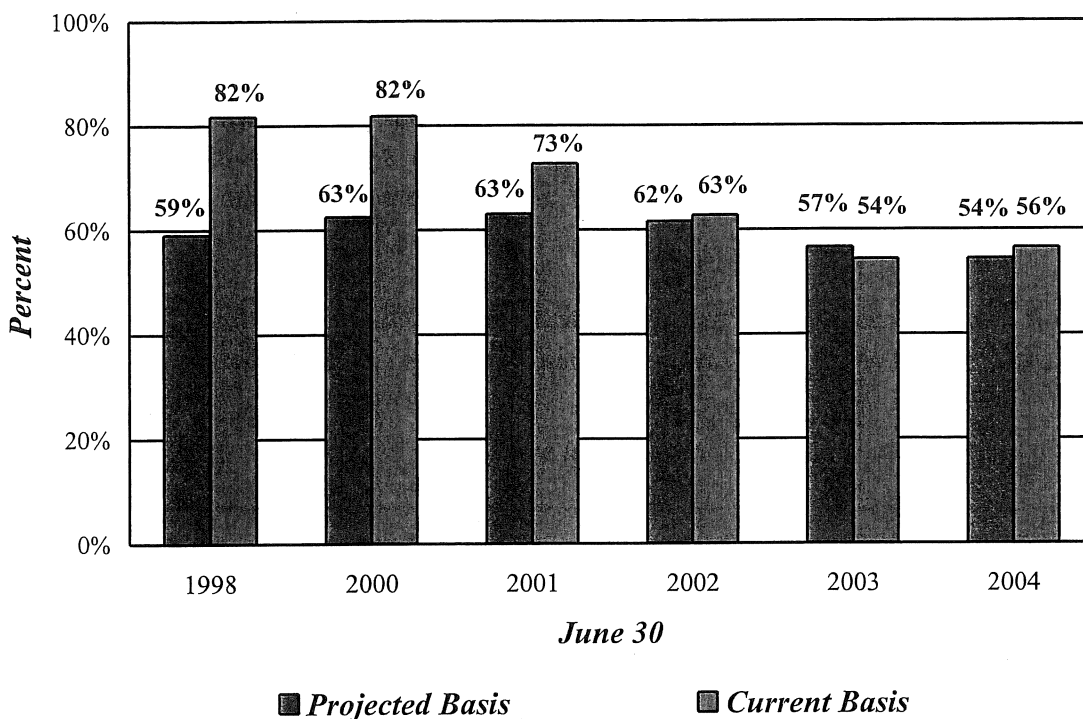
Unfunded actuarial liabilities have increased with this valuation. We expect some increase as a normal outgrowth of the method of paying off this liability: a number of years of increase followed by a gradual decline. The unfunded liabilities grew from 2003 to 2004 due to modest asset and liability losses.

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

Funded Ratios



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.

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**

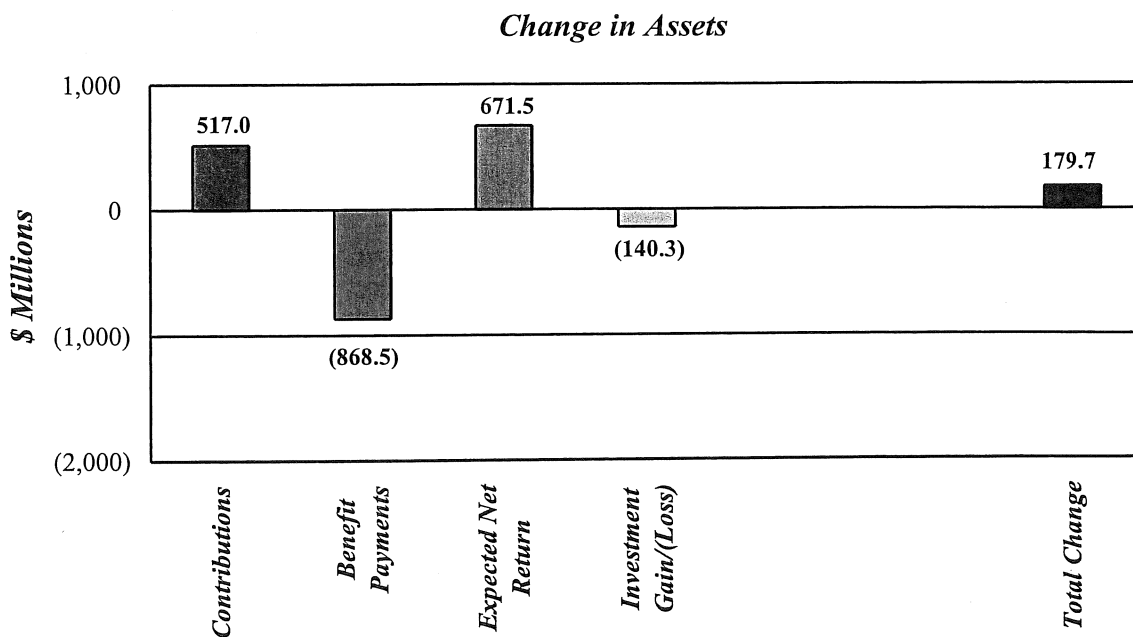
DISCUSSION OF RESULTS

In this section of the Executive Summary, we will discuss the significant events impacting the June 30, 2004 actuarial valuation.

I. Investment Experience

The investment performance was strong during the past year. The actual return was 15.22% on a market value basis compared to 1.91% for the prior fiscal year. On a smoothed actuarial basis, the rate was 6.74% compared to 5.08% for the prior valuation, reflecting continuing recognition of market losses from the low returns from the prior three years. The assumed rate is 8.50%.

Between July 1, 2003 and June 30, 2004, the actuarial value of assets (measured on a five year smoothing basis) increased by \$179.7 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 recognized investment earnings of \$531.2 million over the year resulted in an actuarial loss of \$140.3 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 changed modestly over the past year:

	<i>Active</i>	<i>Deferred Vested</i>	<i>Retired</i>	<i>Disabled</i>	<i>Benefic.</i>	<i>Total Members</i>
Count on June 30, 2003	46,964	1,677	30,842	2,850	3,359	85,692
Left System	(2,414)	(30)	(977)	(110)	(164)	(3,695)
Terminated Vested	(66)	66	0	0	0	0
Retired	(209)	(148)	369	(12)	0	0
Disabled	(153)	0	(2)	155	0	0
Died w/beneficiary	(4)	0	(2)	0	6	0
Rehired	82	(78)	(4)	0	0	0
New	3,726	257	119	55	265	4,422
Count on June 30, 2004	47,926	1,744	30,345	2,938	3,466	86,419

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>
Count on June 30, 2002	12,639	28,096	13,552	54,287
<i>percentage of total</i>	23%	52%	25%	
Count on June 30, 2003	8,561	25,819	12,584	46,964
<i>percentage of total</i>	18%	55%	27%	
Count on June 30, 2004	8,404	25,126	14,396	47,926
<i>percentage of total</i>	18%	52%	30%	

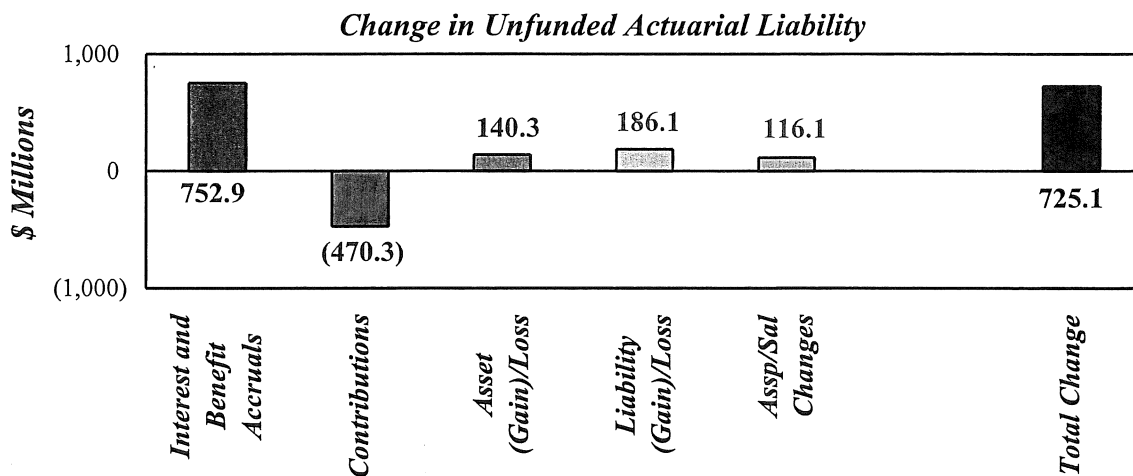
More information on SERS membership can be found in Appendix A.

**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 July 1, 2003, the unfunded actuarial liability increased from \$6.2 billion to \$6.9 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 2003 to 2004:



The liability loss of \$186.1 million over the past year is modest (1.2%) when compared to the total SERS liability of \$15,128.5 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. During FY04, the liability loss was a combination of small factors, including modest salary losses, additional liability due to the return to work of members who were inactive the prior year, and mortality losses (inactive members living longer than expected).

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY

DISCUSSION OF RESULTS

IV. Changes in Actuarial Methods and Assumptions

Connecticut General Statutes mandate that the System's experience be studied every five years to examine the continued appropriateness of the actuarial assumptions (refer to Appendix C of this report for a summary of the actuarial assumptions). In 2004 we performed such a study of the System's experience covering the period 1999 – 2003. As a result of this study, we have confirmed that, for the most part, the actuarial methods and assumptions used to determine the System's funded status and contribution requirements are still valid. There are two changes that the Actuarial Subcommittee of the Retirement Commission has adopted:

- **Salary projection procedure.** The experience study confirmed that the current salary growth assumptions remain appropriate for projecting future System liabilities. However, there is a procedural change that has been made concerning the method of projecting salary growth during the first year following the valuation date. Under the prior procedure, each year the Retirement Division supplied us with the average 'across the board' general wage increase that was effective as of the valuation date. This rate was used in place of the actuarial assumptions with respect to salary growth rates (refer to Appendix C of this report for details of the salary growth assumption). For example, for a member with 10 years of service, the salary growth rate according to the actuarial assumptions is 5.5%. If the Retirement Division supplied us with a rate of 3%, that rate would have been used to project the member's salary in the first year following the valuation date, and the appropriate actuarial assumptions would have been used for all subsequent years.

While the prior procedure did reflect the known economic environment on the valuation date, it tended to understate the impact of merit and promotions on individual member salary increases. The Actuarial Subcommittee of the Retirement Commission recommended changing this procedure to use the actuarial salary growth assumptions to project salaries for all years in the future, not just years after the first year. This change increased the Actuarial Liability by \$115.7 million.

- **Disability Rates.** The observed rates of service-related disabilities in the 1999 – 2003 study period were higher than the assumptions that had been developed by the 1999 experience study. The Actuarial Subcommittee of the Retirement Commission recommended increasing the rates of service-related disabilities. Overall, it is still unlikely for members to suffer a service-related disability, so the cost impact of this change is very small. This change increased the Actuarial Liability by \$0.4 million.

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, 2005 to June 30, 2006</i>	<i>July 1, 2006 to June 30, 2007</i>
Employer Normal Cost	\$279.8	\$292.3
Net Amortization Payment Towards Unfunded Actuarial Liability	343.3	371.7
Total Employer Cost	623.1	663.9
Total Employer Cost as a Percent of Payroll	21.02%	21.28%

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

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
EXECUTIVE SUMMARY**

PRINCIPAL RESULTS

	<i>Interim</i>		
	<i>June 30, 2002</i>	<i>June 30, 2003</i>	<i>June 30, 2004</i>

SERS Membership

Active Membership

Number of Active Members	54,287	46,964	47,926
Payroll (\$millions)	\$2,852.1	\$2,654.3	\$2,816.7
Average Pay	52,539	56,517	58,772

Inactive Membership

Number of Inactive Members	33,850	38,728	38,493
Annual Retired Members' Benefits (\$ millions)	\$655.1	\$836.8	\$880.8
Average Annual Retired Members' Benefits	20,248	22,584	23,967

Assets and Liabilities (\$ millions)

Assets

Market Value	\$7,088.9	\$6,991.6	\$7,677.2
Actuarial Value	7,893.7	8,058.6	8,238.3

Liabilities

Active Members	5,633.5	4,721.5	5,536.9
Inactive Members	7,172.6	9,502.3	9,591.6
Total Actuarial Liability	12,806.1	14,223.8	15,128.5
Unfunded Actuarial Liability	4,912.4	6,165.2	6,890.3

Employer Contributions

	<i>Recertified</i>	
	<i>FY 2003-04</i>	<i>FY 2005-06</i>
First fiscal year in budget cycle		
Normal Cost	\$226,779,359	\$279,753,428
Amortization Payment of Unfunded Liability	<u>247,218,753</u>	<u>343,309,320</u>
Total Employer Contribution	473,998,112	623,062,748
Total Contribution as a Percent of Payroll	17.85%	21.02%
Second fiscal year in budget cycle		
Normal Cost	\$241,707,452	\$292,275,360
Amortization Payment of Unfunded Liability	<u>274,590,716</u>	<u>371,650,991</u>
Total Employer Contribution	516,298,168	663,926,351
Total Contribution as a Percent of Payroll	18.08%	21.28%

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, 2004.

<u>Table</u>	<u>Contents</u>
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	Development of Asset Gain/(Loss)
II-5	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, 2002 to June 30, 2003</i>	<i>July 1, 2003 to June 30, 2004</i>
<i>Market Value as of July 1</i>	\$7,088,897,412	\$6,991,626,215
<i>Contributions</i>		
State	325,908,490	366,730,112
Federal	95,543,241	103,602,832
Employee	50,953,367	46,638,051
Total	<u>472,405,098</u>	<u>516,970,995</u>
<i>Investment Income Net of Expenses</i>		
Interest & Dividends	319,466,083	312,679,182
Realized Gains	9,032,165	50,784,080
Change in Unrealized Gains	(194,985,176)	674,046,383
Expenses	(310,622)	(334,860)
Total	<u>133,202,450</u>	<u>1,037,174,785</u>
<i>Disbursements</i>		
Benefit Payments	696,803,446	862,862,535
Employee Refunds	6,075,299	5,675,645
Total	<u>702,878,745</u>	<u>868,538,180</u>
<i>Market Value as of June 30</i>	6,991,626,215	7,677,233,815
<i>Approximate Net Rate of Return</i>	1.91%	15.22%

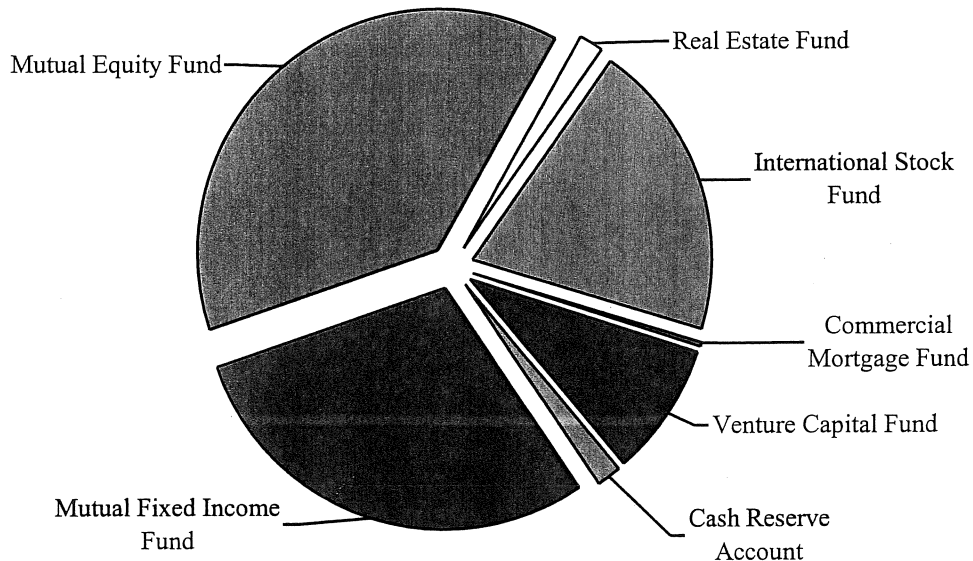
**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS ASSETS**

TABLE II-2

***Market Value of Assets
Breakdown on June 30, 2004***

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	(\$32,381,869)	-0.42%
Accrued Interest	0	0.00%
Investments:		
Cash Reserve Account	136,247,492	1.77%
Mutual Fixed Income Fund	2,242,969,642	29.22%
Mutual Equity Fund	2,945,734,038	38.37%
Real Estate Fund	141,844,062	1.85%
International Stock Fund	1,543,017,014	20.10%
Commercial Mortgage Fund	13,984,612	0.18%
Venture Capital Fund	685,818,824	8.93%
Total Market Value as of June 30, 2004	7,677,233,815	100.00%



**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS ASSETS**

TABLE II-3

Development of Actuarial Value of Assets

	<i>Market Value</i>	<i>Actuarial Value</i>
1. Value on July 1, 2003	\$6,991,626,215	\$8,058,586,633
2. Contributions during 2003-04	516,970,995	516,970,995
3. Benefit Payments during 2003-04	868,538,180	868,538,180
4. Expected Income on (1) through (3)*	580,793,322	671,484,957
5. Expected Value on June 30, 2004: (1) + (2) - (3) + (4)	7,220,852,352	8,378,504,405
6. Market Value on June 30, 2004	7,677,233,815	N/A
7. Market - Actuarial Value on June 30, 2004	N/A	(701,270,590)
8. Preliminary Actuarial Value: (5) + 20% of (7)	N/A	8,238,250,287
9. Final Value on June 30, 2004: (8) within +/- 20% of Market Value		8,238,250,287

* Interest on benefits and contributions is credited on a monthly basis.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS ASSETS**

TABLE II-4

Development of Asset Gain/(Loss)

	<i>Market Value</i>	<i>Actuarial Value</i>
1. Value on July 1, 2003	\$6,991,626,215	\$8,058,586,633
2. Contributions during 2003-04	516,970,995	516,970,995
3. Benefit Payments during 2003-04	868,538,180	868,538,180
4. Expected Income on (1) through (3)*	580,793,322	671,484,957
5. Expected Value on June 30, 2004: (1) + (2) - (3) + (4)	7,220,852,352	8,378,504,405
6. Actual Value on June 30, 2004	7,677,233,815	8,238,250,287
7. Actual Income	1,037,174,785	531,230,839
8. Asset Gain/(Loss): (7) - (4)	456,381,463	(140,254,118)
9. Approximate Rate of Return as of June 30, 2004	15.22%	6.74%
10. Approximate Rate of Return as of June 30, 2003	1.91%	5.08%
11. Change	13.31%	1.66%

* Interest on benefits and contributions is credited on a monthly basis.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS ASSETS**

TABLE II-5

Projection of Assets to Next Two Fiscal Years

	<u>Market Value</u>	<u>Actuarial Value</u>
1. Value on June 30, 2004	\$7,677,233,815	\$8,238,250,287
2. Expected Contributions during 2004-05	564,955,462	564,955,462
3. Expected Benefit Payments during 2004-05	894,177,665	894,177,665
4. Expected Income on (1) through (3)*	639,927,679	687,614,079
5. Expected Value on June 30, 2005: (1) + (2) - (3) + (4)	7,987,939,291	8,596,642,163
6. Market - Actuarial Value on June 30, 2005	N/A	(608,702,872)
7. Preliminary Actuarial Value: (5) + 20% of (6)	N/A	8,474,901,589
8. Final Value on June 30, 2005: (7) within +/- 20% of Market Value	7,987,939,291	8,474,901,589
9. Expected Contributions during 2005-06	676,004,178	676,004,178
10. Expected Benefit Payments during 2005-06	936,723,891	936,723,891
11. Expected Income on (8) through (10)*	668,967,114	710,358,909
12. Expected Value on June 30, 2006: (8)+(9)-(10)+(11)	8,396,186,692	8,924,540,785
13. Market - Actuarial Value on June 30, 2006	N/A	(528,354,093)
14. Preliminary Actuarial Value: (12) + 20% of (13)	N/A	8,818,869,966
15. Final Value on June 30, 2006: (14) within +/- 20% of Market Value	8,396,186,692	8,818,869,966

* Interest on benefits and contributions is credited on a monthly basis.

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.

<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, 2002</u>	<u>June 30, 2003</u>	<u>June 30, 2004</u>
<i>Tier I Actives</i>			
Hazardous Duty	\$397,745,951	\$233,659,790	\$251,928,889
Plan B	2,809,912,639	1,925,959,031	2,130,582,344
Plan C	151,860,367	92,457,238	98,687,446
<i>Total</i>	<u>3,359,518,957</u>	<u>2,252,076,059</u>	<u>2,481,198,679</u>
<i>Tier II Actives</i>			
Hazardous Duty	849,417,103	984,187,088	1,217,383,750
All Others	1,305,025,543	1,317,824,234	1,570,061,334
<i>Total</i>	<u>2,154,442,646</u>	<u>2,302,011,322</u>	<u>2,787,445,084</u>
<i>Tier IIIA Actives</i>			
Hazardous Duty	46,392,204	68,123,495	104,714,816
All Others	73,129,987	99,320,544	163,543,862
<i>Total</i>	<u>119,522,191</u>	<u>167,444,039</u>	<u>268,258,678</u>
<i>Total Actives</i>	5,633,483,794	4,721,531,420	5,536,902,441
<i>Retirees</i>			
Pre-1980	413,936,953	381,547,332	358,855,480
1980-1997 Fixed COLA	5,542,842,696	5,420,741,946	5,404,795,189
1997+ Variable COLA	1,073,364,890	3,464,704,680	3,646,211,236
<i>Total</i>	<u>7,030,144,539</u>	<u>9,266,993,958</u>	<u>9,409,861,905</u>
<i>Deferred Vesteds</i>	142,487,141	235,261,026	181,737,771
<i>Total Actuarial Liability</i>	12,806,115,474	14,223,786,404	15,128,502,117

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS LIABILITIES**

TABLE III-2

Projection of Liabilities to Next Two Fiscal Years

	<u>June 30, 2005</u>	<u>June 30, 2006</u>
<i>Tier I Actives</i>		
Hazardous Duty	\$212,017,785	\$178,820,886
Plan B	2,178,476,961	2,240,259,179
Plan C	92,820,027	92,700,422
<i>Total</i>	<u>2,483,314,773</u>	<u>2,511,780,487</u>
<i>Tier II Actives</i>		
Hazardous Duty	1,366,193,418	1,500,061,303
All Others	1,662,003,273	1,764,566,817
<i>Total</i>	<u>3,028,196,691</u>	<u>3,264,628,120</u>
<i>Tier IIA Actives</i>		
Hazardous Duty	137,689,080	179,639,804
All Others	212,995,382	275,769,203
<i>Total</i>	<u>350,684,462</u>	<u>455,409,007</u>
<i>Total Actives</i>	5,862,195,926	6,231,817,614
<i>Retirees</i>		
Pre-1980	333,414,955	308,357,507
1980-1997 Fixed COLA	5,308,482,486	5,201,697,883
1997+ Variable COLA	4,100,541,687	4,550,350,529
<i>Total</i>	<u>9,742,439,128</u>	<u>10,060,405,919</u>
<i>Deferred Vesteds</i>	213,042,381	246,271,718
<i>Total Actuarial Liability</i>	15,817,677,435	16,538,495,251

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>Table</u>	<u>Contents</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
(Net of Employee Contributions)*

	<i>June 30, 2002</i>	<i>June 30, 2004</i>
<u>Normal Cost in Dollars</u>		
Tier I Hazardous Duty	\$11,827,124	\$6,665,023
Tier I Plan B	89,685,678	66,148,624
Tier I Plan C	3,481,022	2,190,295
Tier II Hazardous Duty	53,684,716	67,328,781
Tier II All Others	88,045,807	95,407,488
Tier IIA Hazardous Duty	7,239,892	11,861,400
Tier IIA All Others	9,341,772	18,290,237
Total	263,306,011	267,891,848

Normal Cost as a Percent of Payroll

Tier I Hazardous Duty	17.10%	16.23%
Tier I Plan B	12.21%	12.19%
Tier I Plan C	9.42%	9.35%
Tier II Hazardous Duty	14.45%	16.15%
Tier II All Others	7.77%	8.46%
Tier IIA Hazardous Duty	6.93%	7.74%
Tier IIA All Others	2.32%	3.58%
Total	9.23%	9.51%

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS CONTRIBUTIONS**

TABLE IV-2

Projection of Normal Cost to Next Two Fiscal Years

<u>Normal Cost in Dollars</u>	<u>June 30, 2005</u>	<u>June 30, 2006</u>
Tier I Hazardous Duty	\$5,493,822	\$4,551,701
Tier I Plan B	66,536,943	66,668,964
Tier I Plan C	2,165,005	2,131,313
Tier II Hazardous Duty	70,800,706	73,682,645
Tier II All Others	96,175,053	96,906,446
Tier IIA Hazardous Duty	14,640,262	17,862,245
Tier IIA All Others	23,941,637	30,472,046
<i>Total</i>	279,753,428	292,275,360

<u>Normal Cost as a Percent of Payroll</u>		
Tier I Hazardous Duty	16.17%	16.09%
Tier I Plan B	12.68%	13.08%
Tier I Plan C	10.19%	10.59%
Tier II Hazardous Duty	16.64%	17.14%
Tier II All Others	8.74%	8.98%
Tier IIA Hazardous Duty	8.00%	8.23%
Tier IIA All Others	3.54%	3.64%
<i>Total</i>	9.44%	9.37%

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS CONTRIBUTIONS

TABLE IV-3

Projected Unit Credit Total Costs For Fiscal Year 2005-06

1.	Actuarial Liability as of June 30, 2005	\$15,817,677,435
2.	Actuarial Value of Assets as of June 30, 2005	8,474,901,589
3.	Unfunded Actuarial Liability as of June 30, 2005: (1) - (2)	7,342,775,846
4.	Amortization Period	27 Years
5.	Amortization Payment Towards Unfunded Actuarial Liability	421,328,884
6.	SEBAC IV Asset Adjustment Amortization Payment	(32,340,640)
7.	SEBAC V Asset Adjustment Amortization Payment	(45,678,924)
8.	Net Amortization Payment: (5) + (6) + (7)	343,309,320
9.	Employer Normal Cost (Net of Employee Contributions)	279,753,428
10.	Total Employer Cost for Fiscal Year 2005-06: (8) + (9)	623,062,748
11.	Projected Payroll	2,964,728,306
12.	Total Employer Cost Percent: (10) / (11)	21.02%

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SERS CONTRIBUTIONS

TABLE IV-4

Projected Unit Credit Total Costs For Fiscal Year 2006-07

1.	Actuarial Liability as of June 30, 2006	\$16,538,495,251
2.	Actuarial Value of Assets as of June 30, 2006	8,818,869,966
3.	Unfunded Actuarial Liability as of June 30, 2006: (1) - (2)	7,719,625,285
4.	Amortization Period	26 Years
5.	Amortization Payment Towards Unfunded Actuarial Liability	453,571,533
6.	SEBAC IV Asset Adjustment Amortization Payment	(33,957,672)
7.	SEBAC V Asset Adjustment Amortization Payment	(47,962,870)
8.	Net Amortization Payment: (5) + (6) + (7)	371,650,991
9.	Employer Normal Cost	292,275,360
10.	Total Employer Cost for Fiscal Year 2006-07: (8) + (9)	663,926,351
11.	Projected Payroll	3,120,753,973
12.	Total Employer Cost Percent: (10) / (11)	21.28%

SECTION V

GASB 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

	<i>June 30, 2003</i>	<i>June 30, 2004</i>
Cash	\$ 4,446,866.28	\$ (32,381,869.23)
Accrued Interest	0.00	0.00
Cash Reserve Account	288,463,958.94	136,247,491.50
Mutual Fixed Income Fund	2,515,112,878.96	2,242,969,641.86
Mutual Equity Fund	2,498,015,184.79	2,945,734,038.24
Real Estate Fund	163,879,606.49	141,844,062.01
International Stock Fund	784,016,289.50	1,543,017,014.31
Commercial Mortgage Fund	27,766,990.77	13,984,612.44
Venture Capital Fund	709,924,439.66	685,818,824.23
Total Assets	6,991,626,215.39	7,677,233,815.36
Liabilities	0.00	0.00
Net assets held in trust for pension benefits	6,991,626,215.39	7,677,233,815.36

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
GASB INFORMATION

TABLE V-2

Statement of Changes in Plan Net Assets

	<i>July 1, 2002 to June 30, 2003</i>	<i>July 1, 2003 to June 30, 2004</i>
<i>Additions</i>		
<i>Contributions</i>		
State	\$325,908,490	\$366,730,112
Federal	95,543,241	103,602,832
Employee	50,953,367	46,638,051
Total Net Contributions	<u>472,405,098</u>	<u>516,970,995</u>
<i>Net Investment Income</i>		
Interest & Dividends	319,466,083	312,679,182
Net Appreciation/(Depreciation)	(185,953,011)	724,830,463
Expenses	(310,622)	(334,860)
Total Investment Income	<u>133,202,450</u>	<u>1,037,174,785</u>
Total Additions	605,607,548	1,554,145,780
<i>Deductions</i>		
Benefit Payments	696,803,446	862,862,535
Employee Refunds	6,075,299	5,675,645
Total Deductions	<u>702,878,745</u>	<u>868,538,180</u>
<i>Net Increase</i>	(97,271,197)	685,607,600
<i>Net assets held in trust for pension benefits</i>		
Beginning of year	7,088,897,412	6,991,626,215
End of year	6,991,626,215	7,677,233,815

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
GASB INFORMATION

TABLE V-3

Schedule of Funding Progress

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll	(6) UAAL as a Percentage of Covered Payroll [(2) - (1)] / (5)
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%
June 30, 2001	7,638,853,783	12,105,366,407	4,466,512,624	63.10%	2,784,495,788	160.41%
June 30, 2002	7,893,683,977	12,806,115,474	4,912,431,497	61.64%	2,852,165,564	172.24%
June 30, 2003	8,058,586,633	14,223,786,404	6,165,199,771	56.66%	2,654,252,370	232.28%
June 30, 2004	8,238,250,287	15,128,502,117	6,890,251,830	54.46%	2,816,729,277	244.62%

No values are 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	106.05%
2002	415,492,599	415,492,599	100.00%
2003	425,902,474	421,451,731	98.95%
2004	473,998,112	470,332,944	99.23%

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
GASB INFORMATION**

TABLE V-5

Summary of Membership

	<u>June 30, 2002</u>	<u>June 30, 2003</u>	<u>June 30, 2004</u>
<i>Current Employees with Vested Benefits</i>			
Tier I, Hazardous Duty	930	533	499
Tier I, Plan B	10,764	7,405	7,293
Tier I, Plan C	594	368	351
Tier II, Hazardous Duty	6,472	6,336	6,207
Tier II, Other	20,606	18,710	18,111
Tier IIA, Hazardous Duty	163	619	1,155
Tier IIA, Other	904	2,614	4,659
<i>Total</i>	40,433	36,585	38,275
<i>Current Employees Not Yet Vested</i>			
Tier I, Hazardous Duty	30	15	12
Tier I, Plan B	309	228	235
Tier I, Plan C	12	12	14
Tier II, Hazardous Duty	136	101	103
Tier II, Other	882	672	705
Tier IIA, Hazardous Duty	2,299	1,872	1,672
Tier IIA, Other	10,186	7,479	6,910
<i>Total</i>	13,854	10,379	9,651
<i>Total Current Employees</i>	54,287	46,964	47,926
<i>Former Employees Currently Receiving Benefits</i>			
Retired Pre-1980	4,931	4,512	4,111
Retired 1980-1997, Fixed COLA	23,687	23,211	22,688
Retired 1997+, Variable COLA	3,736	9,328	9,950
<i>Total</i>	32,354	37,051	36,749
<i>Former Employees Entitled to Future Benefits</i>	1,496	1,677	1,744
<i>Total Former Employees</i>	33,850	38,728	38,493
<i>Total Members</i>	88,137	85,692	86,419

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 48,005 eligible active members for our June 30, 2004 valuation. Of the active records submitted to us, 79 (0.2%) 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, 2002</u>	<u>June 30, 2003</u>	<u>June 30, 2004</u>
Total Employees	54,287	46,964	47,926
Total Earnings (\$ millions)	\$2,852.1	\$2,654.3	\$2,816.7
Average Earnings	52,539	56,517	58,772

Earnings figures as of July 1 are actual amounts paid during the previous July 1 to June 30 period; new entrant earnings are annualized.

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, 2002</u>	<u>June 30, 2003</u>	<u>June 30, 2004</u>
<i>Number of Members</i>			
Tier I Hazardous Duty	960	548	511
Tier I Plan B	11,073	7,633	7,528
Tier I Plan C	606	380	365
Tier II Hazardous Duty	6,608	6,437	6,310
Tier II Others	21,488	19,382	18,816
Tier IIA Hazardous Duty	2,462	2,491	2,827
Tier IIA Others	11,090	10,093	11,569
Total	<u>54,287</u>	<u>46,964</u>	<u>47,926</u>
<i>Total Annual Compensation (\$ Millions)</i>			
Tier I Hazardous Duty	\$69.1	\$40.4	\$41.1
Tier I Plan B	734.3	527.2	542.8
Tier I Plan C	37.0	23.9	23.4
Tier II Hazardous Duty	371.5	391.4	416.9
Tier II Others	1,132.7	1,097.2	1,127.7
Tier IIA Hazardous Duty	104.5	127.2	153.3
Tier IIA Others	403.0	447.0	511.5
Total	<u>2,852.1</u>	<u>2,654.3</u>	<u>2,816.7</u>
<i>Average Compensation</i>			
Tier I Hazardous Duty	\$72,043	\$73,777	\$80,344
Tier I Plan B	66,313	69,065	72,106
Tier I Plan C	61,003	62,784	64,167
Tier II Hazardous Duty	56,230	60,806	66,075
Tier II Others	52,712	56,607	59,932
Tier IIA Hazardous Duty	42,462	51,069	54,218
Tier IIA Others	36,336	44,289	44,217
Total	52,539	56,517	58,772

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY STATISTICS ON SERS MEMBERSHIP

TABLE A-2b

Detail of Active Membership Data by Plan

	<u>June 30, 2002</u>	<u>June 30, 2003</u>	<u>June 30, 2004</u>
<i>Average Age</i>			
Tier I Hazardous Duty	48.9	48.8	49.7
Tier I Plan B	51.4	50.3	51.2
Tier I Plan C	54.1	52.7	53.3
Tier II Hazardous Duty	41.1	41.9	42.8
Tier II Others	45.7	45.8	46.7
Tier IIA Hazardous Duty	34.5	35.2	35.9
Tier IIA Others	39.0	40.0	40.4
Total	44.6	44.3	44.8
<i>Average Service</i>			
Tier I Hazardous Duty	21.6	21.6	22.8
Tier I Plan B	24.0	23.9	24.7
Tier I Plan C	24.9	24.8	25.5
Tier II Hazardous Duty	11.1	12.1	13.0
Tier II Others	12.3	13.0	13.9
Tier IIA Hazardous Duty	2.5	3.3	3.8
Tier IIA Others	2.4	3.1	3.4
Total	12.4	12.2	12.5

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY STATISTICS ON SERS MEMBERSHIP

TABLE A-3

Summary of Inactive Membership Data

	<i>June 30, 2002</i>	<i>June 30, 2003</i>	<i>June 30, 2004</i>
<i>Retired Pre-1980</i>			
Number	4,931	4,512	4,111
Total Annual Benefits (\$ 000s)	\$61,327	\$57,783	\$56,582
Average Annual Benefit	12,437	12,807	13,764
<i>Retired 1980-1997, Fixed COLA</i>			
Number	23,687	23,211	22,688
Total Annual Benefits (\$ 000s)	\$510,754	\$516,404	\$536,741
Average Annual Benefit	21,563	22,248	23,657
<i>Retired 1997+, Variable COLA</i>			
Number	3,736	9,328	9,950
Total Annual Benefits (\$ 000s)	\$83,020	\$262,582	\$287,448
Average Annual Benefit	22,222	28,150	28,889
<i>Total Retired Members</i>			
Number	32,354	37,051	36,749
Total Annual Benefits (\$ 000s)	\$655,101	\$836,768	\$880,771
Average Annual Benefit	20,248	22,584	23,967
<i>Terminated Vested Members</i>			
Number	1,496	1,677	1,744
Total Annual Benefits (\$ 000s)	\$16,644	\$24,481	\$23,197
Average Annual Benefit	11,126	14,598	13,301

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

TABLE A-4

Reconciliation of Changes in Membership

	<i>Active Members</i>	<i>Deferred Vested Members</i>	<i>Retired Members</i>	<i>Disabled Members</i>	<i>Beneficiaries</i>	<i>Total Members</i>
<i>Count as of July 1, 2003</i>	46,964	1,677	30,842	2,850	3,359	85,692
<i>Changed status within System</i>						
to active status	82	(78)	(4)	0	0	0
to deferred vested status	(66)	66	0	0	0	0
to retired status	(209)	(148)	369	(12)	0	0
to disabled status	(153)	0	(2)	155	0	0
to beneficiary status	(4)	0	(2)	0	6	0
<i>Left System</i>	(2,414)	(30)	(977)	(110)	(164)	(3,695)
<i>Entered System</i>	<u>3,726</u>	<u>257</u>	<u>119</u>	<u>55</u>	<u>265</u>	<u>4,422</u>
<i>Count as of June 30, 2004</i>	47,926	1,744	30,345	2,938	3,466	86,419

**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
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	1
35 to 39	0	0	0	0	1	0	0	0	0	0	74
40 to 44	0	1	2	9	58	4	0	0	0	0	202
45 to 49	1	4	10	9	130	47	1	0	0	0	151
50 to 54	2	3	7	5	55	59	19	1	0	0	54
55 to 59	0	0	4	3	18	17	11	1	0	0	22
60 to 64	0	1	2	0	7	10	1	1	0	0	7
65 & Up	0	0	2	1	0	3	0	0	0	0	1
Totals	3	9	27	27	269	140	32	3	1	1	511

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	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	55,444
35 to 39	0	0	0	0	55,444	0	0	0	0	0	79,362
40 to 44	0	78,847	91,606	74,977	80,621	64,975	0	0	0	0	79,839
45 to 49	58,845	71,972	70,245	79,541	80,116	82,549	67,524	0	0	0	79,709
50 to 54	91,994	67,155	67,419	79,455	79,792	78,547	87,187	102,048	0	0	74,996
55 to 59	0	0	65,637	68,942	70,418	73,046	90,060	80,411	0	0	67,553
60 to 64	0	105,064	52,073	0	51,070	75,067	104,759	64,046	0	0	81,907
65 & Up	0	0	55,447	71,839	0	101,805	0	0	85,204	0	80,344
Totals	80,944	74,807	67,970	76,541	78,662	79,085	88,110	82,168	85,204	85,204	80,344

**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
20 to 24	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
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	1	0	1	1	12	0	0	0	0	0	0	15
40 to 44	14	17	17	23	556	80	0	0	0	0	0	707
45 to 49	34	43	54	82	1,029	931	66	0	0	0	0	2,239
50 to 54	36	52	83	87	705	1,304	522	26	0	0	0	2,815
55 to 59	6	22	26	31	294	419	291	69	2	0	0	1,160
60 to 64	3	5	7	14	117	111	95	64	12	0	0	428
65 & Up	0	2	1	3	29	40	20	48	21	0	0	164
Totals	94	141	189	241	2,742	2,885	994	207	35	0	0	7,528

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	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
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	55,181	0	40,113	49,905	52,461	0	0	0	0	0	0	51,649
40 to 44	50,604	58,026	57,935	58,080	60,085	57,012	0	0	0	0	0	59,383
45 to 49	50,031	56,186	59,379	65,780	65,831	63,789	61,554	0	0	0	0	64,273
50 to 54	76,623	70,387	60,401	68,482	69,919	73,608	73,075	66,999	0	0	0	71,955
55 to 59	75,452	72,584	67,710	75,402	70,739	82,403	83,831	83,108	61,100	0	0	79,072
60 to 64	113,880	52,673	74,398	68,201	62,394	76,603	91,894	110,245	100,448	0	0	81,483
65 & Up	0	97,353	66,615	103,908	79,136	82,928	107,216	104,615	109,051	0	0	95,372
Totals	64,016	64,663	61,337	67,808	66,179	71,501	77,944	94,462	103,361	0	0	72,106

**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											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	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	2	0	0	0	0	0	0	0	2
40 to 44	0	1	0	0	14	4	0	0	0	0	0	0	19
45 to 49	3	2	1	3	39	42	5	0	0	0	0	0	95
50 to 54	1	2	1	3	25	65	27	2	0	0	0	0	126
55 to 59	1	1	0	2	23	16	9	5	0	0	0	0	57
60 to 64	1	1	1	1	5	16	7	7	0	0	0	0	39
65 & Up	0	1	0	1	7	3	5	7	3	7	7	3	27
Totals	6	8	3	10	115	146	53	21	3	3	3	3	365

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	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	63,250	0	0	0	0	0	0	0	63,250
40 to 44	0	91,772	0	56,978	54,922	47,562	0	0	0	0	0	0	55,312
45 to 49	54,888	46,280	16,763	54,038	64,038	57,571	64,199	0	0	0	0	0	59,804
50 to 54	37,913	61,613	56,412	54,601	61,343	62,354	57,413	44,071	0	0	0	0	60,367
55 to 59	49,869	39,699	0	67,084	58,986	64,800	59,958	55,783	0	0	0	0	60,276
60 to 64	62,186	67,427	85,999	209,018	53,447	67,040	87,101	77,176	0	0	0	0	74,729
65 & Up	0	97,637	0	44,562	80,244	43,142	73,002	85,041	106,559	106,559	106,559	106,559	78,270
Totals	52,439	64,040	53,058	72,249	61,844	60,960	63,877	71,551	106,559	106,559	106,559	106,559	64,167

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	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	5	24	1	0	0	0	0	0	0	0	0	0	30
30 to 34	24	286	407	5	0	0	0	0	0	0	0	0	722
35 to 39	23	226	1,055	383	5	0	0	0	0	0	0	0	1,692
40 to 44	28	149	670	733	68	0	0	0	0	0	0	0	1,648
45 to 49	8	98	419	412	69	1	0	0	0	0	0	0	1,007
50 to 54	10	71	260	209	54	7	0	0	0	0	0	0	611
55 to 59	4	47	184	140	44	0	1	1	0	0	0	0	421
60 to 64	1	10	66	51	14	0	1	1	0	0	0	0	145
65 & Up	1	5	11	11	6	0	0	0	0	0	0	0	34
Totals	104	916	3,073	1,944	260	8	2	3	0	0	0	0	6,310

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	44,993	49,688	53,141	0	0	0	0	0	0	0	0	0	49,020
30 to 34	51,919	58,320	60,699	59,795	0	0	0	0	0	0	0	0	59,458
35 to 39	55,527	59,717	61,740	69,255	70,778	0	0	0	0	0	0	0	63,113
40 to 44	50,790	60,183	62,329	71,559	71,133	0	0	0	0	0	0	0	66,407
45 to 49	77,362	61,664	61,873	69,877	73,730	82,637	0	0	0	0	0	0	66,083
50 to 54	66,139	58,985	64,689	68,888	66,989	61,334	0	0	0	0	0	0	65,651
55 to 59	57,310	62,751	63,520	67,416	72,575	0	125,393	134,779	0	0	0	0	65,933
60 to 64	44,081	60,039	64,107	68,310	69,673	0	64,918	82,912	0	0	0	0	65,969
65 & Up	15,017	65,057	71,981	75,896	64,795	0	0	0	0	0	0	0	69,286
Totals	55,182	59,434	62,189	70,072	70,974	63,997	95,156	100,201	0	0	0	0	66,075

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25 to 29	26	44	8	0	0	0	0	0	0	0	0	0	0	0	78
30 to 34	78	447	418	39	0	0	0	0	0	0	0	0	0	0	982
35 to 39	117	545	1,197	1,146	51	0	0	0	0	0	0	0	0	0	3,056
40 to 44	144	484	1,131	2,118	365	3	0	0	0	0	0	0	0	0	4,245
45 to 49	120	422	841	1,743	378	6	0	0	0	0	0	0	0	0	3,510
50 to 54	117	375	853	1,393	339	16	20	1	0	0	0	0	0	0	3,114
55 to 59	67	253	692	1,025	294	20	29	17	0	0	0	0	0	0	2,397
60 to 64	30	158	334	422	102	7	6	4	0	0	0	0	0	0	1,063
65 & Up	11	56	127	138	33	1	4	0	0	0	0	0	0	0	370
Totals	711	2,784	5,601	8,024	1,562	53	59	22	0	0	0	0	0	0	18,816

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	0
20 to 24	23,930	0	0	0	0	0	0	0	0	0	0	0	0	0	23,930
25 to 29	51,133	39,878	38,554	0	0	0	0	0	0	0	0	0	0	0	43,494
30 to 34	50,260	53,624	52,057	49,358	0	0	0	0	0	0	0	0	0	0	52,520
35 to 39	48,984	54,721	56,800	53,989	52,966	0	0	0	0	0	0	0	0	0	55,012
40 to 44	55,085	52,290	58,455	60,387	60,785	63,918	0	0	0	0	0	0	0	0	58,806
45 to 49	49,892	54,263	57,706	61,456	66,996	73,727	0	0	0	0	0	0	0	0	59,915
50 to 54	52,255	56,300	59,426	62,257	65,728	80,014	59,403	79,373	0	0	0	0	0	0	60,845
55 to 59	53,127	55,005	58,991	61,280	68,720	66,202	82,308	76,285	0	0	0	0	0	0	61,043
60 to 64	45,437	50,078	57,962	59,966	70,090	68,764	71,130	71,886	0	0	0	0	0	0	58,594
65 & Up	32,869	48,532	52,928	58,074	55,120	55,031	72,809	0	0	0	0	0	0	0	54,002
Totals	51,086	53,669	57,542	60,028	65,087	71,222	72,763	75,626	0	0	0	0	0	0	59,932

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											
	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	0
20 to 24	41	0	0	0	0	0	0	0	0	0	0	41
25 to 29	476	162	0	0	0	0	0	0	0	0	0	638
30 to 34	438	385	4	0	0	0	0	0	0	0	0	827
35 to 39	320	253	5	0	0	0	0	0	0	0	0	578
40 to 44	161	139	1	0	0	0	0	0	0	0	0	301
45 to 49	110	89	1	0	1	1	0	0	0	0	0	202
50 to 54	66	53	2	0	0	0	0	0	0	0	0	121
55 to 59	35	34	0	0	0	0	0	0	0	0	0	69
60 to 64	20	15	1	0	0	0	0	0	0	0	0	36
65 & Up	9	4	0	0	0	1	0	0	0	0	0	14
Totals	1,676	1,134	14	0	1	2	0	0	0	0	0	2,827

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	0
20 to 24	36,591	0	0	0	0	0	0	0	0	0	0	36,591
25 to 29	49,230	51,856	0	0	0	0	0	0	0	0	0	49,897
30 to 34	48,200	54,795	59,825	0	0	0	0	0	0	0	0	51,326
35 to 39	50,841	53,831	55,738	0	0	0	0	0	0	0	0	52,192
40 to 44	53,640	55,149	56,433	0	0	0	0	0	0	0	0	54,346
45 to 49	54,332	58,179	66,748	0	64,698	66,778	0	0	0	0	0	56,201
50 to 54	54,320	56,141	76,831	0	0	0	0	0	0	0	0	55,490
55 to 59	57,786	60,849	0	0	0	0	0	0	0	0	0	59,295
60 to 64	50,873	65,885	56,126	0	0	0	0	0	0	0	0	57,274
65 & Up	57,898	51,762	0	0	0	155,620	0	0	0	0	0	63,125
Totals	50,163	54,850	60,783	0	64,698	111,199	0	0	0	0	0	54,218

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	119	0	0	0	0	0	0	0	0	0	0	0	0	119
20 to 24	557	11	0	0	0	0	0	0	0	0	0	0	0	568
25 to 29	1,152	404	3	0	0	0	0	0	0	0	0	0	0	1,559
30 to 34	1,028	817	3	1	0	0	0	0	0	0	0	0	0	1,849
35 to 39	945	741	1	1	0	0	0	0	0	0	0	0	0	1,688
40 to 44	950	714	4	1	1	0	0	0	0	0	0	0	0	1,670
45 to 49	804	672	2	1	1	1	0	0	0	0	0	0	0	1,481
50 to 54	645	492	4	1	2	0	0	0	0	0	0	0	0	1,144
55 to 59	471	390	6	2	0	0	0	0	0	0	0	0	0	869
60 to 64	183	230	2	0	0	0	0	0	0	0	0	0	0	415
65 & Up	78	127	1	1	0	0	0	0	0	0	0	0	0	207
Totals	6,932	4,598	26	8	4	1	0	0	0	0	0	0	0	11,569

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	16,422	0	0	0	0	0	0	0	0	0	0	0	0	16,422
20 to 24	25,826	32,084	0	0	0	0	0	0	0	0	0	0	0	25,947
25 to 29	37,252	44,891	39,506	0	0	0	0	0	0	0	0	0	0	39,236
30 to 34	40,729	47,379	47,942	46,634	0	0	0	0	0	0	0	0	0	43,682
35 to 39	40,255	46,765	55,321	27,493	0	0	0	0	0	0	0	0	0	43,114
40 to 44	41,174	47,327	35,387	16,496	60,642	0	0	0	0	0	0	0	0	43,788
45 to 49	44,753	49,296	34,966	9,656	3,214	68,895	0	0	0	0	0	0	0	46,765
50 to 54	44,571	49,958	76,984	52,676	22,068	0	0	0	0	0	0	0	0	46,969
55 to 59	41,552	48,380	60,636	66,349	0	0	0	0	0	0	0	0	0	44,805
60 to 64	42,161	46,170	70,980	0	0	0	0	0	0	0	0	0	0	44,522
65 & Up	33,166	37,836	38,709	38,679	0	0	0	0	0	0	0	0	0	36,085
Totals	39,366	47,334	53,137	40,542	26,998	68,895	0	0	0	0	0	0	0	44,217

**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 of Members						Average Benefit Paid in FY04					
	Service		Non-Service		Hazardous		Service		Non-Service		Hazardous	
	Retirement	Connected	Disability	Connected	Disability	Retirement	Other	Retirement	Connected	Disability	Retirement	Other
Under 40	0	167	63	28	172	0	24,464	20,821	35,647	12,167		
40 to 44	2	167	122	223	89	30,406	23,006	24,157	39,332	17,135		
45 to 49	111	169	178	458	144	30,873	23,156	23,543	41,345	20,996		
50 to 54	2,639	198	283	579	667	34,866	22,085	26,917	42,978	14,510		
55 to 59	3,756	197	232	483	933	30,913	20,882	24,191	43,128	14,212		
60 to 64	4,065	166	196	342	800	27,233	18,600	19,186	37,987	11,949		
65 to 69	4,041	131	172	277	849	24,305	14,421	16,962	33,596	11,283		
70 to 74	4,226	83	114	175	745	21,026	11,834	12,445	30,573	11,478		
75 to 79	3,395	44	61	103	688	18,205	9,510	10,017	27,236	12,490		
80 to 84	2,003	16	40	26	467	15,369	7,735	11,534	23,911	10,460		
85 to 89	874	9	10	5	207	14,073	12,721	13,036	16,849	11,102		
90 to 94	248	1	7	1	61	13,481	8,002	8,104	45,119	11,233		
95 and up	28	1	2	0	10	16,853	8,951	8,016	0	10,670		
Totals	25,388	1,349	1,480	2,700	5,832	24,346	19,985	20,981	39,120	12,661		

APPENDIX B

SUMMARY OF PLAN PROVISIONS

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY OF PLAN PROVISIONS

This summary of plan provisions is based on our understanding of the benefits as described by the Connecticut General Statutes, summary plan descriptions, and the Connecticut State Employees Retirement System. It is intended only to describe the essential features of the plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

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 July 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 July 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.

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY OF PLAN PROVISIONS

2. **Normal Retirement Eligibility**

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

Tier I - Plans B and C [Sec. 5-162]: The earliest of age 55 with 25 years of service, age 65 with 10 years of service, or age 70 with 5 years of service.

Tier II [Sec. 5-192i] and Tier IIA: The earliest of age 62 with 10 years of vesting service (effective July 1, 1992), age 60 with 25 years of vesting service, age 70 with 5 years of vesting service, or age 62 with 5 years of actual state service for terminations on or after July 1, 1997. Hazardous duty members may retire after 20 years.

3. **Normal Retirement Benefit**

Final Average Earnings: The average salary of the three highest paid years of service. Commencing January 1, 1986, no one year's earnings can be greater than 130% of the average of the preceding two years in calculating the Final Average Earnings.

Tier I - Hazardous Duty [Sec. 5-173]: 50% of Final Average Earnings plus 2% for each year of service 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 of service. At age 70, greater of 1.25% of Final Average Earnings up to \$4,800 plus 2.5% of Final Average Earnings in excess of \$4,800 times years of service (maximum 20 years) or 1.0% of Final Average Earnings up to \$4,800 plus 2% of Final Average Earnings in excess of \$4,800 times years of service. Minimum benefit with 25 years is \$833.34 per month.

Tier I Plan C [Sec. 5-162]: 2% of Final Average Earnings times years of service. At age 70, greater of 2.5% of Final Average Earnings time years of service (maximum 20 years) or 2.0% of Final Average Earnings times years of service. Minimum benefit with 25 years is \$833.34 per month.

Tier II Hazardous Duty Members [Sec. 5-192n] and Tier IIA: 2.5% 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 benefit with 25 years is \$360 per month.

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY OF PLAN PROVISIONS

Tier II All Other [Sec. 5-192l] and Tier IIA: $1\frac{1}{3}\%$ of Final Average Earnings plus $\frac{1}{2}\%$ of Final Average Earnings in excess of the year's breakpoint*, times up to 35 years of service from October 1, 1982 plus $1\frac{5}{8}\%$ of Final Average Earnings times years of service in excess of 35 years, if any. Minimum benefit with 25 years is \$360 per month.

* \$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 with 10 years of service; benefit is Normal Retirement Benefit reduced for retirement prior to age 65 with less than 25 years of service.

Tier II [Sec. 5-192m] and Tier IIA: Age 55 with 10 years of vesting service; benefit is Normal Retirement Benefit reduced $\frac{1}{4}\%$ (effective July 1, 1991) for each month prior to age 60 if at least 25 years of service or age 62 if at least 10 but less than 25 years of service. Minimum benefit with 25 years of service is \$360 per month.

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; benefit is payable at Normal Retirement Age or an early retirement benefit is 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, 5 years of actual state service, 10 years of vesting service, or age 70 with 5 years of service; benefit is payable at Normal Retirement Age or an early retirement benefit is payable at age 55. In addition employees are always fully vested in their own contributions with 5% interest.

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

7. Member Contributions

<u>Tier I - Hazardous Duty [Sec. 5-161]</u>	4% of earnings up to the Social Security Taxable Wage Base plus 5% of earnings above that level.
<u>Tier I - Plan B [Sec. 5-161]</u>	2% of earnings up to the Social Security Taxable Wage Base plus 5% of earnings above that level.
<u>Tier I - Plan C [Sec. 5-161]</u>	5% of earnings.
<u>Tier II - All Other [Sec. 5-192u]</u>	None.
<u>Tier II - Hazardous Duty [Sec. 5-192u]</u>	4% of earnings.
<u>Tier I - All other</u>	2% of earnings.
<u>Tier IIA - Hazardous Duty</u>	5% of earnings.

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 made an 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 is equal to 50% of the average of the Life Benefit and the 50% Joint & Survivor Benefit the member would have received. If not eligible to retire but 25 years of service, the same benefit calculated as though age 55 using service and earnings at death.

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
SUMMARY OF PLAN PROVISIONS

[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 is equal to 50% of the member's benefit under a 50% Joint & Survivor Annuity. If not eligible to retire but 25 years of service, the same benefit calculated as though age 55 using service and earnings at death. If not eligible for retirement, return of contributions with 5% interest.

Tiers I [Sec. 5-144], II [Sec. 5-192t] and IIA: If death is due to employment, a spouse with dependent children under 18 will be paid \$100,000 in 10 annual installments while living and not remarried; also \$50 per month per child under age 18. If no children under age 18, spouse [or dependent parent(s), if no spouse] will be paid \$50,000 in not less than 10 annual installments.

10. Disability Benefits

Tier I [Sec. 5-142, 5-169, 5-173]: For non-service disabilities occurring prior to age 60 with at least 5 years of service, benefit is 3% of Final Average Earnings times years of service; maximum benefit is 1 $\frac{2}{3}$ % of Final Average Earnings times years of service projected to age 65. If disability occurs prior to age 60 and is due to service, benefit is 1 $\frac{2}{3}$ % of Salary times years of service projected to age 65 (maximum 30 years) and is payable regardless of length of service. Exception: State Police benefit is equal to the normal retirement 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).

If in-service disability occurs after the member is eligible for a non-service disability, the member receives the greater of the in-service and non-service disability benefits.

Tier II [5-192p] and Tier IIA: Prior to age 65 and due to service or with at least 10 years of service, benefit is 1 $\frac{1}{3}$ % of Final Average Earnings plus $\frac{1}{2}$ % of Final Average Earnings in excess of the year's breakpoint, times service projected to age 65 (maximum 30 years) or service to Date of Disability if greater.

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

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

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

11. Optional Forms of Payment

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 is treated as if full-time for eligibility. If member is consistently part-time for all periods, service is treated as if full-time. If member has a varying schedule or some part-time and some full-time service, service and salary are 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 *Actuarial 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.

*CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL METHODS AND ASSUMPTIONS*

B. Projection Method

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. The projection from June 30, 2004 to June 30, 2005 is performed as follows:

- The actuarial assumptions are used to project changes in the membership from June 30, 2004 to June 30, 2005. A demographic profile of new members is constructed based on the demographic profile of Tier IIA employees hired in the 2003-2004 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, 2005 is determined.
- The Market Value of Assets is similarly projected forward from June 30, 2004 to June 30, 2005, and is used to determine the projected Actuarial Value of Assets as of June 30, 2005.
- The Unfunded Actuarial Liability as of June 30, 2005 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 27 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.
- Per bargaining agreements known as SEBAC IV and SEBAC V, the amortization payment is reduced to reflect asset adjustments that were made effective June 30, 1995 and June 30, 1996, respectively, whereby the difference between the Market Value of Assets and the Actuarial Value of Assets as of those dates was amortized in the same fashion and over the same number of years as the Unfunded Actuarial Liability. As of June 30, 2005 the outstanding balances of the asset adjustments are \$563,621,629 and \$796,076,679, respectively.

The methodology described above is repeated in order to project costs to June 30, 2006 for the second year in the biennial budget cycle.

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

C.. Actuarial Assumptions

Interest Rate 8.50%

Payroll Growth Rate 5.00%

<i>Salary Scale</i>	<u><i>Years of Service</i></u>	<u><i>Rate</i></u>
	0	15.00
	1	15.00
	2	10.00
	3	7.00
	4	6.50
	5	6.00
	10	5.50
	15	4.25
	20	4.25
	25	4.25

<i>COLA</i>	<u><i>Group</i></u>	<u><i>Rate</i></u>
	Pre July 1, 1980 Retirees	3.75
	1980 – 1997 Retirees	3.00
	Post July 1, 1997 Retirees	2.75

Healthy Mortality 1994 Group Annuity Mortality Table.

80% of active members are assumed to be married with an average of two children who are on average age 12; female spouses are assumed to be three years younger than male spouses.

20% of pre-retirement deaths are assumed to be service related.

State Police are assumed to comprise 50% of Tier I Hazardous employees.

Disabled Mortality 80% of PBGC Disabled Mortality with Soc. Security for Males
60% of PBGC Disabled Mortality with Soc. Security for Females

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

Turnover

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.

<u>Age</u>	<u>Years of Service</u>					
	<u>0-1</u>	<u>2</u>	<u>3-4</u>	<u>5</u>	<u>6-9</u>	<u>10+</u>
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

Retirement

	<u>Age</u>	<u>First Year Eligible</u>	<u>All Other Ages</u>
	Hazardous	Thru 44	25
45-48		25	20
49-53		10	20
54-55		10	25
56-59		10	40
60-69		25	40
70		100	100

	<u>Age</u>	<u>First Year Eligible</u>		<u>All Other Ages</u>
		<u>Reduced Benefits</u>	<u>Unreduced Benefits *</u>	
All Others	55	17.5	15.0	12.5
	56-60	15.0	15.0	12.5
	61	25.0	25.0	15.0
	62	40.0	30.0	30.0
	63	35.0	35.0	25.0
	64	45.0	45.0	25.0
	65	65.0	65.0	40.0
	66-69	60.0	65.0	40.0
70	100.0	100.0	100.0	

* These rates also apply for Tier I Plan B and Tier I Plan C members upon attainment of age 60 with at least 10 years of service.

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

Disability

In-service Hazardous - 0.11% at all ages (prior year 0.07%)
 All Others - 0.03% at all ages (prior year 0.02%)

Non-service 25% of United Auto Workers Disability Table

To take into account State Police supplemental benefits and the offsets for Workers Compensation, social security, and non-rehabilitation earnings, the following minimum and maximum benefits (as a percent of salary) are valued:

	<u>Minimum</u>	<u>Maximum</u>
Tier I State Police	60%	80%
All other members	40%	60%

***Member Data
Processing***

Service for active members is based on the continuous date of hire reported to us and is adjusted to reflect any periods of purchased service that are reported to us. For purposes of Tier II and IIA vesting and retirement eligibility, we have reflected the five year requirement (which applies to actual state service) rather than the ten year requirement (which applies to vesting service).

Active members who are on a leave of absence or out on Workers Compensation are not reported to us. We have not included an additional liability for such members who may have accrued benefits and may resume employment in the future.

Terminated vested members are reported to us only if they have made an application for benefits to the Retirement Division. We have not included an additional liability for members who have terminated with a vested benefit who may apply for benefits in the future.

For terminated vested members for whom a benefit was not provided, we have estimated benefits based on their date of hire and termination and the average salaries of active members in the prior valuation.

For retired Tier I Plan B members who are not yet age 65, we are supplied with the current benefit amount; we assume that the benefit will be reduced on average by \$750 per year at age 65.

Beneficiaries of retired members receiving contingent annuities are assumed to be the opposite gender of the retired member; females are assumed to be three years younger than males.

APPENDIX D

ACTUARIAL SURPLUS TEST

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL SURPLUS TEST AS OF JUNE 30, 2004

APPENDIX D

Actuarial Surplus Test as of June 30, 2004

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, 2003 (A)	\$6,991,626,215
Market Value of Assets on June 30, 2004 (B)	7,677,233,815
Investment Income for FY 2003-04 (I)	1,037,174,785
Actual Rate of Return for FY 2003-04: $2I / (A + B - I)$	15.22%
Actuarial Interest Rate Assumption	8.50%

Actual return of 15.22% 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

Market Value of Assets on June 30, 2004	\$7,677,233,815
Specified Liabilities on June 30, 2004	
Liability for Retired Members	9,409,861,905
Liability for Terminated Vested Members	181,737,771
Active Member Contributions with Interest	525,822,065
Total	10,117,421,741
50% of Specified Liabilities	5,058,710,871

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, 2004	\$6,890,251,830
Projected Unfunded Liability on June 30, 2009 (see page D-2)	2,815,812,000

Actual Unfunded Liability is not less than 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, 2004

APPENDIX D

Actuarial Surplus Test as of June 30, 2004 - 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); change in actuarial assumptions (June 30, 2004).

<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	\$3,051,885
1988	1,954,257	2003	2,429,273	2018	3,036,354
1989	1,432,333	2004	2,502,591	2019	3,005,755
1990	1,939,758	2005	2,569,504	2020	2,958,121
1991	1,930,524	2006	2,634,814	2021	2,891,282
1992	1,920,505	2007	2,698,021	2022	2,802,848
1993	1,794,192	2008	2,758,563	2023	2,690,187
1994	1,787,586	2009	2,815,812	2024	2,550,405
1995	1,780,419	2010	2,869,064	2025	2,380,319
1996	1,772,643	2011	2,917,539	2026	2,176,432
1997	1,764,205	2012	2,960,364	2027	1,934,904
1998	1,835,087	2013	2,996,571	2028	1,651,520
1999	1,907,249	2014	3,025,084	2029	1,321,656
2000	2,222,296	2015	3,044,712	2030	940,241
2001	2,291,494	2016	3,054,133	2031	501,719
				2032	0