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## MEMORANDUM

To: Actuarial Subcommittee  
From: Althea Schwartz *Althea Schwartz*  
Re: Materials Regarding SERS ERIP Re-certification  
Date: December 5, 2003

As you know, the June 30, 2002 actuarial valuation was the basis for SERS contributions for FYE 04 and FYE 05. However, the 2003 early retirement incentive program (ERIP) was a significant event that changes the contribution requirements for those years. As a result, we have determined revised contribution amounts in order to reflect the cost impact of the 2003 ERIP.

The cost impact is summarized in the following table:

<i>Employer Contribution</i>	<i>Before ERIP</i>	<i>After ERIP</i>	<i>Change</i>
Fiscal Year 2003-2004	491,603,159	473,998,112	(17,605,047)
Fiscal Year 2004-2005	523,001,697	516,298,168	(6,703,529)

The Retirement Division provided us with data on 4,725 members electing the ERIP. Of this group, 4,629 retired prior to June 30, 2003 and 96 are deferring retirement to a date after June 30, 2003 but not later than June 1, 2004. For those who are deferring retirement, we estimated the ERIP benefits.

### *Process for Determining Cost Impact*

To determine the cost of the ERIP, we need to look at the costs "before and after". We examined the impact on the liabilities, the assets and the normal costs.

*Liabilities Before:* We extracted the liability for the ERIP members from the total liability that was determined as of June 30, 2002, our most recent valuation. Our valuation procedures include projecting this liability to June 30, 2003 and 2004 assuming that some of these members will retire, become disabled, or die during that period. Those not projected to leave the group are projected to receive another year of service at the assumed increase in pay. The actuarial assumptions used in the projection are described in the June 30, 2002 valuation report.

*Liabilities After:* Using the ERIP enhanced benefits and the retirement dates for the ERIP members, we determined the retired liability for the ERIP members.

The difference between the "before" liability and the "after" liability is the additional liability due to the ERIP.

*Impact on Assets:* We also adjusted the projected actuarial value of assets as of June 30, 2003 and June 30, 2004 to reflect the cash flow changes resulting from the ERIP. In keeping with our valuation procedure, we did not adjust the assets to reflect any asset gains or losses that may have occurred during FYE03. These asset gains or losses will be reflected when we perform the next full valuation effective June 30, 2004.

*Impact on Amortization Payment:* To determine the impact on the Unfunded Actuarial Liability (UAL), we combined the impact on the liabilities with the impact on the assets. This additional UAL was amortized according to the usual procedures to determine the additional UAL amortization payment for FYE 04 and FYE 05.

*Impact on Normal Cost:* Finally, we adjusted the Employer contribution for FYE 04 and FYE 05 for the change in the Normal Cost due to the ERIP. As you know, the Normal Cost represents the cost of benefits earned by active members. So, there is no Normal Cost for ERIP members because they have retired. This represents a savings to the System which offsets some of the increase in the amortization payment.

Enclosed are several exhibits showing the development of the revised costs.

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS CONTRIBUTIONS**

**Projected Unit Credit Total Costs For Fiscal Year 2003-04**

	<i>Before ERIP *</i>	<i>After ERIP</i>
1. Actuarial Liability as of June 30, 2003	\$13,470,375,985	\$13,962,032,213
2. Actuarial Value of Assets as of June 30, 2003	8,181,700,650	8,173,236,048
3. Unfunded Actuarial Liability as of June 30, 2003: (1) - (2)	5,288,675,335	5,788,796,165
4. Amortization Period	29 Years	29 Years
5. Amortization Payment Towards Unfunded Actuarial Liability	290,512,660	317,984,797
6. SEBAC IV Asset Adjustment Amortization Payment	(29,333,914)	(29,333,914)
7. SEBAC V Asset Adjustment Amortization Payment	(41,432,130)	(41,432,130)
8. Net Amortization Payment: (5) + (6) + (7)	219,746,616	247,218,753
9. Employer Normal Cost (Net of Employee Contributions)	271,856,543	226,779,359
10. Total Employer Cost for Fiscal Year 2003-04: (8) + (9)	491,603,159	473,998,112
11. Projected Payroll	2,994,758,047	2,654,035,645
12. Total Employer Cost Percent: (10) / (11)	16.42%	17.86%

\* from Table IV-3 of the June 30, 2002 valuation report

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**SERS CONTRIBUTIONS**

**Projected Unit Credit Total Costs For Fiscal Year 2004-05**

	<i>Before ERIP *</i>	<i>After ERIP</i>
1. Actuarial Liability as of June 30, 2004	\$14,185,699,129	\$14,590,699,484
2. Actuarial Value of Assets as of June 30, 2004	8,545,796,375	8,372,514,777
3. Unfunded Actuarial Liability as of June 30, 2004: (1) - (2)	5,639,902,754	6,218,184,707
4. Amortization Period	28 Years	28 Years
5. Amortization Payment Towards Unfunded Actuarial Liability	316,448,241	348,895,063
6. SEBAC IV Asset Adjustment Amortization Payment	(30,800,610)	(30,800,610)
7. SEBAC V Asset Adjustment Amortization Payment	(43,503,737)	(43,503,737)
8. Net Amortization Payment: (5) + (6) + (7)	242,143,894	274,590,716
9. Employer Normal Cost	8.93 280,857,803	241,707,452 8.46%
10. Total Employer Cost for Fiscal Year 2004-05: (8) + (9)	523,001,697	516,298,168
11. Projected Payroll	3,144,531,772	2,855,622,410
12. Total Employer Cost Percent: (10) / (11)	16.63%	18.08%

\* from Table IV-4 of the June 30, 2002 valuation report

CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
SERS ASSETS

Projection of Assets to Next Two Fiscal Years

not adjusted for actual C/F  
After ERIP

	Before ERIP *		After ERIP	
	Market Value	Actuarial Value	Market Value	Actuarial Value
1. Value on June 30, 2002	\$7,088,897,412	\$7,893,683,977	\$7,088,897,412	\$7,893,683,977
2. Expected Contributions during 2002-03	472,312,037	472,312,037	471,484,979	471,484,979
3. Expected Benefit Payments during 2002-03	672,919,499	672,919,499	680,244,141	680,244,141
4. Expected Investment Income on (1) through (3)**	594,855,962	663,262,820	594,543,060	662,949,918
5. Expected Value on June 30, 2003: (1)+(2)-(3)+(4)	7,483,145,912	8,356,339,335	7,474,681,310	8,347,874,733
6. Market Value - Actuarial Value on June 30, 2003	N/A	(873,193,423)	N/A	(873,193,423)
7. Preliminary Actuarial Value: (5) + 20% of (6)	N/A	8,181,700,650	N/A	8,173,236,048
8. Final Value on June 30, 2003: (7) within +/- 20% of MVA	7,483,145,912	8,181,700,650	7,474,681,310	8,173,236,048
9. Expected Contributions during 2003-04	541,817,208	541,817,208	523,278,470	523,278,470
10. Expected Benefit Payments during 2003-04	714,934,550	714,934,550	854,427,280	854,427,280
11. Expected Investment Income on (8) through (10)**	629,422,293	688,799,445	622,636,764	682,013,917
12. Expected Value on June 30, 2004: (8)+(9)-(10)+(11)	7,939,450,863	8,697,382,753	7,766,169,264	8,524,101,155
13. Market Value - Actuarial Value as of June 30, 2004	N/A	(757,931,890)	N/A	(757,931,891)
14. Preliminary Actuarial Value: (12) + 20% of (13)	N/A	8,545,796,375	N/A	8,372,514,777
15. Final Value on June 30, 2004: (14) within +/- 20% of MVA	7,939,450,863	8,545,796,375	7,766,169,264	8,372,514,777

\* From Table II-5 of the June 30, 2002 valuation report

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

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
IMPACT OF ERIP**

Fiscal Year 2003-2004

**Impact on Liability**

1. Actuarial Liability as of June 30, 2003 <u>before</u> ERIP	\$13,470,375,985
2. Liability of ERIP Members <u>before</u> ERIP - portion of 1. above attributable to ERIP Members	1,683,366,062
3. Liability of ERIP Members <u>after</u> ERIP - retiring immediately with enhanced benefits	<u>2,175,022,290</u>
4. Actuarial Liability as of June 30, 2003 <u>after</u> ERIP: (1) - (2) + (3)	13,962,032,213
5. Additional Actuarial Liability due to ERIP: (4) - (1)	491,656,228
Portion attributable to the cost of retiring early	276,692,625
Portion attributable to the cost of the chips	214,963,603

**Impact on Assets**

6. Actuarial Value of Assets as of June 30, 2003 <u>before</u> ERIP	\$8,181,700,650
7. Actuarial Value of Assets as of June 30, 2003 <u>after</u> ERIP	<u>8,173,236,048</u>
8. Decrease in Actuarial Value of Assets due to ERIP: (6) - (7)	8,464,602

**Impact on Unfunded Liability and UAL Amortization Payment**

9. Additional Unfunded Actuarial Liability due to ERIP: (5) + (8)	500,120,830
10. Additional Amortization Payment due to ERIP	27,472,137

**Impact on Normal Cost (net of Employee Contributions)**

11. Employer Normal Cost <u>before</u> ERIP	271,856,543
12. Employer Normal Cost <u>after</u> ERIP	226,779,359
13. Employer Normal Cost Savings due to ERIP: (12) - (11)	(45,077,184)
14. Net impact on FYE04 Employer Contribution due to ERIP: (10) + (13)	(17,605,047)

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM**  
**IMPACT OF ERIP**

Fiscal Year 2004-2005

**Impact on Liability**

1.	Actuarial Liability as of June 30, 2004 <u>before</u> ERIP	\$14,185,699,129
2.	Liability of ERIP Members <u>before</u> ERIP - portion of 1. above attributable to ERIP Members	1,788,526,214
3.	Liability of ERIP Members <u>after</u> ERIP - retiring immediately with enhanced benefits	<u>2,193,526,569</u>
4.	Actuarial Liability as of June 30, 2004 <u>after</u> ERIP: (1) - (2) + (3)	14,590,699,484
5.	Additional Actuarial Liability due to ERIP: (4) - (1)	405,000,355

**Impact on Assets**

6.	Actuarial Value of Assets as of June 30, 2004 <u>before</u> ERIP	\$8,545,796,375
7.	Actuarial Value of Assets as of June 30, 2004 <u>after</u> ERIP	8,372,514,777
8.	Decrease in Actuarial Value of Assets due to ERIP: (6) - (7)	173,281,598

**Impact on Unfunded Liability and UAL Amortization Payment**

9.	Additional Unfunded Actuarial Liability due to ERIP: (5) + (8)	578,281,953
10.	Additional Amortization Payment due to ERIP	32,446,822

**Impact on Normal Cost (net of Employee Contributions)**

11.	Employer Normal Cost <u>before</u> ERIP	280,857,803
12.	Employer Normal Cost <u>after</u> ERIP	241,707,452
13.	Employer Normal Cost Savings due to ERIP: (12) - (11)	(39,150,351)
14.	Net impact on FYE05 Employer Contribution due to ERIP: (10) + (13)	(6,703,529)

**CONNECTICUT STATE EMPLOYEES RETIREMENT SYSTEM  
IMPACT OF ERIP**

Summary of Members Electing ERIP

	Valuation		ERIP Members	
	Count *	Count	Average Age	Average Service
Tier I Hazardous Duty	960	366	51.4	24.7
Tier I Plan B	11,073	2,996	57.6	28.4
Tier I Plan C	606	192	59.2	28.3
Tier II Hazardous Duty	6,608	82	59.6	15.8
Tier II Other	21,488	1,089	60.7	16.0
Tier IIA Hazardous Duty	2,462	-	-	-
Tier IIA Other	11,090	-	-	-
	54,287	4,725		

\* at June 30, 2002 Valuation

The estimated total annual benefits for ERIP members is:

\$156.7 million

The estimated total annual pay for ERIP members if they were active is:

\$340.7 million



# 2003 investment advisory council

October 15, 2003

The Honorable John G. Rowland  
Governor  
State of Connecticut  
Executive Chambers  
Hartford, Connecticut

Dear Governor Rowland:

As the current and previous Chairmen of the Investment Advisory Council ("IAC"), we are pleased to present this report on the performance of the State of Connecticut Retirement Plans and Trust Funds ("CRPTF") for the fiscal year ended June 30, 2003.

Facing difficult market conditions for a large part of the year, the CRPTF's fiscal 2003 performance reflected general financial market conditions and produced a net total return (after all expenses) of 2.49%, which, when combined with the funds' negative operating cash flow of \$761 million, resulted in a decline in assets to \$18.3 billion as of June 30, 2003.

The CRPTF underperformed the Connecticut Multiple Market Index ("CMMI") benchmark by 139 basis points, due primarily to continued difficult conditions in the private equity markets. The CRPTF's performance for the one, three and five year periods ending June 30, 2003, was 2.49%, -2.60% and 2.93%, respectively. When measured over a long term horizon, the CRPTF's performance compares favorably with its peers. This is in large part due to the time and attention spent by the Treasurer and the IAC on the funds' asset allocation plan and asset manager selection. The CRPTF's investment strategy is constructed in such a way as to exceed its benchmark and receive superior returns with less risk over a market cycle. The IAC believes that the CRPTF is well positioned to weather the current market conditions.

For the fiscal year, strong relative performance was evidenced in the International Stock Fund ("ISF"), Commercial Mortgage Fund ("CMF") and Cash Reserve Account ("CRA"). Partially offsetting these strong results were the Mutual Equity Fund ("MEF"), Mutual Fixed Income Fund ("MFIF"), Real Estate Fund ("REF") and Private Investment Fund ("PIF"), which produced below benchmark returns.

As anyone familiar with the stock market knows, the domestic equity markets experienced a volatile year. The Russell 3000, the benchmark for the Mutual Equity Fund, eked out a positive .77% return. The Mutual Equity Fund slightly underperformed the index (by 29 basis points) primarily due to industry allocations. The benchmark for the International Stock Fund (a blend of developed and emerging markets indices) dropped by 6.62%. However, the ISF outperformed its benchmark by 23 basis points, primarily due to the developed Europe allocation, which was one of the strongest performing regions over the fiscal year.

The Mutual Fixed Income Fund trailed its benchmark by 350 basis points for the fiscal year, due to its underexposure to high yield and emerging markets debt segments.

The portfolio's long-term commitment to the less liquid sectors of the market is evidenced by the roughly 12% invested in the Private Investment and Real Estate Funds. While performance in a single year is not indicative of ultimate expectations for these funds, it is still important to view these funds against appropriate benchmarks. The Private Investment Fund, while underperforming the Russell 3000, outperformed the Venture Economics All Private Equity benchmark by 273 basis points for the fiscal year. The Real Estate Fund trailed the Russell NCREIF benchmark by 383 basis points.

## INVESTMENT ADVISORY COUNCIL

It is important to note that the IAC reviews fund performance at each meeting, discussing individual manager changes when necessary. In addition, a more extensive review of fund and manager performance is conducted by the IAC on a quarterly basis.

Actuarial assumptions project an average annual investment return for the CRPTF of 8.5%, although market conditions for the past three fiscal years have made such a return assumption unachievable. During fiscal 2003, the CRPTF received contributions of \$182 million and paid pension benefits of \$943, resulting in negative operating cash flow of \$761. This continues a trend of negative operating cashflow that is unlikely to reverse. The IAC is united in continuing to stress that the legislature must address the significant systemic under funding of the pension plans. The latest actuarial reports indicate that the largest plan, the Teachers' Retirement Plan, was 75.9 percent funded, followed by the State Employees' Retirement Plan, which was 61.6 percent funded, and the State Judges Plan, at 66.1 percent funded. The total amount of this under funding is approximately \$8.3 billion. Internal analysis has shown that performance of the investment assets alone will not make up the difference and eventually the state (taxpayers) will have to fund this deficit. It is also important to note that the latest available actuarial reports on the plans reflect data as of June 30, 2002, meaning that the reports do not reflect the impact of the approximately 4600 early retirements accepted by State employees in early 2003. These retirements will increase the liabilities of the State Employees' Retirement Plan, further exacerbating its underfunded status.

During fiscal 2003, the IAC continued to work with the Treasurer's office on modifications to the Investment Policy Statement. In January 2003, the Council approved the Treasurer's adopted guidelines for the Mutual Fixed Income Fund, and as of fiscal year-end, work was underway on revisions to the Real Estate Fund Guidelines.

As the current and former Chairmen of the Investment Advisory Council, we are gratified to be amongst fellow committee members whose care and attentiveness to the IAC's mission demonstrates an unwavering commitment to those whom they represent. It is with this sense of duty and solemn pledge to maintain our commitment to all the current and future pension beneficiaries and the taxpayers of the State of Connecticut that we submit this brief summary on behalf of the Investment Advisory Council.

Sincerely,



Steven W. Hart  
Chairman, Investment Advisory Council  
June 30, 1995 - August 17, 2003



Clarence L. Roberts, Jr.  
Chairman, Investment Advisory Council