Connecticut Teachers' Retirement System

Information for Compliance with GASB Statements No. 25 and No. 27

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GRS

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June 28, 1999

Ms. Clare Barnett, Chair
Teachers' Retirement Board
Connecticut Teachers' Retirement System
121 North Farm Road
Middlebury, Connecticut 06762

Re: Information for Compliance with
GASB Statements No. 25 and No. 27

Dear Ms. Barnett:

This report contains information based on our understanding of two statements issued by the Governmental Accounting Standards Board (GASB) as they apply to the Connecticut Teachers' Retirement System (CTRS) through June 30, 1998:

1. **Statement No. 25:** Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and
2. **Statement No. 27:** Accounting for Pensions by State and Local Governmental Employers.

Statement No. 25 (GAS 25) applies to the plan and is effective for periods beginning after June 15, 1996, while Statement No. 27 (GAS 27) applies to the employer/plan sponsor and is effective for periods beginning after June 15, 1997.

Much of the year-by-year information contained in this report has already appeared in previously issued actuarial valuation reports.

We will be happy to answer questions about the contents of this report.

Sincerely,

Brian F. Dunn

Brian F. Dunn

BFD:ct
Enclosure

CC: Brian Murphy

1. Information for Compliance with GAS 25

Governmental Accounting Standards Board Statement No. 25 (GAS 25) requires a defined benefit pension plan such as the Connecticut Teachers' Retirement System (CTRS) to provide each of the following:

1. A Statement of Plan Net Assets – This will provide information about the market value of plan assets by category (Exhibit A).

2. A Statement of Changes in Plan Net Assets – This will show the transactions which will reconcile beginning-of-the-year total assets with the end-of-the-year figure. (Exhibit B).

3. A Schedule of Funding Progress – This will provide a six-year history of the following:

    - The actuarial value of plan assets,
    - The actuarial accrued liability,
    - The relationship between the assets and the liability, and
    - The relationship between the unfunded actuarial accrued liability and member payroll (Exhibit C).

4. A Schedule of Employer Contributions – This will provide a history of the State's Annual Required Contribution (ARC) and a comparison of the ARC with the actual contributions made each year by the State (Exhibit D). Typically, this will be a six-year history, but only to the extent that the ARC calculation meets certain GASB requirements as described in the comment below.

COMMENT

In accordance with State Statutes the unfunded actuarial accrued liability (UAAL) for CTRS is made up of several components resulting from the unfunded liability for the plan in effect June 30, 1991 plus subsequent gains and losses, and the unfunded liability arising from various amendments to the plan which are amortized over a 30-year period. As of the June 30, 1998 actuarial valuation, the components and remaining amortization periods were as follows:

UAAL Component	Remaining Amortization Period
Plan in effect 6/30/91	34 years
Public Act 82-91	15 years
Public Act 87-381	20 years
Public Act 92-205	25 years
Public Act 98-251	30 years

The Equivalent Single Amortization Period, or ESAP, is defined as the number of years incorporated in a weighted average amortization factor for all components combined. Both Statements require that the ESAP not exceed specified maximums:

7/1/96 through 6/30/06:	40 year maximum
7/1/06 and later:	30 year maximum

This requirement is included in the GASB parameters – a set of criteria to be followed in complying with the Statements.

The Statements indicate that prior years results – to the extent they did not conform to the parameters - need not be re-determined. For example, during certain periods prior to July 1, 1996, the ESAP exceeded 40 years so the results for those periods did not satisfy the parameters. However, to satifsy the GAS 27 requirements, Exhibit E does show a complete contribution history from the 1987-88 fiscal year through the 1997-98 fiscal year, regardless of whether the parameters were satisfied each year.

STATEMENT OF CHANGES IN PLAN NET ASSETS AVAILABLE FOR BENEFITS

Reconciliation of the Market Value of Assets from July 1, 1997 to June 30, 1998:

Net Market Value, July 1, 1997	$8,679,187,861*
Additions	
State Contributions	$ 179,365,000
Member Contributions	155,242,385
Change in Net Appreciation	647,505,343
Interest and Dividends	337,372,813
Gain on Sales of Securities	510,763,178
Total Additions	$1,830,248,719
Deductions	
Benefits	$ 511,011,557
Refunds of Contributions	12,023,580
Total Deductions	$ 523,035,137
Net Increase in Market Value	$1,307,213,582
Net Market Value, June 30, 1998	$9,986,401,443*

* *Each of these amounts includes the balance of the post-retirement adjustment reserve (for members who retire on or after September 1, 1992) as of the respective dates.*

STATEMENT OF PLAN NET ASSETS AVAILABLE FOR BENEFITS

The market value of plan assets by investment category as of June 30, 1998, is as follows:

Cash Reserve Fund	$ 182,796,598
Mutual Equity Fund	4,264,787,871
Mutual Fixed Income Fund	3,385,639,247
International Stock Fund	1,330,986,750
Real-Estate Fund	227,346,923
Commercial Mortgage Fund	150,383,539
Venture Capital Fund	429,717,780
Sub-Total	$9,971,658,708
Net Amount in Cash Account for Benefits	14,742,735
Net Market Value (including the post-retirement adjustment reserve)	$9,986,401,443

SCHEDULE OF FUNDING PROGRESS

A six-year comparison of the Actuarial Value Assets with the Actuarial Accrued Liability and a comparison of the Unfunded Actuarial Accrued Liability with the Member Payroll is as follows (dollar amounts are in millions):

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percent of Covered Payroll (b)-(a) / (c)
6/30/93*						
6/30/94	$5,602.1	$ 8,222.6	$2,620.5	68.1%	$2,030.4	129.1%
6/30/95*						
6/30/96	6,648.2	9,626.8	2,978.6	69.1	2,151.6	138.4
6/30/97*						
6/30/98	7,721.1	10,970.1	3,249.0	70.4	2,298.9	141.3

* *No actuarial valuations were performed as of June 30, 1993, June 30, 1995, and June 30, 1997.*

Note: The Actuarial Value of Assets shown above do **not** include the balance of the post-retirement adjustment reserve as of the respective dates.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Following is a comparison of the State's Annual Required Contribution (ARC) with the amounts actually contributed:

Fiscal Year	Annual Required Contribution	Actual Contributions	Percent Contributed
1996-1997	$180,084,478	$147,884,700	82.1%
1997-1998	211,018,755	179,365,000	85.0

Notes:

1. In certain prior years, the ESAP (Equivalent Single Amortization Period) exceeded the maximum number of years under the GASB parameters. As a result, information for those years is not included in the above Schedule.
2. The previous actuary for CTRS calculated a contribution for 1996-1997 equal to $173,982,000. However, the ESAP included in this calculation exceeded 40 years. An additional $6,102,478 would increase the total to $180,084,478, which then reduces the ESAP to 40 years in accordance with the GASB parameters.

Plan Description and Contribution Information

Membership information as of June 30, 1998, the date of the latest actuarial valuation, is as follows:

Retirees and beneficiaries	18,615
Surviving spouses and dependents	520
Terminated vested and other inactive members	5,637
Active members	43,452
Total	68,224

Plan Description. The Connecticut Teachers' Retirement System is a defined benefit pension plan that covers the teachers, principals, superintendents, and supervisors in the public schools of the State of Connecticut, plus professional employees of State schools of higher education who choose to be covered.

The plan provides retirement, disability, and death benefits to plan members and their beneficiaries.

Contributions. Plan members contribute 6% of pay to the Fund for pension benefits.

The State's funding policy provides for periodic State contributions based upon a ***fundamental financial objective of having rates of contribution which remain relatively level from generation to generation of the Connecticut citizens.*** To determine the State contribution rates and to assess the extent to which the fundamental financial objective is being achieved, the System has actuarial valuations prepared annually. In preparing those valuations, the entry age actuarial cost method is used to determine normal cost and actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized by level percent-of-payroll contributions over a period of future years. The unfunded accrued liability as of June 30, 1991 was initially amortized over a 40-year period of which 36 years remain. Other increases/decreases in unfunded accrued liability are amortized over periods of 30 years or less.

On the basis of the June 30, 1998 actuarial valuation, the State contribution rate was determined to be as follows:

Contributions for	**Percent of Active Member Payroll**
Normal Cost	3.43%
Accrued Liabilities	6.06
Total Employer Rate	9.49%

2. Information for Compliance with GAS 27

It can happen that an employer or, as in the case with CTRS, the entity responsible for funding the plan contributes an amount that is either more or less than the Annual Required Contribution (ARC). To the extent that the actual contribution is more than the ARC, a Net Pension Asset (NPA) is created; to the extent that it is less, a Net Pension Obligation is the result.

In the next year, the new ARC is calculated, then adjusted, first by interest on the prior year's NPA/NPO; then by an amortization of that NPA/NPO. The interest and amortization amounts offset each other in part. This produces the Annual Pension Cost (APC) as follows:

In the case of an NPA:	In the case of an NPO:
ARC	ARC
- interest on NPA	+ interest on NPO
+ amortization of NPA	- amortization of NPO
= APC	= APC

The APC is then compared with the actual contribution made, and the difference is added to the existing NPA/NPO.

Exhibit E which follows shows a development of the APC and NPO for CTRS beginning in the 1987-1988 fiscal year and ending with the 1997-1998 fiscal year.

EXHIBIT E

CONNECTICUT TEACHERS' RETIREMENT SYSTEM
DEVELOPMENT OF ANNUAL PENSION COST AND NET PENSION OBLIGATION
AS OF JUNE 30, 1998

Fiscal Year Ending 6/30	Annual Required Contribution (ARC)	Interest on NPO	ARC Adjustment	Annual Pension Cost (APC)	Actual Contribution	Change in NPO	Net Pension Obligation Balance
1988	$241,563,000	$ 0	$ 0	$241,563,000	$241,563,000	$ 0	$ 0
1989	302,917,000	0	0	302,917,000	282,917,000	20,000,000	20,000,000
1990	348,639,000	1,600,000	845,768	349,393,232	321,639,000	27,754,232	47,754,232
1991	304,331,000	4,059,110	2,018,680	306,371,430	156,638,250	149,733,180	197,487,412
1992	308,724,000	16,786,430	8,348,240	317,162,190	133,057,000	184,105,190	381,592,602
1993	299,589,000	32,435,371	16,130,783	315,893,588	111,600,000	204,293,588	585,886,190
1994	145,786,000	49,800,326	25,111,757	170,474,569	124,253,932	46,220,637	632,106,827
1995	154,036,000	53,729,080	27,486,627	180,278,453	132,503,932	47,774,521	679,881,348
1996	164,650,000	57,789,915	30,012,706	192,427,209	139,953,000	52,474,209	732,355,557
1997	180,084,478*	62,250,222	32,841,687	209,493,013	147,884,700	61,608,313	793,963,870
1998	211,018,755	67,486,929	38,493,859	240,011,825	179,365,000	60,646,825	854,610,695

* *= $173,982,000 + $6,102,478. See Note 2 on Exhibit D.*

Summary of Actuarial Methods and Assumptions

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 1998	
Actuarial cost method	Entry age actuarial cost method	
Amortization method	Level percent of pay	
Remaining amortization periods	Plan in effect 6/30/91	34 years
	Public Act 82-91	15 years
	Public Act 87-381	20 years
	Public Act 92-205	25 years
	Public Act 98-251	30 years
Asset valuation method	4-year smoothed market	
Actuarial assumptions:		
Investment rate of return*	8.5%	
Projected salary increases*	5.0% - 8.1%	
*Includes inflation at	5.0%	
Cost-of-living adjustments for retirements prior to 9/1/92	4.0%	