DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General
Office of Audit Services

REGION IV
Room 3T41
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8909

AUG 14 1998

CIN: A-04-98-00118

Mr. Steve Adams, State Treasurer
10th Floor Andrew Jackson Building
Nashville, Tennessee 37243-0230

Dear Mr. Adams:

This final report provides you with the results of our review of the Tennessee Consolidated Retirement System (TCRS). We analyzed the asset balances and pension liabilities of the TCRS Fund as of June 30, 1997.

Objective

The objective of our review was to determine the reasonableness of the TCRS fund balance as of June 30, 1997.

Summary of Findings

Our review disclosed the TCRS contained assets of over $538 million ($49 million Federal share) in excess of actuarially determined liabilities as of June 30, 1997.

Pension fund assets exceeded actuarially determined liabilities because actual results from TCRS operations significantly deviated from actuarial estimates. Specifically, returns on investments have exceeded expectations, and salary increases for participants have been less than expected.

We are recommending the TCRS consider reducing future pension contribution rates charged to Federal programs. Such a reduction would recognize that assets exceeded actuarially determined liabilities at June 30, 1997. The estimated Federal share of assets in excess of actuarially determined liabilities was $49 million.

In written comments to the draft report, TCRS officials agreed with our findings and recommendation. The TCRS' written comments are summarized after the RECOMMENDATION section of this report and are included in their entirety as an APPENDIX.

INTRODUCTION

BACKGROUND

The DCA requested this review because the State Fiscal Year (SFY) 1995 financial statements indicated potential excess reserves in the TCRS Fund. Also, preliminary analysis of the Tennessee State Comprehensive Annual Financial Report for SFY 1996, indicated the net assets of the Fund exceeded liabilities by $1.51 billion.

To comply with new accounting standards contained in GASB Statement 25, the State changed its method of calculating actuarial liabilities for SFY 1997 financial statement disclosure purposes. Although the TCRS changed its funding status presentation in the financial statements, the method used to compute contribution rates did not change. Due to the change in presentation, the 1997 funding status of the TCRS is not directly comparable to 1996.

The TCRS provides retirement coverage to State employees, higher education employees, teachers, and employees of political subdivisions that have elected to participate in the plan. The assets and related liabilities of each of the political subdivisions are treated as a separate plan. We limited our review to the balances in the State plan.

SCOPE

The objective of our review was to determine the reasonableness of the TCRS fund balance as of June 30, 1997.

To accomplish our objective we reviewed the Office of Management and Budget (OMB) Circular A-87 which allows States to recover costs of goods and services provided in the administration of Federal grant programs.

At the TCRS offices, we: (1) reviewed financial statements, actuarial reports, and other financial data for the fund; and (2) reviewed the reserve balance for reasonableness. We reviewed the work of the State Auditors to determine if: (1) asset transfers occurred during Fiscal Years 1995, 1996, or 1997 between the TCRS and the State's general fund; and (2) the premium and/or billing rates were justified.

We did not test the financial statements of the Fund or review the Fund's costs for allowability. To the extent possible we relied on the work of the Tennessee Division of State Audit. The 1995 and 1996 Comprehensive Annual Financial Reports for the State of Tennessee, and the 1995, 1996, and 1997 Comprehensive Annual Financial Reports for the TCRS, all of which we relied on in this review, were audited by the Tennessee Division of State Audit and given unqualified opinions.

In addition to the above, we relied on the calculations of the actuarial firm of Bryan, Pendleton, Swats & McCallister, LLC, which attested to performing the actuarial evaluation of the TCRS in accordance with the principles of practice prescribed by the Actuarial Standards Board. However, our reliance is limited to the actuarial calculations only, and does not extend to the underlying assumptions regarding economic and demographic factors affecting the TCRS.

We calculated the Federal financial participation for TCRS as follows:

- We selected a judgmental sample of TCRS contributors representing 67 percent of SFY 1997 TCRS contributions.
- We calculated the Federal financial participation in each of the sampled contributors.
- We weighted each respective participation percentage in proportion to its contribution to TCRS.

Our field work was performed in Nashville, Tennessee, from November 1997 to February 1998. On June 23, 1998, we met with TCRS officials to discuss the draft report's finding and recommendation. On August 6, 1998, we received TCRS' written comments to our draft report. Our review was conducted in accordance with generally accepted government auditing standards.

FINDINGS AND RECOMMENDATIONS

As of June 30, 1997, the TCRS' assets exceeded actuarially determined liabilities by over $538 million ($49 million Federal share).

The OMB Circular A-87, Cost Principles for State, Local and Indian Tribal Governments, prohibits States from charging the Federal Government for contingency reserves. One exception to the prohibition against contingencies is actuarially determined reserves maintained in connection with pension plans. However, only reserves computed using acceptable actuarial cost methods are allowable under this exception.

Section 11.e of OMB Circular A-87 further states, *"amounts funded by the governmental unit in excess of the actuarially determined amount for a fiscal year may be used as the governmental unit's contribution in future periods"*.

The pension fund's assets exceeded actuarially determined liabilities because results from TCRS operations deviated significantly from actuarial estimates in some categories. Specifically, actual investment experience exceeded expected performance, and salary increases were less than expected. Subsequent to the June 30, 1997 valuation date, the State instituted measures designed to reduce the TCRS over-funding.

Actual Investment Experience Exceeded Expected Performance

The TCRS estimated investment returns for the period July 1, 1992 through June 30, 1997, to be 8 percent per year. Actual investment performance during this period substantially exceeded the expectations. Returns averaged 11.4 percent[1] for the years ending June 30, 1993 through 1997. As a result of the investment returns being higher than expected, a significantly higher portion of the liabilities of the TCRS were funded through investment earnings than anticipated. Consequently, contribution amounts for the same period were greater than necessary.

One of the primary determinants of required contributions to pension plans is the expected investment performance of existing plan assets. If investment returns are expected to be high, then a larger portion of retirement benefits may be funded by earnings on underlying assets and fewer contributions are required. Lower estimates of investment returns have the effect of requiring larger contributions to the Plan, but are considered more conservative and are more likely to result in actuarial gains than actuarial losses given the same underlying asset base.

During the TCRS' quadrennial experience study conducted in 1997, the TCRS reduced its estimated investment returns from 8 percent to 7.5 percent. While past results would indicate that the investment return estimate should be increased, the TCRS relied on data which indicated that future returns would not duplicate past results.

Salary Increases Were Less Than Expected

The TCRS estimated salary increases for the period July 1, 1992 through June 30, 1997 to be 7 percent per year. Actual salary increases were substantially lower than expectations. Salary increases averaged 5.03 percent for teachers and 4.87 percent for general State employees for the years ending June 30, 1991 through 1995. As a result of the salary increases falling below expectations, the ultimate pension costs for current employees will be lower than expected. Consequently, contribution amounts were greater than necessary to fund the decreased liabilities.

Pension benefits for TCRS participants are based, in part, on salary levels up until retirement age. As a result, future salary increases have a direct effect on the amount of assets required to fully fund pension payments to employees when they retire. To properly anticipate this funding requirement, the TCRS estimates salary increase rates when determining contribution amounts. A higher salary assumption is conservative, because it leads to the assumption that future retirees will have higher salaries, and therefore receive larger benefits from the plan.

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[1]This is a 5 year average of the time weighted rate of return based on the market rate of return.

TCRS Measures Designed to Reduce Over Funding

The funded status of the TCRS has consistently improved over the past 20 years. This improvement has been due to decisions of the TCRS Board of Trustees to adopt conservative actuarial assumptions and to require more than the minimal amount of contributions to the retirement system. The improved funding status has occurred even with periodic benefit enhancements. The Trustees, anticipating large actuarial gains for the year ending June 30, 1997, took a number of steps to prevent large actuarial gains.

During the TCRS' quadrennial experience study, the TCRS reduced its estimated salary increase rates from 7 percent to 5.5 percent. As was the case with expected investment returns, the estimate for salary increases was made based primarily on future developments as opposed to past results. Thus the salary increase expectations were not reduced to a level corresponding to actual results for recent years, but TCRS staff do not expect salary increases to remain at their recent minimal levels.

Another action which decreased the funded status of the TCRS was the provision of a series of significant benefit improvements which increased the liabilities of the TCRS. Among the benefit improvements were the addition of a "geometric COLA" and improved pension portability for participants transferring between different retirement categories. Without the changes in assumptions and benefit enhancements as of June 30, 1997, the excess assets would have totaled over $2 billion rather than over $538 million.

Calculation of Federal Share

Using the weighted average method discussed above, we calculated a 9.12 percent Federal participation rate within the TCRS. Federal revenue as a portion of total State revenue for the past 5 years has been 38.48 percent. However, because the local school systems within Tennessee are major contributors to TCRS and have little Federal financial participation, our method resulted in a lower rate.

Thus, of the $538,190,611 in reserve funds within the TCRS, 9.12 percent or $49,082,984 is the Federal financial participation amount.

RECOMMENDATION

We recommend the TCRS consider reducing future pension contribution rates charged to Federal programs. Such a reduction would recognize that assets exceeded actuarially determined liabilities at June 30, 1997. The estimated Federal share of assets in excess of actuarially determined liabilities was $49 million.

TCRS Comments

In written comments to the draft report, TCRS officials agreed with our findings and recommendation. The TCRS officials said that lower employer contribution rates are planned for the SFYs 1997, 1998, and 1999. The complete text of TCRS' written comments is included in the APPENDIX.

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In accordance with the principles of the Freedom of Information Act (Public Law 90-23), Office of Inspector General, Office of Audit Services reports issued to the Department's grantees and contractors are made available, if requested, to members of the press and general public to the extent information contained therein is not subject to the exemptions in the Act which the Department chooses to exercise.

We request that you respond within 30 days from the date of this letter to the Department of Health and Human Services action official shown below. Your response should present any comments or additional information that you believe may have a bearing on the final determination.

To facilitate identification, please refer to the above Common Identification Number (CIN) A-04-98-00118 in any correspondence related to this report.

Sincerely yours,

Charles J. Curtis
Charles J. Curtis
Regional Inspector General
for Audit Services, Region IV

Direct Reply To:
Mr. Charles J. Seed
Director, DCA Mid-Atlantic Field Office
Room 1067 Cohen Building
330 Independence Avenue, S.W.
Washington, D.C. 20201

STATE OF TENNESSEE

STEVE ADAMS
STATE TREASURER

STEVE CURRY
DIRECTOR

TREASURY DEPARTMENT
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NASHVILLE, TENNESSEE 37243-0230

August 6, 1998

Mr. Charles J. Curtis
Department of Health and Human Services
Regional Inspector General for Audit Service, Region IV
Room 3T41
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

Dear Mr. Curtis:

Enclosed is the response for the Tennessee Consolidated Retirement System relative to the report entitled "review of the reasonableness of the Tennessee Consolidated Retirement System Fund Balance as of June 30, 1997" as prepared by your agency.

Based on the report and our response, we do not believe any other actions are necessary relative to this issue.

If you have any question, please feel free to contact myself or Steve Curry at (615) 741-7063.

Sincerely,

Steve Adams by SC

Steve Adams

SA:df

Management concurs with making the adjustment to future contribution rates based on the results of the latest actuarial valuation as has been TCRS' standard practice. TCRS is funded utilizing an acceptable actuarial method and reasonable actuarial assumptions in accordance with GASB 25. An actuarial valuation of TCRS is performed every two years. An actuarial experience study is conducted every four years.

The purpose of the actuarial valuation is to determine the appropriate level of employer contributions that should be made to TCRS in order to fund the pension obligations on an actuarially sound basis.

Because of the nature of the projections involved in the actuarial process, an actuarial valuation is more an art rather than an exact science. Thus, an actuarial valuation is performed every two years to keep the retirement system funded on a sound basis by recognizing that actual experience may cause the pension fund to lead or lag the accrued obligations.

The actuarial valuation at June 30, 1997 recognized the positive experience realized by the plan since the June 30, 1995 valuation. Chiefly, the positive experience related to investment earnings and salary growth.

Due to the past favorable experience, the TCRS Board of Trustees adopted employer contribution rates that were lower than the normal cost[1] rates. For example, the employer contribution rate for general state employees effective July 1, 1998 is 5.43% while the employer normal cost rate is approximately 8.18%. The reason that the current rate is lower than the normal cost rate recognizes the difference in the assets and liabilities as denoted in this report. For teachers, the similar data is a current employer contribution rate of 5.47% while the normal cost rate is approximately 6.34%. The actual decline in the employer contribution rate is set out in the following chart:

Employer Contribution Rate
Year Ended June 30

	1997	1998	1999
State Employees	7.36%	3.65%	5.43%
Teachers	6.50	3.89	5.47

In summary, the federal government, as well as all other entities in TCRS, are paying an employer contribution rate that is less than the normal cost rate because of the positive experience of the retirement system. Accordingly, the new employer contribution rates adopted by the TCRS Board of Trustees meets the recommendation contained within this report.

[1] That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method. (Paragraph 45 of GASB 25).