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## An Audit of the Financial Statements of the Teacher Retirement System of Texas Year Ended August 31, 1996

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April 1997

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# Key Points of Report

## An Audit of the Financial Statements of the Teacher Retirement System of Texas Year Ended August 31, 1996

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### Overall Conclusion

The Teacher Retirement System's (System) general purpose financial statements for fiscal year 1996 are accurately presented in all material respects, in accordance with generally accepted accounting principles. We noted no material internal control weaknesses or noncompliance with laws and regulations. The actuarial valuation of the pension fund, a current reportable weakness in the System's internal control structure, and an update of progress on prior year comments are summarized below.

### Key Facts and Findings

- At August 31, 1996, the System had assets of \$50.1 billion to fund pension and other benefits for 658,166 members and 142,631 annuitants. Actuarial accrued liabilities for pensions were 96.3 percent funded from the assets of the System. The unfunded remainder, \$1.8 billion, was projected to be amortized over a period of 11.3 years. The System paid \$2.1 billion in retirement benefits during the year, a 22 percent increase over the prior year.
- Control procedures used to ensure the accuracy of membership data submitted to the System's external actuary should be strengthened. The actuary uses membership data in its annual actuarial valuation, which helps to judge the actuarial soundness of the pension plan.
- The System has resolved three of the four prior year comments. The System is aware of weaknesses related to the proper anticipation of international dividends and is continuing efforts to implement a new investment accounting system it believes will strengthen anticipation controls.

### Contact

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## Office of the State Auditor

Lawrence F. Alwin, CPA

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*This audit of the financial statements was conducted in accordance with Government Code, Section 321.0133.*

## Executive Summary

The fiscal year 1996 general purpose financial statements of the Teacher Retirement System of Texas (System) are accurately presented in all material respects, in accordance with generally accepted accounting principles. No material weaknesses in the System's internal control structure or material noncompliance with applicable laws and regulations were noted. However, in the course of the audit, we identified a reportable condition relating to weaknesses in the System's controls over information provided to the System's external actuary. In addition, three of four prior year comments have been resolved. Management is aware of weaknesses over the proper automated anticipation of international dividends and continues efforts to implement a new investment accounting system to resolve these weaknesses.

### Internal Control Issue

Controls to ensure that accurate membership data is submitted to the System's pension plan actuary should be improved. The membership data, sent to the actuary, included errors and some unexplained automated program changes to original membership data. Based on the actuary's assessment of the impact of the errors and our analysis of the unexplained automated program changes, we concluded that a significant misstatement of the actuarial liability did not occur.

The accuracy of membership data is significant as it is used in the annual actuarial valuation. The actuarial valuation is used to judge the actuarial soundness and make important decisions related to contributions and benefits of the pension plan.

### Status of Previous Audit Recommendations

The System has implemented most previous audit recommendations. However, weaknesses over the automated procedures for anticipating international dividends have not been completely resolved. The System's management is aware of the weaknesses in its current system and continues its efforts toward implementing a new investment accounting system it believes will resolve the weaknesses noted.

### Summary of Management's Responses

Management concurred with the findings and recommendations in this report. A cost-benefit analysis will be performed on possible solutions to address issues raised concerning the accuracy of data submitted to the actuary. The System also plans to analyze actuarial information needs as part of the benefits services transformation project (BeST) currently underway.

### Summary of Objective and Scope

The objective of this audit was to express an opinion on the System's financial statements for the year ended August 31, 1996. The scope of this audit included gaining an understanding of, and in some cases testing, the internal control structure, including controls over cash receipts, cash disbursements, investments, and journal vouchers. We also gained an understanding of the control environment. Account balances tested included cash, accounts receivable, investments, accounts payable, revenues, expenditures, and fund balance.

## Overview

The Teacher Retirement System (System) maintains an internal control structure on which it relies for safeguarding assets, conducting and recording operations in an orderly manner, reporting financial information, and complying with applicable laws and regulations. To express an opinion on the System's general purpose financial statements, we gained an understanding of the System's control structure and tested compliance with laws and regulations deemed to be significant.

As stated in our report on the financial statements dated January 31, 1997, and our related reports on internal controls and compliance (Appendix 3 and Appendix 4 of this report), we noted no errors, noncompliance, or weaknesses that we consider material. However, in the course of the audit, we noted a reportable condition that we believe is significant enough to bring to the System's attention, along with our recommendations for improvement. Three of four prior year comments have been resolved by the System. Weaknesses related to the automated anticipation of international dividends continue to exist and are known by management. Management is continuing efforts to implement a new investment accounting System which it believes will significantly strengthen automated anticipation controls.

Section 1:

### Internal Control Issue

#### **Improve Controls to Ensure the Accuracy of Data Submitted to the Actuary for Use in the System's Annual Actuarial Valuation**

The System should improve controls to ensure the accuracy of membership data submitted to its pension plan actuary. The actuary uses membership data in the System's annual actuarial valuation, which helps to judge the actuarial soundness of the pension plan. Information provided from the valuation is also used to make important decisions related to the State's and employees' contribution rates and potential benefit increases. The actuary must be provided with accurate data to ensure that the actuarial soundness of the fund is properly judged and good decisions are made.

The membership data provided to the actuary included errors and some unexplained automated program changes to original membership data. Based on the actuary's assessment of the impact of the errors and our analysis of the unexplained automated program changes, we concluded that a significant misstatement of the actuarial liability did not occur.

The System is responsible for running automated actuarial edit programs on original membership data to provide processed information used by the actuary in valuing the plan's liabilities. The current Information System Support (ISS) employee responsible

for running these programs, in addition to other significant duties, does not possess a detailed understanding of how the programs work or how the external actuary expects them to work. This lack of detailed understanding is due to the following factors:

- The previous employee, who devoted full-time responsibility to modifying and running these edit programs and also possessed both a programming and actuarial background, no longer works for the System.
- The System does not have a policy to cross-train another employee to run these edit programs.
- The edit programs were developed externally many years ago using an older programming language no longer fully supported by the System's ISS staff.
- Both programmer and user documentation are limited and out of date due to numerous program modifications made over the years.

Lack of detailed understanding of these edit programs increases the risk that membership data could be processed incorrectly. This risk is further increased because the System has no policy requiring a secondary review of the processed membership data or of the procedures used to run these programs. A secondary review before the processed membership data is sent to the actuary would help to ensure the edit programs are run correctly and have provided accurate data.

Some of the unexplained automated program changes may be intentional actuarial adjustments embedded in the edit programs. We considered them as errors since the System could not provide us with a complete explanation that changes made to the original membership data were intended. Some of the data errors are not currently used in the actuarial valuation. However, this data could be used for other purposes in the future. Therefore, the System should ensure that all data sent to the actuary is complete and correct.

Errors included the following:

- Failure to update the value of a variable in the current year resulted in the incorrect classification of 1,839 members as active instead of inactive.
- Unexplained programming changes increased the age by one to three years of 4 of 15 beneficiaries tested, resulting in possible understatement of benefit liabilities for these beneficiaries.
- After processing through the actuarial edit program, detailed amounts for prior legislative benefit increases provided to the actuary did not agree with the System's original data; however, the actuary indicated they are currently not using this data for the valuation.

Recommendations:

We recommend that the System take steps to ensure that accurate membership data is sent to the actuary. Such steps could include the following:

- Assess whether an employee with actuarial knowledge should be recruited or whether the System has the resources to provide an employee the opportunity to gain a more detailed understanding of the edit programs.
- Update and maintain the programmer and user documentation for the edit programs to aid in gaining an understanding.
- Cross-train at least one additional employee to serve as a backup to run these programs.
- Require an employee to document a review of the procedures used to run the actuarial edit programs and the final processed membership data.

In addition, more detailed communication between the employee running and modifying these actuarial edit programs and the external actuary would help to ensure that both parties are in agreement that the programming is properly modified and operating correctly. As an alternative, the System may wish to assess whether it would be cost effective to shift the responsibility for maintaining and running these programs directly to the actuary.

Management's Response:

*We agree with the recommendation to improve controls over the data submitted to the actuary used in the System's annual actuarial valuation. A cost benefit analysis will be performed on possible solutions to address issues raised by the auditors. The solution that is most cost effective and mitigates the most risk to the System will be implemented.*

*We will also analyze actuarial information needs as part of the benefits services transformation project (BeST) currently underway. The files containing member data that are input to the actuarial edit programs will be redesigned. If the actuarial edit responsibilities remain with the System, the programs will be totally rewritten. Based on the design of the BeST systems, a common programming language will be used by all programs and the analysts will be conversant in every aspect of the benefit delivery information systems. These changes should address the long-term needs to adequately document programs that extract data for the actuary.*

## Status of Previous Audit Recommendations

The System has implemented, or made progress in implementing, previous audit recommendations relating to the following topics:

- Procedures for anticipation of dividend income from domestic stocks were improved. However, automated anticipation of dividend income from international equities continued to show exceptions in our testing. We chose not to repeat the prior year comment as management is aware of the weaknesses in its current system. However, we will continue to monitor this issue and the expected enhancement to controls offered by the System's new investment accounting software.
- The Computer Security Function was relocated within the organizational structure to report to a higher level manager. This function now reports to the Director of Management Information Systems.
- The System implemented a new *Property Management Procedures Manual* which addresses the recommendations made in the prior year's audit. Implementation of these procedures will provide stronger safeguards over the System's furniture and equipment.
- We noted no instances of accounting data being posted to closed periods. However, this issue is anticipated to be resolved with the implementation of the new investment accounting system. The new system will not allow posting of accounting data to closed periods.

## Objective, Scope, and Methodology

### Objective

The purpose of this audit was to express an opinion on the System's general purpose financial statements for the fiscal year ended August 31, 1996. We designed audit procedures to provide reasonable assurance of detecting material errors or irregularities. We also designed procedures to verify compliance with laws and regulations that may have a material effect on the System's financial statements.

### Scope

The scope of this audit was limited to procedures necessary to express an opinion on the System's general purpose financial statements and to comply with applicable generally accepted auditing standards and *Government Auditing Standards*. The most significant asset accounts examined included Long-Term Investments, Short-Term Investments, and Cash in State Treasury, totaling \$49.3 billion, \$568 million, and \$307 million, respectively. Additionally, we examined significant additions and deductions reported in the Statement of Changes in Plan Net Assets. Additions to Pension Trust Fund net assets totaled \$6.7 billion, with investment income contributing the majority (71 percent). Deductions to net assets amounted to \$2.3 billion, with benefit payments contributing to 92 percent (\$2.1 billion). We also reviewed revenues and expenditures of the Expendable Trust Funds (Insurance Fund) totaling \$201 million and \$207 million, respectively.

### Methodology

We gained an understanding of the System's internal control structure, including the overall control environment and controls over cash balances, cash receipts and accounts receivable, cash disbursements and accounts payable, investments, and journal vouchers. We tested controls over cash disbursements, investment income, and journal vouchers.

We also tested certain accounts, including cash, investments, accounts receivable, accounts payable, fund balances, revenues/additions, and expenses/deductions. Tests of accounts primarily included tests of details supporting entries, confirmations, and analytical review. In addition, procedures to test compliance with significant requirements related to investments, fund balance reserves, and retirement annuities were performed.



## Other Information

Fieldwork was conducted from October 1996 through January 1997. The audit was conducted in accordance with professional standards, including:

- Generally Accepted Government Auditing Standards
- Generally Accepted Auditing Standards

The audit work was performed by the following members of the State Auditor's Office staff:

- Bill Wood, CPA (Project Manager)
- Roger Ferris, CPA
- Robin Key, CPA
- Randall Reid, CPA
- Jim Stolp, CPA
- Larry Vinyard, CPA (Quality Control)
- Carol Smith, CPA, (Audit Manager)
- Craig Kinton, CPA (Director)

Additionally, the State Auditor's Office employed the services of an outside CPA firm, meeting the criteria of a historically underutilized business, to perform a portion of the audit as an independent contractor. Reliance was placed on the opinion of other auditors in relation to the System's equity in real estate property held for sale. We were also directly assisted by and used other audit work performed by the System's internal auditors.

## Profile of the Teacher Retirement System

### Operations

The Teacher Retirement System was established by amendment to the Texas Constitution in 1936 and enactment of statutes in 1937 to provide a retirement program for public education employees in professional and business administration, supervision, and instruction. Benefits were later expanded to include disability, death and survivor benefits. In 1949, membership was expanded to include all employees of public education. The System operates primarily under Texas Government Code, Title 8, Subtitle C. During fiscal year 1996, the System employed approximately 384 employees.

The System administers retirement benefits for all public education employees. The System also administers the Texas Public School Employees Group Insurance Program. This program currently provides insurance benefits to retirees and has begun similar insurance benefits, on a voluntary basis by school district, to active public school employees. Each of these programs is included as a part of the reporting entity of the System because of the oversight responsibility exercised by the System's Board of Trustees. The System is a component unit of the State of Texas and is included in the State's *Comprehensive Annual Financial Report*.

Statistics for the System's programs as of August 31, 1996, were as follows:

#### Teacher Retirement Program

Individual Retirement Accounts .....	658,166
Retirees .....	142,631

#### Public School Employees Group Insurance Program

##### **Retired Plan:**

Retirees Enrolled .....	98,473
Spouses and Dependents Covered .....	14,163

##### **Active Plan:**

Employees .....	207
Dependent Spouses and Children .....	145

Senate Bill 9 combined the active member insurance plan with the retired plan effective September 1, 1995. Coverage for active members began on September 1, 1996.

## Significant Events

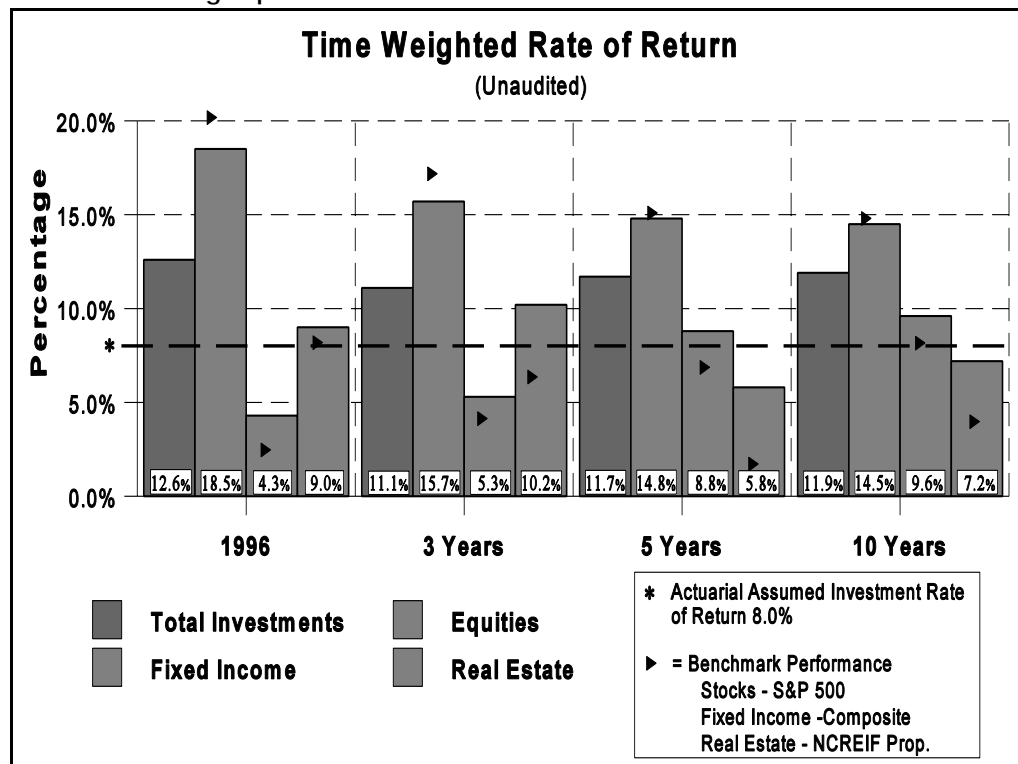
The funding period for the System's unfunded actuarial accrued liability (UAAL) decreased from 14 years to 11.3 years from 1995 to 1996, respectively. Investment returns of 12.6 percent above the actuarial assumption of 8.0 percent helped contribute to actuarial gains and the reduction in the funding period. In addition, benefits paid exceeded contributions made to the System's pension plan for the first time.

The Public School Employees Group Insurance Program recorded a loss (decrease in fund balance) from fiscal year 1996 operations of \$6 million. Expenditures for claims, retention, and administration of \$207 million were greater than contributions and interest revenues of \$201 million. The System reports that current actuarial analysis indicates that current funding will only be sufficient through August 2000.

The System continued progress toward the disposition of property held by its subsidiary real estate corporations. Four properties were sold during fiscal year 1996, bringing the number of active properties to ten with assets of \$436.6 million.

Total time weighted rates of return for the Pension Trust Fund as reported in the System's *Comprehensive Annual Financial Report* were as follows:

Figure 1  
For Periods Ending September 30



Appendix 3:

**Auditor's Report on Internal Controls**

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## AUDITOR'S REPORT ON INTERNAL CONTROLS

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January 31, 1997

Board of Trustees  
Teacher Retirement System of Texas

Members of the Board:

We have audited the general purpose financial statements of the Teacher Retirement System of Texas (System), a component unit of the State of Texas, as of and for the year ended August 31, 1996, and have issued our report thereon dated January 31, 1997.

We conducted our audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement.

The management of the System is responsible for establishing and maintaining an internal control structure. In fulfilling that responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal control structure policies and procedures. The objectives of an internal control structure are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of general purpose financial statements in accordance with generally accepted accounting principles. Because of inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

In planning and performing our audit of the general purpose financial statements of the System for the year ended August 31, 1996, we obtained an understanding of the internal control structure. With respect to the internal control structure, we obtained an understanding of the design of relevant policies and procedures and whether they have been placed in operation, and we assessed control risk in order to determine our auditing procedures for the purpose of expressing our opinion on the general purpose financial statements and not to provide an opinion on the internal control structure. Accordingly, we do not express such an opinion.

Board of Trustees  
Teacher Retirement System of Texas  
January 31, 1997  
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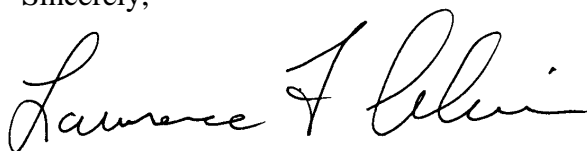
We noted a matter involving the internal control structure and its operation that we consider to be a reportable condition under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control structure that, in our judgment, could adversely affect the System's ability to record, process, summarize, and report financial data consistent with the assertions of management in the general purpose financial statements. The detailed finding related to this reportable condition as well as comments on the follow-up of prior year matters involving the internal control structure and its operations are included in the Detailed Findings and Recommendations section of our management letter. Less significant issues were communicated to appropriate System personnel during the course of our audit.

A material weakness is a condition in which the design or operation of one or more of the specific internal control structure elements does not reduce to a relatively low level the risk that errors or irregularities in amounts that would be material in relation to the general purpose financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

Our consideration of the internal control structure would not necessarily disclose all matters in the internal control structure that might be material weaknesses or reportable conditions under standards established by the American Institute of Certified Public Accountants. However, we believe the reportable condition mentioned above is not a material weakness.

This report is intended for the information of the audit committee, management, and the Legislative Audit Committee. However, this report is a matter of public record and its distribution is not limited.

Sincerely,

A handwritten signature in cursive script that reads "Lawrence F. Alwin".

Lawrence F. Alwin, CPA  
State Auditor

Appendix 4:

**Auditor's Report on Compliance with Laws and Regulations  
Material to the General Purpose Financial Statements**



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**AUDITOR'S REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS  
MATERIAL TO THE GENERAL PURPOSE FINANCIAL STATEMENTS**

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January 31, 1997

Board of Trustees  
Teacher Retirement System

Members of the Board:

We have audited the general purpose financial statements of the Teacher Retirement System of Texas (System), a component unit of the State of Texas, as of and for the year ended August 31, 1996, and have issued our report thereon dated January 31, 1997.

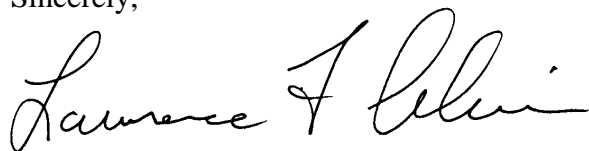
We conducted our audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

Compliance with laws and regulations is the responsibility of management. As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we performed tests of the System's compliance with certain provisions of laws and regulations. However, the objective of our audit of the general purpose financial statements was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion.

The results of our tests disclosed no instances of noncompliance that are required to be reported herein under *Government Auditing Standards*.

This report is intended for the information of the audit committee, management, and the Legislative Audit Committee. However, this report is a matter of public record and its distribution is not limited.

Sincerely,



Lawrence F. Alwin, CPA  
State Auditor

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