Key Points of Report

An Opinion Audit on the Teacher Retirement System of Texas
Year Ended August 31, 1994

April 1995

Key Facts and Findings

- At August 31, 1994, the Teacher Retirement System (System) had assets of $33.9 billion to fund pension and other benefits for 593,065 members and 132,577 annuitants. Actuarial accrued liabilities for pensions were 97.9 percent funded. The unfunded remainder, $825 million, was projected to be amortized over a period of 2.2 years. The System paid out $1.6 billion in retirement benefits during the year.

- Based on our audit, the System's component unit financial statements for fiscal year 1994 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.

- Reconciliations of the System's $33 billion investment portfolio, both internally and with custodian banks, were not always timely, well documented, or adequately reviewed.

- Although generally effective, anticipated-income controls did not function or were not applied as intended in some cases. In fiscal year 1994, interest income covered by such controls totaled $1.377 billion, and dividend income $524 million.

- Access to computer resources is not adequately restricted to those employees needing access to perform their job duties. Without such controls, records could be changed without authorization, and such action not prevented or detected on a timely basis.

- The System has no written policy designating the timing and scope of audits of insurance claim and retention charges by auditors independent of the insurance program and the insurance carrier.

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This financial opinion audit was conducted in accordance with generally accepted auditing standards and Government Auditing Standards issued by the Comptroller General of the United States.
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The System maintains an internal control structure on which it relies for safeguarding of assets, orderly conduct and recording of operations, financial reporting, and compliance with applicable laws and regulations. We gained an understanding of the System's control structure and performed tests of compliance, as part of our audit to express an opinion on the System's component unit financial statements. As stated in our report on the financial statements dated February 17, 1995, and our related reports on internal controls and compliance (Appendix 3.1 and Appendix 3.2 of this report), we noted no errors, noncompliance, or weaknesses that we consider material. However, in the course of the audit, we noted a number of conditions which we believe are significant enough to bring to the System's attention, along with our recommendations for improvement in those areas.

Section 1:
Reportable Conditions

We noted the following matters that we consider reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions are matters coming to our attention that, in our judgment, represent significant deficiencies in the design or operation of the System's internal control structure. Such conditions could adversely affect the System's ability to record, process, summarize, and report financial data accurately in the System's component unit financial report.

Section 1-A:
Improve the Timeliness, Completeness, and Quality Control of Investment Reconciliations

Significant weaknesses were noted relating to the timeliness, completeness, and quality-control review of investment reconciliations. Reconciling the System's $33 billion of investments, both internally and with custodian banks, is among the System's most important control procedures. Because the subsidiary ledgers do not interface with the general ledger, reconciliations between the subsidiary and general ledgers are necessary to ensure the accuracy and internal consistency of the System's accounting records. Reconciliations with custodian banks are the primary control for establishing and ensuring the accuracy of the System's ownership interests. Since most of the System's investments are held in book-entry form, this control is of particular importance.

Long-standing difficulties producing timely investment reconciliations were compounded by a change in the System's primary custodian bank in August 1994. Transitional problems that were encountered related to delays and errors initially in the transfer of some securities between the old and new banks, as well as recordkeeping and reporting changes.
**Internal reconciliations** - The following conditions were noted with respect to reconciliations between investment subsidiary ledgers and the general ledger:

- Full reconciliations were not prepared monthly, as part of a regular monthly accounting cycle. Delayed and postponed reconciliations have been a chronic condition, particularly during the first few months of each fiscal year. The System has cited year-end closing and financial reporting cycles as the primary cause. Accumulated reconciling items early in the year make reconciliations more time-consuming when staff do get to them.

- In addition, accounting staff did not prepare preliminary reconciliations for four of seven types of investment reconciliations during the first few months of fiscal year 1994. The purpose of preliminary reconciliations is to mitigate the effects of postponing full reconciliations, as discussed above.

- Supervisory quality-control reviews of reconciliations were neither timely nor substantive. None of the three types of preliminary reconciliations completed was reviewed in a timely manner. Preliminary reconciliations for September and October 1993 were reviewed late in December. Also, a reviewer signed off on one full reconciliation, although one of the two pages was not present to review.

- Short-term investment portfolio reconciliations were not completed for June, July, and August 1994. The System began reinvesting in short-term securities in June and by August 31, 1994 had an investment balance of $392 million.

- The System’s quarterly investment transaction type reconciliations for fiscal year 1994 were not completed and reviewed until fiscal year 1995.

**Reconciliations with custodian banks** - In addition, the following conditions were noted, relating to reconciliations between subsidiary ledgers and custodian banks:

- Reconciliation with the new domestic custodian bank as of August 31, 1994, was not completed until January 20, 1995, almost five months after year-end. The process of working out transitional problems and the delay in completing the August 31, 1994, reconciliation have further delayed completion of reconciliations with custodian banks and the general ledger on an ongoing basis in fiscal year 1995.

- Documentation of the August 31, 1994, reconciliation with the new domestic custodian bank was difficult to follow. This was the System’s first time to reconcile to this bank. Having limited experience with the bank’s records increased the difficulty of completing the reconciliation. A more standardized documentation method should be developed for future reconciliations.

- The year-end reconciliation to the new domestic custodian bank focused primarily on listing differences, rather than on resolving errors. We noted some items still needing corrections on the System’s or the bank's records in late January 1995.
In the year-end reconciliation of fixed-income investments with the international custodian bank, the preparer reconciled to a bank balance that was several days old. The current balance per bank was $19 million higher than the balance used in the reconciliation. By using a noncurrent balance, the preparer delayed reconciling the additional transactions. Additionally, no documented evidence of regular review existed for reconciliations of this type prepared throughout the fiscal year.

**Recommendations:** To strengthen control over investment balances on an ongoing basis, we recommend that the System:

- Make it a priority to complete and review monthly reconciliations of investments, internally and with custodian banks, within the following month.
  - Establish required completion times for preparation and review, and make these tasks a part of the monthly investment accounting cycle.
  - Consider using a tracking sheet to keep up with the numerous reconciliations which must be completed on an on-going basis.

- Make sure each reconciliation receives substantive review sufficient to ensure that the reconciliation is complete and properly prepared.

- Develop a consistent format and documentation standards for reconciling to the domestic custodian bank.

- Continue to research differences between the domestic custodian bank and subsidiary investment records, and make appropriate correcting entries.

**Management's Response:** We agree that prompt reconciliations with equally prompt follow-up and correction are important control mechanisms. The investment reconciliation process has been a focal point of the Investment Accounting Department's attention since a restructuring of staff in November 1994. At that time, an Equities and Fixed Income accounting unit was formally defined under the direction of an experienced accounting supervisor. Continued emphasis will be placed on these functions to assure all reconciliations are completed within two weeks of month end. Further procedures are being developed to ensure adequate tracking and appropriate management review. We anticipate the updated and formalized procedures should be substantially completed by June 1995.

It is also anticipated that major system improvements which should begin this fall will facilitate significant automation of the reconciliation process. Additionally, we believe this will reduce the number of reconciling differences which must be researched and dealt with between TRS and our custodians. Finally, we plan to automate an interface between the investment accounting subledgers and the TRS general ledger which should also have the effect of reducing differences to be reconciled.
Section 1-B:  
**Tighten Controls, and Application of Controls, Relating to Anticipated Investment Income**

Anticipation of investment income, another of the System's most important control processes, is designed to ensure that the System receives all interest, dividends, and other income due on its investments. In fiscal year 1994, interest income totaled $1.377 billion, and dividend income $524 million. Undercollection or overcollection of income, and any errors made in recording transactions, result in discrepancies between anticipated and actual collections. A reported discrepancy in the fixed-income or equity investment system should, and generally does, cause investment accountants to investigate and take action to resolve the discrepancy. However, we noted examples where anticipated income controls did not function or were not applied as intended.

**Anticipation of interest income** - In a sample of eight fixed-income transactions, we noted one case, in August 1994, where anticipated and actual interest payments on a corporate bond did not agree, and the discrepancy remained unresolved four months later when we viewed the transaction. Further investigation established that the System was paid the correct amount of interest. However, this case called to attention the following control weaknesses:

- Because of a known design flaw in the generation of monthly discrepancy reports, unresolved discrepancies between anticipated and actual interest income are not carried forward from one fiscal year to the next until resolved. Rather, each fiscal year starts as if with a clean slate. This system weakness imposes a special burden on investment accountants to follow through on discrepancies on the August report, to make sure they are resolved. If not resolved, they can easily be forgotten.

- Although discrepancy reports for other months of fiscal year 1994 were retained, the August 1994 discrepancy report was not retained, and the discrepancy in question was apparently overlooked.

- The fixed-income system's display collection screen was apparently not viewed by someone in Investment Accounting during the four-month period or this unresolved interest payment discrepancy would have been detected.

**Anticipation of dividend income** - In a sample of 13 equity investment transactions, we noted anticipated-income control problems in two cases:

- In one case, a dividend to stockholders of record August 12, 1994, was omitted from the calculated dividend income anticipated by the stock system. The cash was deposited to the System's old custodian bank in September 1994, where it earned depository interest until transferred to the System's account in the State Treasury on November 9, 1994. During that period, the revenue source was unclear. When the cash was transferred to the State Treasury, the stock system applied it back to a previous (incorrect) record date, since no anticipated dividend was recorded in the system for August 1994. This resulted in a discrepancy
listing for the earlier record date. Anticipated interest for the August record date was not entered into the system until December 5, 1994, almost four months after the record date and almost one month after the cash was transferred to the State Treasury.

This dividend was one of a number of declared dividends, estimated by the System at $6.6 million, which failed to appear on the August 1994 anticipated dividends report for undetermined reasons. Investment accounting did not discover this problem until unanticipated dividend monies began to be deposited to the System's account. Research was then performed to determine which securities the dividends were for, and the $6.6 million was recorded as revenue in fiscal year 1995, although it met the criteria for accrual in fiscal year 1994. At the time of our inquiry, Investment Accounting and Data Services were in the process of searching stock system records for any other dividends that might have been omitted by the anticipated dividends program, or from input to that program, and not received.

• We noted another case where the stock system has repeatedly applied current dividend payments relating to a particular stock back to a November 1992 record date. Again, we were told the cause had not been determined. The result, in this case, was to generate repeated discrepancies and adjusting activity.

Recommendations: The importance of careful execution of control procedures relating to the anticipation of investment income should be re-emphasized. The System should take steps to strengthen controls, and the application of controls, by implementing the following recommendations:

• Retain all monthly interest discrepancy reports, especially the August report, and correct the system design flaw which causes unresolved discrepancies at fiscal year-end to be dropped rather than carried forward. (The latter recommendation is contingent on the System's continued use of its current fixed-income investment accounting system.)

• Determine the causes and effects of anomalies noted in the accounting system for anticipation of dividends and take appropriate corrective action. We encourage the System to complete its analysis of dividends omitted from the August 1994 anticipated dividend report, to try to determine and address the underlying cause, and to pursue any uncollected dividends. Also, we recommend that the System determine why dividends on one stock continue to be applied to a 1992 record date. (These recommendations are contingent on the System's continued use of its current stock accounting system.)

• Finally, we recommend that the System resolve all discrepancies between anticipated and actual investment income in a timely manner (one month or less), and monitor to be sure this is done.
Management's Response: System modifications are being made to ensure anticipated interest income discrepancies are indeed resolved timely. With regard to equity dividends, we are researching the specific situation discussed to determine why the normal dividend announcement data feed did not provide the necessary information to anticipate that particular dividend and whether a systemic problem exists. We have also developed an automated routine which will highlight equity holdings for which dividend announcements have not been received. Additionally, through the contracts with TRS custodians, TRS is ensured that all dividend and interest payments are paid on the contractual due date. To accomplish this, the custodians also have anticipatory controls for that income. We believe that these items, in addition to the previously discussed improvements in the reconciliation processes, should help ensure that all investment income is received and appropriately accounted for.

Section 1-C: Restrict Access to Computer Resources

Access to computer resources is not adequately restricted to those employees needing access to perform their job duties. The monitoring mechanism that tracks authorized and unauthorized accesses to computer resources is not always reliable.

- Database files, Natural language computer programs, and Cobol language computer programs are not adequately secured.
  - A single password is used by several technical support personnel to update all production database files, and this password is not changed on a periodic basis.
  - Over 30 user identification sign-ons have access to the function that moves a Natural program into the production environment, without notification of appropriate personnel.
  - Cobol production programs can be accessed by 15 persons. A monitoring mechanism for access to Cobol programs has been implemented; however, abnormal terminations can prevent the recording of audit information.

- Computer resource users may have unnecessary access to applications or to commands within applications.
  - The System's internal auditors noted that users of the annuity payroll system and the payee address system had access to commands which were not needed to perform their job duties. The excess access capabilities, in some instances, also resulted in a lack of separation of duties.
- In our review of access to annuity payroll applications and commands, we noted that the TRS 2000 reorganization resulted in a significant number of additional employees receiving access to the system in the annuity payroll area. This additional access was not restricted to specific employees needing access to perform their job responsibilities.

- The designated program managers/owners of the annuity payroll software application are not always the individuals responsible for the integrity of the data.

To maintain adequate access controls over computer programs and database files, an entity must be able to monitor the accesses made by individual employees. This requires separate passwords for all employees and a reliable, effective monitoring mechanism.

The System's Information Resource Security Policies document management's intention to protect its information resources. The policies specify that the System "...must ensure adequate separation of functions for tasks that are susceptible to fraudulent or other unauthorized activity". Restricting computer access to only those employees needing access to perform their job responsibilities is one method of ensuring the System is complying with these policies. Without such controls, System information could be changed without authorization, and these changes may not be prevented or detected on a timely basis.

Recommendations: We recommend that the System restrict access to its computer resources to only those employees who need access to perform their job responsibilities. Access should be restricted at both the overall systems level and the individual application level, as follows:

• Management should reduce the number of employees with access to production programs. Security over production database files should be improved by assigning individual passwords to all employees having access to these files. The System should ensure that mechanisms and procedures necessary to identify possible breaches of security are effective.

• The System should also assign the individuals responsible for data integrity as program managers/owners of the applications and systems, and these supervisors should ensure that the access capabilities they approve for an employee are commensurate with the employee's job requirements. We encourage the System to ensure that these access controls are considered as the System continues the TRS 2000 reorganization.

Management's Response: We are currently installing a software feature which will eliminate the need for the referenced internal password which is used by the four database administrators to move programs from test to production and to update certain data. Once completed, all security will be handled by TRS’s primary mainframe security software, RACF. This change should be made August 31, 1995.

Departmental managers have been instructed to review the access needs of all of their employees, and to limit their access to only those systems required for their job functions.
In addition, the Internal Audit Department is conducting audits which specifically address access concerns. We will evaluate the results of these audits, which should be completed by June 1995, and make appropriate changes.

Section 1-D:
Ensure Adequate, Timely Audit Coverage of Insurance Claims and Retention Charges

The System has no written policy designating the timing and scope of independent audits of its insurance claims and retention charges. From time to time, the System has received independent audits of insurance claims and retention charges, either by its internal auditors or by outside auditors retained by the System or its insurance carrier. The audits, however, have not been performed on a systematic basis that would ensure that the System addresses control weaknesses or dollar errors in a timely manner. In addition, the outside auditors’ scope has been limited to performance issues and has not included verification that amounts paid by the System were appropriate and correct.

The System's Internal Audit Department greatly expanded its audit coverage of the Insurance Department in fiscal year 1994. Auditing of administrative costs and insurance claims verification procedures resulted in identification of at least $170,000 in administrative overcharges, which the insurance carrier will return to the System. The System is also planning a joint internal and outside audit in fiscal year 1995 that will include verification of dollar amounts paid for insurance claims.

The timing and scope of outside audits is currently determined by the Insurance Department Director. The Internal Audit Department determines the need to perform insurance audits based upon the Insurance Department's risk in relation to other System departments and functions. Without a written policy designating the timing and scope of independent audits, the Insurance Department may or may not receive appropriate audit coverage to ensure that control weaknesses and dollar errors are corrected in a timely manner.

Recommendation: We recommend that the System develop a written policy designating the timing and scope of independent audits of insurance claims and retention charges. The designated audit scope of insurance and retention charges should include verification of amounts paid, to ensure that payments are appropriate and correct.

Management's Response: We agree and will develop a comprehensive policy which will specify both the scope and frequency of audits to be conducted. We will determine the appropriate frequency based on the results of the current comprehensive audit. The policy will be developed and put into effect by the end of FY95.
Section 2:
Other Matters: Financial Accounting and Reporting

We noted the following other matters, not considered reportable conditions as defined by the American Institute of Certified Public Accountants, and make additional recommendations relating to financial accounting and reporting.

Section 2-A:
Develop a Comprehensive Accounting Policies and Procedures Manual

Although certain General Accounting and Investment Accounting tasks have been documented, the System does not have a comprehensive accounting policies and procedures manual. A comprehensive manual should include documentation of the accounting departments’ policies, processes, procedures, and tasks, as well as, a description of how other System departments interact with the accounting departments. Development and use of such a manual would facilitate consistency in the application of generally accepted accounting principles in accounting and financial reporting; coordination of tasks and functions; communication; staff orientation and training; assimilation of changes, such as TRS 2000 organizational changes or staff turnover; and efficiency of operations.

Recommendation: We recommend that the System develop, maintain, and use a comprehensive accounting policies and procedures manual, to include documentation about the following:

- Accounting policies - accounting research, including authoritative sources identified, relating to issues of generally accepted accounting principles (GAAP); and decisions made regarding the application of GAAP to specific types of transactions and situations
- Operating policies of the General Accounting and Investment Accounting departments
- Organization of the departments
- Processes, tasks, and responsibilities - descriptions; flowcharts; documentation of daily, weekly, monthly, and annual accounting and financial reporting cycles; quality control checklists used; and cutoff, closing, and consolidation procedures
- Interfaces with other departments - documentation of process objectives, inputs, outputs, and end products from a System-wide perspective; and communication, including customers, contacts, and information-resource people in other departments

Management's Response: We fully anticipate that the reengineering efforts of TRS 2000 will include the Accounting divisions. The documentation of processes, tasks and interfaces with other departments will occur through the TRS 2000 reengineering efforts. In the meantime, we have undertaken a process of obtaining sample policy and procedure manuals from other agencies and are further documenting accounting policies.
Section 2-B:

**Improve Communication among General Accounting, Investment Accounting, and Investments**

Members of the audit team, as well as TRS internal auditors, noted a number of instances where communication gaps between the General Accounting, Investment Accounting, and Investment departments impeded the transmission and discussion of information relevant to financial reporting:

- Investment Accounting changed its method of accounting for investments in mutual funds, from an unacceptable method to an acceptable method. The effect of the change was to recognize $15.3 million of capital gain reinvestments which had occurred in prior years but had not been recorded. These gains would most appropriately have been credited directly to fund equity. However, Investment Accounting deemed the amount immaterial and decided to include the gains in fiscal year 1994 operations. Investment Accounting did not discuss this decision with General Accounting. Aside from the general issue of coordination in matters affecting the financial statements, such discussion would have permitted the materiality or immateriality of the proposed treatment to be considered in conjunction with any similar matters known to General Accounting.

- As discussed previously, an estimated $6.6 million of dividends due in August 1994 failed to appear in anticipated dividends. When the cash was received early in fiscal year 1995, Investment Accounting had to perform research to determine the sources of revenue. Investment Accounting decided to enter the dividends as fiscal year 1995, rather than fiscal year 1994, revenue, without discussing the decision, or the possibility that additional amounts might be discovered, with General Accounting.

- Rather than use information supplied by Investment Accounting, General Accounting decided to use an alternate method to construct year-end general-ledger balances for cash in securities clearing accounts. The reconciled balances supplied by Investment Accounting proved to be accurate. The balances booked by the alternate method were understated by $9.9 million (see separate recommendation to change the method of recording securities clearing account balances).

- Equity Investments had year-end market-value information on preferred stocks and convertible bonds, which Investment Accounting needed to supply information to General Accounting for the financial report. However, Investment Accounting didn't know or find out that Equity Investments had the information. As a result, General Accounting used historical cost instead of market values for these types of securities in the Notes to the Financial Statements when good market-value information was available in-house.
In response to a request from General Accounting, Investment Accounting supplied information for a Note disclosure about the effect of restructuring the payment terms of troubled mortgage loans. The disclosure requires calculations based on original coupon rates. The information supplied by Investment Accounting used current (restructured) rates. The investment accountant was not aware of the purpose of the requested calculations.

**Recommendation**: To ensure the highest quality of financial reporting, as well as improve efficiency of operations, we recommend that the System work to improve communication across departmental lines, among General Accounting, Investment Accounting, and Investments.

**Management's Response**: We agree with the importance of communication and are evaluating procedural and structural alternatives to improve the situation. The November 1994 reorganization will allow Investment Accounting to take a more active role in the closing process, and to assume a greater responsibility for controlling the specialized investment-related accounting entries in the general ledger accounts.

We are also continuing to identify and evaluate procedural, structural, and organizational alternatives for ensuring adequate and appropriate communication of critical information concerning financial transactions.

**Section 2-C:**

**Take Appropriate Actions to Reduce Investment Accounting Errors**

In various tests related to investments and investment income, we noted a more than infrequent incidence of investment accounting errors. In some cases, multiple entries were required, including multiple errors and backouts of errors, before transactions were correctly accounted for. Although errors were eventually corrected in cases that we observed, the relatively frequent occurrence of errors is inefficient and increases the risk that some errors may occur and not be corrected.

**Recommendation**: We recommend that Investment Accounting management take appropriate actions to reduce the incidence of errors, including monitoring and observation of patterns, determining causes, and providing supervision and training, or taking other steps as needed to improve accuracy.

**Management's Response**: The November 1994 reorganization and consolidation of accounting functions has allowed additional supervision and training of employees in that department. However, the volume of data now being entered manually has multiplied in the last few years due to the number of issues now in the portfolio. TRS is currently in the process of automating the domestic custodian daily feed to create automatic postings to the subsidiary ledger for income and principal payments. This will eliminate approximately 2,000 manual entries per month.
Section 2-D:
Enhance Controls in the Fixed-income Subsidiary Ledger to Prevent Entries to Closed Periods

In two instances, accounting adjustments to the fixed-income subsidiary ledger system, relating to fiscal year 1994 interest deposits, were incorrectly recorded by the system as fiscal year 1993 entries. At the time, fiscal year 1993 had already been closed out, and balances carried forward. These errors changed the 1993 ending balances in the system and threw them out of balance with 1994 beginning balances. Also, the entries were omitted from the monthly interest income reports which Investment Accounting used to reconcile between the subsidiary ledger and the general ledger. This caused the two systems to be out of balance for several months.

Misapplication of these entries to 1993 occurred as the combined result of two factors: deposit-date entry errors by the preparer of the entries, and the lack of an edit check in the system that would question whether the preparer intended to make entries to a closed period. Had such an edit check been in effect, the two entries might have been corrected before being accepted into the system.

As a general rule, once the accounting for a fiscal period has been closed the System should not allow entries to be assigned to that period or to receive entry numbers of that period.

Recommendation: We recommend that the System enhance controls in the fixed-income subsidiary ledger system, by adding an edit check that would alert the preparer whenever a proposed adjusting entry, as keyed in, would cause the system to apply that entry to a closed fiscal period.

Management's Response: We will make appropriate modifications to this system to prevent entries to a previous period.

Section 2-E:
Modify Accounting Policies with Respect to Securities Clearing Accounts and Market Valuation of Certain Real Estate Mortgages

All accounting and financial reporting errors that we noted during the audit, whether errors of fact or errors in the application of accounting principles, were considered immaterial in their effect on the financial statements. However, the System should consider changes in accounting policies in the following areas, to fine-tune the accuracy of reported information:

- **Securities clearing accounts.** The System formally records the cash balances of its securities clearing accounts only at year-end, for financial reporting purposes, by adjusting journal entry. In so doing, it has been the System's policy not to record "fail" balances (amounts in the accounts as a result of delayed settlement of investment transactions). As of August 31, 1994, the System recorded only certain unusual sums in the accounts arising from early transfer of monies for settlement of securities purchases after August 31. The System did not record what it considered normal fail balances nor an August...
31 investment income deposit into its domestic securities clearing account. As a result, the balances reported in the financial statements are understated by $9.9 million, in relation to Investment Accounting's reconciled balances for the accounts.

_Market valuation of certain fixed-rate mortgages._ For a fixed-rate mortgage, where the collateralized property value exceeded the loan balance, the System used the loan balance as an estimate of market value for financial reporting purposes. A better measure, in such case, would be the present value of the loan, calculated by discounting expected future cash flows at the current market rate. For the mortgage in question, the loan balance was $91.4 million, and the present value of cash flows at the current rate was $77.2 million. Thus, the policy followed in this particular situation did not result in the System's normally conservative estimate of market value for mortgage investments.

In the near future, the System will switch its basis of accounting for investments to current market value, to implement the newly-issued GASB Statement No. 25. It is therefore desirable to use the best available estimates of market value for all fixed rate mortgages, as well as other investments, whether higher or lower than the book value of the investment.

**Recommendations:** We recommend that the System make the following changes in accounting policies:

- The System's should change its accounting policy to record and report the full reconciled balances of its securities clearing accounts at year-end, including fail balances. When settlement has been delayed on investment acquisition transactions, the System should report all associated assets, risks, and obligations, including 1) investments purchased, based on trade-date accounting; 2) cash or short-term investments in the System's accounts pending settlement, which remain subject to deposit or investment risk; and 3) investment transactions payable, representing the System's liability to brokers to deliver funds to settle transactions when securities are presented.

- Report, as the market value of fixed rate mortgages where the collateralized mortgage value exceeds the loan balance, the present value of the loan, calculated by discounting expected future receipts at the current interest rates.

*Management's Response:* Management concurs with this recommendation and will modify the accounting policies accordingly.
Section 2-F:

Record All Audit Adjustments

In fiscal year 1994, the System did not record in its general ledger, at System level, the effect of certain outside audit adjustments relating to subsidiary corporations. The stated reason was that the adjustments were not material at System level; therefore, it would not be cost-effective to record them. The decision not to record all audit adjustments resulted in financial accounting and reporting differences between the subsidiary and System levels, as well as expenditure of accountant and auditor time to explain, reconcile, and understand the differences.

All audit adjustments proposed by outside auditors of the subsidiary corporations and accepted by management should be formally recorded in the official accounting records of the subsidiary corporations and given effect in the official accounting records of the System. Unrecorded adjustments on three subsidiary corporations netted to a $1.4 million difference in net income between audited subsidiary corporations’ financial statements and the System’s accounting records. Materiality of adjustments may be taken into consideration in the discussion of whether adjustments are necessary. Once adjustments are accepted, to honor the adjustments and back up the financial statements, the System should book all adjustments in the subsidiary corporations’ accounting records and should use adjusted information for the subsidiaries in consolidation at the parent level. In this way, differences between published financial statements of the subsidiaries and accounting records, and between financial statements at the subsidiary and parent levels, will be eliminated.

Recommendation: We recommend that the System book all outside auditor adjustments pertaining to subsidiary corporations, giving effect to adjustments at both the subsidiary and System levels.

Management's Response: Management concurs with this recommendation and will post all audit adjustments pertaining to subsidiary corporations.
Section 3:
Other Matters: Internal Controls

We noted the following other matter, not considered a reportable condition as defined by the American Institute of Certified Public Accountants, and make additional recommendations relating to internal controls.

Section 3-A:
Improve Controls over Furniture and Equipment

The System's control procedures relating to its $12 million investment in furniture and equipment could be strengthened in the following areas:

- **Procedures to track assignments of responsibility, transfers, exchanges, and return of assigned assets when employment is terminated.**

  - Newly hired employees do not sign a form acknowledging that they have accepted custody of property. Until the annual inventory is performed, there is no documentation, except the fixed-asset masterfile (INVY system) listing of property by room, to approximately identify property in a new employee's possession.

  - No procedures exist to document transfers of furniture and equipment between employees or exchanges of equipment with vendors.

  - When an employee terminates, there are no procedures to verify that all property assigned to the employee or in the employee's possession is returned to the System.

- **Procedures to ensure that items returned, exchanged, or purchased on an emergency basis are processed through the INVY System.** Currently, when certain items of furniture and equipment are returned, exchanged-out, or purchased on an emergency basis from a vendor, the item may be delivered either directly to the employee using it or to the receiving department for delivery to the employee. Given the variation in procedures related to transaction of business and delivery of goods, information regarding changes in assets does not consistently reach the INVY system, so that the system can effectively track changes in assets owned and custodianship of the assets.

We noted, also, that the annual physical inventory of furniture and equipment is performed by an employee who is also assigned custodial responsibility for the property. The System is implementing a bar code scanning system which should eliminate this control weakness.

Effective controls over furniture and equipment reduce the risk that assets may be lost, stolen, or misused without timely detection and appropriate corrective action.

**Recommendations:** We recommend that the System implement procedures to:

- Assign responsibility for property, plant, and equipment to individual employees and obtain acknowledgment.
• Track and record transfers between employees and exchange-outs with vendors.

• Verify that all property in a departing employee's possession is returned to the System upon termination.

• Ensure that fixed assets returned to vendors, exchanged-out with vendors, or purchased on an emergency basis are tracked through the INVY system.

Management's Response: Management agrees that all fixed asset purchases or exchanges should be processed by the receiving function in Mail and Supply and should be tracked on the INVY system. We are evaluating the most appropriate and cost-effective methods of establishing and maintaining stewardship of the individual fixed assets. One action which has already been taken is to designate an individual in MIS to be the property manager with responsibility for all computer-related capital assets.

Section 4:

Status of Previous Audit Recommendations

The System has implemented, or made progress in implementing, previous audit recommendations relating to the following topics: 1) disaster recovery planning; 2) improving the audit trail for information in the benefits payee data file; 3) preparation and supervisory approval of Terminal Authorization Forms in Investment Accounting; 4) development of the loan loss reserve; 5) anticipation of cash flows from mortgage loans (although some loan terms cannot be programmed); and 6) computer system access controls (but see new findings and recommendations on this topic in Section 1-C above).

In addition, the System has explored ways to strengthen testing and monitoring of employer entities' compliance with state laws relating to 1) reimbursements to the State for certain state contributions and 2) reporting and proper handling of members who have returned to teaching. Compliance with these laws is the responsibility of employer entities. The responsibility for enforcing compliance is not clearly assigned by law. Effective, efficient enforcement involves the cooperation of numerous entities, and the System has discussed possible solutions with key entities.

Recommendations to improve internal controls related to transactions between the System and its subsidiary corporations have been implemented in part. However, the System still permits the same person to sign legal and transaction documents for both the System and subsidiary corporations, in different capacities as an official of both parties. To provide a measure of checks and balances and to ensure that transactions are reviewed fully from the standpoints of both parties, we repeat our recommendation that the System require different officials to sign for the two parties in parent-subsidiary transactions.

We will follow up on management's progress in future audits.
Appendix 1:

**Objectives, Scope, and Methodology**

**Objective**

The purpose of this audit was to express an opinion on the System’s component unit financial statements for the fiscal year ended August 31, 1994. 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 most significant accounts examined included Long-Term Investments, Short-term Investments, and Cash in State Treasury, totaling $32 billion, $497 million, and $795.6 million, respectively. Also examined were the revenues and expenses/expenditures of the Pension and Expendable Trust Funds. Revenues and expenses of the Pension Trust Fund totaled $6.1 billion and $1.76 billion, respectively. Revenues and expenditures of the Expendable Trust Funds totaled $180 million and $165.7 million, respectively.

**Methodology**

We gained an understanding of the System's internal control structure, including the overall control environment, certain computer-related controls, and controls over cash balances, cash receipts and accounts receivable, cash disbursements and accounts payable, investments, journal vouchers, and fixed assets. We tested controls over cash receipts, cash disbursements, investments, and journal vouchers.

We also tested certain accounts, including cash, investments, accounts receivable, accounts payable, fund balances, revenues, and expenses/expenditures. We also performed procedures to test compliance with significant requirements related to investments, fund balance reserves, and retirement annuities.

**Other Information**

Field work was conducted from September 1994 through February 1995. 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:

- Carol Smith, CPA (Project Manager)
- Sandy Bootz
- Bob Campbell, CPA
- Randy Davis, CPA
- Ann Huebner
Additionally, we were assisted and utilized audit work performed by System internal auditors. Reliance was also placed on the opinion of other auditors in relation to the System’s equity in real estate property held for sale.
Appendix 2:
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 persons employed in public education 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 V.T.C.A., Texas Government Code, Title 8, Subtitle C. During August 1994, the System employed approximately 423 employees.

The System administers retirement benefits for all public education employees. The System also administers the Texas Public School Retired Employees Group Insurance Program for retired public education 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, 1994 were as follows:

**Teacher Retirement Program**
- Individual Retirement Accounts: 593,065
- Retirees: 132,577

**Retired Employees Group Insurance Program**
- Retirees Enrolled: 92,869
- Spouses and Dependents Covered: 13,480

Significant Events

The funding period for the System’s unfunded actuarial accrued liability (UAAL) decreased to 2.2 years after the TRS Board of Trustees modified some of the System’s actuarial assumptions. The changes adopted by the Board, and the year’s actuarial experience, reduced the UAAL from $3.440 billion to $825 million.

A record number of retirements, 9,358, were successfully processed. These represent a 15.3 percent increase from the previous year.

Direct investments in international stocks were made for the first time this year.

The System completed a study on the issue of health insurance as required by House Bill 2711, of the 73rd Legislature. The report *Health Insurance for Public School Employees and Retirees*, in June 1994.
Appendix 3.1:

**Auditor’s Report on Internal controls**
AUDITOR'S REPORT ON INTERNAL CONTROLS

February 17, 1995

Board of Trustees
Teacher Retirement System of Texas

Members of the Board:

We have audited the component unit financial statements of the Teacher Retirement System of Texas (System) as of and for the year ended August 31, 1994, and have issued our report thereon dated February 17, 1995.

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 component unit financial statements are free of material misstatement and about whether the System complied with laws and regulations.

In planning and performing our audit for the year ended August 31, 1994, we considered the System's internal control structure in order to determine our auditing procedures for the purpose of expressing our opinion on the System's component unit financial statements and not to provide assurance on the internal control structure.

Management 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, that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of component unit financial statements in accordance with generally accepted accounting principles.

Because of inherent limitations in any internal control structure, errors, irregularities, or instances of noncompliance 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.
For the purpose of this report, we have classified the significant internal control structure policies and procedures in the following categories:

**Internal Accounting Controls**

- Cash balances
- Cash disbursements and payables
- Cash receipts and receivables
- Control environment
- Investments
- Journal vouchers

For all of the internal control structure categories listed above, we obtained an understanding of the design of relevant policies and procedures and determined whether they have been placed in operation, and we assessed control risk.

We noted certain matters involving the internal control structure and its operation that we consider to be reportable conditions 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 component unit financial statements. The detailed findings relating to these reportable conditions are included in the System's management letter in the Detailed Findings with Management's Responses section. Less significant issues were communicated to appropriate System personnel during the course of our audit.

A material weakness is a reportable condition in which the design or operation of one or more of the 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 component unit financial statements being audited or that noncompliance with laws and regulations may occur and not be detected by management within a timely period in the normal course of operations.

Our consideration of the internal control structure would not necessarily disclose all matters in the internal control structure that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses as defined above. However, we believe none of the reportable conditions described above is a material weakness.

Sincerely,

Lawrence F. Alwin, CPA
State Auditor
Appendix 3.2:  
Auditor's Report on Compliance
AUDITOR'S REPORT ON COMPLIANCE

February 17, 1995

Board of Trustees
Teacher Retirement System

Members of the Board:

We have audited the component unit financial statements of the Teacher Retirement System (System) of Texas as of and for the year ended August 31, 1994, and have issued our report thereon dated February 17, 1995.

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 component unit financial statements are free of material misstatements.

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

The results of our tests indicate that, with respect to the items tested, the System complied, in all material respects, with the provisions referred to in the preceding paragraph. With respect to items not tested, nothing came to our attention that caused us to believe that the System had not complied, in all material respects, with those provisions.

Sincerely,

Lawrence F. Alwin, CPA
State Auditor
Copies of this report have been distributed to the following:

**Legislative Audit Committee**
Honorable James E. "Pete" Laney, Speaker of the House, Chair  
Honorable Bob Bullock, Lieutenant Governor, Vice Chair  
Senator John Montford, Chair, Senate Finance Committee  
Senator Kenneth Armbrister, Chair, Senate State Affairs Committee  
Representative Robert Junell, Chair, House Appropriations Committee  
Representative Tom Craddick, Chair, House Ways and Means Committee

**Governor of Texas**
Honorable George W. Bush

**Legislative Budget Board**

**Sunset Advisory Commission**

**Teacher Retirement System**