



John Keel, CPA
State Auditor

A Report on
**The Audit of the Teacher Retirement System's
Fiscal Year 2008 Financial Statements**

December 9, 2008

Members of the Legislative Audit Committee:

In our audit report dated November 13, 2008, we concluded that the Teacher Retirement System's (System) basic financial statements for fiscal year 2008 were materially correct and presented in accordance with accounting principles generally accepted in the United States of America.

We also issued a report on internal control over financial reporting and on compliance and other matters as required by auditing standards. Our procedures did not identify any material weaknesses in internal control over financial reporting or any noncompliance with laws or regulations that materially affected the financial statements. However, our procedures were not intended to provide an opinion on internal control over financial reporting or to provide an opinion on compliance with laws and regulations.

The major internal controls that we tested for the purpose of forming our opinion on the financial statements were operating effectively. However, we reported some less significant issues involving compliance with state law and information technology controls to System management in a separate letter dated December 9, 2008.

As required by professional auditing standards, we will also communicate to the System's Board of Trustees certain matters related to the conduct of a financial statement audit.

Conducting our audit of the System's financial statements enabled us to obtain information on the actuarial funded status of the pension plan and retiree health care plan, which is summarized below.

Pension Plan Financial Highlights and Actuarial Funded Status

The plan experienced net investment losses of \$4.6 billion (-4.5 percent return) during fiscal year 2008. The average annual return on the plan's investments for the past 10 years has been 6.9 percent. Because the plan has an 8.0 percent assumed long-term rate of return used for actuarial valuation purposes, the plan had a \$13.5 billion loss for fiscal year 2008 when calculated on an actuarial basis. Most of this loss will be deferred across fiscal years 2009 through 2012 under the actuary's five-year asset smoothing methodology used to calculate the actuarial value of the plan's assets.

Background Information

The Teacher Retirement System (System), under Article 16, Section 67, of the Texas Constitution, is authorized to provide retirement and related benefits for employees of public schools, colleges, and universities supported by the State of Texas. The System also administers health care plans for retirees (TRS-Care), active public school employees (TRS-ActiveCare), and their dependents.

The System is responsible for investing funds under its stewardship and for delivering benefits to members as authorized by the Legislature. The System's pension plan is a defined benefit plan, with retirement benefits determined by a pre-established formula.

As of August 31, 2008, the System was serving 1,241,271 members: 966,043 were public and higher education employees and 275,228 were annuitants. These members were employed by 1,360 entities, including school districts, charter schools, colleges, and universities. The pension plan's net assets totaled \$104.9 billion as of August 31, 2008. The System made \$6.5 billion in benefit payments during fiscal year 2008.

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The August 31, 2008, actuarial valuation of the pension plan included the following information:

- The plan's funded ratio (the ratio of actuarial assets to actuarial liabilities) improved for the third consecutive year to 90.5 percent at the end of fiscal year 2008 (this ratio was 89.2 percent at the end of fiscal year 2007). Despite the plan's investment losses, the plan's unfunded actuarial accrued liability (UAAL), which represents the deficit of the plan's actuarial assets compared with its actuarial liabilities, decreased by \$1.0 billion to \$11.5 billion. In part, this improvement occurred because the asset smoothing methodology deferred 80 percent of the fiscal year 2008 losses while recognizing some of the deferred investment gains remaining from fiscal years 2004 through 2007.
- The plan's actuarial funding period (the time required to amortize the UAAL at the current contribution rates) declined to 20.7 years.
- As a result of the significant underperformance compared with the actuarially assumed 8.0 percent investment rate of return for fiscal year 2008, the actuarial valuation now includes \$5.3 billion in net deferred investment losses compared with \$8.7 billion in deferred investment gains as of last year's actuarial valuation.
- The value of the System's investments declined significantly between August 31, 2008, and the October 27, 2008, date of the actuary's report. These losses could be significant enough to require an accelerated recognition of some of the deferred losses that otherwise would be recognized over the next four fiscal years. This accelerated loss recognition would significantly increase the actuarially determined contribution rate necessary to amortize the UAAL over a 30-year period.

**Summary of
Objective, Scope, and Methodology**

The objective of the audit was to issue an opinion on the Teacher Retirement System's (System) fiscal year 2008 financial statements.

The audit scope covered the System's basic financial statements for fiscal year 2008.

The audit methodology included review of internal control over financial reporting, analytical review of material account balances, detailed tests of sample transactions, confirmations of investment holdings and market values, and tests of compliance with laws and regulations.

The audit was conducted in accordance with auditing standards generally accepted in the United States of America and standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States.

The following staff of the State Auditor's Office performed the audit:

- Roger Ferris, CPA (Project Manager)
- Gregory Scott Adams, CPA, MPA, CGFM (Assistant Project Manager)
- Ishani Baxi
- Jules Hunter, CPA, CIA
- Ann Karnes, CPA, MPA
- Jaime Navarro
- Amadou N'gaide, CFE, MBA
- Michele Pheaney, MBA
- Kenneth Wade
- Michael Yokie, CISA (Information Systems Audit Team)
- Charles P. Dunlap, Jr., CPA (Quality Control Reviewer)
- Verma Elliott, MBA, CIA, CGAP (Audit Manager)

Table 1 summarizes investment results and other actuarial and contribution rate information regarding the pension plan for fiscal years 1999 through 2009.

Table 1

Investment Results and Actuarial and Contribution Information For the Teacher Retirement System Pension Plan					
Fiscal Year	Rate of Return on Investments	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Annual Required Contribution (ARC) (Actuarially Determined)	Actual Contribution Rate (Statutorily Determined)
2009	Data will not be available until after August 31, 2009			6.10%	6.58%
2008	-4.5%	\$11.5 billion	90.5%	6.47%	6.58%
2007	14.4%	\$12.5 billion	89.2%	7.02%	6.00%
2006	9.7%	\$13.7 billion	87.3%	7.19%	6.00%
2005	14.4%	\$13.2 billion	87.1%	7.31%	6.00%
2004	11.9%	\$8.0 billion	91.8%	7.39%	6.00%
2003	11.3%	\$5.2 billion	94.5%	7.15%	6.00%
2002	-7.8%	\$3.3 billion	96.3%	5.70%	6.00%
2001	-10.6%	-\$2.1 billion	102.5%	4.12%	6.00%
2000	14.0%	-\$5.4 billion	107.4%	4.92%	6.00%
1999	21.0%	-\$2.2 billion	103.3%	4.12%	6.00%

Source: Teacher Retirement System.

At the end of the fiscal year 2008, the plan's net assets were \$104.9 billion, compared with net assets of \$112.1 billion at the end of fiscal year 2007. In addition, the State's annual required contribution (ARC) rate for fiscal year 2009 (the employer contribution rate that is projected to be needed to eliminate the actuarial funding deficit within the next 30 years) decreased to 6.10 percent of pay from 2008's rate of 6.47 percent. As shown in Table 1, the Legislature's fiscal year 2008 increase in the State's contribution rate to 6.58 percent is also significant because fiscal year 2008 was the first year since fiscal year 2002 in which the State's contributions to the system equaled or exceeded the amount needed to amortize the UAAL over 30 years. A 30-year amortization period is important because state law prohibits making certain changes to the plan, such as increasing benefits, if (1) the amortization period is 31 or more years or (2) the changes would increase the amortization period to 31 or more years (see Texas Government Code, Section 821.006).

According to the actuary's calculation, the current total annual contribution rate of 12.98 percent of pay (6.58 percent from the State and 6.40 percent from active members) is sufficient to amortize the current UAAL over 20.7 years. However, the actuary cautions that the combination of the net investment losses deferred at the end of fiscal year 2008 and the unfavorable investment results that have occurred early in fiscal year 2009 are almost certain to cause the ARC to increase in fiscal year 2010 above the current state contribution rate of 6.58 percent.

Therefore, in spite of the improvement in the actuarial results for fiscal year 2008, the System's actuary continues to advise caution in providing non-funded benefit enhancements. The actuary recommends that any benefit enhancements be fully funded by a separate appropriation, rather than by adding new unfunded liabilities to the System. The actuary also recommends that the Legislature not reduce the state contribution rate at this time.

Subsequent Events Note Disclosure in the System's Financial Statements about Market Volatility after August 31, 2008

The System included the following disclosure as a "Subsequent Events" note in its fiscal year 2008 financial statements:

The financial markets experienced significant volatility subsequent to the August 31, 2008 fiscal year end due to the credit market crisis and concerns about global recession and other market factors. Despite government support designed to keep the global financial system from collapsing, steep declines and periodic boosts in value were experienced indicating a continued uncertainty of global market conditions.

As a basis of reference, based on unaudited reports through November 6, 2008 from State Street Bank, the value of the TRS investment portfolio ranged from a decline of approximately eight percent on September 30, 2008 to a decline of approximately 27 percent on October 27, 2008 as compared to the August 31, 2008 fiscal year end value. In light of these unprecedented market fluctuations, any judgment of the system's financial position should be based on current information rather than fiscal year end. Stakeholders are encouraged to obtain the latest financial statement information from the TRS Web site for current system conditions.

The TRS investment philosophy continues to focus on broadening the diversification of the portfolio. Over a long-term horizon, the investment fund is expected to have more protection from fluctuating market conditions as a result of the multi-year diversification plan adopted by the Board in fiscal year 2007.

Retiree Health Care Plan Actuarial Funded Status

The August 31, 2008, actuarial valuation of the retiree health plan included the following information:

- The UAAL was \$21.6 billion (\$22.3 billion in actuarial accrued liabilities less \$729 million in plan assets). Therefore, the plan's funded ratio (actuarial assets / actuarial liabilities) was 3.27 percent.
- The actuarially determined annual required contribution (ARC) rate from employers and other contributing entities for fiscal year 2008 was 6.03 percent of payroll (\$1.5 billion) based on an amortization period of 30 years. The State contributed 1.00 percent (\$254.7 million), school districts contributed 0.55 percent (\$141.7 million), and Medicare Part D reimbursements of \$59.5 million were received from the federal government. These contributions represented 29.68 percent of the ARC for fiscal year 2008.
- The actuarial assumed rate of return on plan investments, which are comprised of short-term investments only, was 5.25 percent. However, if the plan could accumulate enough assets to invest using a long-term strategy and use the same 8.00 percent assumed rate of return that is used for the pension plan, the State and school districts would be required to contribute \$517 million less than the \$1.732 billion that the actuary projects would be needed to fully fund the ARC during fiscal year 2009 using the 5.25 percent assumption (these amounts exclude contributions from active employees).

Noncompliance with State Law

During this audit, auditors identified an issue involving noncompliance with state law related to the System's securities lending program. The attachment to this letter contains a detailed discussion of this issue, followed by management's response.

We appreciate the System's cooperation during this audit. If you have any questions, please contact Verma Elliott, Audit Manager, or me at (512) 936-9500.

Sincerely,

John Keel, CPA
State Auditor

Attachment

cc: Members of the Teacher Retirement System Board of Trustees
Mr. James H. (Jim) Lee, Chair
Mr. Linus D. Wright, Vice Chair
Ms. Charlotte Clifton
Mr. Robert Gauntt
Mr. John Graham, Jr.
Mr. Mark Henry, Ed.D.
Mr. R. David Kelly
Mr. Philip Mullins
Mr. Dory A. Wiley
Mr. Ronnie G. Jung, CPA, Executive Director, Teacher Retirement System



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Attachment

The System Should Ensure That Its Securities Lending Program Complies with State Law Regarding the Acceptance of Non-cash, Non-government Securities as Collateral

The Teacher Retirement System's (System) securities lending program did not comply with state law because it accepted non-cash collateral other than government securities from borrowers in exchange for loaned securities. According to Texas Government Code, Section 825.303(b)(4), the System's securities lending administrator may accept only cash or government securities as collateral when it loans the System's investments to borrowers. However, as of August 31, 2008, the securities lending administrator, which also serves as the System's custodian bank, had accepted \$2 billion in collateral that was neither cash nor government securities. The collateral accepted included corporate bonds, domestic and international stocks, and letter-of-credit collateral. The System's securities lending policy, dated July 27, 2007, is incorporated into its contract with the securities lending administrator, and that policy permits the acceptance of various types of non-cash collateral other than government securities.

The statute cited above also requires that non-cash collateral be delivered to and maintained by the System's custodian bank. However, the custodian bank reported \$846 million in government securities as collateral that it did not hold directly; instead, other entities held that collateral using tri-party agreements. It is unclear whether the statute permits this method of holding what otherwise appears to be permissible collateral. The System's securities lending policy permits non-cash collateral to be "held by the custodian bank or designated tri-party custodian."

The System's securities lending contract with its custodian bank requires the custodian bank to indemnify the System from any losses due to borrower default. Therefore, although the non-cash, non-government securities collateral accepted did not necessarily comply with statute, accepting such collateral may not expose the System to significant additional risk as long as the custodian bank has sufficient resources to cover any losses due to borrower default.

Recommendations

The System should:

- Restrict non-cash collateral to the types of government securities allowed by statute, revise its securities lending policy accordingly, and incorporate the revised policy in its securities lending contract with its custodian bank.
- Obtain a determination from its legal staff regarding the acceptability of tri-party arrangements for holding allowable types of non-cash collateral.

Management's Response

Upon notification of the finding by the State Auditor's Office that a portion of the collateral for the System's Securities Lending program was non-compliant with the statute, TRS contacted State Street Bank and requested that any non-compliant collateral be replaced with cash or government securities. State Street Bank immediately began the process of replacing non-compliant collateral with cash or government securities. By the end of November 2008 all collateral for the securities lending program was in the form of cash or government securities. TRS is in the process of formally amending the contract with State Street Bank to limit acceptable collateral for lent securities to cash or government securities.

It is important to note that TRS faced no additional loss exposure from the differing forms of collateral because under the terms of the securities lending agreement State Street Bank fully indemnifies TRS from any losses that might occur as a result of insufficient collateralization of any securities lent through the securities lending program. Note also that TRS policy requires that loans of TRS securities be oversecured. The initial collateral delivered for loans of domestic securities must equal 102 percent of the value of the loaned securities, and initial collateral for loans of foreign securities must equal 105 percent of the value of the loaned securities. To the extent that securities loans were overcollateralized, the acceptance of non-eligible collateral would not violate the statutory requirements for eligible collateral.

The revision of the System's Securities Lending Policy will be on the agenda for the Board's Policy Committee meeting and the Board's meeting on December 11, 2008.

TRS Legal staff has analyzed the statute relating to custody and securities lending and has concluded that the use of tri-party arrangements to hold securities lending collateral posted by borrowers is not inconsistent with the statute. Section 825.303(a) provides that:

The retirement system may, in the exercise of its constitutional discretion to manage the assets of the

retirement system, select one or more commercial banks, depository trust companies, or other entities to serve as custodian or custodians of the system's securities and to lend the securities under rules adopted by the board of trustees and as required by this section. The retirement system may select one or more commercial banks, depository trust companies, or other entities to act independently of the custodian and lend the securities under board rules and as required by this section.

Subsection (b)(4) of Section 825.303 provides that a TRS securities lending agent must:

[R]equire any securities broker or dealer to whom it lends securities belonging to the retirement system to deliver to and maintain with the custodian collateral in the form of cash or government securities.

To be entirely consistent with the authority to use "one or more" custodians or lending agents granted in subsection (a), subsection (b)(4) could have referred instead to "a custodian" instead of "the custodian." However, the two provisions, subsections (a) and (b)(4), are not necessarily fatally inconsistent or legally ambiguous, since they can be harmonized by reading subsection (b)(4) to refer to "the [applicable] custodian." The current securities lending authorization agreement authorizes custody of collateral to be maintained under tri-party agreements and designates the third party banks as authorized custodians of TRS collateral. TRS Legal Services does not believe that tri-party arrangements are inconsistent with the legislative intent of Section 825.303, as the Legislature clearly authorized the use of "one or more" custodians and lending agents.