



John Keel, CPA  
State Auditor

A Report on  
**The Audit of the Teacher Retirement System's  
Fiscal Year 2012 Financial Statements**

November 19, 2012

Members of the Legislative Audit Committee:

In our audit report dated November 15, 2012, we concluded that the Teacher Retirement System's (Retirement System) basic financial statements for fiscal year 2012 were materially correct and presented in accordance with accounting principles generally accepted in the United States of America. The Retirement System published our audit report as part of its basic financial statements, which it intends to post on its Web site at <http://trs.state.tx.us>.

We also issued a report on internal control over financial reporting and on compliance and other matters as required by auditing standards (that report, including responses from management, is presented in the attachment to this letter). In that report, auditors identified a deficiency in the Retirement System's information resource change management process that was reported as a significant deficiency in internal control.

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. Accordingly, we do not express an opinion on the effectiveness of the Retirement System's internal control over financial reporting or on compliance with laws and regulations.

Auditors communicated certain issues that were not material or significant to the audit objectives in writing to the Retirement System's management.

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

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

Sincerely,

John Keel, CPA  
State Auditor

Attachment

SAO Report No. 13-009

cc: Members of the Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman

Ms. Charlotte Clifton, Vice Chair

Mr. Todd Barth

Ms. T. Karen Charleston

Mr. Joe Colonna

Mr. Eric C. McDonald

Mr. Christopher Moss

Ms. Anita Smith Palmer

Ms. Nanette Sissney

Mr. Brian Guthrie, Executive Director, Teacher Retirement System



This document is not copyrighted. Readers may make additional copies of this report as needed. In addition, most State Auditor's Office reports may be downloaded from our Web site: [www.sao.state.tx.us](http://www.sao.state.tx.us).

In compliance with the Americans with Disabilities Act, this document may also be requested in alternative formats. To do so, contact our report request line at (512) 936-9500 (Voice), (512) 936-9400 (FAX), 1-800-RELAY-TX (TDD), or visit the Robert E. Johnson Building, 1501 North Congress Avenue, Suite 4.224, Austin, Texas 78701.

The State Auditor's Office is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, national origin, age, or disability in employment or in the provision of services, programs, or activities.

To report waste, fraud, or abuse in state government call the SAO Hotline: 1-800-TX-AUDIT.

# Attachment



## Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

### Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman  
Ms. Charlotte Clifton, Vice Chair  
Mr. Todd Barth  
Ms. T. Karen Charleston  
Mr. Joe Colonna  
Mr. Eric C. McDonald  
Mr. Christopher Moss  
Ms. Anita Smith Palmer  
Ms. Nanette Sissney

We have audited the financial statements of the major enterprise fund and the aggregate remaining fund information, consisting of the fiduciary funds and the nonmajor enterprise fund of the Teacher Retirement System (Retirement System), a component unit of the State of Texas, as of and for the year ended August 31, 2012, which collectively comprise the Retirement System's basic financial statements and have issued our report thereon dated November 15, 2012. Except as discussed in the following paragraph, we conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

We have chosen not to comply with a reporting standard that specifies the wording to be used in discussing restrictions on the use of this report. We believe the use of such wording is not in alignment with our role as a legislative audit function.

### Internal Control Over Financial Reporting

Management of the Retirement System is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the Retirement System's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Retirement System's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Retirement System's internal control over financial reporting.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. *A material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

SAO Report No. 13-302

RODNEY E. JOHNSON BUILDING  
1501 N. Congress Avenue  
Austin, Texas 78701

P.O. Box 12067  
Austin, Texas 78711-2067

Phone:  
(512) 936-9500

Fax:  
(512) 936-9400

Internet:  
[www.sao.state.tx.us](http://www.sao.state.tx.us)

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above. However, as described in the accompanying schedule of findings and responses, we identified certain deficiencies in internal control over financial reporting that we consider to be a significant deficiency. A *significant deficiency* is a deficiency or a combination of deficiencies in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Summary of Findings and Responses
Finding Number
2012-1

#### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Retirement System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of the Retirement System in writing.

The Retirement System's response to the finding identified in our audit is included in the accompanying schedule of findings and responses. We did not audit the Retirement System's response and, accordingly, we express no opinion on it.

This report is intended for the information and use of the Retirement System's Board of Trustees, Retirement System's management, and the Legislature. However, this report is a matter of public record, and its distribution is not limited.

John Keel, CPA  
State Auditor

November 15, 2012

## Schedule of Findings and Responses

### Section 1

### **The Retirement System Should Ensure That It Has Adequate Change Management Controls Over Its Automated Systems Containing Financial Data**

Reference No. 2012-1

#### **Type of finding: Significant Deficiency**

The Teacher Retirement System (Retirement System) does not have an adequate change management process in place for three of its automated systems that process data contained in its financial statements. Those three automated systems are: the General Ledger Accounting System; the Annuity Payroll System; and the TRS [Teacher Retirement System of Texas] Reporting and Query System. Enhancements to the Retirement System's change management process would help ensure that program environments are appropriately separated and protected from unauthorized modifications.

The Retirement System uses the General Ledger Accounting System to record journal entries and produce most of the data in its financial statements. The Retirement System uses the Annuity Payroll System and the TRS Reporting and Query System to account for retirement contribution revenues and retirement benefit payments. The Retirement System reported that it received approximately \$2.2 billion in employee retirement contributions and paid approximately \$7.7 billion in retirement benefits in fiscal year 2012. Additional controls exist outside of the change management process that should detect and prevent material misstatements of those funds in the Retirement System's financial statements.

#### **Texas Administrative Code Information Security Standards**

Title 1, Texas Administrative Code, Section 202.25, requires agencies to implement information resources security safeguards. These include:

- Managing access to information systems to ensure that the users are authorized.
- Protecting the confidentiality of data and systems and ensure that only authorized users have access to the data.
- Using a change management process that helps ensure the information owner approves system changes prior to implementation.
- Establishing a process for controlling modifications to software to ensure information resources are protected against improper modification before, during, and after system implementation.

Title 1, Texas Administrative Code, Section 202.25, requires the Retirement System to use a change management process that controls program changes to help ensure that information resources are protected against improper modification before, during, and after system implementation (see text box for additional information). An adequate change management process would help the Retirement System ensure that funds are adequately safeguarded. Ideally, program changes should be reviewed before implementation, and the programmer who creates the program changes should not be the person who migrates those changes into production.

Although the programmers responsible for maintaining the Retirement System's three automated systems migrate program changes into production, the Retirement System has implemented controls that could allow the managers responsible for the three automated systems to monitor all program changes. Currently, programmers must use a change management tool when they migrate program changes for the three automated systems into production. That change management tool sends email notifications to information systems support management when program changes are migrated into production. Those emails contain both the new program code and the program code that is being replaced, which would allow the recipients to effectively monitor the program changes. Auditors reviewed a random sample of 30 documented changes (from a total of 211 documented changes made during fiscal year 2012) for the General Ledger Accounting System, Annuity Payroll System, and the TRS Reporting and Query System. For the 30 documented changes reviewed, there was no evidence that recipients reviewed those emails during fiscal year 2012.

As a result, there is still a risk that unauthorized or unintentional modifications to production data could be made and that the funds are not adequately safeguarded.

#### **Recommendations**

The Retirement System should ensure that its automated systems are protected against improper modification before, during, and after system implementation. Specifically:

- The Retirement System should consider implementing controls that protect its automated systems from improper modification, such as having a knowledgeable person other than the programmer review and migrate program changes to production.
- If the Retirement System chooses to continue its current monitoring process, it should ensure that knowledgeable individuals receive the emails from the change management tool, review the program changes documented in the emails, and document their reviews.

### Management's Response

*TRS has been working to improve the agency's change management control environment through the implementation of new automated tools and improved procedures. The need for improvement was identified through TRS's own Internal Audit reviews as well as through feedback from the State Auditor's office during the Fiscal Year 2011 audit. Management laid out additional measures to strengthen the process to the Board's Audit Committee in September 2012.*

*Management is in agreement with the recommendation and will implement Option 2 by the end of the second quarter, February 28, 2013. The TRS software development team will continue to refine processes to ensure that its automated systems, GLAS, TRAQs, and ANPA, are protected against improper modification. An additional step will be added to the PAC review process by February 28, 2013, which will include documenting the review of the automatically generated PAC emails by a knowledgeable individual. These reviews will include looking for improper modifications to the code.*