

Audit Committee Meeting

December 2013



Teacher Retirement System of Texas
1000 Red River Street, Austin, Texas 78701-2698

**TEACHER RETIREMENT SYSTEM OF TEXAS
BOARD OF TRUSTEES
AND
AUDIT COMMITTEE**

(Mr. Moss, Chairman; Ms. Charleston; Mr. Corpus; Ms. Palmer; & Ms. Sissney, Committee Members)

AGENDA

**December 13, 2013 – 8:30 a.m.
TRS East Building, 5th Floor, Boardroom**

1. Approve minutes of September 13, 2013 Audit Committee meeting
– Mr. Christopher Moss, Chair
2. Receive State Auditor’s Office report on the Audit of TRS’ Fiscal Year 2013 Comprehensive Annual Financial Report – Ms. Angelica Ramirez and Mr. Greg Adams, State Auditor’s Office
3. Receive report on a plan to conduct a Health Care Risk Assessment and develop a Model Three-Year Audit Plan – Ms. Amy Barrett; Ms. Susan Haseley and Mr. Rene Hernandez, Protiviti Inc.
4. Receive Internal Audit Pension Benefits reports
 - A. Cost of Living Adjustment (COLA) Payment Process – Mr. Art Mata
 - B. Audit of Cost of Living Adjustment (COLA) – Ms. Amy Barrett and Mr. Art Mata
 - C. Special Service Buy Back Legislative Changes – Mr. Adam Fambrough
 - D. Special Service Buy Back Audit – Ms. Jan Engler, Mr. Mike Rehling, and Mr. Scot Leith
5. Receive Internal Audit Investment Management Division reports
 - A. Overview of internal control framework for expressing an opinion on investment controls – Ms. Amy Barrett
 - B. First Quarter Interim Test Results of Investment Controls – Mr. Hugh Ohn
 - C. Quarterly Investment Testing (Agreed-Upon Procedures) – Mr. Hugh Ohn
6. Receive reports on the Fiscal Year 2013 Internal Audit Annual Report and status of prior audit and consulting recommendations
 - A. Fiscal Year 2013 Internal Audit Annual Report – Ms. Amy Barrett
 - B. Status of prior audit and consulting recommendations – Ms. Amy Barrett
7. Discuss or consider Internal Audit administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, fraud risk areas, audits for the annual internal audit plan, or auditors' ability to perform duties – Mr. Christopher Moss and Ms. Amy Barrett

NOTE: The Board of Trustees (Board) of the Teacher Retirement System of Texas will not consider or act upon any item before the Audit Committee (Committee) at this meeting of the Committee. This meeting is not a regular meeting of the Board. However, because the full Audit Committee constitutes a quorum of the Board, the meeting of the Committee is also being posted as a meeting of the Board out of an abundance of caution.

TAB 1



**TEACHER RETIREMENT SYSTEM OF TEXAS
AUDIT COMMITTEE MEETING
September 13, 2013**

The Audit Committee of the Teacher Retirement System of Texas met on Friday, September 13, 2013 in the 5th floor Board room. The following persons were present:

TRS Board Members

Christopher Moss, Audit Committee Chair
Nanette Sissney, Audit Committee Member
Anita Smith Palmer, Audit Committee Member
T. Karen Charleston, Audit Committee Member
R. David Kelly, Board Chair
Todd Barth, Board Member
Joe Colonna, Board Member

TRS Staff

Brian Guthrie, Executive Director
Ken Welch, Deputy Director
Amy Barrett, Chief Audit Executive
Hugh Ohn, Director, Investment Audit & Compliance
Karen Morris, Senior Manager, Internal Audit
Jan Engler, Manager, Internal Audit
Lih-Jen Lan, Information Technology Manager, Internal Audit
Dinah Arce, Senior Auditor, Internal Audit
Terry Harris, Senior Investment Compliance Specialist, Internal Audit
Dorvin Handrick, Senior Information Technology Auditor, Internal Audit
Brian Gomolski, Senior Investment Auditor, Internal Audit
Toma Miller, Auditor, Internal Audit
Amy Morgan, Chief Information Officer
T.A. Miller, Deputy Information Officer
David Cook, Director, Project Management Office
Jerry Albright, Deputy Chief Investment Officer
Jase Auby, Managing Director of Risk, Investment Division
Carolina de Onis, General Counsel
Tim Wei, Assistant General Counsel
Dan Junell, Assistant General Counsel
Timothy Wei, Assistant General Counsel
Don Green, Chief Financial Officer
Cindy Haley, Team Leader, Financial Reporting, General Accounting
Scot Leith, Manager, Director of Investment and Benefit Accounting
Amanda Gentry, Team Leader, Benefit Accounting
Marianne Woods Wiley, Chief Benefit Officer

Mike Rehling, Manager, Benefit Processing
Adam Fambrough, Assistant Manager, Benefit Processing
Brian Zunker, Senior Benefit Consultant, Benefit Processing
Shelia Penn, Team Leader, Benefit Processing
Rita Hodde, Team Leader, Benefit Processing
Adrea Bridgeman, Team Leader, Benefit Processing
Ken Baker, Team Leader, Benefit Processing
Iliana Raup, Team Leader, Benefit Processing
Howard Goldman, Director, Communications
Jay LeBlanc, Director, Risk Management & Strategic Planning
Michelle Pagán, ERM Specialist, Risk Management & Strategic Planning

Other Attendees

Leroy DeHaven, Texas Retired Teachers Association
Ann Fickel, Texas Classroom Teachers Association
Josh Sanderson, Association of Texas Professional Educators
Greg Adams, State Auditor's Office
Angelica Ramirez, State Auditor's Office
Isahani Baxi, State Auditor's Office

Audit Committee Chair Christopher Moss called the meeting to order at 8:00 a.m. with a quorum of committee members present.

Chairman Moss stated that the meeting was being held by telephone conference call under Section 551.130 of the Texas Open Meetings Act with Mr. Joe Colonna joining the meeting by telephone. He asked that all speakers state their full name before speaking during the meeting so that Mr. Colonna will be able to identify speakers.

1. APPROVE MINUTES OF JULY 26, 2013 AUDIT COMMITTEE MEETING

On a motion by Ms. Nanette Sissney, and seconded by Ms. Karen Charleston, the proposed minutes of the September 13, 2013 Audit Committee meeting were approved as presented.

2. RECEIVE STATE AUDITOR'S OFFICE REPORT ON PLANNED AUDIT OF TRS' COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEAR 2013

Mr. Greg Adams, State Auditor's Office (SAO) Project Manager, stated that the SAO will be completing the financial audit of the Fiscal Year 2013 Comprehensive Annual Financial Report (CAFR) in two phases. The first phase was performed in July and August 2013 and the second phase will occur from September - November 2013 with the final audit opinion to be completed by November 12, 2013. He indicated that during November, the SAO will also produce a report on internal controls and compliance with other matters as required by Generally Accepted Governmental Auditing Standards and a required report to the Legislative Audit Committee. He outlined the independence of the SAO in conducting the audit and stated that, as in years past, TRS internal auditors will serve as the liaisons for this project.

3. RECEIVE INTERNAL AUDIT REPORTS

A. Fraud Risk Identification and Prevention Controls Audit

Ms. Jan Engler provided the results of the Fraud Risk Identification and Prevention Controls Audit. Ms. Engler stated that the audit was limited to the Benefit Processing and Benefit Accounting areas and focused on whether current controls could be circumvented in order to commit fraud. She stated that the audit did not discover any evidence of fraud, and that management took immediate steps to remedy any opportunities for fraud that were found. The audit had two significant findings in regards to system access and these were immediately addressed by management. Mr. Don Green, Mr. Scot Leith, and Ms. Marianne Woods Wiley spoke on behalf of management and explained the steps taken to resolve any audit findings in their areas.

B. Semi-Annual Testing of Benefit Payments

Ms. Amy Barrett stated that all benefit payments looked at during the semi-annual test were complete and accurate. No issues were found.

C. Investment Compliance Program Self-Assessment

Mr. Hugh Ohn informed the Committee of an organizational change regarding the investment compliance function. He stated that Senior Investment Compliance Specialist Terry Harris and all duties associated with the investment compliance function transferred out of the Internal Audit Department and now resides within the Legal Services Department. The reorganization will allow for the investment compliance function to be consolidated under one department and expanded into a more comprehensive program.

Mr. Ohn also reviewed the results of the Investment Compliance Self-Assessment that was performed prior to the organizational change. He stated that the self-assessment examined two things. First, the results indicated that TRS' investment compliance function is consistent and in line with regulatory and industry guidelines. Secondly, the self-assessment reviewed an audit recommendation received by Internal Audit during the last Quality Assurance Review. The recommendation was for Internal Audit to discuss with the Board and Executive Director the future direction of the investment compliance function and its organizational placement within TRS.

Mr. Ohn stated that as part of the review and discussion process, Internal Audit identified the organizational placement of the investment compliance function within other pension plans and then examined areas within TRS that could house the function. The pros and cons of each option were discussed and the decision was reached that the Legal Services Department would best be able to provide a consolidated and comprehensive function that would also allow for future expansion. Mr. Ohn stated that in the future Internal Audit will be able to provide independent assurance on the investment compliance function.

D. Quarterly Investment Testing

Mr. Ohn reported that the quarterly investment testing identified two issues. The first was a minor issue regarding the projected closing date for a hedge fund investment being inadvertently omitted on a required report. The second issue was in regards to the Absolute Return asset allocation being below the allowable minimum range by six basis points. He stated that this issue was addressed the previous day during the TRS Risk Management Committee meeting and steps have been taken to mitigate future occurrences.

4. RECEIVE REPORTS ON THE STATUS OF PRIOR AUDIT AND CONSULTING RECOMMENDATIONS

A. TRS Information Security Follow-up Audit

Ms. Lih-Jen Lan reviewed the findings of a follow-up audit that verified whether audit recommendations made during an IT Security audit performed in fiscal year 2011 have been fully implemented. She stated that the audit found that five of the nine recommendations were fully implemented with the other four being substantially implemented.

B. Status of Prior Audit and Consulting Recommendations

Ms. Barrett gave a brief overview of the outstanding audit recommendations. She stated that several have been implemented. There is currently one outstanding recommendation that is past due, however it will be changed to an implemented status as soon as the State Street contract is signed.

5. CONSIDER RECOMMENDATION TO THE BOARD OF TRUSTEES REGARDING THE PROPOSED AUDIT PLAN FOR FISCAL YEAR 2014

Ms. Barrett presented the proposed Audit Plan for fiscal year 2014. She stated that the plan was developed based on a risk assessment comprised of feedback from numerous interviews and results from surveys of Information Technology, Benefits, Executive, and Investments management and staff. The surveys were aimed at determining what areas management and staff identified as the greatest risks to TRS. She discussed the highest risk results and provided a brief overview of the proposed audit projects with emphasis on some key planned projects. Additionally, she advised the Audit Committee that all assurance and agreed-upon procedures projects will be brought before them as well as some consulting projects that will be of specific interest to the Audit Committee.

Chairman Moss moved that the Audit Committee recommend that the Board of Trustees approve the proposed audit plan for fiscal year 2014. The motion was seconded by Ms. Palmer and Ms. Sissney and then unanimously approved by the Committee.

6. DISCUSS SECTION 825.115 OF THE TEXAS GOVERNMENT CODE REGARDING CLOSED MEETINGS WITH THE RETIREMENT SYSTEM'S INTERNAL OR EXTERNAL AUDITORS

Ms. Barrett reviewed a statutory change whereby TRS internal and external auditors are allowed to meet with the TRS Board of Trustees or the Audit Committee in closed session to discuss the following:

- Governance, risk management or internal control weaknesses, known or suspected compliance violations or fraud, status of regulatory reviews or investigations, or identification of potential fraud risk areas and audits for the annual internal audit plan; or
- The auditors' ability to perform duties in accordance with the Internal Audit Charter, relevant auditing standards, and Chapter 2102 (Texas Internal Auditing Act).

Ms. Barrett stated that while the ability to go into closed session exists, it is important to be transparent and use the closed session on a limited basis. She stated that the closed sessions could be used to discuss items such as known or suspected allegations of fraud, scope limitations on ability for the auditor to perform work, information technology vulnerability issues, and the audit plan risk assessment. She also stated that anytime a topic is going to be discussed in closed session during a meeting it must be on the Audit Committee meeting agenda.

7. DISCUSS OR CONSIDER INTERNAL AUDIT ADMINISTRATIVE REPORTS AND MATTERS RELATED TO GOVERNANCE, RISK MANAGEMENT, INTERNAL CONTROL, COMPLIANCE VIOLATIONS, FRAUD, REGULATORY REVIEWS OR INVESTIGATIONS, FRAUD RISK AREAS, AUDITS FOR THE ANNUAL INTERNAL AUDIT PLAN, OR AUDITORS' ABILITY TO PERFORM DUTIES

Ms. Barrett reviewed several standard administrative reports. She indicated that Internal Audit met all performance measures for fiscal year 2013.

The meeting adjourned at 9:30 a.m.

Approved by:

Christopher Moss
Chair, Audit Committee
Board of Trustees
Teacher Retirement System of Texas

TAB 2

Independent Auditor's Report

Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman
Ms. Nanette Sissney, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

Report on the Financial Statements

We have audited the accompanying 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, 2013, and the related notes to the financial statements, which collectively comprise the Retirement System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes

SAO Report No. 14-305

evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the major enterprise fund and the aggregate remaining fund information of the Retirement System, as of August 31, 2013, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matters

Investments with Values that are not Readily Determined

As discussed in Note 3, the financial statements include certain investments valued at approximately \$39,004,925,971 as of August 31, 2013, whose fair values have been estimated by management in the absence of readily determinable fair values. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 20 through 27 and Schedules of Funding Progress and Schedules of Contributions and notes for the Pension Trust Fund and TRS-Care on pages 68 and 69 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Retirement System's financial statements. The information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is fairly stated in all material respects in relation to the basic financial statements as a whole.

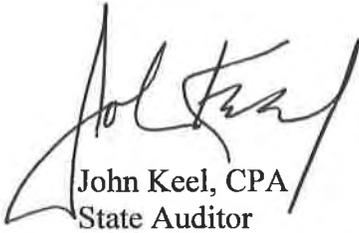
The Introductory, Investment, Actuarial, Benefits, and Statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Report on Summarized Comparative Information

We have previously audited the Retirement System's fiscal year 2012 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 15, 2012. In our opinion, the summarized comparative information presented herein as of and for the year ended August 31, 2012, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 15, 2013, on our consideration of the Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Retirement System's internal control over financial reporting and compliance.



John Keel, CPA
State Auditor

November 15, 2013

**Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System’s Fiscal Year 2013 Financial Statements**

We have audited the financial statements of the Teacher Retirement System (System) for the year ended August 31, 2013, and have issued our report thereon dated November 15, 2013. Professional standards require that we provide you with the following information related to our audit.

No.	Item	Comments
1	The Auditor’s Responsibilities Under Generally Accepted Auditing Standards	As stated in our engagement letter dated July 18, 2013, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management with your oversight are prepared, in all material respects, in accordance with generally accepted accounting principles. Our audit of the financial statements does not relieve management or those charged with governance of their responsibilities.
2	Planned Scope and Timing of the Audit	We performed the audit according to the planned scope and timing previously communicated to you in our engagement letter dated July 18, 2013.
3	Corrected and Uncorrected Misstatements	Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those the auditor believes are trivial, and communicate them to the appropriate level of management. The attached schedule summarizes uncorrected misstatements of the financial statements. Management has determined that their effects are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.
4	Other Information in Documents Containing Audited Financial Statements	Our financial statement audit opinion applies to the basic financial statements, which include the accompanying notes. We also applied certain limited auditing procedures to the Other Supplementary Information and concluded that such information was fairly stated in all material respects in relation to the basic financial statements taken as a whole. We did not opine on Management’s Discussion and Analysis (MD&A) and Required Supplementary Information. However, we performed limited procedures related to this information, which consisted of inquiring management regarding the methods of its measurement and presentation, and comparing the information for consistency with management’s responses to our inquires, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements.
5	Management Representations	We requested certain representations from management that are included in the management representation letter dated November 15, 2013. We also requested a representation letter dated November 15, 2013, from the System’s general counsel regarding the existence of certain contingent liabilities that might require disclosure in the financial statements.

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System's Fiscal Year 2013 Financial Statements

No.	Item	Comments
6	Qualitative Aspects of the Entity's Significant Accounting Practices	<p>Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the System are described in Note 1 to the financial statements.</p> <p>The System implemented the requirements of Governmental Accounting Standards Board (GASB) Statement No. 65, Items Previously Reported as Assets and Liabilities during fiscal year 2013. This statement reclassifies certain items previously reported as assets and liabilities to deferred outflows/inflows of resources or to outflows/inflows of resources and provides financial reporting guidance related to the impact of these outflows/inflows to financial statement elements.</p> <p>The System will implement GASB Statement No. 67, Financial Reporting for Pensions Plans during fiscal year 2014. This statement establishes standards for financial reporting and amends note disclosure and supplemental information requirements for defined benefit pension plans administered through qualified trusts.</p> <p>GASB Statement No. 68, Accounting and Financial Reporting for Pensions is effective for fiscal years beginning after June 15, 2014. This statement establishes procedures for measuring and recognizing the obligations associated with pensions as well as identifies methods for attributing the associated costs to the appropriate period as they are earned over an employee's career. Also included in this statement are amendments to note and required supplementary information requirements as well as details to address special funding situations.</p> <p>We noted no transactions entered into by the System during the year for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the financial statements in a period that differs from when the transaction occurred.</p>
7	Significant Difficulties Encountered During the Audit	We did not encounter any restrictions in performing our procedures or gaining access to individuals or records. Management and staff provided us with all of the information and support we requested.
8	Other Audit Findings or Issues	We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year. These discussions occurred in the normal course of the audit.

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System’s Fiscal Year 2013 Financial Statements

No.	Item	Comments
9	Disagreements with Management	<p>We did not encounter any disagreements with management during the course of the audit.</p> <p>For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor’s report.</p>
10	Management’s Consultations with Other Accountants	<p>In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a “second opinion” on certain situations. If a consultation involves application of an accounting principle to the System financial statements or a determination of the type of auditor’s opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts.</p> <p>To our knowledge, there were no such consultations with other accountants.</p>
11	Significant Findings or Issues Discussed, or Subject to Correspondence, with Management	<p>Prior to and throughout our audit engagement, we had routine discussions, or engaged in correspondence, with management regarding the System and application of accounting principles and auditing standards.</p>
12	Independence	<p>The State Auditor’s Office is independent to conduct the audit of System’s fiscal year 2013 financial statements. It is the State Auditor’s Office’s philosophy to conduct all projects in an environment free of any threats that impair independence.</p>
13	Fraud, Abuse, or Noncompliance with Laws and Regulations, Contracts or Grant Agreements	<p>Auditing standards require auditors to exercise professional skepticism and increased awareness to detect potential violations, fraud, and abuse.</p> <p>We did not find evidence that fraud, abuse, or noncompliance with laws and regulations, contracts or grant agreements, had, or might have, occurred.</p>

This information is intended solely for the use of the Board of Trustees and management of the System and is not intended to be and should not be used by anyone other than these specified parties.

Schedule of Uncorrected Financial Statement Misstatements

Alternative Investments – (\$1,871,644)

**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***

Independent Auditor's Report

Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman
Ms. Nanette Sissney, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

We have audited, in accordance with the 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, 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, 2013, and the related notes to the financial statements, which collectively comprise the Retirement System's basic financial statements and have issued our report thereon dated November 15, 2013.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Retirement System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Retirement System's internal control. Accordingly, we do not express an opinion on the effectiveness of the Retirement System's internal control.

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 a 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. 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.

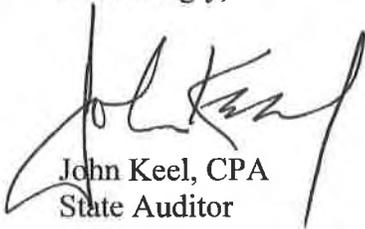
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Retirement System's financial statements are free from 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*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control over financial reporting or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control over financial reporting and compliance. Accordingly, this communication is not suitable for any other purpose.



John Keel, CPA
State Auditor

November 15, 2013

TAB 3

*Powerful Insights.
Proven Delivery.™*

Teacher Retirement System of Texas

Health Care Risk Assessment and Model Three-Year Audit Plan Project

**Presentation to the TRS Audit Committee
December 13, 2013**

protiviti[®]
Risk & Business Consulting.
Internal Audit.

Understanding Your Needs

Protiviti's health care team understands that TRS Internal Audit wishes to perform a Health Care Risk Assessment and model a three-year Audit Plan for TRS-Care and TRS-ActiveCare. Based on our discussion, we understand that:

- The Board-approved TRS Fiscal Year (FY) 2014 Annual Audit Plan includes a project for a Health Care Risk Assessment (HCRA) and a model Health Care Audit Plan
- TRS Internal Audit has requested the HCRA to be completed in the January – March 2014 timeframe with a final report in June 2014
- The scope of the HCRA will be comprehensive, covering health care benefit administration, financial and operational processes, regulatory compliance and related IT/privacy risks for TRS
- The results of this HCRA will be used to:
 - Discuss risk priorities with TRS Leadership and with the Audit Committee of the Board of Trustees
 - Develop a customized Risk Model and Audit Universe of auditable areas, focusing on health care benefits and processes at TRS
 - Develop a model three-year Audit Plan for Health Care for TRS
 - Provide level of effort estimates to conduct the audits identified in the model Audit Plan for TRS

Protiviti's Risk Assessment Methodology

The risk assessment is a critical element of a high-quality Internal Audit department's professional responsibility and places the auditing function "front and center" with senior leadership as a strategic partner in discussions regarding the management of business risks.

Protiviti's risk assessment approach is based on professional standards and considers a wide range of risks that are specific to provider and payer operations and the health care industry overall.

The risk assessment process includes specific research, statistical/financial analysis, executive interviews, surveys and in some cases, facilitated sessions – all focused on alignment of risks with the organization's mission and elements of strategy.

At the conclusion of the Health Care Risk Assessment, we will deliver a comprehensive view of risk to TRS, with suggestions regarding possible areas for further evaluation by the internal auditing function.



Risk Assessment Methodology

Protiviti has completed hundreds of risk assessments for our health care clients. Our approach leverages our understanding of the health care industry in general (and health systems specifically).



SCOPE

- Review the TRS strategic plan, statutes, and other relevant documentation.
- Develop questions/topics to be addressed with executive management, board members, external advisors and/or other management personnel.
- Prepare and submit a preliminary information request list to management.
- Develop and distribute communications regarding the business risk assessment to impacted personnel and schedule on-site interviews.



ANALYZE

- Conduct interviews with executive management, select board members and advisors to discuss a wide perspective on risks affecting each trust.
- Aggregate information captured during interviews, develop risk definitions, and link risks to TRS' objectives.
- Conduct validation discussions using a preliminary Risk Model for TRS in order to gauge risk impact and prioritization.
- Link high priority risks to auditable units.
- Validate and prioritize risks via discussions with executive management.



RECOMMEND AND DESIGN

- Develop a Risk Map for TRS-ActiveCare and TRS-Care which identifies the top prioritized risks
- Clarify the nature of risks identified (Operational, Compliance, Financial, Strategic).
- Recommend audit activities linked to each Risk Map, including estimates regarding level of effort.
- Present results to TRS executive management and the Audit Committee members of the TRS Board of Trustees at the June meeting.

Risk Assessment Methodology

As part of the Health Care Risk Assessment process, we will establish a TRS Audit Universe upfront. We will start with Protiviti's Employer Model – shown below. The Risk Models, and associated risk definitions, provide a methodical way to consider the full range of risks for the Risk Assessment and the model three-year Audit Plan. By evaluating the impact, the Provider and Payer risk model may have, a holistic picture of the environment can be established. See Appendix for full Employer Risk Model.

Protiviti Health Care Provider Risk ModelSM

ENVIRONMENT RISK	PROCESS RISK			INFORMATION FOR DECISION MAKING RISK
<ul style="list-style-type: none"> Competitor Patient Wants Technological Innovation Stakeholder Expectations Capital Availability Stewardship / Political Legal Regulatory Industry Catastrophic Loss 	FINANCIAL <ul style="list-style-type: none"> Price Interest Rate Rate Control Charge Master Contracting <ul style="list-style-type: none"> Liquidity Cash Flow Opportunity Costs <ul style="list-style-type: none"> Credit Bank Covenants Debt Coverage Collateral 	EMPOWERMENT <ul style="list-style-type: none"> Leadership Authority / Limit Outsourcing Performance Incentives Change Readiness Communications 	GOVERNANCE <ul style="list-style-type: none"> Organizational Culture Ethical Behavior Board Effectiveness Succession Planning REPUTATION <ul style="list-style-type: none"> Patient Satisfaction Stakeholder Relations INTEGRITY <ul style="list-style-type: none"> Management Fraud Employee Fraud Third Party Fraud Regal Auto Unauthorized Use 	STRATEGIC <ul style="list-style-type: none"> Environmental Scan Physician Partnerships Business Portfolio Growth Strategy Organization Structure Facilities Resource Allocation Planning Service Innovation PUBLIC REPORTING <ul style="list-style-type: none"> Financial Reporting Evaluation Internal Control Evaluation Tax Exempt Status Regulatory Reporting OPERATIONAL <ul style="list-style-type: none"> Budget & Planning Product/Service Pricing Contract Compliance Measurement (Operations) Accounting Information
		INFORMATION TECHNOLOGY <ul style="list-style-type: none"> Integrity Access Availability Infrastructure 	OPERATIONS <ul style="list-style-type: none"> Patient Satisfaction Capacity Performance Gap Quality Improvement Service Development Efficiency <ul style="list-style-type: none"> Compliance Business Interruption Service Failure Environment Health & Safety 	

Protiviti Health Care Payer Risk ModelSM

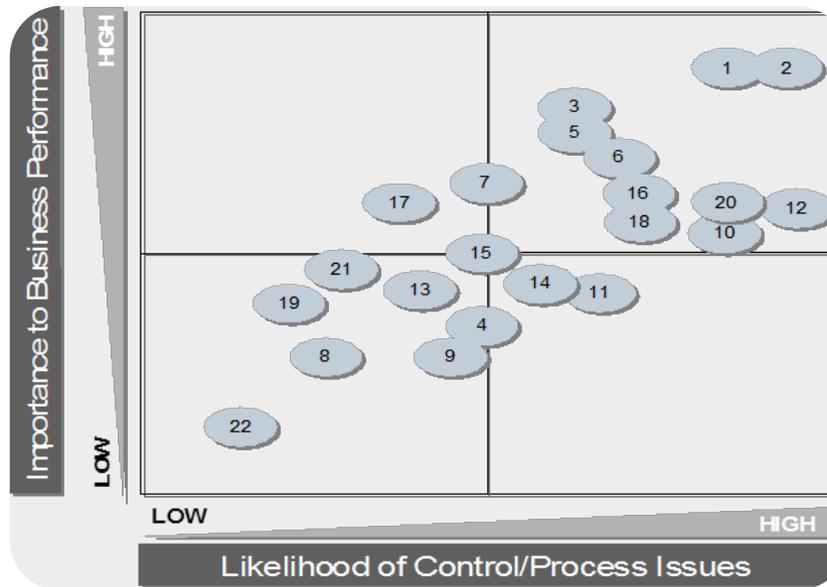
Environment	Operations	Account Management	Financial	
<ul style="list-style-type: none"> Demographic Shifts Concentration Preferential Discretionary Spending Awareness Mergers and Acquisitions Disease Burden 	<ul style="list-style-type: none"> Case Initiation Enrollment / Disenrollment Eligibility Claims Processing Premium Billing and Collection Member Recycle Billing Agent Commission Processing Agent Performance and Training Marketing Product Development Customer / Member Service Member Service / Telephonic Centers Enrollment Operational Issue Monitoring Regulatory Know-How/Issues Internal Audit and Risk Audit Vendor Management 	<ul style="list-style-type: none"> Plan Management Network Management Member Communications Benefit Portability Fraud Waste and Abuse Utilization Management Cost Management Medical Therapy Management Costs / Issues Utilization Management / Fee Tier Categories / Self-Insured Management/Employee Trust Regulatory Change Management Claims Eligibility Regulatory Change Management Contracted Action Plans Performance Standards Human Resources State 	<ul style="list-style-type: none"> Banking (HEBS/HEA/PSA) Contract Paperwork Act Development Product Pricing Bookkeeping Treasury Cash Management Trusts Financial Reporting Personnel Reporting Regulatory Reporting Tax Reporting Advanced Revenue Development and monitoring Insurance Debt Covenants 	
	<ul style="list-style-type: none"> Regulatory and Compliance Programs Medical/Medicaid Federal/State HIPAA Privacy TECFA/CALOP/URAC Accreditation SEC 	<ul style="list-style-type: none"> Government Project Management Marketing Key Performance Indicators QI Definition Change Readiness Board / Executives Communications Planning MMA Down Decision 	<ul style="list-style-type: none"> Image & Branding Impact to Customer Advertising State/State Robo-Advisors Product Integrity & Safety 	<ul style="list-style-type: none"> Information Technology Data Security/Access Availability of Information IT Infrastructure Program Change Control System Implementations Disaster Recovery/Redundancy Delegated Vendor Data Management

Protiviti Health Care Employer Risk ModelSM

Environment	Operations	Account Management	Financial	
<ul style="list-style-type: none"> Competitor Shareholder Expectations Capital Availability Investor Relations Political Legal Catastrophic Loss Healthcare Advancements Health Care Return Privacy Violations Outsourcing Workforce Management Demographic Shifts Concentration Preferential Discretionary Spending Awareness Mergers and Acquisitions Disease Burden Regulatory and Compliance Government Programs (Medicare/Medicaid) Federal/DC State Mandates HPAA Privacy Accreditation SEC 	<ul style="list-style-type: none"> Product Needs Assessment Product Benefit Review-Standard/Non-standard Provider Network Adequacy Underwriting Carrier Selection Contracting/Pricing/Quaranties Case Initiation/Testing Employee/Dependent/Retiree Communications-carrier selection Enrollment / Disenrollment Eligibility Management - Employee, Dependent, Retiree Eligibility Transactions with Carrier- Retrospective Adjustments Claims Processing Benefit Exceptions Premium Billing and Collection - Employer Contribution Premium Billing and Collection - Member Contribution 	<ul style="list-style-type: none"> Appeals – first level claim, fiduciary Oversight Management Internal Member Service Prourement Broker Commission Processing Vendor Contracting Vendor Management/Delegation Oversight Reporting (Performance / Productivity / Customer / Regulatory / MIS) Reporting - Utilization Management, Contract Claims Review, Case Management, Disease Management, Medication Therapy Management Department of Labor Regulatory (Audit) Management State Regulatory/Market Conduct Exam Management CMS Regulatory (Medicaid) Management Wellness, smoking cessation, weight management 	<ul style="list-style-type: none"> Banking Contract Exposure Book Development Product Pricing Investment Treasury Cash Management Taxation Financial Reporting Pension Fund Reporting Regulatory Reporting Tax Reporting Advanced Revenue Reinsurance Debt Covenants Claims Payment Reconciliation 	
	<ul style="list-style-type: none"> Strategy Leadership Change readiness Board Effectiveness Succession Planning Goals and Objectives Staffing Performance Incentives Enterprise Risk Assessment Project Management Planning Key Performance Indicators 	<ul style="list-style-type: none"> QI committees Change readiness Board Effectiveness Succession Planning MMA Down Decisions 	<ul style="list-style-type: none"> Image & Branding Advertising Stakeholder Relations Product Integrity & Safety Management/Employee Regulatory Change Management Contracted Action Plans Regulatory Sanctions Ethical Behavior/Code of Conduct 	<ul style="list-style-type: none"> Information Technology Data Integrity Data Security/Access Availability of Information IT Infrastructure Program Change Control Testing System Implementations Disaster Recovery/Redundancy Delegated Vendor Data Management

Risk Assessment Methodology

The Risk Assessment will result in a prioritized listing of risks and key areas of concern, which serves as the foundation for the design of the model Audit Plan.



Areas of Concern

1. Enrollment
2. Claims
3. Eligibility Data Feeds
4. Benefit Exceptions
5. Pharmacy Benefit Utilization
6. Appeals
7. Performance Guarantees
8. Medical Loss Ratio – Rebate Management
9. Billing
10. Member Communications
11. Provider Network Adequacy
12. Disease Management
13. Care Management
14. Wellness
15. Etc.

Developing a Model Audit Plan

We will leverage the Risk Assessment results to prepare a model three-year TRS Audit Plan. The Plan will be based on our professional experience working in the industry and will link directly with the Risk Assessment results.

An excerpt from an example audit plan, based on risk assessment results is provided below:

Function / Process (ordered randomly)	Comments	Timing	Level of Effort
1. Enrollment and Disenrollment	Enrollment and disenrollment reconciliation processes are understood by all to be problematic, deficient, and undergoing significant change and could limit the organization's ability to enroll and disenroll members and their dependents.	Q1	xx hrs
2. Claims	There is a pervasive lack of confidence in the integrity and fidelity of data being processed within and between applications and management of duplicate claims	Q3	xx hrs
3. Benefit Exceptions	Approval and payment of benefits not defined by the Benefit Summary creates a risk that all members are not treated equally and financial impact to the member and company are not appropriately planned for.	Q1	xx hrs
4. Appeals	Appeals at the second level, administered by the plan as fiduciary, are increasing highlighting a difference in the process used by the payer when handling the first level appeal.	Q2	xx hrs
5. Medical Loss Ratio (MLR) Rebates	Processes to track, calculate and refund rebates to active, terminated and retired employees are not well defined limiting the organizations ability to send the refund to the member correctly and timely.	Q2	xx hrs
6. Disease Management	Reports tracking the improved compliance of members evaluated in the disease management program are not specific to TRS populations.	Q4	xx hrs

Team and Responsibilities

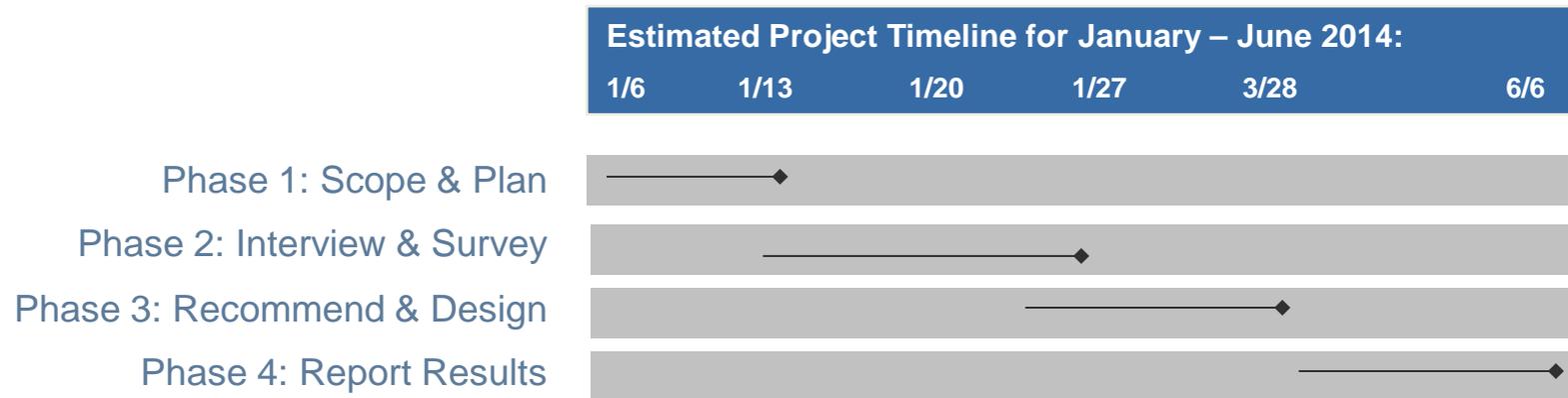
People make the difference in the success of any engagement. The team members below will work directly with TRS during this project. Should a particular area of technical emphasis arise, we will draw on the resources of our broad Health Care practice to supplement the skills of these individuals.

<p>Susan Haseley Managing Director Engagement Lead</p>	<p>Susan is a founding Managing Director in Protiviti's Dallas/Ft. Worth office with over twenty-five years of experience providing risk consulting services. Susan leads Protiviti's Global Health Life Sciences practice and has worked with industry clients across the globe. Prior to joining Protiviti, Susan spent seven years with Andersen as a partner in their Risk Consulting practice focused in Health Care. She also spent thirteen years directing the Internal Audit function for a large insurance organization and two years performing financial system implementations.</p>
<p>Gail Kinkead Associate Director Health Care Specialist</p>	<p>Gail's key competencies include compliance, operations management and account management providing focused solutions that yield quantifiable results with Medicare/Medicaid and Commercial Health Care products including pharmacy, behavioral health, disease management, dental, vision and wellness. Gail will provide overall health care operations and Internal Audit expertise related to the managed care and at risk services/products at TRS.</p>
<p>Jim Cerven Associate Director Health Care Specialist</p>	<p>Jim has designed and implemented comprehensive end-to-end quality systems to effectively measure performance of claim payment and call operations, provider networks, case installation and IT. Under his leadership, these organizations achieved significant and sustainable quality improvement in claim accuracy and call effectiveness.</p>
<p>Rene Hernandez Associate Director TRS Relationship Manager</p>	<p>Rene is an Associate Director in our Dallas office and has been with Protiviti since 2003. He has over fifteen years of external/internal audit, IT audit, SOX, and IT consulting experience. As a licensed CPA and CFSA, Rene has strong financial accounting and auditing expertise that he leverages for his financial accounting, SOX, internal audit, and risk consulting projects, specifically with financial service industry clients. Rene is also a licensed CISA, CRISC, and CITP professional and has successfully completed several IT risk assessments, IT audits, application reviews, ERP configurable control re-designs, and vendor SSAE 16 reviews. For the past two years, Rene has partnered with Amy Barrett and the TRS Internal Audit Department on various investment audits.</p>

Project Timeline

Completion of a Health Care Risk Assessment requires on-site discussions with TRS executives and staff. We recommend an initial planning activity (i.e., review of relevant financial and operational information), followed by selection of interviews. Typically, we try to arrange on-site interviews over a 3 – 5 day period if schedules allow; however, these tend to flow into the following week being conducted via telephone and/or an additional on-site visit.

The project schedule below indicates an estimated elapsed time to complete an Health Care Risk Assessment for TRS.



Appendix: Risk Assessment Methodology

Example Health Care Risk Model - Employer

ENVIRONMENT

- Competitor
- Stakeholder Expectations
- Capital Availability
- Investor Relations
- Political
- Legal
- Catastrophic Loss
- Health Care Advancements
- Health Care Reform
- Privacy Violations
- Outsourcing

ACCOUNT MANAGEMENT

- Demographic Shifts
- Concentration
- Preferences
- Discretionary Spending
- Awareness
- Merger and Acquisitions
- Disease Burden

REGULATORY AND COMPLIANCE

- Government Programs
- Medicare/Medicaid
- Federal DOL
- State Mandates
- HIPPA
- Privacy
- Accreditation
- SEC

OPERATIONS

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Product Needs Assessment • Product Benefit Review - Standard/Non-standard • Provider Network Adequacy • Underwriting • Carrier(s) Selection • Contracting/Pricing/Guarantee • Case Installation/Testing • Employee/Dependent/Retiree Communications - carrier coordination • Enrollment/Disenrollment • Eligibility Management - Employee, Dependent, Retiree • Eligibility Transactions with Carriers - Retrospective Adjustments • Claims Processing • Benefit Exceptions • Premium Billing and Collection - Employer Contribution • Premium Billing and Collection - Member | <ul style="list-style-type: none"> • Contribution • Appeals – first level/claim fiduciary • Grievance Management • Internal Member Service • Procurement • Broker Commission Processing • Vendor Contracting • Vendor Management/Delegation Oversight • Reporting (Performance/Productivity/Customer/Regulatory/MIS) • Reporting (Utilization Management, Clinical Claims Review, Case Management, Disease Management, Medication Therapy Management) • Department of Labor Regulatory (audit) Management • State Regulatory (Market Conduct Exam) Management • CMS Regulatory | <ul style="list-style-type: none"> • (Medicare) Management • Account Management • Compliance/Legal Monitoring • Operational Compliance Management • Regulatory Review/Monitoring • Internal audits • Fraud Waste and Abuse Contract Review • Management/Employee Fraud • Illegal Acts/Unauthorized Use/Abuse • Claims Litigation • Regulatory Change Management • Corrective Action Plans • Performance Guarantee Management • Human Resources • Wellness, smoking cessation, weight management |
|--|--|--|

FINANCIAL

- Banking
- Currency Exposure
- Bid Development
- Product Pricing
- Investment
- Treasury/Cash Management
- Taxation
- Financial Reporting
- Pension Fund Reporting
- Regulatory Reporting
- Tax Reporting
- Actuarial Reserve
- Reinsurance
- Debt Covenants
- Claims Payment Reconciliation

GOVERNANCE

- | | |
|---|---|
| <ul style="list-style-type: none"> • Strategy • Leadership • Organizational Culture • Budget • Goals and Objectives • Staffing • Performance Incentives • Health Care Risk Assessment | <ul style="list-style-type: none"> • Project Management • Planning • Key Performance Indicators • QI committees • Change readiness • Board Effectiveness • Succession Planning • M&A Growth Decisions |
|---|---|

REPUTATION

- | | |
|--|---|
| <ul style="list-style-type: none"> • Image & Branding • Advertising • Stakeholder Relations • Product Integrity & Safety | <ul style="list-style-type: none"> • Misrepresentations • Broker • Negative Media Coverage • Regulatory Sanctions • Ethical Behavior/Code of Conduct |
|--|---|

INFORMATION TECHNOLOGY

- Data Integrity
- Data Security/Access
- Availability of Information
- IT Infrastructure
- Program Change Control
- Testing
- System Implementations
- Disaster Recovery/Redundancy
- Delegated Vendor Data Management

TAB 4

TAB 4A

2013 COLA Summary

Committee:

Art Mata, Scot Leith, Margie Horton, Amanda Gentry, Veronica Faz, Vanessa Boston, Mike Rehling, Brian Zunker, Beckie Smith, Doug Marshall, Christi Holman, Greg Speer, Evan Lecklider, David Cook, Steve Fernandez, Lih-Jen Lan, Linda Brown

SUCCESSSES	CHALLENGES	PAYMENTS
<ul style="list-style-type: none"> The COLA was paid CORRECTLY and ON TIME 	<ul style="list-style-type: none"> Special Payments 	<ul style="list-style-type: none"> Total Paid on October 1, 2013: \$9,628,438.68
<ul style="list-style-type: none"> Senate Bill 1 appropriated funding and FTEs to help TRS implement the COLA raise. However, TRS used its existing and experienced staff to implement the legislation. 	<ul style="list-style-type: none"> Timeline 	<ul style="list-style-type: none"> Total Number of Annuitants: 184,131
		<ul style="list-style-type: none"> Average Payment: \$52.29
		<ul style="list-style-type: none"> Number of people that received max raise of \$100: 18,590

TAB 4B

AUDIT OF COST OF LIVING ADJUSTMENT (COLA)

November 2013

TRS Internal Audit Department

Business Objectives	Ensure COLA payment was processed completely and accurately and in compliance with Senate Bill 1458, Section 2 (Texas Government Code § 824.702)		
Business Risks	Inaccurate interpretation of the law	Incorrect programming codes to implement COLA requirements	Overlooked COLA payments that require special review or manual handling
Management Controls	<ul style="list-style-type: none"> Form a committee of subject matter experts (SMEs) from key business units Obtain assistance from Legal Services Obtain executive decisions as needed 	<ul style="list-style-type: none"> Programmers work closely with SMEs in developing program logic Programming codes are tested prior to execution Data validation performed by Quality Assurance Team (QA) 	<ul style="list-style-type: none"> Manual payments are supported with worksheets and received secondary reviews Special payments involving alternate payees¹ are reviewed by Legal Services as needed
Controls Tested	<ul style="list-style-type: none"> Compare committee meeting minutes with statutory requirements Obtain evidence of Legal Services' interpretations and executive management decisions 	<ul style="list-style-type: none"> Compare the program logic with statutory requirements Obtain evidence of programming tests Assess the QA data validation Test a random sample of annuitants who received COLA and those who did not 	<ul style="list-style-type: none"> Test payments calculated on the manual worksheets Test a sample of special payments made to alternate payees, including payees under Qualified Domestic Relation Orders, child support, tax levy and criminal restitution
Results	<ul style="list-style-type: none"> No exceptions noted Good documentation maintained COLA Committee composition led to successful COLA implementation 	<ul style="list-style-type: none"> No exceptions in high level programming logic review Tests ran successfully prior to execution Independent data validation performed by QA No exceptions in sample post-payment testing 	<ul style="list-style-type: none"> "Pay start" date used to determine COLA eligibility is not the effective election date for two of ten payees tested; no impact on the 2013 COLA Incorrect tax levy paid for one of 18 payees tested, no secondary review for special payment processes
Recommended Actions	None	None	<ul style="list-style-type: none"> Verify the accuracy of COLA eligibility for each 804.005 payee² with legal documents Require a secondary review on special payment processes, including tax levies
Management Responses	None	None	<ul style="list-style-type: none"> The Disbursement Team will review the effective date and complete by June 2014 A verification step has been added to the processes

Legend of Results:



Red - Significant to TRS
Yellow - Other Reportable Issue



Orange - Significant to Business Objectives
Green - Positive Finding or No Issue

¹ A participant's spouse, former spouse, or dependent who has a right to receive some or all of the participant's benefits.

² Under Section 804.005 a qualified payee may elect to begin receiving an ordered portion of a member's annuity before the member retires.



Brian K. Guthrie
Executive Director

www.trs.state.tx.us 800.223.8778 1000 Red River Street
512.542.6400 Austin, Texas 78701-2698

Amy L. Barrett, CIA, CISA, CPA
Chief Audit Executive

November 18, 2013

Audit Committee, Board of Trustees
Mr. Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the **Audit of Cost of Living Adjustment (COLA)** as included in the *Fiscal Year 2014 Audit Plan*.

The audit objectives are to assess the completeness and accuracy of the COLA calculation and provide assurance that implementation actions taken to issue COLA payments to eligible TRS annuitants are in compliance with the state statutory requirements¹.

Based on our audit results, we concluded that COLA payments made are complete, accurate, and in compliance with relevant statutes.

We identified best practices by TRS staff involved in the COLA implementation project:

- 1) The COLA Committee was chaired by an experienced team leader and the committee consisted of subject matter experts (SMEs) from various business units, which facilitated needed communication and coordination.
- 2) The Quality Assurance (QA) team of the Information Technology (IT) Division performed an independent data validation of programming changes.
- 3) The Project Management Office (PMO) provided project oversight and periodic project status reports to keep management and team members informed of implementation concerns and progress.

No significant issues were identified in the COLA implementation. We identified the following opportunities to enhance controls and mitigate risks of incorrect payments:

¹ *Texas Government Code, Section 824.702*. See **Appendix B** (pages 12-13)

- 1) The COLA eligibility for all 804.005 payees² should be verified with the imaged legal document to ensure eligibility was accurately determined.
- 2) The special payment processes³ should require a secondary review and/or control totals reconciliation to ensure payment accuracy.

Results of our procedures are presented in more detail in the **Results and Recommendations** section (pages 6-8). The audit objective, scope, methodology and conclusion are described in **Appendix A** (pages 9-10). *Texas Government Code §824.702, Cost-of-Living Adjustment* is attached in **Appendix B** (pages 11-12).

² *Texas Government Code, Section 804.005* allows an alternate payee an option to make an election to begin receiving the ordered portion of a TRS member's benefit before he/she or his/her beneficiary received a distribution. This election may be made if the member is at least 62 years of age, is eligible for service retirement without reduction and has not retired. The TRS annuity system cannot set up the 804.005 payees to be paid automatically since the member has not retired and is not in the annuity system. A manual worksheet is maintained by Benefit Accounting to manually process benefit payments for these 804.005 payees monthly.

³ Special payment processes are needed, when in some situations, benefit payments to payees require manual review and/or hand calculation, such as annuitants subjected to some Qualified Domestic Relation Orders, child support, and tax levy.

BACKGROUND

Senate Bill (SB) 1458 was passed by the 83rd Texas Legislature and became *Texas Government Code Section 824.702, Cost-of-Living Adjustment*.⁴ It requires TRS to provide a one-time, 3%, cost of living adjustment (COLA) not to exceed \$100 per month payable to annuitants with an effective retirement date or death date of members prior to September 1, 2004. Additionally, eligible annuitants must be living on the effective date of the adjustment, i.e., September 1, 2013, to receive the 2013 COLA.

TRS formed a COLA Committee to implement the COLA adjustment. The COLA Committee members consisted of implementation project team members who are SMEs from various business units, including Benefit Processing (BP), Benefit Accounting (BA), Legal Services, and Information Technology (IT) areas. This implementation project was classified as a portfolio project by the Project Management Office (PMO). A formal project charter and a project plan were created in June 2013.

The COLA Committee was chaired by a senior staff person in Benefit Accounting. The Committee Chair coordinated the implementation effort, organized committee meetings, maintained meeting minutes, oversaw implementation progress in each area, and obtained legal consultation and executive management decisions as needed. The COLA Committee members met several times between June and September to discuss the COLA implementation plan; clarify statutory requirements, issues and concerns in various application systems; and, ensure proper coordination among personnel in the IT and business units.

The project charter stated that the main activities of the committee members included the following:

- Researching and identifying who is eligible for the COLA and in what amount
- Designing and coding software programs to implement the COLA
- Communicating with members about the COLA implementation
- Testing programming code
- Implementing legislation for September payroll due October 1
- Generating necessary Net Pay Change Letters to inform annuitants of the change

The COLA implementation project consisted of four major processes:

- 1) Eligibility and COLA amounts that were determined and calculated for the majority of the annuitants programmatically, with programming logic designed according to statutory requirements
- 2) Eligibility and COLA amounts that were manually determined and calculated for a small group of “804.005 payees”, based on the data maintained on a manual worksheet

⁴ See **Appendix B** (pages 12-13)

- 3) Special payment processes that handled certain annuitants with one or more alternate payees⁵ who have a legal right to receive all or some of their benefit amounts, including the COLA increases, that required manual review and calculation of the alternate payee's share. These alternate payees include payees under Qualified Domestic Relation Orders (QDROs), child support, tax levy and criminal restitution.
- 4) Eligibility and COLA amounts that require review and/or adjustments for retirees and beneficiaries under continuous option codes or with guarantee pay periods after September 1, 2013. Some death claims with death date prior to September 1, 2013 that are received by TRS after September 1, 2013 could affect the determination of COLA eligibility and the calculation of amount that was based on member and retiree records in TRS systems on September 1, 2013.

The COLA increases were processed for the September annuity payroll and issued to eligible annuitants on October 1, 2013 as planned. Total amounts of COLA increases approximated \$9.6 million for 184,000 eligible annuitants.

⁵ An alternate payee is a participant's spouse, former spouse, dependent, or other party who has a legal right to receive some or all of the participant's benefits.

BUSINESS OBJECTIVES, RISKS, AND CONTROLS

We summarized in the table below the business objective, risks, and key management controls of implementing the COLA adjustment in compliance with the state statute.

Business Objective	Ensure COLA payment was processed completely and accurately and in compliance with Senate Bill 1458, Section 2 (<i>Texas Government Code §824.702</i>)		
Business Risks	Inaccurate interpretation of the law	Incorrect programming codes to implement COLA requirements	Overlooked COLA payments that require special review or manual handling
Management Controls	<ul style="list-style-type: none"> • Form a committee that consists of subject matter experts (SMEs) from key business units • Obtain assistance from Legal Services • Obtain executive management decisions as needed 	<ul style="list-style-type: none"> • Programmers work closely with SMEs in developing program logic • Programming codes are tested prior to execution • Data validation performed by Quality Assurance Team (QA) of IT Division 	<ul style="list-style-type: none"> • Manual payments are supported with worksheets and received secondary reviews • Special payments involving alternate payees are reviewed by Legal Services as needed
Controls Tested	<ul style="list-style-type: none"> • Compared committee meeting minutes with statute requirements • Obtained evidence of Legal Services' interpretation and executive management decisions 	<ul style="list-style-type: none"> • Compared the program logic with the statutory requirements • Obtained evidence of programming tests • Assessed the QA data validation • Tested a random sample of annuitants who received COLA and those that did not 	<ul style="list-style-type: none"> • Tested payments calculated on the manual worksheets • Tested a sample of special payments made to alternate payees, including payees under Qualified Domestic Relation Orders, child support, tax levy and criminal restitution

RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

Based on the audit test results, we determined that management controls are operating effectively to achieve the business objective of implementing the COLA payment completely and accurately and in compliance with the statutory requirements.

We observed some best practices in COLA implementation processes and did not identify any significant issues. We noted some opportunities for improving management controls to mitigate risks of incorrect payment to annuitants and the Internal Revenue Service (IRS). Best practices and recommendations are described below.

POSITIVE RESULTS

A. TRS COLA Committee

TRS promptly organized a COLA Committee consisting of SMEs from key business units, including Benefit Processing, Benefit Accounting, Legal Services, and Information Technology areas. The Committee was chaired by a senior experienced staff member who is knowledgeable of TRS annuity benefit law and regulations and has participated in legislative benefit increases in the past. The Committee met regularly. Committee meetings facilitated the COLA project team effort and needed communication and coordination among areas impacted by this legislative mandate. The Committee and its chair were key success factors in the smooth implementation of the 2013 COLA adjustment.

B. Independent Data Validation by Quality Assurance Team (QA)

Internal Audit requested the assistance of the QA team leader in performing an independent review of programming code logic and data validation. QA's participation was very helpful in identifying legislative requirements, key data fields in the annuity system and understanding the main program logic. The QA's independent review of programming code and satisfactory results of data validation provided an additional independent assurance for the COLA implementation project.

C. Project Management Office (PMO) Involvement

This COLA implementation project was classified as a portfolio project by the PMO. A formal project charter was created and a project plan developed. The PMO issued periodic project status reports to Executive Council members to keep them informed. Status reports were also available for other COLA Committee members or interested parties on TRS Intranet site.

SIGNIFICANT RESULTS⁶

No significant issues and recommendations were identified.

OTHER REPORTABLE RESULTS

1. Verify the COLA eligibility for each of the 804.005 payees⁷

As part of the post-payment testing, we tested a random sample of 10 payees from the group of 804.005 payees. The sample consisted of five payees from those who received the COLA increases and the other five from those who did not. The test objective was to determine the completeness and the accuracy of payee's COLA eligibility by verifying the effective date of these payees' election to begin receiving their share of benefit payments under Section 804.005 in the related imaged documents in the TRS Imaging System.

Benefit Accounting (BA) maintains a worksheet to manually process monthly benefit payments for 804.005 payees. This worksheet was also used to make the determination of COLA eligibility and calculate the COLA amount for eligible payees. The "pay start" date in the worksheet was used to determine the COLA eligibility for each payee.

According to Senate Bill 1458, Section 2 (*Texas Government Code* §824.702), for an alternate payee under Section 804.005, "the annuitant is eligible for the adjustment only if the effective date of the election to receive the annuity payment was on or before August 31, 2004."⁸

For two of 10 payees tested, we determined that the "pay start" dates were not the same as the effective date of payee's election for receiving benefits under Section 804.005. However, in both cases, since the effective date of the payee's election and the "pay start" dates were both prior to the COLA eligibility cutoff date (September 2004), the discrepancy did not impact both payees' eligibility for the 2013 COLA.

Recommendation

Benefit Accounting should verify the 2013 COLA eligibility for each payee in the 804.005 group by reviewing and tracking the actual effective date of their election to receive benefit payments under Section 804.005. Conducting such a review would ensure the 2013 COLA increases were processed correctly for all 804.005 payees and any future payment adjustments would be processed based on accurate data.

Management Responses

⁶ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.

⁷ Under *Texas Government Code, Section 804.005*, a qualified payee may elect to begin receiving an ordered portion of a member's annuity before the member retires.

⁸ *Texas Government Code, Section 824.702, (c) (3)*, see **Appendix B**, page 13

The Disbursement Team will research imaged files for the original 804.005 memo and recording the correct effective date for each 804.005 payment. This process should be completed by June 30, 2014.

2. Strengthen management controls in special payment processes

During our testing of special payments to alternate payees under Qualified Domestic Relation Orders (QDROs), child support, tax levy and criminal restitution, we determined that one out of 18 tax levy payments we tested was paid incorrectly to the IRS. BA personnel agreed with the conclusion and corrected the payment immediately upon notification. BA indicated that no secondary review is currently performed for special payment handling processes and no reconciliation process exists within BA that would have detected the error.

Recommendation

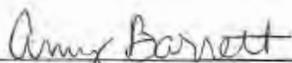
We recommend that management add a secondary review of supporting documents for the special payment processes. In addition, a control totals reconciliation process should be established. The reconciliation should ensure that the total count and amount in the alternate payee system and/or annuity system agrees with those from the special payment handling processes.

Management Responses

The Disbursement Team has implemented a verification step of all manual voucher requests. A control totals reconciliation process will be addressed with the TEAM Program.

* * * *

We appreciate TRS management and staff from Benefit Processing, Benefit Accounting, Legal Services, and Information Technology areas for their cooperation, courtesy, and professionalism extended to us during this audit.



Amy Barrett, CIA, CISA, CPA
Chief Audit Executive



Lih-Jen Lan, CIA, CPA, CISA, CISSP
Senior IT Auditor

APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted this performance audit in accordance with generally accepted government auditing standards contained in the *Government Auditing Standards* issued by the Comptroller General of the United States and the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT OBJECTIVE

The audit objectives are to assess completeness and accuracy of COLA calculation and provide assurance that implementation actions taken to issue COLA payments to eligible TRS annuitants are in compliance with the state statutory requirements.

SCOPE

The scope of the audit covered key activities of TRS COLA implementation including statutory requirements as stated in Senate Bill 1458, Section 2 (*Texas Government Code* §824.702), the COLA programming logic, COLA payments calculation, and those that required manual processes, such as 804.005 payees, and special handling for alternate payees for child support, tax levy, Qualified Domestic Relations Orders (QDROs), and criminal restitution.

We did not review the programming code changes made in the DCLM (death claims processing) system. The fieldwork testing did not cover COLA payment adjustments that might be resulting from death claims with death dates prior to September 1, 2013 but received by TRS after September 1, 2013. Such adjustments to the COLA eligibility and amount would occur after September 1, 2013 and be included in the October pay period. The data file of payment records for October pay period would not be available for data mining and analyses until mid-November.

METHODOLOGY

The audit methodology included obtaining information on management's implementation actions, gaining understanding of statutory requirements, and review and testing of management controls and key processes. To meet the audit objectives, we specifically performed the following procedures:

- Attended the COLA Committee meetings
- Reviewed the COLA adjustment requirements as stated in SB 1458, Section 2 (*Texas Government Code* §824.702)
- Mapped all option codes used in the annuity system to the statutory requirements
- Interviewed SMEs in Benefit Processing, Benefit Accounting, and Information Technology areas

- Gained an understanding of death claims related issues that could impact the COLA eligibility determination and the calculation of COLA amounts
- Reviewed the claims work processes put in place to review and adjust benefit payments when claims with death date prior to September 1, 2013 were received after September 1, 2013
- Reviewed data validation report provided by the QA team lead
- Performed a high level review of key COLA programming logic
- Observed special payment handling processes
- Used ACL (a data mining software) to calculate eligible COLA amounts for the 804,005 payees and agreed to those calculated by BA in their manual worksheets
- Used ACL to perform queries on data in the COLA Detailed Report for anomalies in data fields, such as option codes, retirement date, and death date of members and payees, that could affect the COLA eligibility and calculation
- Used ACL to target specific data fields to judgmentally select certain testing sample items
- Conducted post-payment testing on a random sample of regular COLA payments and those that were processed manually
- Reviewed the accuracy of the COLA calculation and the proper split between annuitants and alternate payees for each type of special payments
- For a selected sample tested completeness and verified the accuracy of retirement date, option code, and death date, if applicable, against the imaged source documents in the Imaging System

CONCLUSION

Based on the audit test results, we determined that management controls are operating effectively to achieve the business objective of implementing the COLA payment completely and accurately and in compliance with the statutory requirements.

We observed some best practices in COLA implementation processes and did not identify any significant issues. We noted some opportunities for improving management controls to mitigate risks of incorrect payment to annuitants and the IRS.

APPENDIX B
TEXAS GOVERNMENT CODE
Section 824.702. Cost-of-Living Adjustment

Sec. 824.702. COST-OF-LIVING ADJUSTMENT.

(a) The retirement system shall make a one-time cost-of-living adjustment payable to annuitants receiving a monthly death or retirement benefit annuity, as provided by this section.

(b) Subject to Subsections (c) and (d), to be eligible for the adjustment, a person must be, on the effective date of the adjustment and disregarding any forfeiture of benefits under Section 824.601, an annuitant eligible to receive:

- (1) a standard service or disability retirement annuity payment;
- (2) an optional service or disability retirement annuity payment as either a retiree or beneficiary;
- (3) an annuity payment under Section 824.402(a)(3) or (4);
- (4) an annuity payment under Section 824.502; or
- (5) an alternate payee annuity payment under Section 804.005.

(c) If the annuitant:

- (1) is a retiree, or is a beneficiary under an optional retirement payment plan, to be eligible for the adjustment under this section:
 - (A) the annuitant must be living on the effective date of the adjustment; and
 - (B) the effective date of the retirement of the member of the Teacher Retirement System of Texas must have been on or before August 31, 2004;
- (2) is a beneficiary under Section 824.402(a)(3) or (4) or 824.502, to be eligible for the adjustment:
 - (A) the annuitant must be living on the effective date of the adjustment; and
 - (B) the date of death of the member of the retirement system must have been on or before August 31, 2004; or
- (3) is an alternate payee under Section 804.005, the annuitant is eligible for the adjustment only if the effective date of the election to receive the annuity payment was on or before August 31, 2004.

- (d) An adjustment made under this section does not apply to payments under:
- (1) Section 824.203(d), relating to retirees who receive a standard service retirement annuity in an amount fixed by statute;
 - (2) Section 824.304(a), relating to disability retirees with less than 10 years of service credit;
 - (3) Section 824.304(b)(2), relating to disability retirees who receive a disability annuity in an amount fixed by statute;
 - (4) Section 824.404(a), relating to active member survivor beneficiaries who receive a survivor annuity in an amount fixed by statute;
 - (5) Section 824.501(a), relating to retiree survivor beneficiaries who receive a survivor annuity in an amount fixed by statute; or
 - (6) Section 824.804(b), relating to participants in the deferred retirement option plan with regard to payments from their deferred retirement option plan accounts.
- (e) An adjustment under this section:
- (1) must be made beginning with an annuity payable for the month of September 2013; and
 - (2) is limited to the lesser of:
 - (A) an amount equal to three percent of the monthly benefit subject to the increase; or
 - (B) \$100 a month.
- (f) The board of trustees shall determine the eligibility for and the amount of any adjustment in monthly annuities in accordance with this section.

TAB 4C



Service Purchase Overview

Purchasing service credit increases years of service, which increases the amount of the member's retirement annuity. Service credit is also an important part of determining eligibility for TRS benefits.

Eligible TRS members may purchase the following:

Withdrawn Service	Unreported Service and/or Compensation	Substitute Service	Out-of-State Service	Developmental Leave
Military Service	USERRA Service	State Sick/Personal Leave	Work Experience by a Career or Technology Teacher	Membership Waiting Period Service

2011 Legislative Changes

Bill Type	Old Cost Structure	New Cost Structure
Withdrawn	6%	8%
Out-of-State	8%	Actuarial Present Value
Unreported Service	5%	Actuarial Present Value
Developmental Leave	Contributions	Actuarial Present Value
Military	8%	No Change
USERRA	Contributions	No Change
Work Experience	Actuarial Present Value	No Change
Waiting Period	Actuarial Present Value	No Change
State Sick/Personal Leave	Actuarial Present Value	No Change



Implementation

- Revised TRS administrative rules
- Changed SSBB system program; added actuarial tables
- Revised departmental procedures and forms
- Trained staff
- Posted information and video to TRS website
- Included information in TRS News, Annual Statements, TRS Service Credit Brochure
- Targeted communications to members with unpaid bills
- Approved decision repository item to help with administrative implementation

TAB 4D

SPECIAL SERVICE BUY BACK (SSBB) AUDIT

November 22, 2013

TRS Internal Audit Department

Business Objectives	To determine eligibility, calculate billing, and apply payments accurately for members purchasing service credits.	
Business Risks	<p>Benefit Processing</p> <ul style="list-style-type: none"> Ineligible service credit is purchased SSBB billing is inaccurate or not in compliance with legislative changes to purchase cost and TRS Laws & Rules 	<p>Benefit Accounting</p> <ul style="list-style-type: none"> SSBB payments are not posted to members' accounts accurately Members do not receive credit for purchased service
Management Controls	<ul style="list-style-type: none"> Secondary review Departmental procedures Exception reports Segregation of duties System programmed to calculate costs Implementation guidelines regarding deadlines related to legislative changes are in TRS Decision Repository to ensure consistent application 	<ul style="list-style-type: none"> Exception reports Daily balancing Departmental procedures Segregation of duties Secondary review Limited system access
Controls Tested	<ul style="list-style-type: none"> Secondary review/verification System programming regarding cost calculations Exception reports Consistency of application of implementation guidelines 	<ul style="list-style-type: none"> Exception reports Segregation of duties Secondary Review Limited System access
Results	No Issues	No Issues
Recommended Actions	N/A	N/A
Management Responses	N/A	N/A

Legend of Results: **Red** - Significant to TRS **Orange** - Significant to Business Objectives
Yellow - Other Reportable Issue **Green** - Positive Finding or No Issue

November 22, 2013

Audit Committee, Board of Trustees
Mr. Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the audit of **Special Service Buy Back (SSBB)**¹, as included in the *Fiscal Year 2014 Audit Plan*. The business objectives related to the Benefit Accounting and Benefit Processing departments are to determine eligibility, calculate billing, and apply payments accurately for members purchasing service credits.

The audit objectives were to determine the following:

- Eligibility for service credit is in accordance with TRS Laws & Rules
- SSBB billing is accurate and the calculation method, tables, and implementation dates are in compliance with current legislation
- SSBB payments are accurately applied to member accounts and key process controls are working as management intended

In addition to testing performed within Benefit Accounting and Benefit Processing, this project included an assessment of system calculation changes, quality assurance and user testing that occurred within Information Technology as a result of legislative changes in 2011.

Based on our audit results, we determined that management controls are operating effectively to achieve business objectives. We did not identify any significant or reportable issues.

Results of our procedures are presented in more detail in the **Results and Recommendations** section (page 5). The audit objective, scope, methodology and conclusion are described in **Appendix A** (page 7) and **Appendix B** provides a 2011 SSBB Legislative Changes Overview table (page 9).

¹ Through **SSBB**, in addition to earning membership service credit for employment with a TRS-covered employer, eligible TRS members may purchase service credit as provided by law. See the **Background** section on the following page for more information.

BACKGROUND

Types of Service Credit Available for Purchase

In addition to earning membership service credit for employment with a TRS-covered employer, eligible TRS members may purchase the following nine types of service credit:

1. Withdrawn service (service credit previously earned, but refunded)
2. Unreported service and/or compensation, including substitute service
3. Out-of-state public school service
4. Active duty military service
5. Uniformed Services Employment & Re-employment Rights Act (USERRA) service
6. State sick and/or personal leave (purchase of excess leave time at retirement)
7. Developmental leave (time spent undergoing special training)
8. Work experience by a career or technology teacher
9. Membership waiting period service

Special service buy back purchases can be made in order to increase the total years of service used to calculate a member's retirement benefit. As a general rule, it is beneficial for the member to buy service credit as soon as possible once their eligibility is established. This ensures the lowest cost to the member and ensures that their retirement process is not delayed in the future. The Special Service Buy Back (SSBB) teams in Benefit Processing and Benefit Accounting work with members who are purchasing special service. The Benefit Processing SSBB team is responsible for determining a member's eligibility to purchase service, calculating the amount that is due for the service purchase, and issuing a bill to the member. The Benefit Accounting SSBB team oversees the posting of service credit payments to the member's account and ensures that the member receives credit for the purchased service or compensation time. In the event that a refund is needed, the Benefit Accounting SSBB team oversees the refund process.

Rate Changes to Purchase Some Types of Service Credit

In 2011, the Texas Legislature increased the cost to purchase several types of service. Effective September 1, 2011, the cost to purchase credit for out-of-state service, developmental leave, and unreported service and/or compensation (including substitute service) was changed to the *actuarial present value*² at the time of purchase. Additionally, the reinstatement fee for withdrawn service was increased from six percent to eight percent.

The statute established a two-year window in which eligible members were able to purchase the four affected types of service credit at the cost in effect prior to September 1, 2011 as long as the service purchase was paid in full or an installment agreement was entered into no later than August 31, 2013 (since this date fell on a holiday weekend, the deadline was extended to September 3, 2013).

² Generally, *actuarial present value* means that a member will make payment sufficient to fund the cost of the increased benefits the member will receive as a result of purchasing the additional credit.

If members entered into an installment agreement, all payments had to be completed timely, in accordance with the agreement. If TRS terminated the agreement for non-payment or if the member chose to terminate the agreement, the member was subject to the higher cost for any purchase after the adjusted deadline date of September 3, 2013.

The table below (excerpt from the TRS Website) shows a few examples of how the change in fee structures impacted the cost to purchase service. In preparing the **examples**³, TRS used the following assumptions, based on a *typical* TRS member:

- Age 44
- 10 years of current service credit
- Current annual salary of \$42,930

Service Credit Type	Other assumptions used in example, if applicable	Estimated costs for service credit purchased by the August 31, 2013 deadline	Estimated costs for service credit purchased after the August 31, 2013 deadline
Withdrawn service	Assumes withdrawal date in FY 1996 and withdrawal amount of \$1,551	\$3,506.82	\$4,555.29
Unreported service and/or compensation, including substitute service	Assumes salary of \$6,000 (typical substitute rate for 90 days 10+ years ago)	\$556.80	\$6,379.34
Developmental leave		\$5,599.79	\$6,379.34
Out-of-state service for persons who were TRS members on 12/31/05 and whose out-of-state service was performed before 1/1/06	Assumes a “base salary” during the first year of membership of \$24,240 (state minimum teacher salary in 2001)	\$3,955.97	\$6,379.34

Source: TRS Website

³ The above cost estimates are examples, intended for illustration only. They are not applicable to any specific member and are not binding on TRS. Service credit costs are affected by several factors, including age, number of years of TRS service credit, salary at time of purchase, as well as when service credit is purchased. These costs do not reflect additional fees for payment on an installment basis. Refer to the *TRS Service Credit brochure* for additional information regarding the requirements to purchase all types of service credit.

BUSINESS OBJECTIVES, RISKS, AND CONTROLS

For the audit of Special Service Buy Back (SSBB) we obtained information about the following business objectives, as well as the related risks and the controls management established to mitigate these risks:

TRS Department	Benefit Processing	Benefit Accounting
Business Objectives	To determine eligibility, calculate billing, and apply payments accurately for members purchasing service credits.	
Business Risks	<ul style="list-style-type: none"> • Ineligible service credit is being purchased (including fraudulent billing) • SSBB billing is inaccurate or not in compliance with legislative changes to purchase cost and TRS Laws & Rules (including fraudulent billing such as changing fee factors) 	<ul style="list-style-type: none"> • SSBB payments are not accurately posted to members' accounts, intentionally posting an overage to issue a refund and posting taxable funds as non-taxable when processing rollovers • Service credits are inaccurately applied to members' accounts, including intentional inflation of service credits.
Management Controls	<ul style="list-style-type: none"> • Secondary review/verification • Departmental procedures • Exception reports • Segregation of duties • System programmed to calculate costs • Implementation guidelines regarding deadlines related to legislative changes are in TRS Decision Repository to ensure consistent application 	<ul style="list-style-type: none"> • Exception reports • Daily balancing • Departmental procedures • Segregation of duties • Secondary review • Limited system access
Controls Tested	<ul style="list-style-type: none"> • Secondary review/verification • System programming regarding cost calculations • Exception reports • Consistency of application of implementation guidelines as described in TRS Decision Repository 	<ul style="list-style-type: none"> • Exception reports • Segregation of duties • Secondary review • Limited system access

RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

Based on our audit results, we determined that management controls are operating effectively to achieve business objectives. We did not identify any significant or reportable issues.

POSITIVE RESULTS

The following best practices were identified within the Benefit Accounting SSBB team:

- A very effective three-step training process is used to ensure adequate transfer of knowledge occurs when new staff is brought on board
- Processes used to review exception reports are well documented and evidence of regular review is maintained
- SSBB business policies and procedures are formally documented
- Segregation is maintained in daily balancing/reconciliation activity

Several instances of best practices were also found within the Benefit Processing SSBB team:

- Processes and procedures for determining eligibility for service purchase as well as calculating service bills are well documented and in a user-friendly format
- An effective secondary review process is in place to ensure that members are being accurately billed
- Management decisions regarding the implementation of statutory changes were well documented
- Implementation guidelines were consistently followed, even during the highest peak of year-end processing

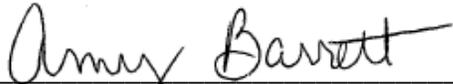
SIGNIFICANT OR OTHER REPORTABLE RESULTS⁴

No significant or other reportable issues were identified during this audit.

⁴ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.

* * * * *

We appreciate Benefit Accounting and Benefit Processing management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate the support provided by Information Technology Information System Support management and staff.



Amy Barrett, CIA, CPA
Chief Audit Executive



Ian Engler, CIA, CISA, CFE
Internal Audit Manager



Torna Miller, CGAP
Internal Auditor



Dinah Arce, CPA, CIA, CFE, CIDA
Senior Internal Auditor

APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted this performance audit in accordance with generally accepted government auditing standards contained in the *Government Auditing Standards* issued by the Comptroller General of the United States and the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors, Inc.

These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT OBJECTIVE

The audit objective was to determine whether internal controls are in place and are working effectively to achieve the business objectives stated below and mitigate significant risks to meeting those objectives.

- To determine eligibility, calculate billing, and apply payments accurately for members purchasing service credits.

SCOPE

The scope of the audit included testing of SSBB service purchases that were paid in full between August 15, 2013 and October 1, 2013.

Additionally, the scope included a review of system access privileges held by members of the Benefit Accounting SSBB team.

The audit scope did not include a review of system access privileges held by members of the Benefit Processing SSBB team as this testing was within the scope of the *Fraud Risk Identification and Prevention Controls Audit* issued in August 2013.

METHODOLOGY

Our methodology included obtaining information on management's business objectives and risks, and focused on key processes and monitoring controls that management has established to address significant risks. To meet the audit objectives, we specifically performed the following procedures:

- Examined 45 SSBB service credit purchases that were in a paid in full status. Verified that eligibility criteria were met for the member, the service, and the rate used in calculating the bill. Recalculated each bill to ensure accuracy. Identified

proof of secondary review. Verified that payments were accurately posted to the member account and that the purchased time was credited.

- Reviewed mainframe system access for the Benefit Accounting SSBB team to verify that proper segregation of duties was being followed.
- Reviewed the process used by Benefit Processing staff to test and implement programming changes performed within the SSBB mainframe system in response to legislative changes in 2011.
- Reviewed oversight and secondary review processes in place within the Benefit Processing SSBB team and the Benefit Accounting SSBB team.

CONCLUSION

Based on our audit results, we determined that management controls are operating effectively to achieve business objectives. We did not identify any significant or reportable issues.

APPENDIX B

2011 SSBB Legislative Changes Overview

Type of Special Service	Description	Requirements for Purchase Eligibility ¹	SB 1668 Change	Requirements in order to purchase service at old rate
Developmental Leave	Absence from membership service that is approved by the members TRS covered employer for study, research, travel or another purpose to improve the member's professional competence. The member must notify TRS before the leave begins.	<ul style="list-style-type: none"> • Member must have 5 years of service credited in TRS before the leave occurs. • Leave must be approved in advance by the TRS-covered employer and the "Notice of Intent to Take Developmental Leave" form must be certified by the employer and on file with TRS prior to the date the leave begins. • Member must have at least 1 year of service credit in TRS following the leave. • Member can purchase up to 2 years of developmental leave credit 	For service rendered Sept. 1, 2011 or after: <ul style="list-style-type: none"> • Cost increases to the actuarial cost of the additional benefit resulting from the credit • Service credit for leave taken on or after Sept 1, 2011 can be purchased at any time before retirement, it no longer must be purchased by the end of the first school year following the leave. 	Member may purchase credit for eligible service at old cost if: <ul style="list-style-type: none"> • Leave was completed before Sept. 1, 2011 • 1st year of re-employment in TRS-covered position after the leave occurred is either 2011-2012 or the 2012-2013 school year • Service credit is purchased before Sept 1, 2013, or an installment agreement is signed and received at TRS before that date.
Membership Waiting Period	A person was subject to a 90-day waiting period for TRS membership if the person: <ul style="list-style-type: none"> • began work for a TRS-covered employer on or after September 1, 2003, but before September 1, 2005, and • was not already a TRS member at the time that employment began. 	If, due to the waiting period, the member did not work a sufficient length of time as a TRS member in a school year to earn a year of membership service credit, the member may be eligible to purchase waiting period service credit. To do so, they must have sufficient waiting period service and TRS-covered service combined during the school year to meet the length of service requirements for a year of TRS membership service credit.	No changes	No change in costs

¹ To use purchased service credit in calculating service retirement benefits, the purchase must be completed by the effective date of retirement or by the last day of the month in which the retirement application is submitted, whichever is later. If the service credit must be purchased in order to establish eligibility to retire, the purchase must be completed by the effective date of retirement. To use purchased service credit in the calculation of a disability retirement benefit, the purchase must be completed by the effective date of retirement, by the last day of the month in which the retirement application is submitted, or within 30 days of TRS correspondence notifying the member that the disability retirement has been certified, whichever is later.

Type of Special Service	Description	Requirements for Purchase Eligibility ¹	SB 1668 Change	Requirements in order to purchase service at old rate
Military Service	Active duty in federal military service rendered in the U.S. armed forces	<ul style="list-style-type: none"> • Member must have 5 years of TRS membership service credit for actual service with a TRS-covered employer. • Can purchase up to 5 years of service credit for active duty federal military service in the U.S. armed forces. Includes voluntary, draft, and reservist ordered to active duty. • Military service terminated by a sentence of court-martial is not eligible for purchase. • Military service credit can only be established with one Texas public statewide retirement system. 	No changes	No change in costs
Out-of-State Service	Member may purchase credit for employment in public education in a state other than Texas or with a DODDS school.	<ul style="list-style-type: none"> • Member must have 5 years of TRS membership service credit • Member may purchase one year of out-of-state service credit for each year of service credit with a TRS-covered employer, up to a maximum of 15 years • Member must have at least 1 year of TRS service credit following the out-of-state service • If out-of-state service was performed while member was in the armed forces and was compensated for the service by the United States, the service is not eligible for purchase as TRS service credit. 	<p>For service rendered January 1, 2006 or after:</p> <ul style="list-style-type: none"> • Cost increases to the actuarial cost of the additional benefit resulting from the credit • No deposits for out-of-state service credit may be made before the member accumulates 5 years of credit for service in the public schools of Texas. 	<p>Member may purchase credit at old cost if:</p> <ul style="list-style-type: none"> • they were a member of TRS on December 31, 2005 • eligible service was rendered before January 1, 2006 • verification of out-of-state service is received at TRS no later than August 31, 2013 • the credit is purchased in full before Sept 1, 2013 or an installment agreement is signed and received at TRS before Sept 1, 2013

Type of Special Service	Description	Requirements for Purchase Eligibility ¹	SB 1668 Change	Requirements in order to purchase service at old rate
Sick / Personal Leave	A member may purchase one year of membership service credit for 50 days or 400 hours or more of accumulated state sick and/or personal leave that is unused as of your last day of employment before retirement.	<ul style="list-style-type: none"> • Member must have at least 10 years of TRS service credit for actual service with one or more Texas public education employers • Member must retire from a Texas public education employer • Maximum purchase of 1 year of service credit • Only 5 days of state sick and/or personal leave may be credited each year toward the 50-day or 400-hour total. • State sick and personal leave service credit may be used only for calculating benefits but cannot be used to determine eligibility for retirement. • Days or hour accumulated during DROP participation period cannot be used towards purchasing service credit. 	No changes	No change in costs
Unreported Service (including Substitute Service)	Service / Compensation creditable for eligible amounts not previously reported to TRS.	If substitute service - At least 90 days of substitute service had to be rendered during the school year.	<p>For service rendered Sept. 1, 2011 or after:</p> <ul style="list-style-type: none"> • Cost increases to the actuarial cost of the additional benefit resulting from the credit. • Member is required to pay the employee contribution to TRS-Care if unreported service was in TX public school district or charter school • For unreported service paid after August 31, 2011, member required to verify service within 5 years of when it was rendered in order for it to be creditable. • For unreported service paid before September 1, 2011, TRS must receive the required verification by August 31, 2016. • No longer mandatory to purchase unreported service after verification. 	<p>Member may purchase credit for eligible service at old cost if:</p> <ul style="list-style-type: none"> • service was rendered, earned, or paid before Sept. 1, 2011 • credit is purchased before Sept 1, 2013, or an installment agreement is signed and received at TRS before that date.

Type of Special Service	Description	Requirements for Purchase Eligibility ¹	SB 1668 Change	Requirements in order to purchase service at old rate
USERRA	Member leaves TRS covered employment for active military duty and returns to TRS covered employer.	<ul style="list-style-type: none"> • Member must leave employment with a TRS-covered employer for voluntarily or involuntarily active military duty. • Member must return to, or apply for re-employment with the same TRS-covered employer within 90 days of discharge or release from active military service. (unless delay due to illness or injury incurred in service) • USERRA service credit must be purchased within the time period applicable under federal law (generally, five years from the date of re-employment or application for re-employment). Otherwise it must be purchased as military service. 	<p>For members with military service that qualifies as USERRA service, the service may be counted toward length of service requirements for TRS benefit eligibility (but not benefit amount), even if the member does not purchase credit for the service.</p> <p>USERRA service can be counted to determine eligibility for benefits, including service or disability retirement, TRS-Care health benefits including premium level, and active member death benefits.</p>	No change in costs
Withdrawn Proportionate Service	Member has active membership in more than one Texas public statewide retirement system may be eligible to combine all of their service credit.	Has to be active member of another qualifying Texas retirement system.	<p>For service withdrawn Sept. 1, 2011 or after:</p> <p>Member required to deposit the withdrawn amount and interest plus a fee of 8% (increased from 6%) compounded annually from the date of the withdrawal to the date of redeposit. If more than one member account was withdrawn and service credit cancelled, all eligible service credit must be reinstated.</p>	<p>Member may purchase credit for eligible service at old cost if:</p> <ul style="list-style-type: none"> • TRS covered employment was terminated no later than August 31, 2011 • Refund application was filed before August 31, 2011 • Member returns to TRS covered employment or employment with another TX public retirement system no later than August 31, 2013 • Bill for reinstatement of withdrawn service is requested no later than August 31, 2013 • Payment in full is received before Sept 1, 2013, or an installment agreement is signed and received at TRS before that date.

Type of Special Service	Description	Requirements for Purchase Eligibility ¹	SB 1668 Change	Requirements in order to purchase service at old rate
Withdrawn Service	<p>Member can reinstate credit that was terminated by a refund of accumulated deposits in their TRS active account.</p> <p><u>Withdrawn service not eligible for repurchase:</u> student employment, individuals currently contributing to ORP</p>	<ul style="list-style-type: none"> Member must resume membership in TRS and pay all costs for the withdrawn service credit to TRS. (not required to be currently contributing to TRS to be eligible to reinstate withdrawn service – you simply must have an active account and account balance with TRS) 	<p>For service withdrawn Sept. 1, 2011 or after:</p> <p>Member required to deposit the withdrawn amount and interest plus a fee of 8% (increased from 6%) compounded annually from the date of the withdrawal to the date of redeposit. If more than one member account was withdrawn and service credit cancelled, all eligible service credit must be reinstated.</p>	<p>Member may purchase credit for eligible service at old cost if:</p> <ul style="list-style-type: none"> TRS covered employment was terminated no later than August 31, 2011 Refund application was filed before August 31, 2011 Member returns to TRS covered employment or employment with another TX public retirement system no later than August 31, 2013 Bill for reinstatement of withdrawn service is requested no later than August 31, 2013 Payment in full is received before Sept 1, 2013, or an installment agreement is signed and received at TRS before that date.
Work Experience	<p>A certified career or technology teacher can establish TRS service credit for the work experience that entitles you to a salary step credit as a teacher.</p>	<ul style="list-style-type: none"> Member must be a career or technology teacher Member must be entitled to salary-step credit for the work experience under Section 21.403(b) of the Texas Education Code Maximum of 2 years of service credit can be established 	No changes	No change in costs

Other Changes per SB 1668:

- A member who was ineligible to receive a refund but nevertheless obtained one from TRS will no longer be required to reinstate the refunded amounts before being eligible to receive TRS benefits on subsequent service credit.

TAB 5

TAB 5A

MEMORANDUM

TO: Audit Committee Members, TRS Board of Trustees
Brian Guthrie, Executive Director

FROM: Amy Barrett, Chief Audit Executive

SUBJECT: Overview of Internal Control Framework for Expressing an Opinion on Investment Controls

DATE: November 20, 2013

Effective for fiscal year 2014, Internal Audit changed its investment audit approach from providing assurance on specific investment programs or functions to expressing an overall opinion on the effectiveness of internal controls within the Investment Management Division (IMD) at fiscal year-end. For the purpose of expressing an overall opinion on IMD controls, Internal Audit will rely on the results of past two years' audits of IMD programs and processes as well as the interim results of quarterly control tests to be performed in fiscal year 2014.

We believe this new audit approach will make the audit process more efficient by reducing Internal Audit and IMD staff time for administrative activities such as planning, scoping meetings and detailed report reviews. Additional benefits of the new approach include providing more holistic assurance of overall IMD operations rather than providing isolated assurance on specific programs or functions.

For the controls we test as part of our audit, we will use the control framework recently issued by COSO¹. The table in **Appendix A** provides examples of controls applicable to the IMD based on the 17 COSO principles. The table in **Appendix B** summarizes the IMD controls previously tested or to be tested at different time periods during three fiscal years.

¹ COSO stands for the Committee of Sponsoring Organizations of the Treadway Commission. COSO is a joint initiative of five private sector organizations dedicated to develop frameworks and guidance on enterprise risk management, internal control and fraud deterrence. The five participating organizations are the American Accounting Association, American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), the Association of Accountants and Financial Professionals in Business (IMA) and the Institute of Internal Auditors (IIA).

Appendix A - Controls Mapped to COSO Principles

COSO Component	COSO Principle	Examples of IMD Controls
Control Environment	The organization demonstrates a commitment to integrity and ethical values	<ul style="list-style-type: none"> • Conflict of interest disclosure, including placement agent disclosure • Ethics policies
	The board of trustees demonstrates independence from management and exercises oversight of the development and performance of internal control	<ul style="list-style-type: none"> • Board approval of investment-related policies • Use of consultants
	Management establishes - with board oversight - structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives	<ul style="list-style-type: none"> • IMD organization chart • Internal Investment Committee • Delegated investing authority
	The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives	<ul style="list-style-type: none"> • IMD career path • Incentive Compensation Plan
	The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives	<ul style="list-style-type: none"> • Annual goal-setting and evaluation • 360 evaluation
Risk Assessment	The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives	<ul style="list-style-type: none"> • Target investment returns established • Asset allocation with allowable ranges
	The organization identifies risks to achieve its objectives across the entity and analyzes risks to determine how they should be managed	<ul style="list-style-type: none"> • Various risk measures, including Value at Risk (VAR) and Tracking error
	The organization considers the potential for fraud in assessing risks to the achievement of objectives	<ul style="list-style-type: none"> • TRS Trading Policy • TRS Fraud and Ethics Hotline
	The organization identifies and assesses changes that could significantly impact the system of internal control	<ul style="list-style-type: none"> • Assessment of changing economy • Identification of market dislocation • Bubble monitoring
Control Activities	The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels	<ul style="list-style-type: none"> • Segregation of duties • Approval of transactions • Trade reconciliations • Minimum credit rating of counterparties • Independent performance reporting
	The organization selects and develops general control activities over technology to support the achievement of objectives	<ul style="list-style-type: none"> • Restrictions on information technology (IT) system access • Control tests on vendor-supported IT systems

COSO Component	COSO Principle	Examples of IMD Controls
	The organization deploys control activities through policies that establish what is expected and procedures that put policies into action	<ul style="list-style-type: none"> • Investment-related policies, including Investment Policy Statement, Securities Lending Policy, Soft Dollar Policy and Proxy Voting Policy • Operating procedures
Information and Communication	The organization obtains or generates and uses relevant, quality information to support the functioning of internal control	<ul style="list-style-type: none"> • Investment performance reports • Investment risk reports
	The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control	<ul style="list-style-type: none"> • Investment Management Committee meetings • Monthly staff meetings; • Transparency reports
	The organization communicates with external parties regarding matters affecting the functioning of internal control	<ul style="list-style-type: none"> • Investment reports to legislative oversight bodies • Cost Effectiveness Measurement (CEM) studies
Monitoring Activities	The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning	<ul style="list-style-type: none"> • Weekly asset and risk exposure report • CUSUM (Cumulative Sum) signals • Compliance monitoring • Quarterly reports to Risk Management Committee
	The organization evaluates and communicates internal control deficiencies timely to those parties responsible for taking corrective action, including senior management and the board of trustees, as appropriate	<ul style="list-style-type: none"> • Daily investment compliance reports • Follow-up activities on compliance alerts • Compliance violation memo to the Board

Appendix B - IMD Controls Tested or To Be Tested in Three Fiscal Years

COSO Component	FY 14	FY 13	FY 12
Control Environment	2 nd Quarter	Complete	Complete
Risk Assessment			Complete
Control Activities:			
Securities Lending	1 st Quarter		
Commission Sharing Arrangements	1 st Quarter		
Internal Public Markets	2 nd Quarter		
Trade Management	2 nd Quarter		
Cash Securities	3 rd Quarter		
Investment Performance	3 rd Quarter		
Energy and Natural Resources	3 rd Quarter		
External Public Markets and Hedge Funds	4 th Quarter		
Strategic Asset Allocation	4 th Quarter		
Private Equity			Complete
Real Assets			Complete
Emerging Manager Program		Complete	
Tactical Asset Allocation (including Derivatives)		Complete	
Information and Communication:			
Annual Financial Statements	4 th Quarter	Complete	Complete
Board Reports	All Quarters	Complete	Complete
Management Reports			Complete
Information Systems (Bloomberg)			Complete
Monitoring Activities			
Quarterly Compliance Tests	All Quarters	Complete	Complete
State Street Compliance Monitoring	All Quarters	Complete	
Investment Accounting			Complete

TAB 5B

FIRST QUARTER INTERIM TEST RESULTS OF INVESTMENT CONTROLS

November 21, 2013

TRS Internal Audit Department

Business Objectives	Securities Lending: Generate additional income by lending securities while assuming low risk with regard to borrowers and collateral investments	Commission Sharing Arrangements: Obtain additional resources to gain access to investment-related research products and services essential for portfolio management
Business Risks	<ul style="list-style-type: none"> Counterparty risk (including borrower default) Investment risk related to cash collateral received (resulting in loss of capital) Lending agent default Non-compliance with laws, regulations, or lending agreements 	<ul style="list-style-type: none"> Policies not consistent with laws and regulations Trades driven mainly to generate soft dollars or commission sharing arrangements (CSA) credits Not capturing all credits Paying for ineligible or poor quality services
Management Controls	<ul style="list-style-type: none"> Indemnification on borrower default Credit checks on borrowers Collateral investing guidelines Minimum credit rating on lending agent Monthly monitoring calls Compliance monitoring 	<ul style="list-style-type: none"> Legal staff's involvement in policy development Annual CSA budget Approval needed prior to payment Reconciliation of CSA credits and expenditures
Controls Tested	<ul style="list-style-type: none"> Indemnification provision Credit checks on borrowers Monthly monitoring calls Reasonableness checks on lending income splits 	<ul style="list-style-type: none"> Annual CSA budget Review of CSA credits Approval for CSA expenditures Reconciliation of CSA credits and payments
Interim Results	Controls tested are operating effectively. However, securities lending income is not regularly reviewed for reasonableness.	Controls tested are operating effectively. However, the CSA budget may not be sustainable in the long term due to declining trading volume.
Recommended Actions	Perform reasonableness checks on securities lending income.	Consider other options to find long-term solutions to address revenue shortfall projections for the CSA program.
Management Responses	Management agrees with the recommendation. To monitor the reasonableness of the earnings split calculation, Investment Accounting will create a monthly securities lending income summary, including total net lending earnings, State Street earnings, TRS earnings, and earning split percentage.	Management concurs with the recommendation. IMD will work with TRS executive management to find long-term solutions to address revenue shortfall for the CSA program.

Legend of Interim Results: Red - Significant to TRS Orange - Significant to Business Objectives
Yellow - Other Reportable Issue Green - Positive Finding or No Issue

MEMORANDUM

TO: Audit Committee Members, TRS Board of Trustees
Brian Guthrie, Executive Director

FROM: Amy Barrett, Chief Audit Executive 
Hugh Ohn, Director of Investment Audit Services 

SUBJECT: **First Quarter Interim Test Results of Investment Controls**

DATE: November 21, 2013

The purpose of this memo is to report the interim results of Internal Audit's tests of Investment Management Division (IMD) controls for the first quarter of fiscal year 2014. The results of these tests are considered interim since they will be used to express the overall opinion on IMD controls at the end of the fiscal year 2014. For the control tests for the first quarter of fiscal year 2014, we selected two areas: (a) Securities Lending and (b) Soft Dollars, including the Commission Sharing Arrangements.

OVERVIEW

Securities Lending Program

Texas Government Code, Section 825.303 (*Securities Custody and Securities Lending*) authorizes TRS to hire a financial institution to lend securities under the rules adopted by the Board of Trustees (Board). TRS contracted with State Street Bank to manage its securities lending program. While State Street is responsible for managing the securities lending program for TRS, TRS management and staff are responsible for monitoring securities lending activities performed by State Street Bank. These monitoring activities include review of weekly exposure reports, monthly program reviews, monthly conference calls, and State Street's annual presentation to the Board.

Securities lending provides benefits to the financial markets and to investing organizations by providing liquidity to financial markets while generating additional income to investing organizations which lend securities. However, securities lending involves several risks, including counterparty credit/default risk, cash collateral reinvestment risk, and operational risk.

A simplified process for securities lending works as follows: The securities lending agent lends the investing organization's securities to approved borrowers in return for collateral (mostly in the form of cash). Then the securities lending agent invests this cash collateral according to TRS' investment guidelines. A portion of income generated from collateral investments is paid to the borrowers (which is called borrower rebate). The remaining income is split at an agreed-upon rate between the investing organization and the securities lending agent. For fiscal year 2013, the amount of securities lending income distributed to TRS was \$87.4 million.

**First Quarter Interim Test Results
November 21, 2013 Memorandum**

Soft Dollars (including the Commission Sharing Arrangements)

Soft dollars refer to a portion of the commission investment managers or pension funds pay to soft dollar brokers when trading securities. Soft dollars accumulated at the soft dollar brokers are used to pay for investment-related goods, services, and research. Soft dollars arrangements, including the Commission Sharing Arrangements (CSA), are authorized and operated according to the guidance under *Section 28(e) of the Securities Exchange Act of 1934*.

TRS has used soft dollars for over 25 years under the Soft Dollar Policy adopted the Board. The Board also approves the soft dollar budget as part of the TRS annual budget. For fiscal year 2014, the TRS soft dollar budget (including the CSA portion) is \$27.1 million.

TRS has been transitioning from soft dollars to the CSA since 2007. The CSA is a type of soft dollar arrangement but it is less expensive and easier to administer than soft dollars. Instead of having separate agreements with individual soft dollar brokers, TRS contracts with a CSA administrator who manages a cash account which is funded by executing brokers to pay for investment-related goods, services, and research. The TRS custodian (State Street Bank) currently administers the CSA account for TRS.

While the CSA provides valuable resources for investment managers to gain access to investment-related goods, services or research, there is a risk that they could be used for non-investment or research purposes, and thus not in compliance with regulatory rules.

FINDINGS AND RECOMMENDED ACTIONS

1. Include reasonableness checks on securities lending income as part of Investment Accounting's monitoring activities

The Securities Lending Policy states that the Chief Financial Officer is responsible for monitoring the securities lending program and providing accurate and timely accounting for the securities lending program. As part of these responsibilities, the Investment Accounting Team (which reports to the Chief Financial Officer) ensures that securities lending income is reported in TRS monthly and annual financial statements and that information on securities lending activities is disclosed in the notes to the annual financial statements. Based on Internal Audit's prior recommendation in March 2012, Investment Accounting planned to perform reasonableness checks on securities lending income received from the securities lending agent (i.e., State Street Bank). However, due to the loss of one staff, this plan was put on hold. In the past, there was an instance when State Street Bank had to adjust the securities lending income that had previously been distributed to TRS due to calculation errors. Performing reasonableness checks would strengthen monitoring of securities lending activities rather than entirely relying on the information provided by the securities lending agent.

Recommendation

We recommend that Investment Accounting include reasonableness checks on securities lending income as part of its monitoring activities.

Management's Action Plan

Management agrees with the recommendation. To monitor the reasonableness of the income split calculations performed by State Street, Investment Accounting will create a monthly securities lending income summary including total net securities lending earnings, State Street Earnings, TRS Earnings and Earnings Split percentage, beginning with the December 2013 month-end cycle. The target implementation date is January 2014.

2. Consider other funding options to address long-term CSA revenue shortfall projections

According to IMD's projections, a revenue shortfall in the CSA budget of approximately \$5 million (out of expenditure budget of \$24.7 million) was initially projected for fiscal year 2014. The fiscal year 2014 forecasted trading volume was the reason for the anticipated shortfall. To address this projected shortfall, the IMD has taken several measures, including increased commission sharing rates (which became effective November 1, 2013) and reduced anticipated research expenditures. These measures are expected to resolve the initial anticipated shortfall for 2014; however, these measures may not provide a long-term solution.

Recommendation

We recommend that the IMD work with TRS executive management to find long-term solutions to address the revenue shortfall for the CSA budget caused by declining trading volumes. Some of the options available to consider are to:

- Budget soft dollars out of hard dollars, especially for the contractual obligation expenses (such as information system support and data subscriptions)
- Continue investigating the viability of commission recapture programs for external managers

Management's Action Plan

Management concurs with the recommendation. The IMD will work with TRS executive management to find long-term solutions to address revenue shortfall for the CSA program. The target implementation date is July 2014 (as part of FY 2015 Board Budget meeting).

TAB 5C

QUARTERLY INVESTMENT TESTING
INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), WIRE TRANSFER PROCEDURES
CALENDAR QUARTER ENDED SEPTEMBER 30, 2013, EXCEPT AS NOTED

Business Objectives	1. <u>Board Reports</u> All required information is reported to the TRS Board of Trustees	2. <u>Investment Selection and Approval</u> Investments made are within delegated limits and established selection criteria	3. <u>Other (IPS, SLP, wire transfers, other reporting)</u> Risk limits are followed for other investment programs and activities	4. <u>Monitoring by Investment Compliance Specialist</u> Investment activities comply with IPS (for the three months ended October 31, 2013)
Business Risks	Board is not informed of key investment decisions and critical information	Approvals and fundings exceed delegated limits	Risks exceed Board established tolerances	Noncompliance is undetected or not timely resolved
Management Assertions	All required reports are made to the Board	Approvals and fundings are within limits and made for qualified managers	Programs are within risk limits	Investment activities comply with investment policies (proxy, securities lending, IPS)
Agreed-Upon Procedures	<ul style="list-style-type: none"> Compare Board reports to IPS requirements 	<ul style="list-style-type: none"> Vouch Internal Investment Committee (IIC) approved investments to supporting documentation Verify approval limits of new investments 	<ul style="list-style-type: none"> Validate IMD obtained reporting requirements of new managers/funds and summarized results Obtain senior management disclosures about known compliance violations Test supporting documentation for wire transfers 	<ul style="list-style-type: none"> Perform various compliance checks and monitor State Street's daily compliance reports
Test Results	<ul style="list-style-type: none"> All reporting requirements met Documentation provides support for information tested 	<ul style="list-style-type: none"> All supporting documentation exists IMD management identified and disclosed that one new investment in an Emerging Manager fund exceeded authorized limits 	<ul style="list-style-type: none"> All other requirements of the IPS, SLP, wire transfer procedures, etc. are met 	<ul style="list-style-type: none"> All requirements of investment policies met
Management Responses	None	IMD will amend closing documentation to require a reduction in TRS' commitment should closing commitment exceed policy limit	None	None

Legend: **Red** - Significant to TRS **Orange** - Significant to Business Objectives **Yellow** - Other Reportable Exception **Green** - Positive Test Result/ No Exception

November 20, 2013

Carolina de Onis, TRS Legal Counsel

We have completed the **Quarterly Investment Testing** of compliance with the requirements of the Investment Policy Statement (IPS), Securities Lending Policy (SLP), and procedures for wire transfers as included in the *Fiscal Year 2014 Audit Plan*.

We performed the procedures listed below that were agreed to by the TRS Legal Services division. These procedures include tests that supplement the current compliance monitoring procedures performed by State Street and the Senior Investment Compliance Specialist.

This agreed-upon procedures engagement was performed in accordance with generally accepted government auditing standards contained in the *Government Auditing Standards* issued by the Comptroller General of the United States.

The sufficiency of the agreed-upon procedures performed is solely the responsibility of the specified users of the report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our testing procedures and results are included in **Appendix A**. The monitoring results of the Investment Compliance Specialist are included in this report in **Appendix B**.

Internal Control Structure

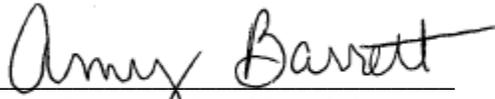
We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas tested.

Had we performed additional procedures, or had we made an examination of the system of internal control, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified below and does not extend to the internal control structure.

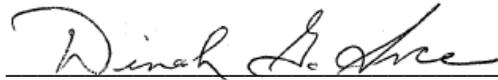
This report is intended solely for information and use by TRS management, the Board of Trustees, and oversight agencies, and is not intended to be and should not be used by anyone other than those specified parties. However, this report is a matter of public record and its distribution is not limited.

* * * * *

We express our appreciation to management and key personnel of the Investment Management Division and Investment Accounting for their cooperation and professionalism shown to us during this quarterly testing.



Amy Barrett, CIA, CPA, CISA
Chief Audit Executive



Dinah G. Arce, CIA, CPA, CFE, CIDA
Senior Auditor



Hugh Ohn, CFA, CPA, CIA, FRM
Director of Investment Audit Services

APPENDIX A

AGREED-UPON PROCEDURES AND RESULTS

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
1	1	IPS Article 1.7 - Verify that all requirements were reported to Board of Trustees	Obtain copies of all reports required to be reported to Board of Trustees and compare to reporting requirements per Investment Policy Statement (IPS)	Reports required to be reported to Board of Trustees complied with IPS.	No response required
2	2	Article 2.6 – Verify that Investment Management Division (IMD) evaluated hedge fund classification	<ul style="list-style-type: none"> • Select sample of approved investments in hedge funds and external managers • Obtain analysis indicating whether each investment is hedge fund or not. If analysis is unavailable, inconclusive, or erroneous, report that result • For any analysis requiring Board approval of classification, obtain Board minutes to verify whether approval was obtained 	Selected sample of approved investments in hedge funds and external managers. Each had analysis indicating whether investment was a hedge fund or not. No Board approval was required.	No response required
3	2	Article 2.7h – Verify funds added to previously approved investments for purposes of rebalancing or adjusting risk did not exceed 2% of associated portfolios	<ul style="list-style-type: none"> • Determine if Chief Investment Officer (CIO), Deputy CIO, or Director of External Public Markets adjusted portfolios for the purposes of rebalancing or adjusting risks • If funds added, did such additional investments or allocations exceed 2% of Hedge Fund Portfolio, External Manager Portfolio, or Other Absolute Return Portfolio (as appropriate) per investment on a monthly basis • Obtain documentation from IMD staff supporting rebalancing analytics. Report on exceptions. 	No rebalancing occurred in selected investments.	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
4	2	IPS Article 6 – Obtain evidence that new investments in emerging managers meet requirements	<p>Test sample of approved investments to verify:</p> <ul style="list-style-type: none"> • Each is independent private investment management firm with less than \$2 billion • Each has a performance track record as a firm of less than 5 years, or both • TRS commitment did not exceed 40% of fund size 	<ul style="list-style-type: none"> • Investments tested are independent private investment management firms with less than \$2 billion, or • Have a performance track record as a firm that is no more than 5 years or both. • IMD self-reported a violation in the October 2013 Quarterly Transparency Report. On October 25, 2013, TRS approved an investment of \$15,000,000 in an Emerging Manager fund. At the time of closing, the fund size was \$35,700,000 because the manager had not raised the \$50,000,000 targeted amount. This made TRS commitment 42% of the fund size, and thus exceeded the 40% maximum allowed by policy. (Note that this investment was outside of our testing period, but within the period for reporting policy violations.) 	As reported in the October 2013 Quarterly Transparency Report, due to the low materiality of this issue and the illiquidity of the investment, IMD does not plan to take action at this time. IMD will ensure that closing documentation will be amended in the future to require a reduction in the size of TRS' commitment should a fund finally close at a level that will cause TRS' commitment to be larger than 40% of the fund.
5	3	IPS Article 9.3d – Obtain evidence of IMD's examination of requirements of its securities lending agent	Confirm securities lending agent is an organization rated A- or better by a Nationally Recognized Statistical Rating Organization (NRSRO)	Reviewed the Daily Derivatives Report as of June 30, 2013 and noted that the rating for State Street was A- or better per Moody's, Fitch, and Standard and Poor's	No response required
6	2	Article 9.9 – Verify leverage used meets requirements	<ul style="list-style-type: none"> • Verify leverage was used only as authorized • Inquire whether any risk parameters were exceeded and if so, was the limit caused by leverage 	Leverage was used only as authorized and no risk parameters were exceeded.	No response required
7	2	IPS Article 11 - Verify existence of placement agent questionnaire for each new investment selected for testing and	<ul style="list-style-type: none"> • For each investment selected for testing, verify that IMD obtained responses to the questionnaire • Determine that IMD compiled 	Each investment tested had a completed questionnaire and was included in the summary report to the Board	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
		test for inclusion in summary report to Board	responses to the questionnaires and reported all results to Board at least semi-annually		
8	2	IPS Appendix B – Verify investments approved are within policy limits	<ul style="list-style-type: none"> • Select sample of approved investments and obtain tear sheet for each, observe the approved amounts are within authorized limits <ul style="list-style-type: none"> a) Initial allocation – .50% b) Additional or follow-on – 1% c) Total Manager Limits – 3% d) Total limit each manager organization – 6% • Obtain documentation from IMD staff that supports the calculations of the authorized limits • Inquire if any “Special Investment Opportunities” were made for the quarter, and if so: <ul style="list-style-type: none"> a) Obtain documentation that the Special Investment Opportunity was either a distressed situation or market dislocation b) Obtain documentation that the CIO notified the Executive Director (ED) of each Special Investment Opportunity c) Obtain documentation that CIO and ED requested comments from chairman of appropriate board committee and TRS consultants and advisers d) Verify Special Investment Opportunity did not exceed \$1 billion. e) Verify that no further investment in a special Investment Opportunity 	For the sample selected for testing, no manager or partner organization exceeded the authorized limits and documentation existed for IMD staff calculations of authorized limits. There were no Special Investment Opportunities.	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
			was made until Board reauthorized CIO's authority to designate a Special Investment Opportunity		
9	4	Compliance Report of Senior Investment Compliance Specialist (SICS) – Verify with SICS that all other policy requirements were met	Obtain the investment compliance report from the Sr. ICS of other non-compliance issues as a result of the custodian's monitoring procedures	Obtained the investment compliance report. Refer to Appendix B	Refer to Appendix B
10	3	Quarterly Disclosures – Verify all known compliance violations have been reported	Send request for disclosure to IMD management, Legal Investment staff, and CIO requesting disclosure of any known compliance violations during testing period	Obtained all disclosures from IMD management, Legal Investment staff, and CIO of any known compliance violations during testing period	No response required
11	3	Test authorizations of wire transfers – Verify wire transfers are authorized and properly supported	Obtain wire transfer reports for testing period, select sample of wire transfers, verify that supporting documentation exists for each	All wire transfers tested were properly authorized and correct amounts were wired.	No response required

Note: Testing procedures for the Investment Policy Statement (IPS), Securities Lending Policy (SLP), and wire transfers are for the activity for the quarter ending September 30, 2013.

APPENDIX B

COMPLIANCE WITH INVESTMENT AND RELATED POLICIES As of and for the three months ended October 31, 2013

Policy	Compliance Exceptions	Reportable Exceptions	Management Responses
Investment Policy Statement (IPS)	No	None	N/A
Securities Lending Policy (SLP)	No	None	N/A
Proxy Voting Policy	No	None	N/A

-  Unsatisfactory progress is being made or there have been significant delays in resolving issue.
-  Timely or satisfactory progress is being made toward resolving issue.
-  No exception or satisfactorily resolved issue.

TAB 6

TAB 6A



Brian K. Guthrie
Executive Director

www.trs.state.tx.us 800.223.8778
512.542.6400

1000 Red River Street
Austin, Texas 78701-2698

Amy L. Barrett, CIA, CPA
Chief Audit Executive

October 15, 2013

Honorable Rick Perry, Governor
Members of the Legislative Budget Board
Members of the Sunset Advisory Commission
Mr. John Keel, CPA, State Auditor
Mr. R. David Kelly, Chair, TRS Board of Trustees
Mr. Christopher Moss, Chair, TRS Board Audit Committee
Members of the Board of Trustees, Teacher Retirement System of Texas

Attached is the annual report of the Internal Audit department of the Teacher Retirement System of Texas (TRS). This report provides information on the audit plan, assurance, consulting, and advisory projects completed, and other Internal Audit activities. It also meets the annual reporting requirement of the Texas Internal Auditing Act (Government Code, Chapter 2102.009 and 2102.0091).

The work performed by TRS Internal Audit contributes toward accountability, integrity, and good management practices within TRS operations. Fiscal year 2013 projects contributed to the improvement of risk management, control, and governance processes. Internal Audit issued 7 assurance and 7 agreed-upon procedures reports, followed-up and reported quarterly on the status of all outstanding audit recommendations, as well as performed advisory services in Benefit Services, Health Care, Investment Management, Finance, Information Technology, TEAM Program initiatives, and Executive areas.

Thank you for your continued support of TRS and the important role that internal auditing serves in supporting effective risk management, control, and governance processes.

For further information about the contents of this report or to request copies of Internal Audit reports, please contact Amy Barrett at (512) 542-6559.

Sincerely,

Brian Guthrie
Executive Director

Amy L. Barrett, CIA, CPA, CISA
Chief Audit Executive

cc: Executive Council Members
Internal Audit Staff Members

Teacher Retirement System of Texas
Internal Audit Annual Report for Fiscal Year 2013

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EXECUTIVE SUMMARY

Purpose of Report

This report meets the *Texas Internal Auditing Act* requirement for state agency internal auditors to prepare and distribute an annual report (Government Code, Chapter 2102 as amended by House Bill 2485 during the 78th Legislature and House Bill 16 during the 83rd Legislature). This is the twenty-third such report prepared by TRS since the statutory requirement became effective in 1991.

The report contains information on the fiscal years 2013 and 2014 audit plans and projects completed during fiscal year 2013. The report is based on work completed during the period September 1, 2012 through August 31, 2013.

Report Format

This report consists of the executive summary and the seven parts listed below:

- Part I** Compliance with House Bill 16: Postings to Internet Website
- Part II** Internal Audit Plan for Fiscal Year 2013
- Part III** Consulting Services and Nonaudit Services Completed
- Part IV** External Quality Assurance Review
- Part V** Internal Audit Plan for Fiscal Year 2014
- Part VI** External Audit Services
- Part VII** Reporting Suspected Fraud and Abuse

Teacher Retirement System of Texas - Mission Statement

Internal Audit is strongly committed to the mission of the Teacher Retirement System.

The mission of the Teacher Retirement System of Texas is:

“Improving the retirement security of Texas educators by prudently investing and managing trust assets and delivering benefits that make a positive difference in members’ lives”

Internal Audit Strategic Plan

Our internal audit strategic plan lists the Internal Audit mission and vision statement.

The **mission** of the Internal Audit department is to provide independent, objective assurance and consulting services designed to add value and improve the organization's operations. Internal Audit helps the organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Our **vision** is to provide *trusted assurance and valued advice* to our stakeholders who include the TRS Board of Trustees, the TRS Board Audit Committee, and executive management.

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2013

Our strategic plan ensures the following objectives are met:

- Projects and other activities add value to the organization
- Plans are consistent with the organization's goals
- Activities are communicated and approved
- Resources are appropriate, sufficient, and effectively deployed to meet future needs

We achieved our significant objectives and initiatives planned for fiscal year 2013. In fiscal year 2014, we plan to review and update our strategic plan objectives and initiatives so that our plan will continue to meet the above objectives and stay aligned with TRS' strategic plan for fiscal years 2015 through 2019.

Part I: Compliance with House Bill 16: Postings to Internet Website

The Teacher Retirement System of Texas Internal Audit department complies with the Texas Internal Auditing Act, Government Code, Chapter 2102, as amended by House Bill 2485 during the 78th Legislature and as amended by House Bill 16 during the 83rd Legislature. House Bill 16 requires certain state agencies and higher education institutions to post internal audit plans and internal audit annual reports within 30 days of approval, and a summary of actions taken to address concerns, if any, that are raised by the audit plan or annual report. This section of the annual report describes the procedures TRS Internal Audit follows to comply with House Bill 16.

Part II: Audit Plan for Fiscal Year 2013

Fiscal Year 2013 Audit Plan was approved by the TRS Audit Committee and the Board of Trustees in September 2012. This section lists the fiscal year 2013 planned projects and their completion status as well as advisory or special projects completed that were not listed in the original audit plan.

Internal Audit plans its work in an effort to assist TRS in managing risk. The Audit Plan focused on the following areas: Benefit Services, Investment Management, Health Care, Finance, Information Technology, Executive, and TEAM Program initiatives.

Audits and other projects represent a broad scope of professional internal audit practice and include work in the areas of risk management, control, and governance.

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2013

Fiscal Year 2013 Internal Audit Performance Measures

The TRS Board and executive management measure the performance of Internal Audit based on established criteria. Internal Audit's performance measures relating to its targets during fiscal year 2013 and their completion status are as follows:

Target Performance	Activity	Status
1. Plan and execute employer audit activities with significant direction and input from TRS subject matter experts	Coordinated with management on the development of employer self-audit tools per the revised project approved by board in June 2013; project will continue into FY 2014	Achieved
2. Facilitate and monitor timely hiring and coordination of TEAM Independent Program Assessment (IPA) vendor	Provided coordination and support of IPA vendor for identifying, communicating, and reporting risks	Achieved
3. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests)	Completed 87% of audit and agreed-upon procedures projects in board approved revised FY 2013 Audit Plan	Achieved
4. Complete external quality assurance review with no significant compliance exceptions	Completed External Quality Assurance Review in April 2013; subsequently reported at the June 2013 Audit Committee	Achieved
5. Enhance trust through transparency and ongoing two-way communication with trustees and executive management through regular meetings, requests for audit plan input and feedback on performance	<ul style="list-style-type: none"> • CAE conducted recurring meetings with Executive Director, attended Executive Council meetings, and met with chief officers as needed • CAE met with Audit Committee Chair quarterly • CAE gathered input from trustees and executive management for the annual audit plan development 	Achieved
6. Enhance value through allocating time for special requests throughout the year	Allocated 970 hours for unscheduled projects	Achieved
7. Identify and utilize at least two internal or external resources to train and mentor audit staff in employer reporting and information technology	<ul style="list-style-type: none"> • Worked with Benefit Accounting and Legal Services staff to gain knowledge on employer reporting and related TRS Laws and Rules • Worked with external service providers on outsourced audit projects and advisory projects in Information Technology 	Achieved

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2013

Target Performance	Activity	Status
8. Systematically monitor emerging investment issues and impact to TRS via the investment compliance program	<ul style="list-style-type: none"> • Attended regular meetings with Deputy CIO and Managing Director of Risk to maintain current on investment issues • Monitored investment related issues through daily news services and discussed at weekly meetings of IA Investment compliance staff 	Achieved
9. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services	Year-to-date calculation is 78% of total available department hours (excluding uncontrollable leave) spent on direct assurance, consulting, and advisory services.	Achieved
10. Facilitate success of external financial audit by effectively providing audit support, coordinating meetings, reserving facilities, and gathering schedule requests to enable timely outcomes with no surprises	State Auditor's Office Report on the Audit of Fiscal Year 2012 Comprehensive Annual Report (CAFR) was reported to the Audit Committee in December 2012.	Achieved

Part III: Consulting Services and Nonaudit Services Completed

During fiscal year 2013, Internal Audit performed one consulting project resulting in formal recommendations to management. Internal Audit provided advisory services as listed on pages II-11 through II-12 in **Part II** of this report.

Part IV: External Quality Assurance Review

Our most recent external quality assurance review (QAR) was completed in April 2013 by representatives of the State Agency Internal Audit Forum and other public pension funds. A summary is included in this section of the report. The review concluded that the TRS Internal Audit department is in compliance with the *IIA International Standards*, *Government Auditing Standards*, and the *Texas Internal Auditing Act*. The QAR report was presented to the TRS Audit Committee in the June 2013 Audit Committee meeting.

Part V: Audit Plan for Fiscal Year 2014

The *Fiscal Year 2014 Audit Plan* is included in this section and continues to focus on risk management, control, and governance processes that support TRS mission. Interviews with trustees and risk assessment surveys of management were used to identify perceived areas of risk and potential internal audit projects. This information was combined into an overall audit plan designed to address critical risks to achieving TRS objectives while being sensitive to operational requirements.

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2013

Part VI: External Audit Services

TRS procured seven external services in fiscal year 2013 as listed in this section of the report.

Part VII: Reporting Suspected Fraud and Abuse

Since 2006, TRS has taken many actions, as listed in this section of the report, to implement the fraud detection and reporting requirements of the General Appropriations Act and the Texas Government Code. During fiscal year 2013, the TRS Risk Management and Strategic Planning department updated the fraud risk assessment information obtained from TRS divisions and departments. Internal Audit utilized this updated information in the planned fiscal year 2013 Fraud Identification and Prevention Audit to provide assurance on some of the key controls within three TRS departments.

Contact

For more information or additional copies of this report, please contact Chief Audit Executive, Amy Barrett, at (512) 542-6559.

TAB 6B

**TRS Internal Audit
Summary of Audit Recommendations Status
December 2013**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
11-306 Investments Performance Calculations and Reporting					
	Include the performance calculation methodology used by State Street in TRS written operating policies and State Street Service Agreement	Implemented	Other Reportable	8/2011	11/2013
12-403 Audit of Compensation, Payroll and Position Control					
	Develop and implement a written procedures manual for payroll	In Progress	Other Reportable	4/2013	10/2014
13-201 Health Care Administration Audit					
	Formalize procedures for non-financial contract monitoring – staff guidance	In Progress	Other Reportable	3/2014	
	Formalize procedures for non-financial contract monitoring – minor contract requirement modifications	In Progress	Other Reportable	9/2014	
	Strengthen internal processes and procedures related to plan enrollment and coverage changes	In Progress	Other Reportable	3/2014	

Significant to Business Objectives

	<ul style="list-style-type: none"> • Past <i>original</i> estimated completion date • No management action plan <u>or</u> No progress on management action plan
	<ul style="list-style-type: none"> • Past <i>original</i> estimated completion date • Progress on management action plan
	<ul style="list-style-type: none"> • <i>Original</i> estimated completion date has not changed • Progress on management action plan
	Satisfactory implementation of management action plan <u>or</u> Acceptance of risk by management
	Implementation of management action plan pending Internal Audit validation

Other Reportable

	<ul style="list-style-type: none"> • Past <i>original</i> <u>or</u> first <i>revised</i> estimated completion date • No management action plan <u>or</u> No progress on management action plan
	<ul style="list-style-type: none"> • Past <i>original</i> <u>or</u> first <i>revised</i> estimated completion date • Progress on management action plan
	<ul style="list-style-type: none"> • Within <i>original</i> <u>or</u> first <i>revised</i> estimated completion date • Progress on management action plan
	Satisfactory implementation of management action plan <u>or</u> Acceptance of risk by management

**TRS Internal Audit
Summary of Audit Recommendations Status
December 2013**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
13-102	Telephone Counseling Center Performance Measures Audit (Outsourced Audit conducted by Myers and Stauffer LC)				
	Address Average Speed to Answer (ASA) reliability issues	Implemented	Significant	5/2013	8/2013
	Evaluate service level as a more suitable measure	In Progress	Other Reportable	12/2013*	
13-305	Emerging Manager Program Audit				
	Improve fund-of-funds manager and evaluator's responsiveness to prospective emerging managers by clearly communicating TRS' expectations and ensuring timely and satisfactory closure on referrals	Implemented	Other Reportable	12/2013	11/2013
	Closely monitor the fund-of-funds manager's portfolio as well as the firm's situation	Implemented	Other Reportable	6/2014	11/2013
	Revise the Investment Policy Statement to be consistent with the fund commitment plan	Implemented	Other Reportable	10/2014	11/2013
13-602	Fraud Risk Identification and Prevention Audit				
	Benefit Accounting - Improve system access reviews to ensure access privileges remain current with job duties	In Progress	Significant	12/2013	
	Benefit Processing - Improve system access reviews to ensure access privileges remain current with job duties and are appropriately balanced between the need for cross-training staff and the need for restricted access to limit opportunity for fraud	Implemented	Significant	12/2013	9/2013
	Enhance current monitoring of reports within Benefit Processing to improve the likelihood of identifying fraudulent activities	Implemented	Other Reportable	10/2013	11/2013
	Ensure that consistent quality assurance reviews occur and broaden the sample of reviewed items within Benefit Processing	Implemented	Other Reportable	10/2013	9/2013

*Date changed from September 2016 reported in June 2013 quarterly report to reflect date evaluation will be completed and provided to executive management rather than the implementation date.

**TRS Internal Audit
Summary of Audit Recommendations Status
December 2013**

State Auditor's Office (SAO) Outstanding Recommendations

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
SAO Audit Report, April 2013, Incentive Compensation at the Teacher Retirement System, the Permanent School Fund, and the Employees Retirement System (reported at the June 2013 Audit Committee)					
	Obtain board confirmation of Incentive Compensation Plan	Implemented	Other Reportable	9/2013	9/2013

TAB 7

Teacher Retirement System of Texas
December 2013 Audit Committee Agenda Items Mapped to TRS Stoplight Report

403(b)	Accounting & Reporting Agenda Item 2	Active Health Care Sustainability Agenda Item 3	Budget	Business Continuity
Communications & External Relations	Credit	Customer Service	Employer Reporting	Ethics & Fraud Prevention
Facilities Planning	Governmental/ Association Relations & Legislation	Health Care Administration Agenda Item 3	Information Security & Confidentiality	Investment Accounting
Investment Operations Agenda Items 5A, 5B	Investment Reporting Agenda Item 5C	Legacy Information Systems	Liquidity/Leverage	Market
Open Government Agenda Items 6A, 6B, 7	Pension Benefit Administration Agenda Items 4A, 4B, 4C, 4D	Pension Funding	Purchasing & Contracts Agenda Item 3	Records Management
Regulatory, Compliance & Litigation	Retiree Health Care Funding Agenda Item 3	TEAM Program	Workforce Continuity	

Status of Fiscal Year 2014 Planned Assurance, Consulting, and Advisory Services as of November 2013

Title	Type	Status
Executive		
Electronic Records	Audit	
Fraud Investigation Procedures Development	Consulting	
Internal Ethics and Fraud Hotline Administration	Advisory	Ongoing
Meetings Participation	Advisory	Ongoing
Special Requests	Advisory	Ongoing
Finance		
Purchasing and Contract Administration	Audit	
GASB 67 and 68 Implementation Status	Consulting	
State Auditor's Office (SAO) Financial Audit Coordination	Advisory	Complete
Meetings Participation	Advisory	Ongoing
Special Requests and Surprise Inspections	Advisory	
TEAM Program		
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Ongoing
TEAM Committees Participation	Advisory	Ongoing
Pension Benefits		
Cost of Living Adjustment (COLA) Calculation	Audit	Complete
Refunds, Inactive and Escheated Accounts	Audit	
Special Service Buy Back Process	Audit	Complete
Telephone Counseling Center Follow-up	Audit	
Benefits Payment Testing for SAO Financial Audit	Audit	Complete
Semi-annual Benefits Testing	Agreed-Upon Procedures	
Employer Reporting		
TRS Employer Reporting Controls	Consulting	
Employer Self-Audit Program	Consulting	
Employer Reviews/Special Projects	Various	In Progress

Status of Fiscal Year 2014 Planned Assurance, Consulting, and Advisory Services as of November 2013

Health Care Benefits		
Health Care Governance, Risk Management, and Reporting	Consulting	
Health Care Vendor Update Meetings	Advisory	Ongoing
Health Care Vendor and Auditor Selection Observation	Advisory	
Information Technology		
Identity and Access Management, and Contractor Onboarding Process	Audit	
Information Technology (IT) Security Program Follow-up	Audit	
Emerging IT Risks: Cloud Computing and Mobile Device Security	Consulting	
University of Texas Students' Project – Best Practices and Policies for Cloud Computing and Mobile Devices	Consulting (Added)	Complete
Co-Location/Disaster Recovery Planning	Consulting	
Network Penetration Test; Security Risk Assessment Review	Advisory	
Technology Committee Meetings Attendance	Advisory	Ongoing
Investment Management		
Overall Internal Control Opinion on Investment Activities (includes periodic status reports)	Audit	In Progress
Quarterly Investment Testing	Agreed-Upon Procedures	1st Quarter Complete
Private Strategic Partner Network (SPN) Fee Calculations	Consulting	
Incentive Compensation Plan Review	Advisory	
Investment Committees Attendance	Advisory	Ongoing
Internal Audit Department		
Internal Quality Assurance Review	Advisory	
External Quality Assurance Reviews	Advisory	
Annual Internal Audit Report	Audit	Complete
Quarterly Audit Recommendations Follow-up	Audit	Ongoing
Fiscal Year 2015 Audit Plan	Advisory	
Health Care Audit Universe	Consulting	
Audit Committee Meetings Preparation	Advisory	Ongoing
Internal Audit Strategic Plan	Advisory	In Progress

Fiscal Year 2014 Internal Audit Advisory Services¹ September – November 2013

BENEFIT SERVICES
TEAM PROJECT <ul style="list-style-type: none"> • Executive Steering Committee Participation • Business Rules Committee Participation • Organizational Change Management Advisory Group Participation • Monthly meetings with TEAM Project Manager • Core Management Team: Standing Prioritization Review Meeting • Independent Program Assessment Vendor Coordination and Support • Assistance to TRS Project Management Office with identification of internal controls in the Line of Business commitments and Financial System Replacement requirements
HEALTH BENEFITS
<ul style="list-style-type: none"> • Health Plan Administrator (HPA) and Pharmacy Benefit Manager (PBM) Vendor Quarterly Update Meeting Participation • TRS-ActiveCare Request for Proposal (RFP) Meeting Participation (Non-voting)
INVESTMENTS
<ul style="list-style-type: none"> • Personal Trading Monitoring, Weekly Meetings with Legal Services, Quarterly Reporting to Executive Director • Monthly Securities Lending Update Meetings Participation • Internal Investment Committee (IIC) Attendance • Quarterly Update Meeting with IMD Managing Director of Risk • Quarterly Meeting with State Street Compliance group • Assistance with transition of the investment compliance function from Internal Audit to Legal Services • Assistance with Internal Public Markets' development of a process map for Pre-IPO investment
FINANCIAL SERVICES
<ul style="list-style-type: none"> • Coordination of State Auditor's Office on the Audit of TRS' Fiscal Year 2013 Comprehensive Annual Financial Report
EXECUTIVE
<ul style="list-style-type: none"> • State Auditor's Office Quarterly Update Meetings Coordination and Support • Hot Line Call Facilitation • Executive Requests • Social Media Advisory Committee Participation • Website Advisory Committee Participation
INFORMATION TECHNOLOGY
<ul style="list-style-type: none"> • Enterprise Security Project Team Participation

¹ Advisory Services (non-audit services) - The scope of work performed does not constitute an audit under Generally Accepted Government Auditing Standards (GAGAS).

**Internal Audit Goals and Performance Measures - Fiscal Year 2014
1st Quarter Ending November 30, 2013**

Target Performance	Activity	Status
Goal 1: Enhance Effectiveness of Internal Audit Organization		
1. Update the Internal Audit Strategic Plan, 2012-2016, and align with TRS mission and core values.	Internal Audit staff met September 20, 2013 in a facilitated meeting and developed draft goals. Internal Audit Strategic Plan for FY 2015-2019 will be finalized this fiscal year.	On Task
2. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services.	Achieved 76% for the first quarter	On Task
3. Develop and implement transition plan for the transfer of the investment compliance function from Internal Audit to Legal Services.	The investment compliance function transferred to Legal Services effective September 1, 2013. Internal Audit management provided assistance as needed during the first quarter.	Achieved
Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment		
4. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests).	Planned assurance and agreed-upon procedures projects are on schedule and assigned to staff	On Task
5. Complete internal self-assessment and report annually on Quality Assurance and Improvement Program.	Scheduled and assigned to staff	On Task
Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment and Health Care		
6. Obtain internal audit staff training and implement COSO Internal Control 2013 Integrated Framework in the Investment Management Division overall internal control opinion audit during fiscal year 2014.	The CAE and two internal audit directors received training on the COSO Internal Control 2013 Integrated Framework. This framework is being implemented in the IMD overall internal control opinion that is currently in progress.	On Task
7. Enhance staff knowledge of investment due diligence key processes by visiting one TRS asset manager.	Open – to be scheduled	On Task

**Internal Audit Goals and Performance Measures - Fiscal Year 2014
1st Quarter Ending November 30, 2013**

Goal 4: Deliver Value-Added Consulting and Advisory Activities		
8. Facilitate coordination of TEAM Independent Program Assessment (IPA) Vendor by coordinating meetings with Executive Director, Executive Steering Committee (ESC) and Core Management Team (CMT), quarterly presentations to the TRS Board of Trustees, and other contractual activities.	Coordination and support of IPA vendor is ongoing	On Task
9. Facilitate timely completion and success of State Auditor's Office (SAO) audits in fiscal year 2014 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests.	State Auditor's Office Report on the Audit of Fiscal Year 2013 Comprehensive Annual Report (CAFR) will be reported to the Audit Committee in December 2013 (see Tab 2)	Achieved
10. Coordinate with Legal Services and executive management on the development of framework for ethics and fraud investigations and implement in fiscal year 2014.	Scheduled and assigned to staff	On Task
11. Coordinate with Benefit Accounting and executive management on the development of employer self-audit program and implement in fiscal year 2014.	Continuation of project that began in fiscal year 2013; scheduled and assigned to staff	On Task
Goal 5: Enhance Participation in Professional and Peer Organizations		
12. Participate in at least two quality assurance reviews of internal audit departments in state agencies and public pension funds.	The CAE led a quality assurance review of the Employees Retirement System of Texas internal audit function. An audit manager is currently leading a quality assurance review at the Office of the Attorney General internal audit function.	On Task
13. Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SIAIF, CFA Institute) through monthly chapter meetings and engage in leadership roles in at least two of the professional organizations.	Participation in professional organizations is ongoing. The CAE is secretary for APPFA, and one audit manager is on the Board of Governors for the Austin Chapter of the IIA.	On Task

Legend: Target Status



Target not achieved

Behind in achieving target



On task to achieve target

Achieved target

Teachers Retirement System of Texas
Internal Ethics and Fraud Investigations
Incident Report Activity Summary
1/1/2010 (inception) through 11/30/2013

Time Period	Number of Calls Per Ethics and Fraud Hotline	Status
1/01/2010 – 8/31/2010	1	Resolved
9/01/2010 – 8/31/2011	2	Resolved
9/01/2011 – 11/30/2011	0	N/A
12/01/2011 – 3/31/2012	1	Resolved
4/01/2012 – 5/31/2012	0	N/A
6/01/2012 – 8/31/2012	0	N/A
9/01/2012 – 11/30/2012	1	Resolved
12/01/2012 – 3/31/2013	0	N/A
4/01/2013 – 5/31/2013	0	N/A
6/01/2013 – 8/31/2013	0	N/A
9/01/2013 – 11/30/2013	0	N/A

Time Period	Internal Investigations that Internal Audit Provided Assistance	Status
6/01/2013 – 8/31/2013	1	Resolved

Resolved – fully investigated by the Triage Team and all actions agreed to by the Triage Team have occurred.

Per the TRS Fraud and Ethics Hotline Procedures:

- The Audit Committee Chair will be kept apprised of the status of investigations and will be notified of any suspected fraud in accordance with TRS’s Fraud, Waste, and Abuse Prevention Policy.
- The Audit Committee will be provided with statistics quarterly regarding calls received, their disposition, and those resulting in identification of fraud and notification to the State Auditor’s Office hotline.
- The Audit Committee may instruct Internal Audit to perform an audit of matters relating to issues identified with the allegation in accordance with the Audit Committee Charter.
- Internal Audit will consider results of hotline calls and actions by the Triage Team in developing the annual audit plan or amendments to that plan.



2014–2018 State Strategic Plan FOR INFORMATION RESOURCES MANAGEMENT

The State Strategic Plan for Information Resource Management identifies the Top 10 Technology Priorities that will affect technology decisions in Texas government for the next five years. The Texas Department of Information Resources (DIR) developed these priorities over the past year through collaborative measures including

- convening an advisory committee of public and private industry technology professionals
- surveying CEOs, CIOs, and information resource managers (IRMs) in state agencies*
- consulting multiple stakeholders and subject-matter experts
- conducting in-depth research and analysis of top technology trends and priorities impacting both government and the private sector around the country

The nature of information technology is one of rapid advancements and constant change, which makes the role of IT in government a balancing act between citizen expectations, innovative options, efficiency measures, and budget constraints. The role of IT in the state's overall ability to deliver quality services to citizens continues to grow. With this growth comes challenging decisions on how to best prioritize agency and statewide investments in technology.

State agencies should consider each of the Top 10 Technology Priorities for its significance to agency operations and service delivery. Given the decentralized nature of IT in Texas government and the diversity of missions, some priorities may not be as relevant to some agencies as others. Each agency must make informed decisions, based on its unique business needs, to determine how these priorities align with its business goals and IT strategic plan.

Because business needs and technology vary by agency, the priorities have not been assigned a numerical ranking at the enterprise level; however, they are presented in three general groups:

- The first three priorities—Security and Privacy, Cloud Services, and Legacy Modernization—are of significant interest to state leadership as illustrated by recent legislative action.
- The next four priorities—Business Continuity, Enterprise Collaboration and Planning, IT Workforce, and Virtualization—are included as technology priorities for the first time as of this strategic planning cycle.
- The final three priorities—Data Management, Mobility, and Network—were identified in previous planning cycles and remain as priorities for Texas government.

* For the purposes of this report the term *state agencies* includes institutions of higher education unless otherwise noted.

Read the Plan

From the CIO

A welcome message from Karen Robinson, Chief Information Officer for the State of Texas.

Top 10 State IT Priorities for 2014–18

Describes the technology areas shaping Texas government, with a sample of current agency initiatives and additional resources for each priority.

- [Security and Privacy](#)
- [Cloud Services](#)
- [Legacy Modernization](#)
- [Business Continuity](#)
- [Enterprise Planning and Collaboration](#)
- [IT Workforce](#)
- [Virtualization](#)
- [Data Management](#)
- [Mobility](#)
- [Network](#)

Plan Development Process

Glossary



[Download printable version – Tagged PDF \(1.3MB\)](#)

Published Nov. 1, 2013

Internal Audit Staff Quarterly Accomplishments

- Internal Audit hosted three students from the University of Texas at Austin who completed a consulting project for their graduate audit class project. Dinah Arce was project lead and assisted the students in their research of best practices and policies on cloud computing and mobile devices. Lih-Jen Lan provided additional technical expertise. The students presented the results of their research to TRS Information Technology executive management as well as Internal Audit staff in November 2013.
- Hugh Ohn and Amy Barrett attended the Association of Public Pension Fund Auditors Conference in Orlando, Florida.
- Karen Morris and Amy Barrett attended the Institute of Internal Auditors training on implementing the 2013 Internal Controls Framework issued by the Committee of Sponsoring Organizations (COSO).
- Lih-Jen Lan attended the Security Congress 2013 conference hosted by the International Information System Security Certification Consortium (ISC)² and the TeamMate User Forum 2013.
- Jan Engler is currently leading a quality assurance review of the Office of the Attorney General of Texas internal audit function. Amy Barrett led a quality assurance review of the Employees Retirement System of Texas internal audit function.
- Jan Engler and Toma Miller were 2013 TRS Golden Apple nominees due to receiving the TRS Bushel of Fun Awards for demonstrating TRS values, and, Amy Barrett and Jan Engler were recognized for their 5 year and 10 year service awards, respectively, at the TRS Annual Awards Ceremony held in November 2013.
- Karen Morris was promoted to Director of Pension Audit Services.
- Karen Morris received the TRS Core Value accountability award as part of TRS November Core Values Campaign.
- Dinah Arce is coordinating the Austin Chapter of the Institute of Internal Auditors' Holiday Outreach to the Settlement Home for Children.
- Dinah Arce gave a presentation to the State Agency Internal Audit Forum (SAIAF) on the topic "Hosting an Internal Audit Open House."



TRS Cloud Computing & Mobile Device Consultation

Meet the Consultants

- **Mike Attanucci**



- **Chelsea Swan**



- **Bill White**



- **Master's in Professional Accounting (MPA) students at The University of Texas at Austin**

- **Currently studying Management Audit & Control with Professor Bob George, a graduate class specializing in Internal Audit methods and responsibilities**

- **Have the opportunity as students to perform a consulting project for the TRS Internal Audit practice**

What Was Our Project?

- Our consulting project for the Texas Teacher Retirement System involved researching best practices for the use of Cloud Computing and Mobile Devices in business and/or government organizations, comparing them to TRS best practices, and making any suggestions for improvement
- Our research involved studying suggested and/or implemented policies/manuals for Cloud Computing and Mobile Devices, as well as studying the risks and mitigations involved with each
- We also sent a survey to members of APPFA and SAIAF asking them to answer several questions regarding Cloud Computing and Mobile devices as well as share any written policies and guidelines they may have to use for comparison
- Lastly, we documented how we complied with each of the IIA Standards regarding consulting services

TEACHER RETIREMENT SYSTEM OF TEXAS
Internal Audit Department
November 2013

