

# **Audit Committee Meeting**

**September 2014**



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**

**September 19, 2014 – 8:00 a.m.  
TRS East Building, 5<sup>th</sup> Floor, Boardroom**

1. Approve minutes of July 11, 2014 Audit Committee meeting  
– Mr. Christopher Moss, Chair
2. Receive State Auditor's Office report on planned audit of TRS' Comprehensive Annual Financial Report for Fiscal Year 2014 – Ms. Angelica Ramirez, Mr. Michael Clayton, and Ms. Ishani Baxi, State Auditor's Office
3. Receive State Auditor's Office report on audit of TRS Incentive Compensation – Ms. Angelica Ramirez and Mr. Michael Clayton, State Auditor's Office
4. Receive Internal Audit reports
  - A. Purchasing and Contract Administration Audit – Ms. Jan Engler
  - B. Semi-Annual Testing of Benefit Payments (Agreed-Upon Procedures) – Mr. Dorvin Handrick
  - C. Fourth Quarter Test Results of Investment Controls (Strategic Asset Allocation, and Energy and Natural Resources) – Mr. Hugh Ohn; Mr. Jason Lamin, Lenox Park LLC
  - D. Overall Opinion on Investment Management Division Internal Controls – Mr. Hugh Ohn
  - E. Quarterly Investment Testing (Agreed-Upon Procedures) – Mr. Hugh Ohn
5. Receive reports on the status of prior audit and consulting recommendations
  - A. TRS Information Security Follow-Up Audit – Mr. Ron Franke and Ms. Tiffany Seaman, Myers and Stauffer LC
  - B. Status of Prior Audit and Consulting Recommendations – Ms. Amy Barrett
6. Receive reports on Quality Assurance Improvement Program (QAIP) Self-Assessment and Internal Audit Strategic Plan – Ms. Amy Barrett
  - A. QAIP Self-Assessment Report
  - B. Internal Audit Strategic Plan for Fiscal Years 2015-2019
7. Consider recommendations to the Board of Trustees – Ms. Amy Barrett
  - A. Proposed Revisions to the Internal Audit Charter
  - B. Proposed Audit Plan for Fiscal Year 2015
8. Discuss or consider Internal Audit administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, hotline usage report, 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  
July 10, 2014**

The Audit Committee of the Teacher Retirement System of Texas met on Thursday, July 10, 2014 in the 5<sup>th</sup> floor Board room. The following persons were present:

**TRS Board Members**

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

**TRS Staff**

Brian Guthrie, Executive Director  
Ken Welch, Deputy Director  
Amy Barrett, Chief Audit Executive  
Britt Harris, Chief Investment Officer  
Toma Miller, Senior Auditor, Internal Audit  
Carolina de Onís, General Counsel  
Ronnie Bounds, Assistant General Counsel  
Janet Bray, Director, Human Resources  
Chris Bailey, Classification and Compensation Specialist, Human Resources  
Mike Pia, Chief of Staff to the Chief Investment Officer, Investment Division  
Chase Basta, Deputy Chief of Staff to the Chief Investment Officer, Investment Division  
Scott Ramsower, Private Equity Investment Manager, Investment Division

Audit Committee Chair Christopher Moss called the meeting to order at 5:10 p.m. with a quorum of committee members present.

**1. APPROVE MINUTES OF JUNE 6, 2014 AUDIT COMMITTEE MEETING**

On a motion by Ms. Anita Palmer, and seconded by Mr. David Corpus, the proposed minutes of the June 6, 2014 Audit Committee meeting were approved as presented.

**2. EVALUATE THE PERFORMANCE OF THE CHIEF AUDIT EXECUTIVE AND CONSIDER A RECOMMENDATION TO THE BOARD OF TRUSTEES REGARDING THE PERFORMANCE APPRAISAL AND COMPENSATION OF THE CHIEF AUDIT EXECUTIVE**

Pursuant to sections 551.074 of the Texas Government Code, the Audit Committee adjourned into executive session to deliberate the individual evaluation, including the salary, of the Chief Audit Executive. The time was 5:11 p.m.

The Audit Committee reconvened in open meeting at 5:59 p.m.

On a motion by Ms. Sissney, the Committee recommended that the Board of Trustees approve the proposed performance appraisal of the Chief Audit Executive for fiscal year 2014. Ms. Sissney also stated that the Audit Committee would defer the consideration of any salary increase to the Board of Trustees.

The meeting adjourned at 6:00 p.m.

Approved by the Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas on the 19th day of September, 2014.

Attested by:

---

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

**TAB 2**



# **Audit Committee Meeting Agenda**

## **Financial Statement Audit of the Teacher Retirement System**

### **For the Fiscal Year Ended August 31, 2014**

#### **INTRODUCTION AND AUDIT TEAM MEMBERS**

State Auditor's Office Audit Team:

- Angelica M. Ramirez, CPA (Audit Manager)
- Michael O. Clayton, CPA, CISA, CFE, CIDA, Project Manager
- Ishani Baxi, CIDA, Assistant Project Manager
- New and returning team members

#### **PURPOSE AND SCOPE OF THE AUDIT**

- Issue an opinion on the Teacher Retirement System's fiscal year 2014 financial statements in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, and the financial reporting requirements issued by the Governmental Accounting Standards Board.

#### **REPORTING TIME LINE**

- Independent auditor's report (opinion on the financial statements) – November 14, 2014 (estimated).
- Report on internal controls and on compliance and other matters (required for audits performed in accordance with generally accepted government auditing standards) – November 2014.
- Report to the Legislative Audit Committee – November 2014.

#### **ADMINISTRATIVE AND OTHER MATTERS**

- Audit work will be conducted in two phases; interim work July 7 – August 29, and substantive work September 29 – November 14.
- Auditors will coordinate their work through the internal audit liaison but will still have direct access to records, employees, and external service providers.
- Internal Audit will provide direct assistance through the performance of selected audit procedures as agreed upon between the State Auditor's Office and Internal Audit.
- The State Auditor's Office is independent to conduct the audit of the System's fiscal year 2014 financial statements. The State Auditor's Office conducts all projects in an environment of full independence; that is, free of any personal, external, or organizational impairment.

#### **Current Status of the Project**

- Auditors have completed the planning phase of the audit
- Auditors have begun testing census data at the entities selected for testing of census data for this year's financial statement audit

TAB 3



**John Keel, CPA**  
**State Auditor**

An Audit Report on

**Incentive Compensation at the  
Teacher Retirement System, the  
Permanent School Fund, the  
General Land Office, and the  
Employees Retirement System**

May 2014

Report No. 14-033



An Audit Report on

# ***Incentive Compensation at the Teacher Retirement System, the Permanent School Fund, the General Land Office, and the Employees Retirement System***

SAO Report No. 14-033  
May 2014

## ***Overall Conclusion***

Through their incentive compensation plans for plan year 2013, the Teacher Retirement System (TRS), the Permanent School Fund (PSF) of the Texas Education Agency, and the General Land Office made incentive compensation awards to employees in accordance with their policies and procedures. The Employees Retirement System (ERS) did not always award incentive compensation appropriately because it did not always award incentive compensation in accordance with its policies and procedures.

### **Incentive Compensation for Plan Year 2013**

TRS, the PSF, ERS, and GLO awarded a total of \$9,665,385 in incentive compensation to 210 employees through their incentive compensation plans for plan year 2013. Specifically:

- TRS awarded \$5,489,499 to 111 employees.
- The PSF awarded \$838,838 to 35 employees.
- GLO awarded \$259,747 to 3 employees.
- ERS awarded \$3,077,301 to 61 employees.

In addition, the PSF, GLO, and ERS should strengthen their incentive compensation plans by formally approving those plans prior to the start of the plan performance period. The commissioner of education approved the PSF incentive compensation plan after the performance period had begun, and the ERS board of trustees did not formally approve the ERS incentive compensation plan prior to the beginning of the plan year. GLO did not provide evidence of the formal approval of its incentive compensation plan during this audit.

Auditors communicated other, less significant issues separately to TRS, the PSF, ERS, and GLO management in writing.

## ***Summary of Management's Response***

Management of the PSF, ERS, and GLO agreed with the recommendations in this report. However, auditors have included a follow-up comment to address some of the information in the management response from ERS (see Chapter 4). This report did not address any recommendations to TRS.

## ***Summary of Information Technology Review***

Auditors tested access controls over spreadsheets containing incentive compensation calculations at TRS, the PSF, GLO, and ERS and concluded that access controls at all four entities were adequate.

---

*This audit was conducted in accordance with Texas Government Code, Section 321.0132.*

*For more information regarding this report, please contact Angelica Ramirez, Audit Manager, or John Keel, State Auditor, at (512) 936-9500.*

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

The objective of this audit was to determine whether incentive compensation at TRS, the PSF, GLO, and ERS was calculated and paid in accordance with their policies and procedures.

The scope of this audit covered incentive compensation plan years ending September 30, 2013, at TRS; July 31, 2013, at the PSF; June 30, 2013, at GLO; and August 31, 2013, at ERS.

The audit methodology included collecting information and documentation from the audited entities; reviewing incentive compensation plans, policies, and procedures, and other guidance related to incentive compensation; and analyzing and evaluating data and the results of tests. Using professional judgment, auditors selected a sample of incentive compensation payments at TRS, ERS, and the PSF. Auditors tested the entire population of incentive compensation payments at GLO. Auditors verified that recipients tested were eligible to receive incentive compensation payments, that data inputs used in calculations were correct, and that payment amounts were calculated correctly based on the terms of the incentive compensation plans. As noted above, auditors also tested access controls at the audited entities.

# Contents

## ***Detailed Results***

---

Chapter 1	
TRS Awarded Incentive Compensation in Accordance With Its Policies and Procedures .....	1
Chapter 2	
The PSF Awarded Incentive Compensation in Accordance With Its Policies and Procedures .....	4
Chapter 3	
GLO Awarded Incentive Compensation in Accordance With Its Policies and Procedures .....	8
Chapter 4	
ERS Did Not Always Award Incentive Compensation in Accordance With Its Policies and Procedures .....	10

## ***Appendices***

---

Appendix 1	
Objective, Scope, and Methodology .....	15
Appendix 2	
ERS Incentive Compensation Plan Excerpts Regarding Executive Director Discretion.....	18
Appendix 3	
ERS Memos Regarding Inclusion of Legal and Investment Operations Staff in Its Incentive Compensation Plan.....	19

# Detailed Results

Chapter 1

## **TRS Awarded Incentive Compensation in Accordance With Its Policies and Procedures**

---

### **The TRS Incentive Compensation Plan**

TRS calculates investment returns for its incentive compensation plan on a net-of-fees-paid-to-external-managers basis.

Source: *Pure View Report*, State Street Global Services.

The qualitative (discretionary, non-performance-based) portion of the TRS incentive compensation payment calculation represents 20 percent of the incentive compensation payment for each eligible employee.

The Teacher Retirement System (TRS) awarded incentive compensation for its plan year ended September 30, 2013, in accordance with its policies and procedures.

TRS awarded a total of \$5,489,499 in incentive compensation to 111 employees.<sup>1</sup> TRS awarded the most incentive compensation to its chief investment officer, who received \$264,240 payable over a two-year period. That \$264,240 represented 5 percent of the \$5,489,499 in total incentive compensation that TRS awarded.

The TRS incentive compensation plan is based on a combination of investment performance and qualitative performance. The investment performance component compares investment performance with benchmarks and the performance of other large public funds. The qualitative performance component assesses performance in a variety of areas such as ethics, decision making and judgment, and analytical skills.

The TRS incentive compensation plan measures investment performance on both a one-year basis and a three-year basis. For the year ended September 30, 2013, TRS investments generated a positive return of 0.25 percent (25 basis points) over the preceding three-year period and a positive return of 0.94 percent (94 basis points) over the preceding one-year period. TRS's incentive compensation plan weights the three-year return twice as much as the one-year return. TRS met its goals for both the one-year and three-year periods; therefore, this triggered the awarding of incentive compensation.

---

<sup>1</sup> As of January 31, 2014, TRS had paid employees \$2,744,749 of the \$5,489,499 it awarded; \$2,744,750 was due to be paid in 2015.

Table 1 shows the positions eligible to earn incentive compensation in the TRS plan and the incentive compensation award range for each position for the 2013 plan year.

Table 1

TRS Incentive Compensation Awards for Plan Year 2013	
Eligible Position	Incentive Compensation Award Range (rounded to the nearest dollar) <sup>a</sup>
Chief Investment Officer	\$264,240
Deputy Director Investment Officer	\$161,847
Investment Fund Director	\$188,620
Portfolio Manager V	\$31,819 to \$165,682
Chief Trader II	No employee in this position was eligible for incentive compensation in plan year 2013
Portfolio Manager IV - Director	\$20,698 to \$116,489
Chief Trader I	\$88,290
Director V	\$99,625
Portfolio Manager IV - Manager	\$96,923
Portfolio Manager III	\$12,474 to \$91,994
Trader II	\$36,790 to \$46,484
Portfolio Manager II	\$44,960 to \$53,170
Portfolio Manager I	\$52,627 to \$66,476
Trader I (more than 4 years of experience)	\$26,439 to \$29,089
Investment Analyst IV	\$21,521 to \$57,379
Investment Analyst III	\$16,880 to \$36,444
Financial Analyst IV (Team Leader)	\$26,588 to \$34,993
Trader I (1-3 years of experience)	No employee in this position was eligible for incentive compensation in plan year 2013
Director IV	\$41,437
Director III	\$38,444
Director II	\$32,280
Director I	No employee in this position was eligible for incentive compensation in plan year 2013
Investment Analyst II	\$3,158 to \$21,527
Accountant VII	\$16,004 to \$21,213
Systems Analyst VI	\$19,301 to \$27,522
Program Specialist VII	No employee in this position was eligible for incentive compensation in plan year 2013
Accountant VI	\$12,229
Investment Analyst I (more than 4 years of experience)	\$7,630 to \$9,091
Financial Analyst III	\$8,610

TRS Incentive Compensation Awards for Plan Year 2013	
Eligible Position	Incentive Compensation Award Range (rounded to the nearest dollar) <sup>a</sup>
Program Specialist VI	\$12,244 to \$14,241
Systems Analyst V	No employee in this position was eligible for incentive compensation in plan year 2013
Investment Analyst I (1-3 years of experience)	\$6,909
Accountant V	No employee in this position was eligible for incentive compensation in plan year 2013
Accountant IV	No employee in this position was eligible for incentive compensation in plan year 2013
Accountant III	No employee in this position was eligible for incentive compensation in plan year 2013
Accountant II	No employee in this position was eligible for incentive compensation in plan year 2013
Executive Assistant III	No employee in this position was eligible for incentive compensation in plan year 2013
Financial Analyst II	\$3,800 to \$8,860
Financial Analyst I	No employee in this position was eligible for incentive compensation in plan year 2013
Training Specialist IV	\$5,890
Systems Analyst IV	No employee in this position was eligible for incentive compensation in plan year 2013
Systems Analyst III	No employee in this position was eligible for incentive compensation in plan year 2013
Program Specialist V	No employee in this position was eligible for incentive compensation in plan year 2013
Program Specialist IV	No employee in this position was eligible for incentive compensation in plan year 2013
Program Specialist III	\$6,078 to \$7,262
Admin Assistant V	\$1,083
Admin Assistant IV	\$1,103
Admin Assistant III	No employee in this position was eligible for incentive compensation in plan year 2013
Admin Assistant II	No employee in this position was eligible for incentive compensation in plan year 2013
Executive Assistant I	\$1,095 to \$1,379
Executive Assistant II	\$1,201 to \$1,249
Program Specialist II	No employee in this position was eligible for incentive compensation in plan year 2013
Program Specialist I	No employee in this position was eligible for incentive compensation in plan year 2013
<sup>a</sup> A single amount is presented when only one individual was in the position for plan year 2013; a range of amounts is presented when multiple individuals were in the position for plan year 2013.	

Source: TRS.

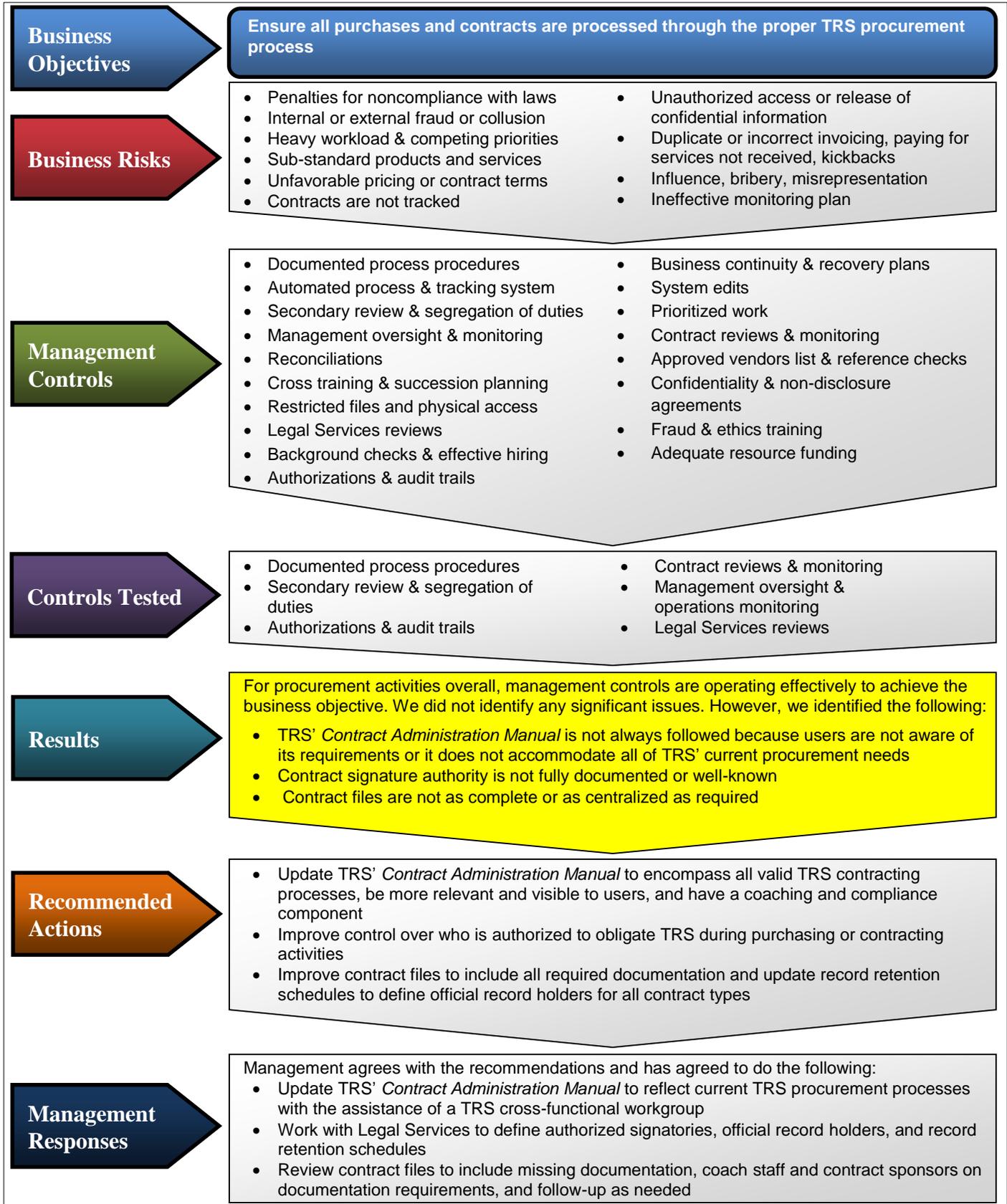
**TAB 4**

**TAB 4A**

# PURCHASING AND CONTRACT ADMINISTRATION AUDIT

September 2014

TRS Internal Audit Department



Legend of Results:

- |               |                          |               |                                      |
|---------------|--------------------------|---------------|--------------------------------------|
| <b>Red</b>    | - Significant to TRS     | <b>Orange</b> | - Significant to Business Objectives |
| <b>Yellow</b> | - Other Reportable Issue | <b>Green</b>  | - Positive Finding or No Issue       |

September 17, 2014

Audit Committee, Board of Trustees  
Brian Guthrie, Executive Director

## EXECUTIVE SUMMARY

We have completed the audit of **Purchasing and Contract Administration**<sup>1</sup>, as included in the *Fiscal Year 2014 Audit Plan*. The business objective related to the Purchasing and Contract Administration (Purchasing) Department is to ensure all administrative purchases and contracts, including related payments, are authorized and processed in accordance with TRS policy and applicable law, rule, and/or process.

Based on our audit results, we determined that overall management controls for TRS' procurement activities are operating effectively to achieve the business objective. We did not identify any significant issues. However, we identified some instances where TRS' *Contract Administration Manual (CAM)*, was not always followed because users are not aware of its requirements or the *CAM* does not accommodate TRS' current procurement needs.

For example, we identified nine instances out of 24 contracts tested where either 1) an existing vendor was used to obtain another type of service that was not explicitly included in the original contract, or 2) contracts were extended beyond the optional renewal periods, in some cases multiple times, without going through a new competitive selection process.

Another contract from our sample was procured with no competitive selection process because it was stated as proprietary in nature and paid for by a vendor. In total, these ten contracts ranged from investment consultant type contracts to facilities maintenance and remodeling contracts.

Opportunities to improve control over who is authorized to obligate TRS during purchasing or contracting activities were also identified. TRS

Fiduciary principles of prudence generally require that a benefit plan trustee employ competitive procedures when acquiring goods and services for the plan. Thus, it is the policy of TRS that no contract with TRS involving the acquisition, purchase or lease of goods and services by TRS may be awarded without a competitive selection process, except when otherwise required by TRS' fiduciary duties, or as provided in other applicable law or policy.

In the absence of any specific noncompetitive process permitted by applicable law or policy, the Executive Director must approve in writing the use of a non-competitive process for awarding a contract.

Source: *TRS Contract Administration Manual*

<sup>1</sup> This procurement audit included administrative purchases and contracts, as well as Commission Sharing Arrangement (CSA) and soft dollar expenditures but did not include any TRS investment deal contracts.

signature authority delegation has not been fully documented and as a result, one contract we tested was signed by an employee who was not explicitly authorized to sign a contract for TRS under the circumstances at that time. Another contract was signed by an individual without signature authority.

In addition, we found that for most contracts tested, the electronic contract files, which are the official contract files, do not consistently contain all the required documents.

During the course of the audit, other matters unrelated to the audit scope involving soft dollar purchase procedures and maintenance of investment deal contract files came to our attention. As permitted by audit standards, we will issue a separate side issue memo to management for their consideration.

Results of our procedures are presented in more detail in the **Results and Recommendations** section (page 6). The audit objective, scope, methodology and conclusion are described in **Appendix A** (page 12).

## **BACKGROUND**

### **Contract Administration Policy (Excerpt)<sup>2</sup>**

#### **A. General Policy**

TRS is a public pension fund created pursuant to Article XVI, section 67 of the Texas Constitution and chapters 821 – 825 of the Government Code. TRS is also the trustee of statutory health benefit programs it administers for the benefit of TRS participants under specific provisions of the Insurance Code.

Texas law imposes fiduciary duties on the retirement system. Fiduciary principles of prudence generally require that a benefit plan trustee employ competitive procedures when acquiring goods and services for the plan. Thus, it is the policy of TRS that no contract with TRS involving the acquisition, purchase or lease of goods and services by TRS may be awarded without a competitive selection process, except when otherwise required by TRS's fiduciary duties, or as provided in other applicable law or policy. In the absence of any specific noncompetitive process permitted by applicable law or policy, the Executive Director must approve in writing the use of a non-competitive process for awarding a contract. Nothing in this policy, however, requires the use of competitive bidding where it is prohibited by law.

Soft dollar expenditures are incidental to investment transactions involving plan assets held in trust for the exclusive benefit of plan participants and must comply with fiduciary principles and the Soft Dollar Policy adopted by the TRS Board of Trustees.

Notwithstanding any other law, under Texas Government Code 825.103(d), TRS has exclusive authority over the purchase of goods and services using money other than money appropriated from the general revenue fund, including specifically money from trusts under the administration of the retirement system.

In the event TRS utilizes funds appropriated from the General Revenue Fund to pay for goods or services, TRS will follow Texas Comptroller of Public Accounts (CPA) rules and procedures relating to the acquisition of goods and services for the program to the extent that compliance is not inconsistent with applicable law or fiduciary requirements.

Otherwise, TRS may use CPA rules and procedures as a guideline in purchasing goods and services unless law, fiduciary duty or the best interest of TRS as determined by the Board or Executive Director requires otherwise. TRS in no way delegates any authority to CPA over any assets of any trust fund for which TRS is trustee.

---

<sup>2</sup> References to contracts or purchases of goods and services stated above do not include those with a total dollar value of \$5,000 or less. This dollar amount is the statewide non-competitive procurement threshold.

## B. Applicability

Unless expressly excluded, this policy and the procedures contained in this manual apply to all procurements by TRS (above the non-competitive dollar threshold of \$5,000 added for clarification), including:

- Purchases of goods and services and contract workforce
- Applicable acquisitions through soft dollar arrangements
- Interagency and intergovernmental agreements
- Leases to acquire goods and services
- Amendments, modifications and renewals of contracts or agreements
- All other agreements that are intended to be legally binding on TRS
- Procurements conducted by and/or procurement obligations made by TRS but paid by outside vendors, including the master custodian are subject to this policy
- Procurements utilizing mixed funds, funds from sources subject to the contract policy and funds from sources that are not subject to this policy

Contracts reviewed and authorized prior to the adoption of this policy shall remain in full force and effect; however, any modification or extension of such contracts shall be reviewed and authorized in accordance with this policy.

### **This policy does not apply to:**

- Acquisition of specific investments
- Selection of brokers
- Agreements regarding the administration of benefits pertaining to individual participant accounts
- Agreements in settlement of litigation or claims
- Utilities such as telephone service, electricity, water and wastewater
- External managers who manage assets for TRS
- Agents for taxes and similar investment related services in foreign jurisdictions and other such contracts the Executive Director, Deputy Director or Purchasing Manager determine are impractical to make subject to this policy

Procurements conducted and paid by outside vendors, including the master custodian, on behalf of TRS are subject to the procurement policy and procedures of the outside vendor or master custodian and are not subject to TRS policy and procedures contained in this manual.

*Source: Excerpt from the TRS Contract Administration Manual (CAM) - February 2010*

## BUSINESS OBJECTIVES, RISKS, AND CONTROLS

For the audit of Purchasing and Contract Administration, we obtained information about the following business objective, as well as the related risks and the controls management established to mitigate these risks:

<b>Business Objective</b>	Ensure all administrative purchases and contracts, including related payments, are authorized and processed in accordance with TRS policy and applicable law, rule, and/or process.	
<b>Business Risks</b>	<ul style="list-style-type: none"> <li>• Penalties for noncompliance with laws</li> <li>• Ineffective monitoring plan</li> <li>• Heavy workload and competitive priorities</li> <li>• Sub-standard products and services</li> <li>• Unfavorable pricing or contract terms</li> </ul>	<ul style="list-style-type: none"> <li>• Unauthorized access or release of confidential information</li> <li>• Contracts not tracked</li> <li>• Influence, bribery, misrepresentation</li> <li>• Internal or external fraud or collusion</li> <li>• Duplicate or incorrect invoicing, paying for services not received, kickbacks</li> </ul>
<b>Management Controls</b>	<ul style="list-style-type: none"> <li>• Documented process procedures</li> <li>• Automated process and tracking system</li> <li>• Secondary review and segregation of duties</li> <li>• Management oversight and operations monitoring</li> <li>• Reconciliations</li> <li>• Cross-training and succession planning</li> <li>• Restricted files and physical access</li> <li>• Legal Services reviews</li> <li>• Background checks and effective hiring</li> </ul>	<ul style="list-style-type: none"> <li>• System edits</li> <li>• Business continuity and recovery plans</li> <li>• Prioritized work</li> <li>• Contract reviews and monitoring</li> <li>• Approved vendors list and reference checks</li> <li>• Confidentiality and nondisclosure agreements</li> <li>• Fraud and ethics training</li> <li>• Adequate resource funding</li> <li>• Authorizations and audit trails</li> </ul>
<b>Controls Tested</b>	<ul style="list-style-type: none"> <li>• Documented process procedures</li> <li>• Secondary review and segregation of duties</li> <li>• Authorizations and audit trails</li> </ul>	<ul style="list-style-type: none"> <li>• Contract reviews and monitoring</li> <li>• Management oversight and operations monitoring</li> <li>• Legal Services reviews</li> </ul>

# RESULTS AND RECOMMENDATIONS

## POSITIVE RESULTS

TRS Purchasing and Contract Administration (Purchasing) Department management and staff collectively have long-time procurement experience, are knowledgeable of State purchasing requirements, maintain multiple purchaser certifications, and consistently support TRS purchasing efforts in a professional and expert manner.

The Purchasing Department has numerous tools and user training programs that they anticipate using to improve the procurement process. Implementation of these tools has been delayed due to unexpected turnover at all levels of the Purchasing Department causing management and staff to focus efforts on rebuilding the department for the last couple of years. Contracting efforts for the TEAM initiative have also had a significant resource impact on the purchasing and contracting team. Now that the department is fully staffed, they plan to begin implementing these new initiatives.

## SIGNIFICANT RESULTS<sup>3</sup>

No significant issues and recommendations were identified.

## OTHER REPORTABLE RESULTS

- 1. TRS' *Contract Administration Manual* should encompass all valid TRS contracting processes, be more relevant and visible to users, and have a coaching and compliance component**

During the audit, we identified some instances where TRS' *Contract Administration Manual (CAM)*, was not always followed because users are not aware of its requirements or the *CAM* does not accommodate TRS' current procurement needs.

For example, we identified nine instances out of 24 contracts tested where either 1) an existing vendor was used to obtain another type of service that was not explicitly included in the original contract, or 2) contracts were extended beyond the optional renewal periods, in some cases multiple times, without going through a new competitive selection process.

Another contract from our sample was procured with no competitive selection process because it was stated as proprietary in nature and paid for by a vendor. In total, these ten contracts ranged from investment consultant type contracts to facilities maintenance and remodeling contracts.

---

<sup>3</sup> 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.

For the four investment consultant contracts tested, whose annual payments collectively total \$3,525,000, TRS initially acquired these consultant services as a result of a competitive selection process (one consultant contract beginning in 2002 and three consultant contracts beginning in 2005) but when the contract renewal options were exhausted and the contracts were due to expire, at the Board's direction, these four contracts were extended through August 2011.

At the end of the contract extension in 2011, the Investment Management Division evaluated the existing consultants, were satisfied with their performance, and recommended to the Board that the four contracts be renewed. As is within TRS' authority, TRS did not undergo a new competitive selection process and negotiated new contracts with each of the four investment consultants that extend through August 2016 with a renewal option not to exceed two years, thereby, possibly extending the four contracts through August 2018.

Testing also identified a building remodeling contract that was initiated for \$100,000 in October 2007 where, after exhausting three optional one-year renewals, the contract was extended four more times using emergency extensions (with no signed emergency justification). The last extension occurred in May 2014 bringing accumulated payments over the course of the contracting period to approximately \$768,000.

A result of not using a competitive selection process is that other vendors, including HUB vendors<sup>4</sup>, may not be provided an opportunity to be included in a competitive selection process.

## **Recommendation**

TRS' *Contract Administration Manual* should encompass all valid TRS contracting processes, be more relevant and visible to users, and have a coaching and compliance component. Specifically, TRS management should consider implementing changes in the following areas:

### **A. TRS' Contract Administration Manual Revision:**

- Coordinate a workgroup consisting of individuals across various TRS departments that are knowledgeable and who are routine users of the contracting process. Working under the leadership and guidance of purchasing management, workgroup participants should assist in development of formal procedures for their particular contracting process.
- Ensure competitive selection process for all areas is well-defined and that new procedures are as inclusive of the various procurement processes as possible to limit the need for exceptions.

---

<sup>4</sup> Historically Underutilized Business (HUB) – In accordance with 34 Texas Administration Code, Section 20.13, each state agency shall make a good faith effort to utilize HUBs in contracts for construction, services, (including professional and consulting services) and commodities purchases.  
Source: <http://www.window.state.tx.us/procurement/prog/hub/>

- Ensure that the procedures include a clear process for documenting the justification and approval of all exceptions in the rare occasions when they are needed.
- B. Procurement Coaching and Compliance Monitoring Component:
- Coach all contract sponsors, or their designees, and anyone involved in procurement at TRS, including the Board, to participate in the contracting process.
  - Include coaching on procurement fiduciary responsibility, discuss with fiduciary counsel to identify a range of processes that meets TRS' fiduciary obligation.
  - Monitor for compliance with approved *CAM* requirements and follow-up and/or escalate noncompliance in a timely manner.
- C. Update or develop Purchasing Department written procedures to match current and new processes.

### Management Responses

TRS management agrees with the recommendations.

- A. TRS' *Contract Administration Manual (CAM)* revised February, 2010 is out of date and does not accurately reflect current TRS procurement processes.

Specifically, we will:

- i.) Work to revise the *CAM* with input from a cross-functional workgroup. Our goal for completing the revision of the *CAM* is September 30, 2015.
- ii.) Ensure the competitive selection process is well defined and that new procedures are as inclusive of the various procurement processes as possible to limit the need for exceptions. We will also work to document and clearly define procurement processes unique to TRS that result from TRS' procurement and contracting exemptions.
- iii.) We will ensure (1) a process exists to document the reasons for source selection for exempted purchases and contracts, and (2) a justification and approval process is defined when exceptions are made to a competitive selection process. These processes shall be submitted for executive management approval.

- B. Procurement coaching and compliance monitoring are important elements of a good procurement and contracting program.

Specifically, we will:

- i.) Coach all contract sponsors, or their designees, and anyone involved in procurement at TRS, including the Board, to participate in the contracting process.
- ii.) Include coaching on procurement fiduciary responsibility, we will discuss with fiduciary counsel to identify a range of processes that meet TRS' fiduciary obligation and review the options identified to make

recommendations to TRS executive management for approval. Our goal for completion is December 31, 2015.

- iii.) Monitor for compliance with approved *CAM* requirements. Create escalation paths to address noncompliance by September 30, 2015.

C. The Purchasing and Contracts Department has written procedures for the expense and contracts systems; however these have not been updated recently.

Specifically we will:

- i.) Revise and develop department procedures for all current processes by October 31, 2015.

## **2. Improve control over who is authorized to obligate TRS during purchasing or contracting activities**

TRS contract signature authority delegation is not clearly documented, and as a result, one contract we tested was signed by an individual who was not explicitly authorized to sign a contract for TRS under the existing circumstances. Another contract was signed by an individual without signature authority.

If employees are not clear on the precise circumstances in which they are authorized to financially and contractually obligate TRS, they may think they are acting within their authority when they are not. In addition, a risk exists that TRS could become involved in litigation over a disputed contract that was signed by an individual not specifically authorized to financially obligate TRS.

### **Recommendation**

Financial Services management should work with Legal Services to clearly document which individuals have contract signature authority and under what circumstances. A master document containing all signature authority information should be maintained in an electronic central repository, quickly updated when changes occur, and easily assessable to all TRS management and purchasing staff as a reference tool.

### **Management Responses**

Management agrees with this recommendation. We will develop a list of the types of TRS contracts. Using this list, we will work with Legal Services to define authorized signatories, official record holders, and records retention schedules. Our goal for completion of this task is February 28, 2015.

### **3. Improve central contract files to include all necessary documentation and update record retention schedules to define official record holders for all contract types**

Even though TRS' *Contract Administration Manual* designates that the Purchasing Department will maintain the central contract file and all associated documents in an electronic central repository, during our testing we found that the central contract files were often missing required documents and contained multiple copies of other documents. In some cases, the only copy of the contract was held by the contract sponsors instead of being imaged into the central contract file. According to TRS record retention guidelines, contract sponsors should only maintain a *convenience copy* of the contract and all official record copies should be sent to the Purchasing Department to be retained in the central contract file.

#### **Recommendation**

Financial Services management should ensure that central contract files include all required documentation and update TRS record retention schedules to define official record holders for all contracts and related documentation. Management should consider taking the following actions:

- Update central contract files to contain the required items listed in TRS' *Contract Administration Manual*, where possible.
- Train purchasing staff and contract sponsors on what documents are required to be retained in the central contract file.
- Implement an escalation process to ensure required documentation is being provided and implement a process to minimize duplication of imaged documents.
- Update TRS record retention schedules to clearly define who the official record holders are for all contracts and related documentation.

#### **Management Responses**

Management agrees with the recommendations, with the exception of implementing a process to minimize duplication of imaged documents in which case acceptance of the risk is more appropriate.

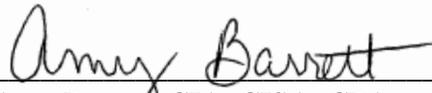
Specifically, we will:

- i.) Review contract files for required items and attempt to include missing documentation during Contract Administration Coordinator reviews. We will implement this change immediately.
- ii.) Coach purchasing staff and contract sponsors on the documents required to be retained in the central contract file. Documentation checklists currently exist and the Purchasing and Contracts staff are knowledgeable; however, we will also make this information available to agency staff and include it on the intranet. Our goal for completion is December 31, 2014.

- iii.) Implement a follow-up process to ensure required documentation is being provided. Our goal for completion is December 31, 2014.
- iv.) Work with Legal Services to define authorized signatories, official record holders, and records retention schedules. Our goal for completion is February 28, 2015.

\* \* \* \* \*

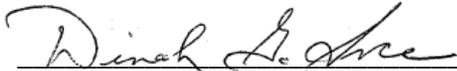
We appreciate Financial Services and Investment Management Division management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate support provided by Legal Services and Information Technology Departments, as well as executive management.



Amy Barrett, CIA, CISA, CPA  
Chief Audit Executive



Jan Engler, CIA, CISA, CFE  
Audit Manager/Project Manager



Dinah Arce, CIA, CPA, CFE, CIDA  
Senior Auditor/Assistant Project Manager



Toma Miller, CGAP  
Senior Auditor



Art Mata, CEBS, CPM  
Internal Audit Consultant

## 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.

- The business objective related to the Purchasing and Contract Administration Department is to ensure all administrative purchases and contracts, including related payments, are authorized and processed in accordance with TRS policy and applicable law, rule, and/or process.

#### SCOPE

This Procurement and Contract Administration audit included administrative purchases and contracts as well as commission sharing arrangement (CSA) and soft dollar expenditures, but did not include any TRS investment deal contracts.

#### METHODOLOGY

Our methodology included obtaining information on management's business objective 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:

- Developed and updated process flowcharts
- Conducted interviews with management and key staff members
- Reviewed written process procedures as well as the *TRS Contract Administration Manual*, *State of Texas Procurement Manual*, and the *State of Texas Contract Management Guide*
- Performed testing on a judgmental selection of procurements in existence during FY2013 and FY2014
- Analyzed user system access authorization and capabilities to applicable automated systems as well as the use and safeguarding of TRS procurement cards

## **CONCLUSION**

Based on our audit results, we determined that overall management controls for TRS' procurement activities are operating effectively to achieve the business objective. We did not identify any significant issues. However, we identified some instances where TRS' *Contract Administration Manual (CAM)* was not always followed because users are not always aware of its requirements or the *CAM* does not accommodate TRS' current procurement needs.

We also identified opportunities to improve control over who is authorized to obligate TRS during purchasing or contracting activities. In addition, we found that for most contracts tested, the electronic contract files, which are the official contract files, do not consistently contain all the required documents.

During the course of the audit, other matters unrelated to the audit scope involving soft dollar purchase procedures and maintenance of investment deal contract files came to our attention. As permitted by audit standards, we will issue a separate side issue memo to management for their consideration.

**TAB 4B**

# SEMI-ANNUAL TESTING OF BENEFIT PAYMENTS

JANUARY 2014 – JUNE 2014

TRS Internal Audit Department

<b>Business Objectives</b>	To deliver retirement and related benefits authorized by law for members and their beneficiaries.		
<b>Business Risks</b>	<b>Fraud / Errors</b> Benefit payments could be incorrect or fraudulent in these areas: <ul style="list-style-type: none"> <li>• Payments to recent retirees</li> <li>• Benefit payments with an expiration date</li> </ul>	<b>Eligibility</b> TRS members could retire with full benefits without meeting Rule of 80 or minimum requirements	<b>Manual Voucher Payments</b> Manual voucher payments could be processed incorrectly or without proper authorization
<b>Management Assertions</b>	All benefit payments are valid	All retirees who received annuity benefit payments are eligible	All manually processed voucher payments are valid
<b>Agreed-upon Procedures</b>	Matched benefit payments to supporting documents in two areas: 1. Recent retiree benefit recalculations 2. Benefit payment expiration dates	3. Recalculated Rule of 80 or minimum requirements for all new normal-age service retirements during the testing period	4. Matched 60 randomly selected manually processed voucher payments to supporting documentation
<b>Test Results</b>	One recent retiree's annuity was miscalculated due to the wrong highest year's salary included resulting in underpayment of \$16.22 per month	No Exceptions	The beneficiary share of an annuity back-payment amount was miscalculated due to improper handling of an ERS insurance adjustment resulting in an underpayment of \$14.02 for each of the three beneficiaries
<b>Management Responses</b>	Management agrees with the test results and is taking corrective actions including correcting the annuity amount, paying the difference in underpayments already issued, and training staff	N/A	Management agrees with the test results and is taking corrective actions including issuing amount owed to beneficiaries and training staff

Legend of Results: **Red** - Significant to TRS  
**Yellow** - Other Reportable Exception

**Orange** - Significant to Business Objectives  
**Green** - Positive Test Result/No Exception

August 28, 2014

Don Green, Chief Financial Officer  
Marianne Woods Wiley, Chief Benefit Officer  
Betsey Jones, Director, Health Care Policy and Administration

We have completed the second testing period for the **Semi-Annual Testing of Benefit Payments** as included in the *Fiscal Year 2014 Audit Plan*.

We performed the procedures listed below that were agreed to by management of Benefit Services, Health and Insurance Benefits, and the Financial Division. These procedures included four data-mining tests designed to identify anomalies in benefit payments during the current testing period and possible deviations from management's benefit processing controls.

For this testing period, the tests performed included testing gross payment amounts made to recent retirees, manual benefit payments, normal age retirement criteria, and expiry date testing for five or ten year guaranteed period payments, disability retirement payment calculations for retirees with less than ten years of service, and expiration dates greater than 50 years. There were two exceptions noted as a result of the test procedures performed. The detailed procedures and results of our testing are explained in **Appendix A**.

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.

### **Internal Control Structure**

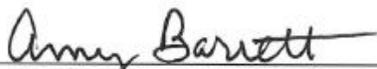
We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas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

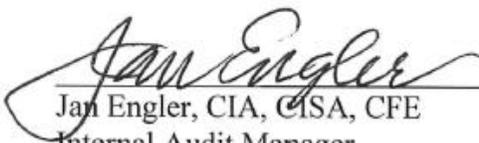
\* \* \* \* \*

We express our appreciation to management and key personnel of Information Technology, Benefit Services, Health and Insurance Benefits, and the Financial Division for their cooperation and professionalism shown to us during the testing.

  
\_\_\_\_\_  
Amy Barrett, CIA, CPA, CISA  
Chief Audit Executive

  
\_\_\_\_\_  
Dorvin Handrick, CISA, CDP  
Senior IT Auditor

  
\_\_\_\_\_  
Tom Miller, CGAP  
Senior Internal Auditor

  
\_\_\_\_\_  
Jan Engler, CIA, CISA, CFE  
Internal Audit Manager

  
\_\_\_\_\_  
Lih-Jen Lan, CIA, CPA, CISA, CISSP  
IT Audit Manager

## APPENDIX A

### AGREED UPON PROCEDURES AND RESULTS

1. Test Purpose: Test that gross annuity payments to recent retirees (December 2013 or later retirements) from January to June 2014 are calculated accurately.

Test Description: Query the *January to June 2014 Benefit Payments Data File* for all gross annuity payments that were related to recent member retirements and randomly select three service retirement sample items and two disability retirement sample items from each month for a total of 30 sample items. Recalculate the gross payment amount as follows: The annuitant's standard annuity payment is first recalculated based on the member's number of years of service and the average salary amount at the time of retirement and agreed to the supporting documentation in the TRS *Imaging System*. If applicable, recalculate the gross annuity payment amount using the annuity payment option adjustment factor(s) selected by the member per the supporting documentation in the TRS *Imaging System*.

Test Results: All 30 gross annuity payments to recent retirees from January to June 2014 were recalculated and traced to supporting documentation. One exception was noted where the gross annuity payment amount for a recent disability retiree was miscalculated because the wrong highest year's salary was used resulting in an underpayment of \$16.22 per month.

Management Response: Benefit Processing agrees with the exception. One of the higher salaries that should have been used in the calculation of the annuity was a salary from early years and inadvertently overlooked due to human error. The retiree's gross annuity amount is being changed to the correct amount and the annuitant will be paid the difference of the underpayments already issued. Additionally, since this is an uncommon scenario, a reminder was sent to staff to continually be vigilant of these situations to avoid such errors in the future.

2. Test Purpose: Test that the expiration date to stop the annuity payment timely is properly recorded in the system.

Test Description: Test the expiration date accuracy for a sample of annuity payments from January to June 2014 for the three groups described below. Agree the recorded expiration date to the auditor's calculation based on the imaged documents maintained in the TRS *Imaging System*. Each test is described as follows:

- a. Expiration date of guaranteed-period annuity options retirement
  - i.) For guaranteed-period (5-year and 10-year) annuity options that TRS is paying the beneficiary because the retiree was deceased before the guaranteed period ended, obtain all records with an expiration date that is greater than the retirement date plus the guaranteed period. Agree these records to supporting documentation indicating the expiration date.

- ii.) Obtain all records where the payment status is active but there is no expiration date. Trace these records to the supporting documentation.

b. Expiration date of disability retirement with less than ten years of service

The disabled retiree with less than ten years of service should receive a standard benefit amount of \$150 per month for the shortest period of the retiree's disability period, retiree's life, or total number of creditable service months.

- i.) Obtain all records with a retiree death date but payment status is still active. Trace to the supporting documentation.
- ii.) Obtain all records that the gross payment amount is not the standard amount of \$150 and report differences.
- iii.) Obtain all records where the expiration date has expired but the payment status is still active. Trace to the supporting documentation.
- iv.) Obtain all records where the member was not the payee. Trace to the supporting documentation.
- v.) Obtain all records where the expiration date is greater than the retirement date plus years of member service. Select five random samples from each monthly data file to test by adding the number of creditable service months, based on the imaged documents in the TRS *Imaging System*, to the retirement date and comparing that number with the expiration date in the retirement system. Agree sample items to supporting documentation.

c. Expiration date is longer than 50 years from the date of current payment record.

Obtain items from all payment records with an expiration date that is more than 50 years from each data file from January to June 2014 that have not been previously tested. Recalculate and agree the recorded expiration date to the supporting documentation.

Test Results:

a. Expiration date of guaranteed-period annuity options retirement

- i. No exceptions were noted where the expiration date was greater than the retirement date plus the guaranteed period.
- ii. All 51 unique sample items of records, with an active payment status but no expiration date, were traced to the supporting documentation. No exceptions were noted.

b. Expiration date of disability retirement with less than ten years of service

No exceptions were noted.

c. Expiration date is beyond 50 years from current payment records

The recalculated expiration date for the two records identified agreed to the recorded expiration date in the supporting documentation. No exceptions were noted.

3. Test Purpose: Test for normal-age service retirement benefits from January to June 2014 that do not meet the Rule of 80 with at least five years of service or the minimum retirement age of 65 with at least five years of service.

Test Description: Query the *January to June 2014 Benefit Payments Data File* for all payments that were related to normal-age service retirement benefits since December 2013. All proportionate retirements, early-age retirements, and disability retirements are excluded. The annuitant's retirement age is calculated based on the year and month of the member's retirement date and birth date in the annuity system records. All records were recalculated by the auditor according to the stated criteria using the automated audit software.

Test Results: All normal-age service retirement benefits met the requirements of Rule of 80 with at least five years of service or with the minimum retirement age of 65 and at least five years of service. No exceptions were noted.

4. Test Purpose: Test that manual voucher payments are properly authorized and supported.

Test Description: Select a random sample of ten manual voucher payments per month from the *January to June 2014 Benefit Payments Data File*. Trace and agree these manual voucher payments to the supporting documents maintained in the *TRS Imaging System*.

Test Results: We randomly selected 60 manual voucher payments to test. These test samples included 17 premium refunds, nine annuity pop-ups, 11 qualified domestic relations order (QDRO) related payments, five payments re-issued due to returned payments, six retiree requests to re-issue payment, six payments re-issued due to retiree/beneficiary death, and six other related manual payments. All payments were traced and agreed to the supporting documents. One exception was noted in our sample testing. The exception occurred when the beneficiary share of an annuity back-payment amount was miscalculated due to the handling of an ERS insurance adjustment during the processing of a manual claims payment. The exception resulted in an underpayment of \$14.02 for each of the three joint beneficiaries.

Management Response: Benefit Processing agrees with the exception and will issue \$14.02 that is owed to each of the three beneficiaries affected. One of the three beneficiaries received their portion of the reissued payment and the other two have yet to be paid. Additionally, training of staff will be conducted to remind them of procedure whenever this rare scenario occurs.

**TAB 4C**

# FOURTH QUARTER TEST RESULTS OF INVESTMENT CONTROLS

September 3, 2014

## TRS Internal Audit Department

<b>Business Objectives</b>	<p><b>Strategic Asset Allocation (SAA):</b> Establish permissible asset classes, asset allocation targets, and performance benchmarks to reasonably achieve the long-term actuarial rate of return adopted by the Board of Trustees</p>	<p><b>Energy and Natural Resources (ENR):</b> Invest in energy- and natural resource-related sectors throughout the value chain and capital structure to generate excess return while providing protection from inflation</p>
<b>Business Risks</b>	<ul style="list-style-type: none"> <li>Funding risk (i.e., Fund becomes actuarially unsound, requiring aggressive asset allocations and/or higher contributions from State and/or members)</li> <li>Failure to consider investable asset types</li> <li>Failure to consider projected returns and risks, including tail risks</li> <li>Inappropriate benchmarks selected for asset classes</li> </ul>	<ul style="list-style-type: none"> <li>Selecting unqualified managers</li> <li>Investment selected not fitting portfolio or investment strategy</li> <li>Strategy or style drift by managers</li> <li>Lack of transparency</li> <li>Key person risk at the manager or fund</li> <li>Fraud or mismanagement of funds</li> <li>Inaccurate financial or performance reporting</li> </ul>
<b>Management Controls</b>	<ul style="list-style-type: none"> <li>Consideration of actuarial analysis to project assets and liabilities growth</li> <li>Consideration of large universe of assets</li> <li>Survey of return and risk expectations on asset classes</li> <li>Scenario analysis</li> <li>Use of investment consultants</li> </ul>	<ul style="list-style-type: none"> <li>Due diligence</li> <li>Premier List</li> <li>Semi-annual portfolio review</li> <li>Performance monitoring</li> <li>Annual capital plan</li> <li>Attendance at Advisory Board meetings</li> <li>Review of audited financial statements</li> </ul>
<b>Controls Tested</b>	<ul style="list-style-type: none"> <li>Consideration of actuarial analysis</li> <li>Consideration of large universe of assets</li> <li>Survey of return and risk expectations</li> <li>Scenario analysis</li> <li>Use of investment consultants</li> </ul>	<ul style="list-style-type: none"> <li>Due diligence</li> <li>Premier List</li> <li>Semi-annual portfolio review</li> <li>Annual capital plan</li> <li>Attendance of Advisory Board meetings</li> </ul>
<b>Results</b>	<p>Management controls are operating effectively to achieve business objective.</p>	<p>Management controls are operating effectively to achieve business objective. However, we identified opportunities to enhance controls.</p>
<b>Recommended Actions</b>	<p>None</p>	<ul style="list-style-type: none"> <li>Tailor manager and investment certification questionnaires to address ENR-specific topics</li> <li>Consider leveraging consultants to a greater extent to supplement limited internal resources</li> </ul>
<b>Management Responses</b>	<p>N/A</p>	<p>Management agrees with the recommendations. Management will:</p> <ul style="list-style-type: none"> <li>Continue updating the certification process for ENR-specific topics by Q2 of 2015</li> <li>Explore expanding its relationship with its fund consultants to provide portfolio review and formal investment monitoring</li> </ul>

Legend of Results: **Red** - Significant to TRS  
**Yellow** - Other Reportable Issue

**Orange** - Significant to Business Objectives  
**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: **Fourth Quarter Test Results of Investment Controls**

DATE: September 3, 2014

---

The purpose of this memo is to report the interim results of Internal Audit's tests of Investment Management Division (IMD) controls for the fourth quarter of fiscal year 2014. The results of these tests are combined with prior results to express the overall opinion on IMD controls based on the tests performed in the past three years. This overall opinion is included in section 4.D of the Audit Committee Book. For the fourth quarter of fiscal year 2014, we tested controls related to the following two areas: (a) Strategic Asset Allocation (SAA) Study; (b) Energy and Natural Resources (ENR) portfolio. As part of this project, Internal Audit engaged an external service provider (Lenox Park LLC) to obtain additional expertise in the areas of due diligence related to the ENR portfolio.

### OVERVIEW

#### Strategic Asset Allocation (SAA) Study

As required by the Investment Policy Statement (IPS), the Asset Allocation team of the IMD conducts an asset-liability study for the pension plan at least once every five years to review asset classes, return-risk assumptions, and correlation of returns with applicable benchmarks and across asset classes. The primary business objective of the asset-liability study is to establish (through surveys and statistical modeling techniques) permissible asset classes, asset allocation targets, and performance benchmarks to reasonably achieve the long-term actuarial rate of return adopted by the Board of Trustees.

Major tasks completed as part of the 2014 Asset Liability Study include the following:

- Survey of capital market expectations on returns, volatility, and correlations
- Consultation with actuary and consultants
- Consideration of reduction of current asset classes and addition of new asset classes
- Comparison with peer group's asset allocation
- Optimization of constrained portfolios (to validate portfolio efficiency)
- Scenario analysis on asset mixes under different economic conditions
- Comparison of the current portfolio with the proposed portfolio

## **Fourth Quarter Investment Control Test Results September 3, 2014 Memorandum**

Overall, we determined that management controls are operating effectively to achieve the business objective of the Strategic Asset Allocation study. In particular, we noted that the proposed asset allocations as well as the information presented to the Board of Trustees were well supported and documented in the detailed records. No significant or reportable issues and recommendations were identified with regard to the Strategic Asset Allocation Study.

### Energy and Natural Resources (ENR) Portfolio

To take advantage of the rising energy boom in the U.S., TRS decided to create a separate asset class for energy and natural resources under the investment policy in September 2013. The current target allocation is three percent of the total trust with the maximum allocation up to eight percent. After Board approval of this allocation, the IMD created an ENR team under the Chief Investment Officer and consolidated the existing energy and natural resource-related private markets investments into the Energy and Natural Resources (ENR) portfolio as a separate profit center.

The business objective of the ENR portfolio is to invest in energy- and natural resource-related sectors throughout the value chain and capital structure to generate alpha (i.e., returns in excess of benchmark returns) while providing protection from inflation. The ENR team currently consists of two directors and an investment manager. As authorized by the policy, the team is responsible for investing in both private and public energy or natural resource related securities either directly or through funds.

The ENR team is assisted by external investment management resources, including Tudor Pickering, Hamilton Lane, Hewitt Ennis Knupp, IHS CERA, Wood Mackenzie, Von Gonten, and Wall Street commodities and equity analysts with regard to sourcing of future deals; and performing due diligence and monitoring existing managers, funds, and investments. The ENR team also collaborates with energy sector analysts and portfolio managers in the Internal Public Markets team which primarily manages investments in public equities.

As of June 30, 2014, the commitment amount and market value of the ENR portfolio was \$4.7 billion and \$2.3 billion, respectively. According to State Street's PureView report, year-to-date return (since January 1, 2014) of the ENR portfolio was 5.29%, outperforming its benchmark by 427 basis points.

### **FINDINGS AND RECOMMENDED ACTIONS**

Overall, we determined that management controls are operating effectively to achieve the business objective of the ENR portfolio. As a result, no significant issues and recommendations were identified. However, we identified two opportunities to enhance controls related to ENR investing processes as follows:

#### **1. Tailor Manager and Investment Certification Questionnaires to address ENR-Specific Topics**

The ENR team currently uses due diligence questionnaires that were established by Private Equity and Real Assets. This practice is a logical and efficient decision since the ENR portfolio

## **Fourth Quarter Investment Control Test Results September 3, 2014 Memorandum**

was separated out from the Private Equity and Real Assets portfolios and the current ENR portfolio includes only private markets investments. We note that the following ENR-specific topics were covered during past due diligence work even though they were not specifically included in the certifications. The certifications can be improved for ENR by including more detailed questions on specific topics such as:

- Hedging strategies for commodity risks and underlying portfolio companies;
- Investment manager competitiveness for assets in various economic cycles (e.g., cost of capital vs. master limited partnerships); and
- Macro-economic and commodity-specific sensitivity analyses (e.g., inflation, oil and natural gas prices) the manager expects to have in the fund's investments.

### **Recommendation**

We recommend that the ENR team tailor the manager and investment certification questionnaires to address ENR-specific topics while removing some questions related specifically to traditional private equity or real estate investments.

### **Management's Action Plan**

Management agrees with the recommendation. Updating the certifications has been part of the ENR business plan from the beginning. The ENR team wanted to ensure that they established proven processes before implementing additional granularity and specificity of ENR related topics. ENR expects to complete this process by 2<sup>nd</sup> quarter 2015. We also note that the Manager Certification and Investment Certification are the initial document for collecting data on managers. Our questionnaire is supplemented with the consultants' questionnaires and followed up with several due diligence sessions to assess ENR specific topics. These processes will continue.

## **2. Consider Leveraging Consultants to a Greater Extent to Supplement Limited Internal Resources**

No single consultant covers the broad array of sectors, asset types, and return profiles in which ENR invests. ENR has coordinated a strong network of consultants with knowledge of different sectors and investment types to supplement its internal resources for analyzing opportunities. The ENR team extensively utilizes services of its existing consultants to evaluate the prudence of investments, to monitor existing investments, and to monitor the energy and natural resource industries and macro outlooks. However, possible considerations to improve consulting support include:

- Periodic updates on the ENR portfolio and existing investments. For example, Private Equity receives a quarterly portfolio overview which includes Market update, portfolio update, portfolio assessment and portfolio analytics. ENR might benefit from this type of detailed analysis as well.
- Additional investment consultants for principal investments on the occasions that the existing consultant is conflicted;

**Fourth Quarter Investment Control Test Results  
September 3, 2014 Memorandum**

- Identify additional technical consulting resources to include mining, agriculture, and additional reservoir engineers and geologists as needed; and
- Engaging consultant for more formal and proactive individual investment monitoring support; and
- Gaining access to smaller private equity and public investment opportunities as permitted in the Investment Policy Statement.

Given the small size of the ENR team, leveraging consultants will become more critical as the ENR team shifts its focus from capital deployment in funds toward portfolio monitoring and principal investing in the future.

**Recommendation**

We recommend that the ENR team explore leveraging consultants and expanding consultant coverage to obtain additional services and reporting, including an additional investment consultant for principal investments, additional technical consulting support and more formal portfolio and investment monitoring by existing fund consultants.

**Management's Action Plan**

Management agrees with the recommendation. TRS' Private Markets group has significant real-time portfolio monitoring and statistics available via the eFront system which is more detailed and timely than what the consultants can provide. ENR will explore expanding its relationship with its fund consultants to provide portfolio review and more formal investment monitoring.

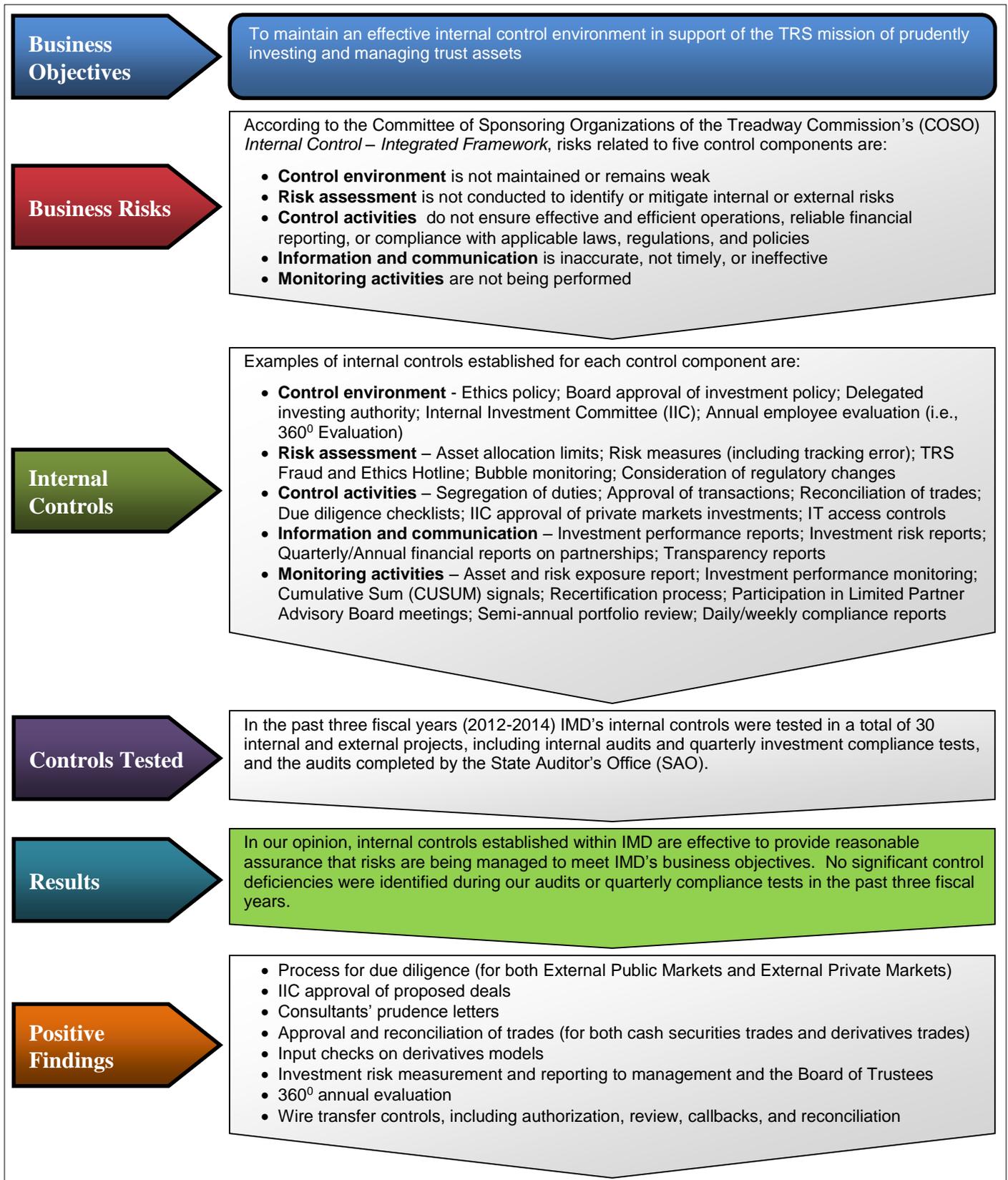
ENR is planning to enhance its principal and technical consultant bench in 2015. ENR is exploring with the Emerging Managers program how to better access ENR-related emerging managers which may include expanded consulting services. ENR is actively exploring how and when to best expand into public markets as per its mandate.

**TAB 4D**

# OVERALL OPINION OF IMD INTERNAL CONTROLS

September 3, 2014

TRS Internal Audit Department



Legend of Results:

Red

- Unsatisfactory

Yellow

- Some Improvement Needed

Orange

- Major Improvement Needed

Green

- Effective

September 4, 2014

Audit Committee, Board of Trustees  
Brian Guthrie, Executive Director

## EXECUTIVE SUMMARY

We have completed the **Overall Opinion of Investment Management Division (IMD) Internal Controls** as included in the *Fiscal Year 2014 Audit Plan*. IMD's business objectives include maintaining an effective internal control environment in support of TRS' mission of prudently investing and managing trust assets.

The purpose of this report is to provide overall opinion on whether internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet IMD's business objectives. This opinion is based on the results of the past three fiscal years' (2012 through 2014) audits and quarterly compliance tests of IMD's groups, portfolios, operations, and activities.

In our opinion, internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet the business objectives. Results of a total of 30 audits and quarterly compliance tests in the past three fiscal years did not identify any significant control deficiencies. Some opportunities to enhance controls were identified and management has implemented or is in the process of implementing all of the prior recommendations. The table in **Appendix B** (page 7) lists the IMD areas where Internal Audit or external service providers tested controls during the previous three fiscal years. **Results and Recommendations** section (page 2) provides information about Internal Audit's positive findings as well as information on prior recommendations.

Our evaluation of internal controls at IMD was based on the internal control framework ("*The COSO Internal Control – Integrated Framework*") issued by COSO<sup>1</sup> in 2013. The table in **Appendix C** (page 8) provides information on five internal control components, 17 COSO principles, and examples of controls applicable to IMD.

The audit objective, scope, methodology and conclusion are described in **Appendix A** (page 5).

---

<sup>1</sup> 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 Professional in Business (IMA) and the Institute of Internal Auditors (IIA).

## RESULTS AND RECOMMENDATIONS

During fiscal years 2012 through 2014, a total of 30 internal and external projects of IMD were completed, including quarterly investment compliance tests and the audits completed by the State Auditor’s Office (SAO).

The following table shows the breakdown of the number of projects (audits and quarterly compliance tests) by Internal Audit and external parties in the past three fiscal years:

**Number of Internal and External Projects Completed During FY 2012–2014**

Project Name (Project Number)	FY 12		FY 13		FY 14	
	Internal Project	External Project	Internal Project	External Project	Internal Project	External Project
Audit of State Street’s Compliance Calculations (12-301)	1					
Audit of Investment Risk Management (12-302)	1					
Audit of External Private Markets (EPM) Investments (12-303)	1					
Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures (12-304, 13-304 and 14-302)	4		4		4	
Audit of Investment Accounting (12-402)	1					
Incentive Compensation at the Teacher Retirement System, the Employees Retirement System, and the Permanent School Fund, Plan Years 2011, 2012, and 2013 (State Auditor’s Office)		1		1		1
Audit of the Teacher Retirement System’s Financial Statements, FY 11, FY 12, and FY 13 (State Auditor’s Office)		1		1		1
Contractual Allowances in Asset Management Contracts (13-302)			1			
Audit of Derivatives (13-303)			1			
Audit of Emerging Manager Program (13-305)			1			
A Follow-up Audit Report on Ethics Policies for Trustee Investing Practices at the Employees Retirement System, the Teacher Retirement System, and the University of Texas Investment Management Company (State Auditor’s Office)				1		
Quarterly Test Results of Investment Controls (14-301)					4	
Sub-total =	8	2	7	3	8	2
<b>Grand Total =</b>	<b>30</b>					

## OVERALL RESULTS

Based on the results of the past three fiscal years' (2012 through 2014) audits and quarterly investment compliance tests, we determined that internal controls are operating effectively to achieve IMD's business objectives. No significant control deficiencies were identified as a result of these test results.

## POSITIVE RESULTS

The audits for the past three fiscal years included many positive audit results. Examples of specific positive results are:

- Proposed asset allocations as well as the information presented to the Board of Trustees as part of the Strategic Asset Liability Study were well supported and documented (*FY 14 IMD Control Tests, Q4*)
- The process for due diligence of External Managers in TRS External Public Markets (EPU) is first rate. Controls we tested are appropriate and operating effectively (*Lenox Park LLC as part of FY 14 IMD Control Tests, Q3*)
- All approved Private and Public Markets investments were approved by the Internal Investment Committee (*Quarterly Investment Compliance Tests, FY 14*)
- Consultant's prudence letters were obtained before all External Private and External Public Markets deals were presented to the Internal Investment Committee for approval (*FY 14 IMD Control Tests, Q3 and Quarterly Investment Compliance Tests, FY 14*)
- TRS investment trades were properly approved and timely reconciled for both cash securities trades and derivatives trades (*FY 14 IMD Control Test, Q3*)
- TRS has exercised prudence in selecting a fund-of-funds manager and evaluators to source, perform due diligence, and in some cases allocate to emerging managers (*FY 13 Audit of Emerging Manager Program*)
- Users of the derivatives model perform checks to ensure that input data is loaded into the model correctly and completely (*FY 13 Audit of Derivatives*)
- Qualitative award of the incentive compensation plan was supported by the results of 360<sup>0</sup> annual evaluation (*State Auditor's Office Audit of Incentive Compensation at TRS, Plan Years 2011, 2012, and 2013*)
- Risks defined by the Investment Policy Statement (IPS) are included in a semi-annual investment risk report to the Board and in other regular reports to management (*FY 12 Audit of Investment Risk Management*)
- Validation checks are in place to verify the accuracy of the system data interfaces with the external service provider used to develop Risk Management reports and risk alarms (*Protiviti as part of FY 12 Audit of Investment Risk Management*)
- A consultant's prudence letter was provided by an external consultant for each investment and each investment was approved by the Internal Investment Committee (*Deloitte & Touche as part of FY 12 Audit of External Public Markets*)

- Controls to ensure that partnership investments are valued in accordance with TRS valuation guidelines were operating effectively. These controls include monthly reconciliations of partnership statements to State Street reports and a review of the partnerships' audited financial statements on an annual basis (*FY 12 Audit of Investment Accounting*)
- Controls related to the complete and accurate execution of wire transfers were operating effectively. These controls include Investment Accounting's review of wire requests, signoff of requests by authorized individuals, and the ongoing reconciliation of completed wire transfers with the custodian (*Quarterly Investment Compliance Tests, FY 12, FY 13, and FY 14*)

## SIGNIFICANT RESULTS<sup>2</sup>

No significant issues and recommendations were identified.

## OTHER REPORTABLE RESULTS

Some of the internal and external audit reports included recommendations to enhance internal controls. Management has implemented or is in the process of implementing all of these prior recommendations. Information about the recommendations and the implementation statuses for the past three fiscal years is included in **Appendix D** (page 11).

\* \* \* \* \*

We appreciate IMD management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We especially appreciate audit coordination and facilitation provided by the Investment Operations management and staff.

  
 Amy Barrett, CIA, CPA, CISA  
 Chief Audit Executive

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

  
 Nick Ballard, CFA  
 Senior Investment Auditor

  
 Michael Allen  
 Internal Audit Intern

<sup>2</sup> 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.

## APPENDIX A

### AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

We conducted the audits 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<sup>3</sup> are in place and are working effectively to achieve the business objectives of the Investment Management Division (IMD) of the Teacher Retirement System of Texas (TRS.)

#### SCOPE

The scope of the audits was limited to policies, processes and internal controls established within IMD during fiscal years 2012 through 2014.

The audit scope did not include TRS policies, processes, or internal controls not applicable to IMD or established by other TRS departments.

#### METHODOLOGY

Internal Audit examined the management control framework, the risk assessment strategy, policies, procedures and practices, information used for decision making, and reporting as applicable to IMD. The *COSO's Internal Control – Integrated Framework* was used as our criteria to identify different types of internal controls established at IMD and to assess whether these controls are effective. Effective controls mean that the controls exist and are operating as designed.

Our audit 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 within IMD.

---

<sup>3</sup> According to the COSO, internal control is defined as a process, effective by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.

To meet the audit objectives, we specifically performed the following procedures:

- Performed risk assessments to identify high risk areas within IMD to allocate audit resources
- Developed audit plans to determine audit coverage of IMD for fiscal years' 2012 through 2014
- Gained an understanding of business objectives, risks, business processes, and internal controls related to the scope of the relevant audit
- Reviewed investments-related policies and procedures
- Interviewed TRS executives, IMD management and staff, and external parties involved in the business processes
- Surveyed other pension funds to obtain information about investment risk measures, risk limits and monitoring practices
- Tested sample of investment transactions and established internal controls
- Evaluated the effectiveness of Information Technology (IT) general controls, including access to systems and files

## **CONCLUSION**

In our opinion, internal controls established within IMD are effective to provide reasonable assurance that risks are being managed to meet IMD's business objectives. This opinion is based on results of the past three fiscal years' (2012 through 2014) audits and quarterly investment compliance tests of IMD groups, portfolios, operations, and activities.

## APPENDIX B

### IMD Areas of Internal Controls Tested in Past Three Fiscal Years

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

## APPENDIX C

### IMD Internal Controls Mapped to COSO Principles

COSO Component	COSO Principle	Examples of IMD Controls Tested
<b>Control Environment</b>  (The set of standards, processes, and structures that provide the basis for carrying out internal control across the organization)	The organization demonstrates a commitment to integrity and ethical values	<ul style="list-style-type: none"> <li>• Ethics policies</li> <li>• TRS Fraud and Ethics Hotline</li> <li>• Conflict of interest disclosure, including placement agent disclosure</li> </ul>
	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"> <li>• Board approval of investment-related policies</li> <li>• Board oversight of investment decisions</li> <li>• Obtaining external reviews, including consultants' and auditors' reviews</li> </ul>
	Management establishes - with board oversight - structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives	<ul style="list-style-type: none"> <li>• IMD organization chart</li> <li>• Delegated investing authority</li> <li>• Internal Investment Committee (IIC)</li> <li>• Service level agreement with external service providers</li> </ul>
	The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives	<ul style="list-style-type: none"> <li>• IMD career path</li> <li>• Continuing education requirement</li> <li>• Incentive Compensation Plan</li> </ul>
	The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives	<ul style="list-style-type: none"> <li>• Annual goal-setting and evaluation</li> <li>• 360 evaluation</li> </ul>
<b>Risk Assessment</b>  (A dynamic and iterative process for identifying and assessing risks to the achievement of objectives)	The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives	<ul style="list-style-type: none"> <li>• Target investment returns established</li> <li>• Asset allocation with allowable ranges</li> </ul>
	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"> <li>• Different types of risks identified in the Investment Policy Statement</li> <li>• Various risk measures, including Value at Risk (VAR) and Tracking error (Limits on acceptable tracking error) established</li> <li>• Use of performance-to-risk measurements such as Sharpe Ratio</li> </ul>
	The organization considers the potential for fraud in assessing risks to the achievement of objectives	<ul style="list-style-type: none"> <li>• TRS Trading Policy</li> <li>• TRS Fraud and Ethics Hotline</li> </ul>
	The organization identifies and assesses changes that could significantly impact the system of internal control	<ul style="list-style-type: none"> <li>• Assessment of changing economy</li> <li>• Identification of market dislocation</li> <li>• Bubble monitoring</li> <li>• Consideration of regulatory changes and their impact on IMD</li> </ul>

COSO Component	COSO Principle	Examples of IMD Controls Tested
<p><b>Control Activities</b></p> <p>(The actions established through policies and procedures that help ensure that management's directives to mitigate risk to the achievement of objectives are carried out)</p>	<p>The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels</p>	<ul style="list-style-type: none"> <li>• Segregation of duties</li> <li>• Approval of transactions</li> <li>• Reconciliation of trades</li> <li>• Minimum credit rating of counterparties</li> <li>• Due diligence checklists</li> <li>• IIC approval of investments</li> <li>• Premier List</li> </ul>
	<p>The organization selects and develops general control activities over technology to support the achievement of objectives</p>	<ul style="list-style-type: none"> <li>• Restrictions on information technology (IT) system access</li> <li>• Control tests on vendor-supported IT systems</li> </ul>
	<p>The organization deploys control activities through policies that establish what is expected and procedures that put policies into action</p>	<ul style="list-style-type: none"> <li>• Investment-related policies, including Investment Policy Statement, Securities Lending Policy, Soft Dollar Policy and Proxy Voting Policy</li> <li>• Operating procedures</li> <li>• Process maps</li> </ul>
<p><b>Information and Communication</b></p> <p>(The continual, iterative process of providing, sharing, obtaining, and using relevant and quality information from internal and external sources)</p>	<p>The organization obtains or generates and uses relevant, quality information to support the functioning of internal control</p>	<ul style="list-style-type: none"> <li>• Investment performance reports</li> <li>• Investment risk reports</li> <li>• Investment consultants' reports</li> <li>• Industry research reports (Internal Public Markets)</li> <li>• Quarterly and annual financial statements (External Private Markets)</li> </ul>
	<p>The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control</p>	<ul style="list-style-type: none"> <li>• Investment Management Committee meetings</li> <li>• Monthly staff meetings</li> <li>• Transparency reports to the Board of Trustees</li> </ul>
	<p>The organization communicates with external parties regarding matters affecting the functioning of internal control</p>	<ul style="list-style-type: none"> <li>• Investment reports to legislative oversight bodies</li> <li>• Participation in Cost Effectiveness Measurement (CEM) studies</li> <li>• Communication to external managers (External Public Markets, External Private Markets) about changes in policy that affect controls</li> </ul>

<b>COSO Component</b>	<b>COSO Principle</b>	<b>Examples of IMD Controls Tested</b>
<b>Monitoring Activities</b>  (Ongoing evaluations, separate evaluation, or some combination of the two that are used to ascertain whether each of the five components of internal control is present and functioning)	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"> <li>• Weekly asset and risk exposure report</li> <li>• Semi-annual risk reports to the Risk Management Committee of the Board</li> <li>• CUSUM (Cumulative Sum) signals</li> <li>• Daily and weekly compliance monitoring</li> <li>• Investment performance monitoring</li> <li>• Participation in Limited Partner Advisory Board meetings (External Private Markets)</li> </ul>
	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"> <li>• Premier List Updates</li> <li>• Semi-annual portfolio review (External Private Markets)</li> <li>• Recertification process required for CUSUM signal generated (External Public Markets)</li> <li>• Daily and weekly investment compliance reports</li> <li>• Follow-up activities on compliance alerts</li> <li>• Compliance violation memo to the Board</li> </ul>

## APPENDIX D

### Recommendations and Implementation Status for Audits and Compliance Testing Performed in Fiscal Years 2012, 2013, and 2014

Report Number and Report Title	Recommendation	Implementation Status	Implementation Date
14-301 Fourth Quarter Test Results of Investment Controls	Tailor manager and investment certification questionnaires to address ENR-specific topics	In progress	Q2 FY 2015 (planned)
	Consider leveraging consultants to a greater extent to supplement limited internal resources	In Progress	Q4 FY 2015 (planned)
14-301 First Quarter Interim Test Results of Investment Controls	Include reasonableness checks on securities lending income as part of Investment Accounting's monitoring activities	Implemented	2/2014
	Consider other funding options to address long-term CSA revenue shortfall projections	Implemented	5/2014
14-302 First Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended September 30, 2013	Test Result - IMD management identified and disclosed that one new investment in an Emerging Manager fund exceeded authorized limits	Implemented	11/2013
14-302 Second Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended December 31, 2013	Two external managers purchased a stock newly added to the Sudan Restricted Companies List	Implemented	1/2014
13-303 Audit of Derivatives	Establish a formal checklist procedure to help ensure consistent usage of the TAA Model	Implemented	4/2013
	Derivative model files should be password-protected	Implemented	4/2013
	Further restrict network folder level access to Derivative model files	Implemented	4/2013
13-304 First Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended September 30, 2012	Test Result - All reporting requirements met, except one investment was approved by the IIC before being reported to the Board	Implemented	9/2012

Report Number and Report Title	Recommendation	Implementation Status	Implementation Date
13-304 Second Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended December 31, 2012	Test Result – Callback for one wire transfer for \$90,000 did not occur	Implemented	12/2012
13-304 Fourth Quarter - Quarterly Investment Testing Investment Policy Statement (IPS), Wire Transfer Procedures Calendar Quarter Ended June 30, 2013	Test Result - Information about the projected closing date for one hedge fund investment was mislabeled as “Not Applicable” when it should have been the expected funding date of July 31, 2013	Implemented	6/2013
	Test Result - The Absolute Return asset allocation was -0.06%, which was below the 0% minimum range	Implemented	6/2013
13-305 Audit of Emerging Manager Program	Closely monitor the fund-of-funds manager’s portfolio as well as the firm’s situation	Implemented	11/2013
	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	11/2013
	Revise the Investment Policy Statement (IPS) to be consistent with the fund commitment plan	Implemented	11/2013
12-301 Audit of State Street’s Compliance Calculations	State Street included all relevant IPS and IMA compliance rules and no significant exceptions were noted in the calculation formulas that were used for testing these compliance rules. However, we identified the following errors: A calculation formula included an incorrect compliance threshold for country concentration in one IMA	Implemented	12/2011
	Two Directional Hedge Fund accounts were misclassified as Stable Value Hedge Funds	Implemented	12/2011
	Sudan and Iran restricted companies were not fully updated in the testing formula	Implemented	12/2011

Report Number and Report Title	Recommendation	Implementation Status	Implementation Date
12-302 Audit of Investment Risk Management	Liquidity risk reporting should be included in the semi-annual Investment Risk Report to the Risk Management Committee of the Board of Trustees	Implemented	8/2012
	Develop documentation detailing the TRS Value at Risk (VaR) methodology and reporting choices	Implemented	8/2012
	TRS should request that State Street periodically perform independent model validations and general IT control review for its in-house risk services application, TruView, and provide the report to TRS	Implemented	8/2012
	Include status updates of External Public Markets' (EPU) re-underwriting process for managers that trigger risk signal report to the IIC	Implemented	8/2012
12-303 Audit of External Private Markets (EPM) Investments	Identify information for Trustees to preclude non-compliance with private markets prohibited investments under the Board of Trustees Ethics Policy	Implemented	1/2013
	Reconcile the partner capital statement with audited financial statements	Implemented	8/2013
	Consider discontinuing operation of the valuation committee	Implemented	1/2013
	Obtain IIC approval for investment proposals requiring board action	Implemented	10/2012
12-304 Second Quarter - Quarterly Testing - Investment Policy Statement (IPS) and Securities Lending Policy (SLP) Calendar Quarter Ended December 31, 2011	Test Result - One Public Market Strategic Partner Network (SPN) purchased shares of a company on the Sudan restricted list. Upon TRS' request, all shares were sold	Implemented	3/2012
	Test Result - One new investment not reported to Board prior to IMD approval	Implemented	3/2012
	Test Result - Inaccurate information for one reporting element included in the Tear Sheet ("Due Diligence Summary")	Implemented	3/2012

Report Number and Report Title	Recommendation	Implementation Status	Implementation Date
12-304 Third Quarter - Quarterly Testing - Investment Policy Statement (IPS) and Securities Lending Policy (SLP) Calendar Quarter Ended March 31, 2012	Test Result - A summary of four new managers' responses to the IPS Appendix A Questionnaire was not included in the report to the Board. However, IMD did obtain the required responses to the questionnaire.	Implemented	5/2012
12-304 Fourth Quarter - Quarterly Testing - Investment Policy Statement (IPS) and Securities Lending Policy (SLP) Calendar Quarter Ended June 30, 2012	Test Result - Three Tear Sheets did not disclose prospective fee information as required by policy	Implemented	8/2012
	Test Result - No annual report was filed of Sudan investment activity	Implemented	8/2012
12-030 State Auditor's Office Report on Incentive Compensation at the Teacher Retirement System, the Employees Retirement System, and the Permanent School Fund	TRS should establish a performance target for its trade management group and update its incentive compensation plan to reflect that target.	Implemented	10/2013

**TAB 4E**

**QUARTERLY INVESTMENT TESTING**  
**INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), WIRE TRANSFER PROCEDURES**  
 CALENDAR QUARTER ENDED JUNE 30, 2014, EXCEPT AS NOTED

<b>Business Objectives</b>	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 Senior Compliance Specialist</u> Investment activities comply with IPS (for the three months ended July 31, 2014)
<b>Business Risks</b>	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
<b>Management Assertions</b>	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 (IPS, securities lending)
<b>Agreed-Upon Procedures</b>	<ul style="list-style-type: none"> <li>Compare Board reports to IPS requirements</li> </ul>	<ul style="list-style-type: none"> <li>Vouch Internal Investment Committee (IIC) approved investments to supporting documentation</li> <li>Verify approval limits of new investments</li> </ul>	<ul style="list-style-type: none"> <li>Validate IMD obtained reporting requirements of new managers/funds and summarized results</li> <li>Obtain senior management disclosures about known compliance violations</li> <li>Test supporting documentation for wire transfers</li> </ul>	Monitor investment activities for compliance, including State Street's daily compliance monitoring services and reports
<b>Test Results</b>	<ul style="list-style-type: none"> <li>All reporting requirements met</li> <li>Documentation provides support for information tested</li> </ul>	<ul style="list-style-type: none"> <li>All supporting documentation exists</li> <li>All newly approved investments were within authorized limits</li> </ul>	<ul style="list-style-type: none"> <li>All other requirements of the IPS, SLP, wire transfer procedures, etc. are met</li> </ul>	<ul style="list-style-type: none"> <li>All investment policy requirements are met</li> </ul>
<b>Management Responses</b>	None	None	None	None

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

September 3, 2014

Carolina de Onis, TRS General 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 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, including the monitoring results of the Senior Compliance Specialist, are included in **Appendix A**.

### **Internal Control Structure**

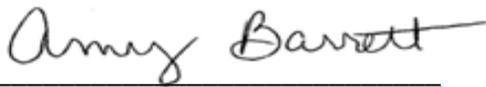
We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas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



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



Nick Ballard, CFA, MBA  
Senior Investment Auditor

## 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 the Board of Trustees. Quarterly reporting requirements include investment performance, asset class exposures, and external investments under consideration. Semiannual reports include outstanding derivatives, leverage, and liquidity positions; and risk limits	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	4	IPS Article 1.8 – Obtain evidence that TRS complied with Chapters 806 and 807 of the Government Code relating to prohibitions on investments in Sudan and Iran, respectively.	<ul style="list-style-type: none"> <li>• Ensure that responsible staff have updated Sudan/Iran restricted lists</li> <li>• Determine whether TRS complied with the following requirements: (a) to notify the Comptroller’s Office and the Pension Review Board regarding holdings of restricted company securities; (b) to divest holdings; and (c) to file annual report of Sudan/Iran investment activity to the Legislature and the Attorney General</li> </ul>	<ul style="list-style-type: none"> <li>• Investment Compliance staff updated Sudan/Iran restricted lists.</li> <li>• TRS complied with the annual report requirements.</li> </ul>	No response required
3	2	IPS Article 3.3f – Obtain evidence of existence of IMD’s prudent underwriting objectives for advisor’s due diligence	Select sample of Private Market investments approved during testing period, obtain evidence of existence of advisor's report stating investment opportunity meets prudent underwriting standards and merits inclusion within respective portfolios	For selected private markets approved investments for the quarter, verified that the prudence letter from the advisor was included in the Internal Investment Committee (IIC) materials.	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
4	2	IPS Article 7 – 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"> <li>• Each is independent private investment management firm with less than \$2 billion</li> <li>• Each has a performance track record as a firm of less than 5 years, or both</li> <li>• TRS commitment did not exceed 40% of fund size</li> </ul>	<ul style="list-style-type: none"> <li>• Investments tested are independent private investment management firms with less than \$2 billion, or</li> <li>• Have a performance track record as a firm that is no more than 5 years or both.</li> <li>• TRS commitment not exceeding 40% of fund size.</li> </ul>	No response required
5	2	IPS Article 12 - Verify existence of placement agent questionnaire for each new investment selected for testing and test for inclusion in summary report to Board	<ul style="list-style-type: none"> <li>• For each investment selected for testing, verify that IMD obtained responses to the questionnaire</li> <li>• Determine that IMD compiled responses to the questionnaires and reported all results to Board at least semi-annually</li> </ul>	Each investment tested had a completed questionnaire and was included in the summary report to the Board	No response required
6	2	IPS Appendix B – Verify investments approved are within policy limits	<ul style="list-style-type: none"> <li>• 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"> <li>a) Initial allocation – .50%</li> <li>b) Additional or follow-on – 1%</li> <li>c) Total Manager Limits – 3%</li> <li>d) Total limit each manager organization – 6%</li> </ul> </li> <li>• Obtain documentation from IMD staff that supports the calculations of the authorized limits</li> <li>• Inquire if any “Special Investment Opportunities” were made for the quarter, and if so: <ul style="list-style-type: none"> <li>a) Obtain documentation that the Special Investment Opportunity was either a distressed situation or market dislocation</li> </ul> </li> </ul>	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
			<ul style="list-style-type: none"> <li>b) Obtain documentation that the CIO notified the Executive Director (ED) of each Special Investment Opportunity</li> <li>c) Obtain documentation that CIO and ED requested comments from chairman of appropriate board committee and TRS consultants and advisers</li> <li>d) Verify Special Investment Opportunity did not exceed \$1 billion.</li> <li>e) Verify that no further investment in a special Investment Opportunity was made until Board reauthorized CIO's authority to designate a Special Investment Opportunity</li> </ul>		
7	4	Compliance certification by the Senior Compliance Specialist (SCS) – Verify that SCS is not aware of any other policy violations	Obtain information about any investment compliance violations from the SCS of other non-compliance issues, including the result of the custodian's monitoring services	Obtained compliance certification from the Senior Compliance Specialist	No response required
8	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
9	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 June 30, 2014**

**TAB 5**

# TAB 5A

CONFIDENTIAL PRIVATE DOCUMENT - NOT SUBJECT TO PUBLIC DISCLOSURE - GOVERNMENT  
CODE § 552.139 relating to exception to disclosure for government information relating to  
security issues for computers.

**TAB 5B**

**TRS Internal Audit  
Summary of Audit Recommendations Status  
September 2014**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
<b>12-403 Audit of Compensation, Payroll and Position Control</b>					
	Develop and implement a written procedures manual for payroll	In Progress	Other Reportable	4/2013	10/2014
<b>13-602 Fraud Risk Identification and Prevention Audit*</b>					
	Benefit Accounting - Improve system access reviews to ensure access privileges remain current with job duties	Implemented	Significant	12/2013	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
<b>14-104 Refunds of Inactive and Dormant Accounts*</b>					
	Fraud , Waste, and Abuse Policy (FWAP) refresher training needs to occur for existing employees as required by policy	In Progress	Significant	12/2014	
	Benefit Accounting department should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds	In Progress	Significant	2/2015	

\*A follow-up audit has been included in the proposed Audit Plan for Fiscal Year 2015. See **Tab 7B**.

**Significant to Business Objectives**

	<ul style="list-style-type: none"> <li>Past <i>original</i> estimated completion date</li> <li>No management action plan <u>or</u> No progress on management action plan</li> </ul>
	<ul style="list-style-type: none"> <li>Past <i>original</i> estimated completion date</li> <li>Progress on management action plan</li> </ul>
	<ul style="list-style-type: none"> <li><i>Original</i> estimated completion date has not changed</li> <li>Progress on management action plan</li> </ul>
	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"> <li>Past <i>original</i> <u>or</u> first <i>revised</i> estimated completion date</li> <li>No management action plan <u>or</u> No progress on management action plan</li> </ul>
	<ul style="list-style-type: none"> <li>Past <i>original</i> <u>or</u> first <i>revised</i> estimated completion date</li> <li>Progress on management action plan</li> </ul>
	<ul style="list-style-type: none"> <li>Within <i>original</i> <u>or</u> first <i>revised</i> estimated completion date</li> <li>Progress on management action plan</li> </ul>
	Satisfactory implementation of management action plan <u>or</u> Acceptance of risk by management

**TRS Internal Audit  
Summary of Audit Recommendations Status  
September 2014**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
<b>14-104 Refunds of Inactive and Dormant Accounts*</b> (continued)					
	Benefit Processing department should assess risk and control options for enhancing account safeguards and decreasing the risk of fraudulent account refunds	In Progress	Significant	2/2015	
	Assign staff to review the MR6020 District 000A Transfer Error List	In Progress	Significant	2/2015	
	Written procedures need to be updated	In Progress	Other Reportable	2/2015	
	Research the underlying cause for the secondary verification process not always working as intended	In Progress	Other Reportable	2/2015	
<b>14-404 Audit Of Cost of Living Adjustment (COLA)</b>					
	Verify the COLA eligibility for each of the 804.005 payees	Implemented	Other Reportable	6/2014	6/2014
<b>14-502 Audit of Contractors Onboarding and System Access</b>					
	Enhance controls in the development, modification and maintenance of automated scripts used in system user account creation and deactivation processes	Implemented	Other Reportable	8/2014	8/2014

**TAB 6**

**TAB 6A**

# INTERNAL AUDIT QUALITY ASSURANCE SELF-ASSESSMENT

AUGUST 22, 2014

Teacher Retirement System Internal Audit Department

<b>Business Objectives</b>	<p>Internal Audit (IA) function generally conforms with professional auditing standards, Texas Internal Auditing Act, auditor codes of ethics, and Internal Audit's Quality Assurance and Improvement Program (QAIP). (Standards consider Internal Audit function authority, independence, proficiency, quality assurance and improvement program, and how the audits are planned, performed, communicated, managed, and resolved.)</p>
<b>Inherent Risks Without Controls</b>	<ul style="list-style-type: none"> <li>• Audits may not address significant organizational risks</li> <li>• Audit processes may be inefficient and ineffective</li> <li>• Assurance could be unreliable without effective quality control</li> </ul>
<b>Internal Audit Controls</b>	<ul style="list-style-type: none"> <li>• Internal Audit charter, organizational chart, board minutes</li> <li>• Job descriptions, resumes, training records, evaluations</li> <li>• Work papers, work programs, reports, quality control processes</li> <li>• Annual risk assessment, audit plan</li> <li>• IA policies and procedures</li> <li>• TRS Internal Audit Quality Assurance and Improvement Program</li> </ul>
<b>Tests</b>	<p>Conducted self-assessment to validate Internal Audit activities conform with applicable professional standards and state law using the self-assessment tool developed by the <i>State Agency Internal Audit Forum</i> (SAIAF). These tests included steps to assess implementation of Internal Audit's QAIP.</p>
<b>Best Practices</b>	<ul style="list-style-type: none"> <li>• Board approved TRS Internal Audit Charter</li> <li>• Achievement of professional requirements for annual training</li> <li>• Supervisory review of all audit working papers</li> <li>• Management involvement in annual audit planning</li> <li>• IA Strategic Plan alignment with TRS Strategic Plan</li> </ul>
<b>Results</b>	<p>IA "generally conforms" with professional auditing standards, related codes of ethics, Texas state law, and Internal Audit's Quality Assurance and Improvement Program. Many best practices were identified. Opportunities for additional improvement were identified.</p>
<b>Recommended Actions</b>	<p>Opportunities for improvement:</p> <ol style="list-style-type: none"> <li>1. Follow currently established guidelines for the routine review and update of written policies and procedures and include evidence of chief audit executive (CAE) approval</li> <li>2. Develop and implement a process to address the actions taken should an audit be terminated before it is completed</li> <li>3. Develop a policy to address sufficiency of management's responses</li> </ol>
<b>Internal Audit Responses</b>	<p>IA management agrees and has begun implementing recommended improvements.</p>

Legend of Results: **Red** - Does not conform      **Yellow** - Partially conforms      **Green** - Generally conforms

August 22, 2014

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

## EXECUTIVE SUMMARY

We have completed the **Internal Audit Quality Assurance Self-Assessment** as included in the *Fiscal Year 2014 Audit Plan*. Annually, TRS Internal Audit staff conducts a self-assessment as an integral part of Internal Audit's Quality Assurance and Improvement Program (QAIP).

The objective of the self-assessment conducted in fiscal year 2014 was to determine whether the TRS Internal Audit department (Internal Audit) generally conforms with The Institute of Internal Auditors (IIA) *International Standards for the Professional Practice of Internal Auditing (Standards)*, the U.S. Government Accountability Office's (GAO) *Government Auditing Standards*, the IIA and GAO *Codes of Ethics*, the *Texas Internal Auditing Act*, and Internal Audit's Quality Assurance and Improvement Program (QAIP).

## CONCLUSION

Based on the results of the self-assessment, we concluded that TRS Internal Audit generally conforms with the IIA *International Standards for the Professional Practice of Internal Auditing*, the U.S. GAO's *Government Auditing Standards*, the IIA and GAO *Codes of Ethics*, the *Texas Internal Auditing Act*, and Internal Audit's QAIP.

As part of our commitment to continuous improvement, we identified opportunities to improve our processes and procedures to enhance compliance with statutory and professional internal auditing requirements. These are included in this report as "Opportunities for Improvement" and are:

- Follow currently established guidelines for the routine review and update of written policies and procedures and include evidence of the chief audit executive (CAE) approval
- Develop and implement a process to address the actions taken should an audit be terminated before it is completed
- Develop a policy to address sufficiency of management's responses

Results of our procedures are presented in more detail in the **Detailed Conclusions** section. The audit objective, scope, methodology, and conclusion are described in **Appendix A**. The Internal Audit organization chart is found at **Appendix B**.

## BACKGROUND

The Chief Audit Executive is responsible for Internal Audit's *Quality Assurance and Improvement Program (QAIP)*, which covers all types of internal audit activities. The QAIP is designed to ensure that Internal Audit:

- Complies with professional auditing standards, codes of ethics, and state law
- Is monitored to ensure effective and efficient operations
- Provides unbiased and independent assurance activities
- Adds value and improves organizational operations
- Includes both periodic and ongoing internal assessments
- Includes an external quality assurance review (peer review) at least once every three years, the results of which are communicated to executive management and the TRS Board Audit Committee (Audit Committee)

## INTERNAL ASSESSMENT

**Ongoing Reviews** of internal audit activities are conducted through:

- Supervision of engagements
- Regular, documented review of work papers during engagements by appropriate Internal Audit staff
- Consistent use of audit policies and procedures for each engagement to ensure compliance with applicable planning, fieldwork, and reporting standards
- Review and approval of all final reports and recommendations by the CAE
- Feedback from customer surveys on individual engagements
- Analyses of performance metrics established to improve effectiveness and efficiency

**Periodic Reviews** of internal audit activities are designed to assess conformance with professional auditing standards, codes of ethics, and state law, and the efficiency and effectiveness of the internal audit activity in meeting the needs of its various stakeholders.

Periodic reviews are conducted through:

- Routine independent customer surveys
- Quarterly activity and performance reporting to executive management and the Audit Committee
- Annual risk assessment for purpose of annual audit planning
- Annual self-assessment reviews to assess compliance with internal audit policies and auditing standards, achievement of internal audit performance metrics, and benchmarking of best practices

## OVERALL CONCLUSION

After completing the self-assessment for fiscal year 2014, our conclusion is that the Teacher Retirement System of Texas (TRS) Internal Audit function generally conforms with *The Institute of Internal Auditor's (IIA) International Standards for the Professional Practice of Internal Auditing*, the U.S. Government Accountability Office's (GAO) *Government Auditing Standards*, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit's Quality Assurance and Improvement Program.

This conclusion is based on completion of a self-assessment using the *State Agency Internal Audit Forum (SAIAF) Master Peer Review Program* and the review of a complete set of working papers of an assurance and a consulting project using the SAIAF Working Paper Review Tool in TeamMate<sup>1</sup>. As part of our commitment to continuous improvement, we identified opportunities to enhance our processes and documentation as described in the **Detailed Results** section of this report entitled "Opportunities for Improvement."

More detailed information regarding our self-assessment is found below. All of the standards and the individual conformance levels are detailed in **Appendix C**.

---

<sup>1</sup> Audit management software

## DETAILED RESULTS

### I. Positive Findings

This self-assessment noted many best practices that are in place within TRS Internal Audit. Several are enumerated below:

- The TRS Internal Audit Charter incorporates all of the standards, is clear, is updated every two years, and is approved by the Audit Committee of the Board. Specifically, it identifies the purpose, authority, responsibility, types of services performed, compliance with required standards, and reference to code of ethics.
- All staff members complete annual training to meet the requirements of their professional certifications as well as the standards required by IIA and GAO.
- TeamMate is used to document all phases of an audit project. Besides providing efficiencies in work paper preparation and retention, TeamMate requires a review step. This ensures that a second level review takes place before issuing audit reports.
- Business units are involved in audit planning. Important information about risks and controls provided by management is important in building a risk based audit plan.
- The TRS Internal Audit Strategic Plan aligns with the TRS Strategic Plan. This is important to ensure that Internal Audit's focus is aligned with the TRS' goals and objectives.

### II. Opportunities for Improvement

#### A. The Institute of Internal Auditors (IIA) Standard for Managing Internal Audit Activity

*The standard for managing the internal audit activity (Performance Standard 2040) states that the chief audit executive must effectively manage the internal audit activity to ensure it adds value to the organization. One aspect in managing an internal audit activity is the implementation of policies and procedures to address consistency in the manner in which the activities are carried out, such as records retention, handling of confidential information, and completing and documenting continuing education requirements. These policies and procedures should be reviewed and updated on a regular basis and approved by the CAE.*

Our self-assessment noted that there are established guidelines for Internal Audit policies and procedures. The guidelines establish an annual review process, including dates of implementation/revisions and name of the contact person. Also, the established guidelines state that the CAE will annually ensure that staff has reviewed and updated the procedures for which they are “owner.”

We also noted the following:

1. Some of the policies and procedures are combined into one document, rather than having a policy and separate procedures for implementing that policy.
2. Some procedures do not have corresponding policies.
3. Some policies and procedures do not include dates of implementation or revision dates or may not indicate the owner/contact person.
4. Although the CAE does review and approve policies and procedures as they are implemented, the guidelines do not include a step that the CAE will evidence approval by signing and dating.

### **Opportunities for Improvement:**

Internal Audit should follow the currently established guidelines for written policies and procedures. A step should be added to have the CAE document approval of policies and procedures by signing and dating each.

Further, to ensure that the annual review of policies and procedures takes place, Internal Audit could include an agenda item within its Annual Internal Audit Retreat.

### **Management's Response**

Management agrees. Internal Audit will follow the currently established guidelines for internal policies and procedures and will incorporate into the guidelines that each policy and procedure will evidence CAE's approval and date of approval. Internal Audit will also add an agenda item to the Annual Internal Audit Retreat that policies and procedures will be discussed and reviewed. Planned implementation date is October 31, 2014.

### **B. Engagement Planning**

*Generally Accepted Governmental Auditing Standards 6.50 states "If the audit was terminated before it was completed and an audit report was not issued, did the auditors document the results of the work to the date of termination and why the audit was terminated?"*

Currently, there is no process to follow if an audit is terminated before completion. At TRS, no audit has ever been terminated before it was completed. Although the need for this process has never arisen, having a process in place is prudent planning, a best practice, and helps to ensure consistency.

### **Opportunities for Improvement**

There should be a step added in TeamMate to address the actions taken should an audit be terminated before it is completed. This step could be added in the wrap up section.

## Management's Response

Management agrees with the recommendation and will have a step added to the TeamMate electronic working paper template to address the process for documenting an audit that is terminated before it is completed. Planned implementation date is October 31, 2014.

## C. Communicating Results

*Generally Accepted Governmental Auditing Standards 7.32 - 7.38 states that if auditors disagree with comments or planned corrective actions stated by the audited entity, the auditors should explain their reasons for disagreement in the report.*

As a result of a recent follow-up audit, the CAE determined that she did not provide management with sufficient formal feedback to make management aware that the written responses to certain findings in the original report did not fully address the recommendations.

## Opportunities for Improvement

Internal Audit should establish and follow a policy requiring disclosure in the final audit report when Internal Audit believes management's responses do not fully address the recommendations or indicate acceptance of risk.

## Management's Response

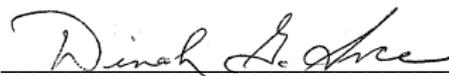
The CAE agrees with the recommendation and will implement a policy requiring an indication in the final audit report, following management's response, whether or not Internal Audit believes management's response fully addresses the recommendation and/or accepts the risk indicated. Internal Audit plans to implement this policy by October 31, 2014.

\* \* \* \*

We express our appreciation to the TRS Board and Board Audit Committee as well as executive and senior management and staff who consistently support the Internal Audit staff and their activities.



Amy Barrett, CIA, CPA, CISA  
Chief Audit Executive



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

# APPENDIX A

## OBJECTIVE, SCOPE, AND METHODOLOGY

### Objective

The self-assessment objective was to determine whether the Teacher Retirement System of Texas (TRS) Internal Audit generally conforms with *The IIA Standards for the Professional Practice of Internal Auditing*, the U.S. GAO's *Government Auditing Standards*, the IIA and GAO Codes of Ethics, the Texas Internal Auditing Act, and Internal Audit's QAIP.

### Scope

The review period was fiscal year 2013. We used *State Agency Internal Audit Forum* (SAIAF) procedures and steps that included the *International Standards for the Professional Practice of Internal Auditing*, *Generally Accepted Government Auditing Standards* (GAGAS), Texas Internal Auditing Act, and Internal Audit's QAIP requirements to conduct the annual TRS Internal Audit Quality Assurance Self-Assessment.

### Methodology

We evaluated conformance with the following statutes and professional standards:

- *Texas Government Code* Chapter 2102 (Texas Internal Auditing Act)
- *International Standards for the Professional Practice of Internal Auditing* and the *Code of Ethics* of the Institute of Internal Auditors, Inc. (IIA)
- *Generally Accepted Government Auditing Standards* (GAGAS) developed by the U.S. Government Accountability Office (GAO) and the GAO Code of Ethics

During fieldwork, we performed the following procedures:

- Reviewed the most current TRS Internal Audit Charter, Internal Audit plan, TRS Internal Audit job descriptions, TRS Internal Audit certifications and continuing professional education hours, Request for Purchase (RFP) documentation, and follow-up documentation of the past audit recommendations
- Interviewed the Chief Audit Executive and other TRS Internal Audit Staff

### Conclusion

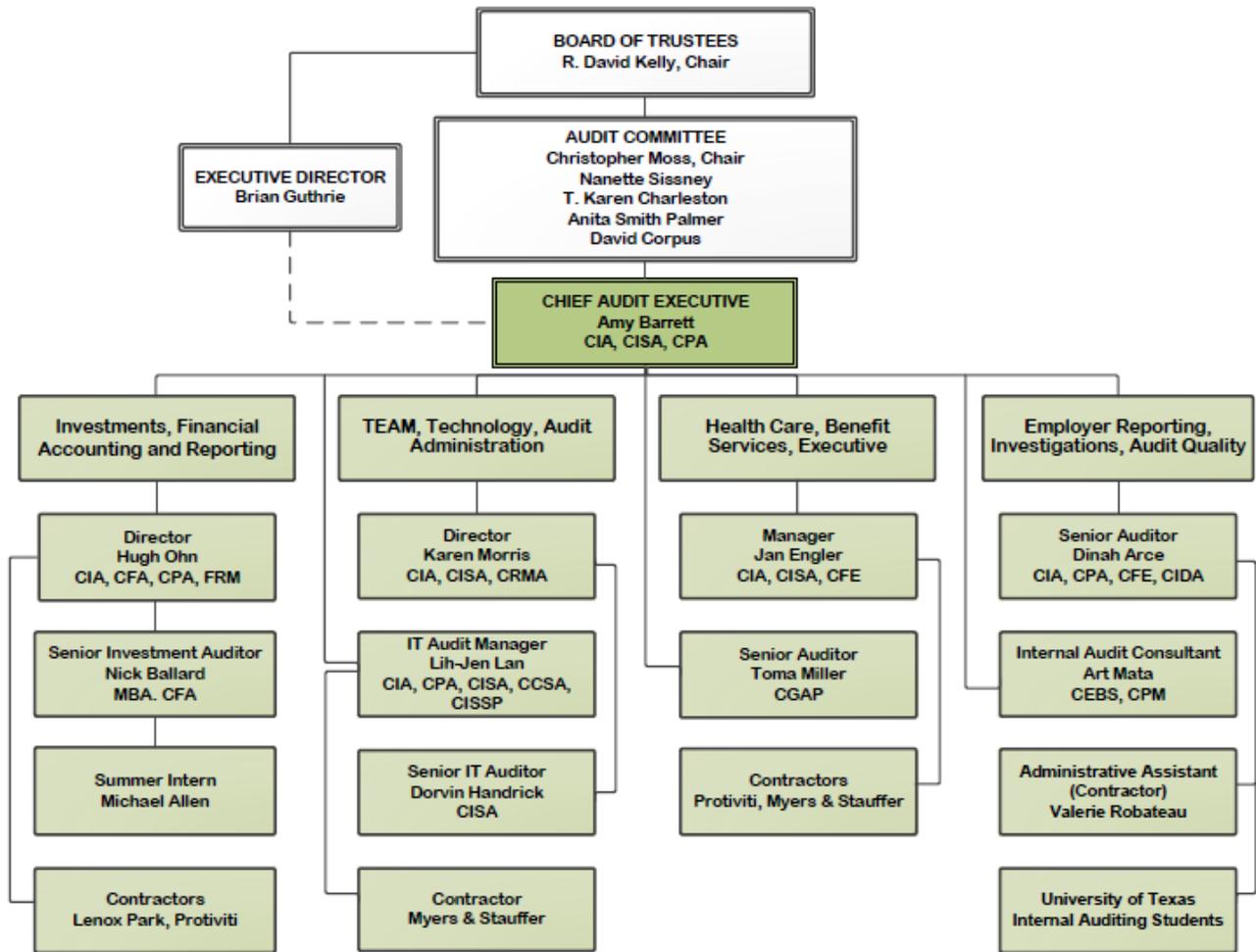
Our conclusion is that TRS Internal Audit generally conforms with these professional standards and related codes of ethics, the state law, and Internal Audit's QAIP.

# APPENDIX B

## TRS ORGANIZATIONAL CHART

The following organization chart shows the Internal Audit function reports directly to the Board of Trustees, but administratively to the Executive Director. This facilitates an independent environment for the Internal Audit function to fulfill professional standards.

### TEACHER RETIREMENT SYSTEM OF TEXAS Internal Audit Department August 2014



## APPENDIX C

### TRS 2014 Self-Assessment

#### SUMMARY OF COMPLIANCE WITH STANDARDS

		Generally Conforms	Partially Conforms	Does Not Conform
<b>OVERALL CONCLUSION</b>		Pass		
<b>IIA CODE OF ETHICS</b>		Pass		
<b>TEXAS INTERNAL AUDITING ACT</b>		Pass		
<b>IIA STANDARDS:</b>				
<b>AS 1000</b>	<b>Purpose, Authority, and Responsibility</b>	Pass		
AS 1010	Recognition of the Definition of Internal Auditing, the Code of Ethics, and the <i>Standards</i> in the Internal Audit Charter	Pass		
<b>AS 1100</b>	<b>Independence and Objectivity</b>	Pass		
AS 1110	Organizational Independence	Pass		
AS 1120	Individual Objectivity	Pass		
AS 1130	Impairment to Independence and Objectivity	Pass		
<b>AS 1200</b>	<b>Proficiency and Due Professional Care</b>	Pass		
AS 1210	Proficiency	Pass		
AS 1220	Due Professional Care	Pass		
AS 1230	Continuing Professional Development	Pass		
<b>AS 1300</b>	<b>Quality Assurance and Improvement Program</b>	Pass		
AS 1310	Requirements of the Quality Assurance and Improvement Program	Pass		

		<b>Generally Conforms</b>	<b>Partially Conforms</b>	<b>Does Not Conform</b>
AS 1311	Internal Assessments	<b>Pass</b>		
AS 1312	External Assessments	<b>Pass</b>		
AS 1320	Reporting on the Quality Assurance and Improvement Program	<b>Pass</b>		
AS 1321	Use of “Conforms with the <i>International Standards for the Professional Practice of Internal Auditing</i> ”	<b>Pass</b>		
AS 1322	Disclosure of Nonconformance	<b>Pass</b>		
<b>PS 2000</b>	<b>Managing the Internal Audit Activity</b>	<b>Pass</b>		
PS 2010	Planning	<b>Pass</b>		
PS 2020	Communication and Approval	<b>Pass</b>		
PS 2030	Resource Management	<b>Pass</b>		
PS 2040	Policies and Procedures	<b>Pass</b> See improvement opportunity #1 in final report		
PS 2050	Coordination	<b>Pass</b>		
PS 2060	Reporting to Senior Management and the Board	<b>Pass</b>		
<b>PS 2100</b>	<b>Nature of Work</b>	<b>Pass</b>		
PS 2110	Governance	<b>Pass</b>		
PS 2120	Risk Management	<b>Pass</b>		
PS 2130	Control	<b>Pass</b>		
<b>PS 2200</b>	<b>Engagement Planning</b>	<b>Pass</b>		
PS 2201	Planning Considerations	<b>Pass</b>		
PS 2210	Engagement Objectives	<b>Pass</b>		
PS 2220	Engagement Scope	<b>Pass</b>		
PS 2230	Engagement Resource Allocation	<b>Pass</b>		
PS 2240	Engagement Work Program	<b>Pass</b>		

		Generally Conforms	Partially Conforms	Does Not Conform
<b>PS 2300</b>	<b>Performing the Engagement</b>	Pass		
PS 2310	Identifying Information	Pass		
PS 2320	Analysis and Evaluation	Pass		
PS 2330	Documenting Information	Pass		
PS 2340	Engagement Supervision	Pass		
<b>PS 2400</b>	<b>Communicating Results</b>	Pass		
PS 2410	Criteria for Communicating	Pass		
PS 2420	Quality of Communications	Pass		
PS 2421	Errors and Omissions	Pass		
PS 2430	Use of “Conducted in Conformance with the <i>International Standards for the Professional Practice of Internal Auditing</i> ”	Pass		
PS 2431	Engagement Disclosure of Nonconformance	Pass		
<b>PS 2500</b>	<b>Monitoring Progress</b>	Pass		
<b>PS 2600</b>	<b>Resolution of Senior Management’s Acceptance of Risks</b>	Pass		
<b>GOVERNMENT AUDITING STANDARDS:</b>				
<b>GAGAS 1.19 3.22 3.31 3.46 3.59 3.79-3.81 3.88</b>	<b>Independence and Objectivity</b>	Pass		
<b>GAGAS 2.23 3.82-85 3.95-96 3.105</b>	<b>Quality Assurance and Improvement Program</b>	Pass		

		<b>Generally Conforms</b>	<b>Partially Conforms</b>	<b>Does Not Conform</b>
<b>GAGAS 6.07</b> <b>6.13</b> <b>6.16</b> <b>6.23</b> <b>6.28</b> <b>6.36-38</b> <b>6.40-41</b> <b>6.45-46</b> <b>6.50-51</b>	<b>Engagement Planning</b>	<b>Pass</b> See improvement opportunity #2 in final report		
<b>GAGAS 6.53</b> <b>6.60</b> <b>6.66-67</b> <b>6.69</b> <b>6.83</b>	<b>Performing the Engagement</b>	<b>Pass</b>		
<b>GAGAS 7.04</b> <b>7.09-7.13</b> <b>7.14-7.19</b> <b>7.21-7.23</b> <b>7.27-7.31</b> <b>7.32-7.44</b> <b>8.04</b> <b>A7.02</b>	<b>Communicating Results</b>	<b>Pass</b> See improvement opportunity #3 in final report		

**Definitions of conformance ranking system:**

**Generally Conforms –**

Means the assessor has concluded that the relevant structures, policies, and procedures of the activity, as well as the processes by which they are applied, comply with the requirements of the individual Standard or element of the Code of Ethics in all material respects. For the sections and major categories, this means that there is general conformity to a majority of the individual Standards or elements of the Code of Ethics, and partial conformity to the others, within the section/category. There may be significant opportunities for improvement, but these should not represent situations where the activity has not implemented the Standards or the Code of Ethics, is not applying them effectively, or is not achieving their stated objectives.

**Partially Conforms –**

Means the assessor has concluded that the activity is making good-faith efforts to comply with the requirements of the individual Standard or element of the Code of Ethics, section and major category, but has fallen short of achieving some of the major objectives. This will usually represent some significant opportunities for improvement in effectively applying the Standards or Code of Ethics and/or achieving their objectives. Some of the deficiencies may be beyond the control of the activity and may result in recommendations to senior management or the Board of the organization.

**Does Not Conform –**

Means the assessor has concluded that the activity is not aware of, is not making good-faith efforts to comply with, or is failing to achieve many/all of the objectives of the individual Standard or element of the Code of Ethics, section and major category. These deficiencies will usually have a significant negative effect on the activity's effectiveness and its potential to add value to the organization. They may also represent significant opportunities for improvement, including actions by senior management or the Board.

**TAB 6B**

# 2015 - 2019

TRS' Internal Audit Strategic Plan



*Looking Towards the Future*

*Trusted Assurance,  
Trusted Assurance,  
Valued Advice  
Valued Advice*

# TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

## Our Mission

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

We strive to provide ***trusted assurance and valued advice*** through our services to the Board of Trustees, the Audit Committee, and executive management:

- Assurance that TRS' risk management, governance, and control processes support achievement of TRS mission and business objectives
- Advice and consultation for improving processes through business partnerships and collaboration

## Our Stakeholders

One of our priorities is to assess key stakeholder expectations, identify gaps, and implement a comprehensive strategy for improvement. Our primary stakeholders include:

- TRS Board of Trustees, and the Board Audit Committee
- Executive Director
- Executive Management

# TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

## STRATEGIC GOALS

Our four strategic goals were developed to ensure that Internal Audit supports the changing needs of TRS' stakeholders in achieving business goals and objectives. These goals represent a strategy for enhancing our contribution to the TEAM Program success, supporting effective Audit Committee governance processes, improving internal audit business expertise, and integrating TRS core values into internal audit processes.

- Goal 1 Assist with the Success of the TRS Enterprise Modernization Application (TEAM) Program
- Goal 2 Support Audit Committee Governance
- Goal 3 Enhance Internal Audit Staff's Competence and Expertise in Support of TRS Risk Management, Control, and Governance Processes
- Goal 4 Support Agency Culture Initiatives

The **table** on the following pages identifies the objectives and related strategies and tactics for each goal.

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

<b>GOAL 1: ASSIST WITH THE SUCCESS OF THE TRS ENTERPRISE APPLICATION MODERNIZATION (TEAM) PROGRAM</b>	
<b>Objective 1: Facilitate independent oversight for Board and external oversight agencies</b>	
<b>Strategy</b>	<b>Tactics</b>
S1. Provide contract oversight and monitoring of Independent Program Assessment (IPA) vendor	T1: Obtain deliverables, schedule required meetings, and approve invoices for payment T2: Monitor hours incurred and contract performance
S2. Coordinate communication process between IPA vendor and key stakeholders	T1: Obtain and address feedback from stakeholders and IPA regarding communications process and access requests T2: Clarify audit's role relating to IPA in Internal Audit Charter update
S3. Coordinate with State Auditor's Office (SAO) for testing of Financial System Replacement (FSR) software application for financial and other future audits	T1: Participate in status update and key decision-making meetings on FSR T2: Communicate documentation requirements for SAO future audits T3: Review sufficiency of documentation in preparation for SAO future audits
<b>Objective 2: Provide input and assistance during development and implementation of TRUST (new Benefits system)</b>	
<b>Strategy</b>	<b>Tactics</b>
S1. Define involvement in TEAM program related to TRUST system	T1: Participate in TEAM committees and other activities, as requested, and ensure Internal Audit (IA) role is stated clearly in TEAM documents such as project charters T2: Allocate resources in annual audit plan to provide coverage of significant committees and projects activities T3: Participate in review of documents by established TEAM deadlines
S2. Assist management in evaluating key <u>internal</u> controls incorporated in TRUST system and business processes	T1: Allocate/schedule IA resources in annual audit plan T2: Obtain list of key controls from management where assistance in validation is desired T3: Assist management in evaluating selected key controls, participate in controls testing, review test results and follow-up on test exceptions T4: Formally communicate observations from testing participation to project management
S3. Assist management in evaluating key <u>security</u> controls incorporated in TRUST system and business processes	T1: Allocate/schedule IA resources in annual audit plan T2: Obtain list of key security controls from management where assistance in validation is desired T3: Assist management in evaluating selected key security controls, participate in controls testing, review test results, and follow-up on test exceptions T4: Formally communicate observations from testing participation to project management

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

<b>Objective 3: Use TRUST in future audits</b>	
<b>Strategy</b>	<b>Tactics</b>
S1. Obtain training on using TRUST	T1: Coordinate with Business Process Managers (BPMs) to ensure Internal Audit (IA) training needs are identified and scheduled T2: Allocate/schedule IA resources in annual audit plan for TEAM training T3: Augment IA TEAM training with internal meetings as needed by IA Subject Matter Experts T4: Maintain IA repository for “training” documents as a permanent file for future use
S2. Utilize data analytics and continuous auditing	T1: Participate in TEAM program requirements gathering and detailed reviews to ensure that the TRUST system has the capability of providing data to perform data analysis T2: Based on knowledge obtained from training, identify potential new data analytic tests in the TRUST system T3: Incorporate data analytics and continuous auditing into projects associated with TRUST system
<b>Objective 4: Provide input during development and implementation of the Financial System Replacement (FSR) software application</b>	
<b>Strategy</b>	<b>Tactics</b>
S1. Define involvement in TEAM program related to the FSR software application	T1: Participate in TEAM committees and other activities, as requested, and ensure Internal Audit (IA) role is stated clearly in TEAM documents such as project charters T2: Allocate resources in annual audit plan to provide coverage of significant committees and projects activities T3: Participate in review of documents by established TEAM deadlines
S2. Assist management in evaluating key internal controls incorporated in the FSR software application and business processes	T1: Allocate/schedule IA resources in annual audit plan T2: Obtain list of key controls from management where assistance in validation is desired T3: Assist management in evaluating selected key controls, participate in controls testing, review test results and follow-up on test exceptions T4: Formally communicate observations from testing participation to project management
S3. Assist management in evaluating <u>security</u> controls incorporated in the FSR software application and business processes	T1: Allocate/schedule IA resources in annual audit plan T2: Obtain list of key security controls from management where assistance in validation is desired T3: Assist management in evaluating selected key security controls, participate in controls testing, review test results, and follow-up on test exceptions T4: Formally communicate observations from testing participation to project management

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

Objective 5: Use FSR software application in future audits	
Strategy	Tactics
S1. Obtain training on using new FSR software application	T1: Coordinate with Business Process Managers (BPMs) to ensure Internal Audit (IA) training needs are identified and scheduled T2: Allocate/schedule IA resources in annual audit plan for TEAM training T3: Augment IA TEAM training with internal meetings as needed by IA Subject Matter Experts T4: Maintain IA repository for “training” documents as a permanent file for future use
S2. Utilize data analytics and continuous auditing	T1: Participate in TEAM program requirements gathering and detailed reviews to ensure that the FSR application has the capability of providing data to perform data analysis T2: Based on knowledge obtained from training, identify potential new data analytic tests in the FSR application T3: Incorporate data analytics and continuous auditing into projects associated with the FSR application
GOAL 2: SUPPORT AUDIT COMMITTEE GOVERNANCE	
Objective 1: Provide assurance to the Audit Committee and executive management on risk mitigation activities related to the pension and healthcare trusts	
Strategy	Tactics
S1. Conduct assurance activities relating to the completeness and accuracy of Reporting Entity information submitted to TRS	T1: Conduct audits and investigations of Reporting Entities as requested or as scheduled on the annual audit plan based on an objective risk assessment T2: Conduct internal audits of controls maintained by TRS or its vendors over completeness and accuracy of Reporting Entity data T3: Communicate to Reporting Entities regarding issues found during audits via presentations, the TRS website, and direct communication T4: Coordinate with the SAO to facilitate their audit of the TRS financial statements and with other interested organizations conducting reporting entity audits T5: Monitor changes in auditing requirements of professional organizations and the SAO
S2. Provide assurance on investment risk mitigation activities	T1: Issue an overall opinion annually on the effectiveness of internal controls relating to investment activities for the past three years T2: Test investment compliance, cash transfers, and ethics controls quarterly T3: Continuously monitor changes to the investment environment by analyzing investment data, attending important meetings, reading relevant documents, utilizing consultants, networking, attending relevant training, and maintaining certifications

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

Strategy	Tactics
S3. Provide assurance on health care risk mitigation activities	T1: Stay current on legislative changes impacting TRS health plans and associated risks T2: Utilize TRS and vendor health care risks assessments to develop a reasonable and flexible approach for performing routine audits of the health care trusts T3: Procure health care expertise to execute risk-based audit plans, if needed T4: Obtain training for dedicated Internal Audit staff on health care risks and compliance requirements
S4. Coordinate with Enterprise Risk Management (ERM) on risk assessment activities	T1: Enhance collaboration with ERM through regular meetings and information sharing T2: Utilize risk assessments developed by management through the ERM program as the basis of the annual audit plan T3: Provide feedback after each audit to ERM about the completeness of management's risk assessments for future consideration T4: Participate in internal Risk Oversight Committee meetings
<b>Objective 2: Improve Internal Audit communication</b>	
Strategy	Tactics
S1. Refine report format of Internal Audit reports and Audit Committee materials	T1: Review current materials for possibilities for improvement T2: Survey Audit Committee members and management on report format and incorporate feedback T3: Review other entities' presentations for ideas
S2. Improve delivery of information	T1: Survey Audit Committee and management for improvement on delivery of information and incorporate feedback T2: Identify and participate in public speaking training/opportunities T3: Maintain Internal Audit intranet and internet sites
<b>Objective 3: Provide information on effective Audit Committee practices</b>	
Strategy	Tactics
S1. Obtain and provide information to the Audit Committee on best practices of audit committees	T1: Designate a portion of the spring meeting to Audit Committee education during legislative session years T2: Provide Audit Committee orientation to new trustees
S2. Consider using Audit Committee self-evaluation tool	T1: Present and explore concept of self-evaluation with the Audit Committee chair T2: Develop a self-evaluation tool for consideration by the Audit Committee chair
S3. Explore sharing governance resources through Diligent	T1: Meet with Diligent owner to discuss ideas and potential resources T2: Discuss idea of sharing information with the Audit Committee chair

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

Objective 4: Improve governance on fraud awareness, prevention, and detection activities	
Strategy	Tactics
S1. Develop fraud detection activities	T1: Document standard procedures for Internal Audit fraud investigations T2: Provide input into updates to the TRS Fraud Policy T3: Provide assistance in investigations as formally requested T4: Incorporate control tests in assurance projects to ensure controls are there to prevent or timely detect unusual “fraud” red flag activity
S2. Improve fraud awareness and prevention program	T1: Administer the TRS Fraud and Ethics Hot Line, including updating promotional materials
GOAL 3: ENHANCE INTERNAL AUDIT STAFF’S COMPETENCE AND EXPERTISE IN SUPPORT OF TRS RISK MANAGEMENT, CONTROL, AND GOVERNANCE PROCESSES	
Objective 1: Cultivate in-house Subject Matter Experts	
Strategy	Tactics
S1. Deepen knowledge of TRS laws (federal and state), rules, and internal policies	T1: Pilot new auditor rotation into operational functions T2: Participate in internal training in business units T3: Hold lunch-and-learn knowledge transfers sessions at audit meetings T4: Analyze other audit reports and share best practices identified in those reports T5: Leverage knowledge transfer from contractors
S2. Broaden foundational skills in data analytics	T1: Prepare and present training programs (e.g., Audit Command Language, Microsoft Access, Computer-Aided Audit Tools) to Internal Audit (IA) staff T2: Add a project scoping step in TeamMate to include data analytics on every project T3: Identify data analytics mentors for IA staff T4: Attend and apply external data analysis training in projects
Objective 2: Ensure continued competence and expertise of Internal Audit	
Strategy	Tactics
S1. Develop workforce continuity plans	T1: Work with Human Resources to develop a continuity plan for Internal Audit (IA) T2: Establish a cross training policy within IA T3: Participate in the TRS Leadership Development Program

## TRS INTERNAL AUDIT STRATEGIC PLAN FY2015 – 2019

<b>GOAL 4: SUPPORT AGENCY CULTURE INITIATIVES</b>	
<b>Objective 1: Integrate TRS Core Values into Internal Audit activities</b>	
<b>Strategy</b>	<b>Tactics</b>
S1. Explore opportunities and methods to tie audit findings into TRS core values	T1: Recognize Internal Audit and client actions that demonstrate TRS core values T2: Identify in audit activities when positive findings directly demonstrate a TRS core value
S2. Integrate TRS Core Values into IA policies and procedures	T1: Incorporate TRS core values into the internal Ethics and Fraud Hot Line materials T2: Update job descriptions and performance evaluations to include TRS core values (Human Resources led initiative)

**TAB 7**

**TAB 7A**

# TEACHER RETIREMENT SYSTEM OF TEXAS

## INTERNAL AUDIT CHARTER

### ROLE OF INTERNAL AUDIT

Auditing is a cornerstone of good public sector governance. By providing unbiased, objective assessments of whether public resources are managed responsibly and effectively to achieve intended results, auditors help public sector organizations achieve accountability and integrity, improve operations, and instill confidence among citizens and stakeholders. The public sector auditor's role supports the governance responsibilities of oversight, insight, and foresight. Oversight addresses whether public sector entities are doing what they are supposed to do and serves to detect and deter public corruption. Insight assists decision-makers by providing an independent assessment of public sector programs, policies, operations, and results. Foresight identifies trends and emerging challenges. Auditors use tools such as financial audits, performance audits, investigations, and advisory services to fulfill each of these roles.<sup>1</sup>

### MISSION

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.

### OBJECTIVES AND SCOPE OF WORK

#### Assurance Objectives

The objectives of assurance services are to provide formal, independent assurance to management and the Audit Committee that the organization's assets are safeguarded, that operating efficiency is enhanced, and that compliance is maintained with prescribed laws, and management and TRS Board of Trustees (Board of Trustees) policies. The assurance services objectives also include independent assessment of the organization's risk awareness and management, reliability and integrity of the organization's data, and achievement of the organization's goals and objectives.

#### Attestation Engagements: Agreed-Upon Procedures

Agreed-upon procedures consist of auditors performing specific procedures on the subject matter and issuing a report of findings based on the agreed-upon procedures. In an agreed-upon procedures engagement, the auditor does not express an opinion or conclusion, but only reports on agreed-upon procedures in the form of procedures and findings related to the specific procedures applied.<sup>2</sup>

---

<sup>1</sup> The Institute of Internal Auditors *Supplemental Guidance: The Role of Auditing in Public Sector Governance*, 2<sup>nd</sup> Edition, January 2012

<sup>2</sup> *Government Auditing Standards* of the United States Government Accountability Office, 2011 Revision

### **Consulting and Advisory Services Objectives**

The objectives of consulting and advisory services are to provide management with assessments and advice for improving processes that will advance the goals and objectives of the organization. No assurance is provided.

The objectives of consulting services are to provide formal assessments and advice on the front-end of projects so that risks may be managed and internal controls may be designed at the beginning of a project. The objectives and the scope of consulting projects are agreed to by management.

The objectives of advisory services are to provide informal advice to management. Examples of advisory services include participating in various committees in a non-voting capacity; providing routine advice on policies, internal controls, and audit recommendations; providing training and risk management tools; facilitating meetings; and collecting benchmarking information.

### **Scope**

Internal Audit provides opinions on governance, risk management, and controls as the result of an individual assurance project or as an overall opinion of the adequacy of governance, risk management, and control within the organization. The scope of work of the Internal Audit department is to determine whether the organization's framework of risk management, control, and governance processes, as designed and represented by management, is functioning in a manner to ensure:

- Programs are operating within the highest fiduciary standards and are directed toward the requirements defined in the federal and state constitutions, laws, regulations, and TRS policies and procedures.
- Risks within and outside the organization are appropriately identified and managed.
- Risk and control information is effectively communicated throughout the organization.
- Ethics-related programs and activities are effective.
- Significant financial, managerial, and operating information is accurate, reliable, and timely.
- Significant legislative or regulatory issues impacting the organization are recognized and addressed appropriately.
- Interaction with appropriate internal committees occurs as needed.
- Employee actions are in compliance with policies, standards, procedures, and applicable laws and regulations.
- Employer (reporting entity) data and contributions reported to TRS are accurate, complete, and in compliance with applicable laws and rules.
- Resources are acquired economically, used efficiently, and adequately protected.
- Programs, plans, and objectives are monitored and achieved in line with the TRS mission.

- Quality and continuous improvement are fostered in the organization’s control process.
- Internal controls are in place and are functioning effectively to accomplish business and strategic objectives.
- Information technology controls including information systems security controls are in place and are functioning effectively.
- Contractors are meeting the obligations of their contracts while in conformance with applicable laws, regulations, policies, procedures, and best practices.
- Specific operations, processes and programs are reviewed at the request of management or the Audit Committee.

During the performance of professional services, recommendations for improvement in risk management, control, and governance processes may be identified. This information will be communicated to management and the Audit Committee.

## **AUTHORITY**

### **Legal Basis for the Internal Audit Function**

The Internal Audit department operates within the Teacher Retirement System of Texas under:

- Article 16, Section 67 of the Texas Constitution
- Title 8, Subtitle C, *Texas Government Code*
- Chapter 2102 (Texas Internal Auditing Act), *Texas Government Code*

### **Delegation of Authority Relevant to the Performance of Engagements**

To fulfill the mission and objectives of the internal audit function, the chief audit executive and staff of the Internal Audit department are hereby authorized by the Board of Trustees to:

- Have unrestricted access to all TRS divisions, departments, personnel, activities, confidential and non-confidential data and records, information systems, physical property, and contractors relevant to the performance of engagements, subject to applicable state and federal laws.
- Have access to contractor records and files in line with contract terms and specifically the “right to audit” section.
- Have unrestricted access to the chair of the Audit Committee, Audit Committee members, and the executive director.
- Allocate resources, set frequencies, select subjects, determine scope of work, and apply the techniques required to accomplish assurance and consulting objectives.
- Obtain the necessary assistance of personnel in units of the organization where audits are performed, as well as other specialized services from within or outside the organization.
- Obtain timely reports from management on actions proposed and taken pertaining to audit recommendations.

The chief audit executive and staff of the Internal Audit department are not authorized to:

- ~~Perform any operational duties for the organization. **Compliance duties are not considered operational duties.**~~
- Initiate or approve accounting transactions external to the Internal Audit department.
- Direct the activities of any organization employee not employed by the Internal Auditing department, except to the extent such employees have been appropriately assigned to auditing teams or to otherwise assist the internal auditors.

Section 3.1.1 of the Bylaws of the Board of Trustees states the purpose and responsibilities of the Audit Committee.

## **INDEPENDENCE AND OBJECTIVITY**

### **Organizational Placement**

The chief audit executive reports functionally to the Board of Trustees through the Audit Committee and administratively to the executive director of the Teacher Retirement System. This reporting structure provides for Internal Audit independence and objectivity as required by Texas State law and professional standards.

## **RESPONSIBILITIES AND ACCOUNTABILITY**

The chief audit executive and staff of the Internal Audit department shall be accountable to the Board of Trustees, the Audit Committee, and the executive director to:

- Develop a flexible annual audit plan using an appropriate risk-based methodology, considering any risks or control concerns identified by management and the Board of Trustees, and submit that plan to the Audit Committee for review and **approval recommendation for approval by the Board. as well as provide periodic updates.**
- Develop short-term and long-term strategic goals for Internal Audit.
- Implement the approved audit plan including appropriate plan amendments, and special projects requested by management and the Audit Committee.
- Provide quarterly reports comparing actual results to the annual audit plan.
- Assess the adequacy and effectiveness of the organization's processes for controlling its activities and managing its risks in the areas set forth under the mission and scope of work, including the effectiveness of the Enterprise Risk Management (ERM) **and Investment Compliance programs.**
- Report significant issues related to the processes for controlling the activities of the organization including potential improvements to those processes.
- Provide quarterly reports to the Audit Committee and management summarizing the results of audit activities including the implementation status of prior audit recommendations.

- Provide copies of audit reports to management, the Audit Committee, the Board of Trustees and oversight agencies specified in state law.
- Evaluate and assess significant new or changing functions, services, processes, operations, information systems and internal controls concurrent with their development, implementation, and/or expansion.
- Partner with management for all operations to understand the internal control environment, risks, and risk mitigation activities.
- ~~Provide support to the internal investment compliance program.~~
- Participate in a consulting or advisory capacity in the planning, design, development, implementation, and modification phases of major information systems to determine whether:
  - adequate controls are incorporated during the development phases of business processes and systems before implementation
  - adequate project and risk management processes are in place and functioning effectively to mitigate risks that may hinder achieving project goals and objectives
  - thorough systems testing is performed at appropriate development phases
  - information security is addressed at appropriate development phases and at implementation
  - processes are in place and functioning effectively to develop and maintain complete and accurate systems documentation
  - the intended purpose and objectives of the system implementation or modifications have been met
- Facilitate and coordinate activities of ~~monitor the timely hiring and coordination of~~ the TRS Enterprise Application Modernization (TEAM) program Independent Program Assessment vendor and ensure direct access to executive management and the Board of Trustees.
- Select, train, develop and retain professional audit staff members who collectively have the knowledge, skills, abilities, experience, expertise, and professional certifications to meet the requirements of this charter.
- Maintain an effective quality assurance and improvement program to include supervision, training, internal reviews, and external reviews.
- Keep management and the Audit Committee informed of emerging trends and successful practices in risk management, control, and governance through training and other forms of communication.
- Provide the Audit Committee a list of Internal Audit annual performance goals and results and the *Annual Internal Audit Report* required by state law.
- Provide the Audit Committee periodic reports on the sufficiency of Internal Audit resources.
- Assist in the deterrence of fraud by examining and evaluating the adequacy and the effectiveness of the system of internal controls and administering the internal fraud and ethics hot line.

- Report immediately any known incident of significant fraud to executive management, the Audit Committee, the Board of Trustees, and the State Auditor’s Office.
- Conduct or participate as appropriate in the investigation of suspected illegal or fraudulent activities within the organization and report results to executive management and the Audit Committee.
- Act as the primary point of contact related to audits, investigations, or inquiries of the State Auditor’s Office and other external audit groups.
- Consider the scope of work of external auditor groups as appropriate for the purpose of providing optimal audit coverage to the organization at a reasonable overall cost.
- Coordinate with other control and monitoring functions (risk management, legal, accounting, ethics, investments compliance, and physical and information systems security).

## STANDARDS OF AUDIT PRACTICE

The chief audit executive and staff members of the Internal Audit department will comply with the following professional standards:

- *Texas Government Code*, Chapter 2102 (Texas Internal Auditing Act)
- *International Standards for the Professional Practice of Internal Auditing* and the *Code of Ethics* of The Institute of Internal Auditors, Inc., see **Appendix A**
- *Government Auditing Standards* of the United States Government Accountability Office and their Code of Ethics, see **Appendix A**
- *Information Systems Standards, Guidelines and Procedures for Auditing and Control Professionals* of the Information Systems Audit and Control Association, as applicable

\*\*\*\*\*

## SIGNATURE SECTION

The Internal Audit Charter revision was adopted by the Board of Trustees of the Teacher Retirement System of Texas on September 14, 2012.

---

Christopher Moss  
Chair, Audit Committee  
Board of Trustees

---

R. David Kelly  
Chair  
Board of Trustees

---

Amy L. Barrett, CIA, [CISA](#), CPA  
Chief Audit Executive

---

Brian Guthrie  
Executive Director

## APPENDIX A

### ***Code of Ethics of The Institute of Internal Auditors, Inc.***

Internal auditors are expected to apply and uphold the following principles:

- 1. Integrity** - The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgment.
- 2. Objectivity** - Internal auditors exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgments.
- 3. Confidentiality** - Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so.
- 4. Competency** - Internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services.

### **Rules of Conduct**

#### **1. Integrity**

Internal auditors:

- 1.1. Shall perform their work with honesty, diligence, and responsibility.
- 1.2. Shall observe the law and make disclosures expected by the law and the profession.
- 1.3. Shall not knowingly be a party to any illegal activity, or engage in acts that are discreditable to the profession of internal auditing or to the organization.
- 1.4. Shall respect and contribute to the legitimate and ethical objectives of the organization.

#### **2. Objectivity**

Internal auditors:

- 2.1. Shall not participate in any activity or relationship that may impair or be presumed to impair their unbiased assessment. This participation includes those activities or relationships that may be in conflict with the interests of the organization.
- 2.2. Shall not accept anything that may impair or be presumed to impair their professional judgment.
- 2.3. Shall disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under review.

### **3. Confidentiality**

Internal auditors:

- 3.1. Shall be prudent in the use and protection of information acquired in the course of their duties.
- 3.2. Shall not use information for any personal gain or in any manner that would be contrary to the law or detrimental to the legitimate and ethical objectives of the organization.

### **4. Competency**

Internal auditors:

- 4.1. Shall engage only in those services for which they have the necessary knowledge, skills, and experience.
- 4.2. Shall perform internal audit services in accordance with the *International Standards for the Professional Practice of Internal Auditing*.
- 4.3. Shall continually improve their proficiency and the effectiveness and quality of their services.

## ***Government Auditing Standards of the United States Government Accountability Office Code of Ethics***

The ethical principles that guide the work of auditors who conduct audits in accordance with GAGAS are:

- a. the public interest;
- b. integrity;
- c. objectivity;
- d. proper use of government information, resources, and positions; and
- e. professional behavior.

### **The Public Interest**

The public interest is defined as the collective well-being of the community of people and entities the auditors serve. Observing integrity, objectivity, and independence in discharging their professional responsibilities assists auditors in meeting the principle of serving the public interest and honoring the public trust. The principle of the public interest is fundamental to the responsibilities of auditors and critical in the government environment.

A distinguishing mark of an auditor is acceptance of responsibility to serve the public interest. This responsibility is critical when auditing in the government environment. GAGAS embodies the concept of accountability for public resources, which is fundamental to serving the public interest.

## **Integrity**

Public confidence in government is maintained and strengthened by auditors performing their professional responsibilities with integrity. Integrity includes auditors conducting their work with an attitude that is objective, fact-based, nonpartisan, and non-ideological with regard to audited entities and users of the auditors' reports. Within the constraints of applicable confidentiality laws, rules, or policies, communications with the audited entity, those charged with governance, and the individuals contracting for or requesting the audit are expected to be honest, candid, and constructive.

Making decisions consistent with the public interest of the program or activity under audit is an important part of the principle of integrity. In discharging their professional responsibilities, auditors may encounter conflicting pressures from management of the audited entity, various levels of government, and other likely users. Auditors may also encounter pressures to inappropriately achieve personal or organizational gain. In resolving those conflicts and pressures, acting with integrity means that auditors place priority on their responsibilities to the public interest.

## **Objectivity**

The credibility of auditing in the government sector is based on auditors' objectivity in discharging their professional responsibilities. Objectivity includes independence of mind and appearance when providing audits, maintaining an attitude of impartiality, having intellectual honesty, and being free of conflicts of interest. Maintaining objectivity includes a continuing assessment of relationships with audited entities and other stakeholders in the context of the auditors' responsibility to the public. The concepts of objectivity and independence are closely related. Independence impairments impact objectivity.

## **Proper Use of Government Information, Resources, and Positions**

Government information, resources, and positions are to be used for official purposes and not inappropriately for the auditor's personal gain or in a manner contrary to law or detrimental to the legitimate interests of the audited entity or the audit organization. This concept includes the proper handling of sensitive or classified information or resources.

In the government environment, the public's right to the transparency of government information has to be balanced with the proper use of that information. In addition, many government programs are subject to laws and regulations dealing with the disclosure of information. To accomplish this balance, exercising discretion in the use of information acquired in the course of auditors' duties is an important part in achieving this goal. Improperly disclosing any such information to third parties is not an acceptable practice.

Accountability to the public for the proper use and prudent management of government resources is an essential part of auditors' responsibilities. Protecting and conserving

government resources and using them appropriately for authorized activities is an important element in the public's expectations for auditors.

Misusing the position of an auditor for financial gain or other benefits violates an auditor's fundamental responsibilities. An auditor's credibility can be damaged by actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an auditor's personal financial interests or those of an immediate or close family member; a general partner; an organization for which the auditor serves as an officer, director, trustee, or employee; or an organization with which the auditor is negotiating concerning future employment.

### **Professional Behavior**

High expectations for the auditing profession include compliance with all relevant legal, regulatory, and professional obligations and avoidance of any conduct that might bring discredit to auditors' work, including actions that would cause an objective third party with knowledge of the relevant information to conclude that the auditors' work was professionally deficient. Professional behavior includes auditors putting forth an honest effort in performance of their duties and professional services in accordance with the relevant technical and professional standards.

**TAB 7B**

# Fiscal Year 2015 Audit Plan

## *September 19, 2014*

---

Amy Barrett, CIA, CISA, CPA  
Chief Audit Executive

---

Christopher S. Moss  
Chair, Audit Committee, Board of  
Trustees

---

Brian Guthrie  
Executive Director

---

R. David Kelly  
Chair, Board of Trustees



# Executive Summary

## Professional and Statutory Requirements

This document provides the *Fiscal Year 2015 Audit Plan* (Audit Plan) as required by professional auditing standards, the *Texas Internal Auditing Act* (Act), and the *Texas Government Code 2102.008* for the Teacher Retirement System of Texas (TRS). The Act requires state agencies to conduct a program of internal auditing that includes an annual audit plan that is prepared using risk assessment techniques and identifies individual audit projects to be conducted during the year. The Audit Plan is required to be evaluated and updated annually for recommendation of approval by the TRS Audit Committee of the Board of Trustees (Audit Committee) to the TRS Board of Trustees (Board). Internal Audit is independent of management and provides objective assurance and consulting services designed to add value and improve TRS' operations.

## Audit Plan Development and Scope

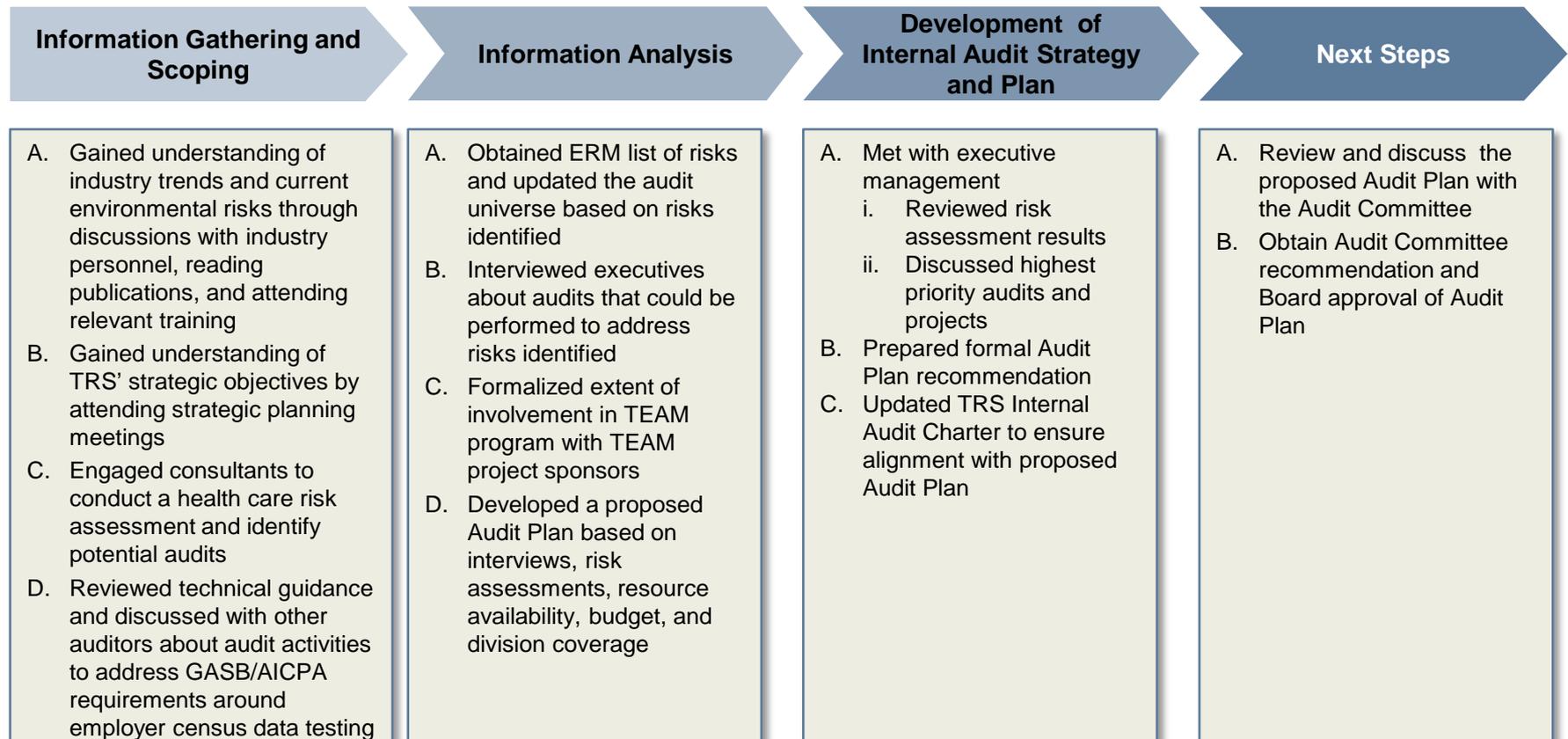
Our Audit Plan is designed to provide coverage of key risks, given the existing staff and approved budget. See the **Appendices** for information regarding the internal audit budget, performance measures, and audit universe.

## Changes Subsequent to Approval

Interim changes to the Audit Plan will occur from time to time due to changes in business risks, timing of TRS' initiatives, and staff availability. We will report Audit Plan changes to senior management and present changes to the Audit Committee at the following quarterly Audit Committee meeting. Amendments to the approved Audit Plan deemed to be significant (based on discussions with the executive director and audit committee chair) will be submitted to the Audit Committee for recommendation to the Board for approval. The State Auditor's Office also requires notification of material changes to the Audit Plan.

# Risk Assessment & Audit Planning Approach

*Risk assessments developed by the Enterprise Risk Management (ERM) team and a health care audit services vendor were used to identify 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. The Audit Plan also includes hours for ad hoc projects and special requests. The following approach was taken in creating the Audit Plan:*



# Types of Projects to Cover Risk Areas

**Internal Audit considered ERM risk ranking when identifying and prioritizing various projects. An important part of the Audit Plan is that the identified processes, systems, and initiatives should receive differing types and levels of review based on their importance, perceived risk, and most efficient approach. Our suggested levels of review activities are as follows:**

## Audit

- Audit Focus: Assess evidence available in order to conclude on an audit objective
- Deliverable: Audit report for public distribution unless protected by statute
- Estimated level of effort per project: 400 - 500 hours

## Agreed-Upon Procedures

- Agreed-Upon Procedures Focus: Determine specific steps to test with management's agreement and report on results; used for data analytics and quarterly testing of specific data and transactions
- Deliverable: Agreed-upon procedures report for public distribution (use is limited to those with understanding of procedures performed)
- Estimated level of effort per project: 100 - 300 hours

## Formal Consulting

- Consulting Focus: Respond to requests for formal study or assessment with recommendations; no assurance provided
- Deliverable: Consulting report or memo for limited distribution; significant material weaknesses identified would be reported to executive management and the Audit Committee as required by professional auditing standards
- Estimated level of effort per project: 100 - 200 hours

## Informal Consulting (Advisory)

- Advisory Focus: Participate in activities in a non-voting capacity, e.g., provide training and input on policies and procedures
- Deliverable: Verbal discussion or a brief memo to management
- Estimated level of effort per year: 10 – 100 hours

# Audit Plan: TEAM

*The tables on this and the following pages summarize the name of each project, type of project, and preliminary scope of work to be performed. Scope of work will be finalized as part of each project's formal planning phase.*

Title	Type	Preliminary Scope
TEAM Program Internal Controls Assessment	Advisory	Assist management in its evaluation of key internal controls, including security controls, incorporated into TRUST, the new benefits system, and business processes
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Coordinate and monitor activities of the IPA vendor and ensure direct access to executive management and the board
TEAM Committees and TEAM Projects Participation	Advisory	Participate in TEAM Executive Steering Committee (ESC) and other committees in a non-voting capacity, and provide advisory services related to TEAM project activities

# Audit Plan: Pension Benefits

Title	Type	Preliminary Scope
Follow-Up Audit on Significant Findings of Prior Benefits Audits	Audit	Follow-up on outstanding audit recommendations related to identified weaknesses with fraud prevention controls to determine whether mitigations have been implemented
Benefits Testing for State Auditor's Office (SAO) Audit of Comprehensive Annual Financial Report (CAFR)	Audit	Conduct benefit testing on behalf of the SAO to be used in completion of the CAFR audit
Semi-Annual Benefits Testing	Agreed-Upon Procedures	Recalculate a sample of benefit payments semi-annually and determine whether documentation on file supports the calculation

# Audit Plan: Finance/Reporting Entities

Title	Type	Preliminary Scope
Payables Audit	Audit	Assess whether TRS received goods and services as invoiced and paid
Actuarial Data Controls	Audit	Assess whether data submitted to the actuary is complete and accurate and the controls surrounding the process are sufficient. Assess controls at actuary for complying with accounting standards and ensuring the completeness and accuracy of data reported to TRS for the financial audit.
Reporting Entity Audits (3-4) and investigations	Audit	Determine whether information reported to TRS is complete and accurate, especially in the areas of eligibility, compensation, employment after retirement and related surcharges
TRS Reporting Entity Website Audit Information	Advisory	Post audit-related information and tools on the TRS employer (reporting entity) website. Information may include self-audits, audit programs, audit results, technical guidance, and frequently asked questions about reporting entity audits.
State Auditor's Office (SAO) Financial (CAFR) Audit Coordination	Advisory	Coordinate activities of the SAO to ensure deadlines are met; coordinate quarterly update meetings with executive management and the SAO
Business Process Analysis of Activities Involving Multiple Departments	Consulting	In conjunction with Organizational Change Management, document and analyze business processes that overlap multiple departments; provide options to TRS management for realigning and streamlining process activities while considering segregation of duties requirements.

# Audit Plan: Health Care

Title	Type	Preliminary Scope
Health Care Vendor Update Meetings	Advisory	Attend quarterly meetings with health care vendors to understand results, issues, and TRS management's monitoring controls
Health Care Vendor Selection Observation	Advisory	Observe selection process of large vendor and service providers
Health Care Audit Services Review	Consulting	Assess quality and scope of health care audit services procured by TRS management and provide feedback on approach and scope of future procurements by management for audit services

# Audit Plan: Information Technology

Title	Type	Preliminary Scope
Electronic Records	Audit	Assess whether electronic records are maintained to enable business functionality and are in accordance with TRS requirements
Cloud Computing, Mobile Device Security, Co-Location/Disaster Recovery, IT Security	Consulting and Advisory	Provide additional advice or tools for implementing recommendations made in prior year's consulting and audit projects
Network Penetration Test; Security Risk Assessment Review	Advisory	Obtain, read, and follow-up on any issues identified during the network penetration tests and the security risk assessment conducted by the TRS Information Security Officer
Technology Committees Meeting Participation	Advisory	Participate (non-voting) in meetings to stay apprised of initiatives relating to enterprise security and information technology operations

# Audit Plan: Investment Management

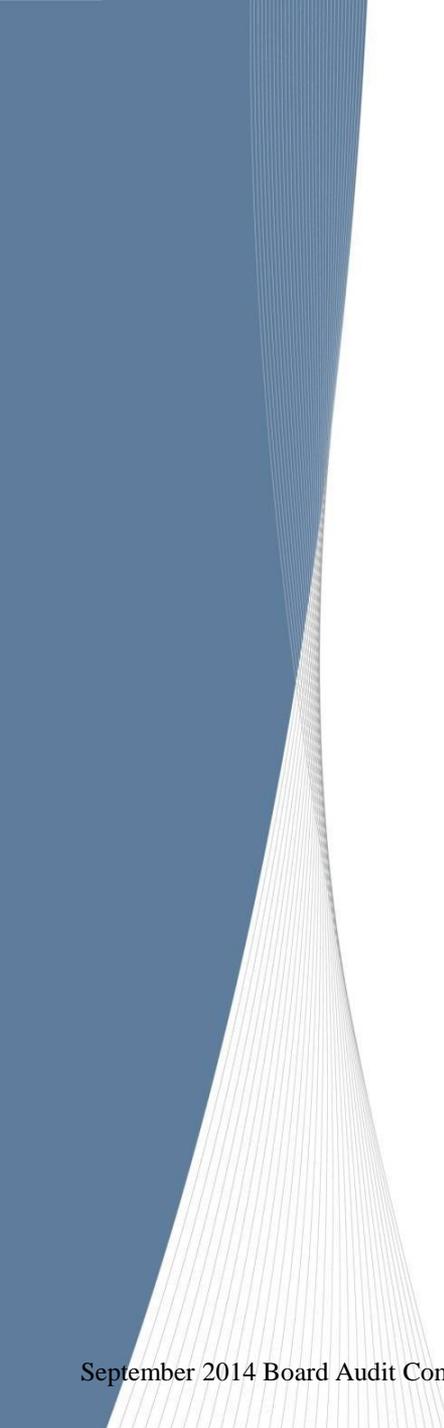
Title	Type	Preliminary Scope
Overall Internal Control Opinion on Investment Activities (includes periodic status reports)	Audit	Assess key operating, compliance, and reporting controls within the Investment Management Division and its service providers relating to private markets transactions. Private market activities to be assessed include due diligence, valuation, fees, fund transfers, risk management, governance, management and board reports, information systems, compliance, accounting, and investment operations.
Quarterly Investment Compliance and Ethics Policies Testing	Agreed-Upon Procedures	Assess compliance with TRS ethics policies and the Investment Policy Statement (IPS) requirements including placement agent disclosures and Internal Investment Committee (IIC) processes; test board report accuracy; test wire transfer compliance with internal procedures; provide input into IPS and other investment policy changes
Emerging Risk Reviews	Advisory	Stay current on changes in the Investment Management Division and review new initiatives when identified
Incentive Compensation Plan Review	Advisory	Prior to payment, recalculate the incentive compensation award amounts to determine if they are calculated in accordance with plan provisions; reconcile performance to the service provider
Investment Committees Attendance	Advisory	Stay current on Investment Management Division initiatives by attending IIC, Derivatives Operations, Monthly Staff, and other meetings including Annual Town Hall

# Audit Plan: Internal Audit Activities

Title	Project Description
Internal Quality Assurance Review	Conduct a self-assessment of Internal Audit's compliance with professional auditing standards
Annual Internal Audit Report	Prepare annual report of audit activities in accordance with SAO instructions
Quarterly Audit Recommendations Follow-Up	Follow-up and report on the status of outstanding audit recommendations
Fiscal Year 2016 Audit Plan	Prepare annual audit plan based on a documented risk assessment in accordance with professional auditing standards and the Texas Internal Auditing Act
Audit Committee Meetings Preparation	Prepare communications and attend Audit Committee and Board meetings
Internal Audit Vendor Request for Qualifications (RFQ)	Prepare an RFQ to select qualified vendors for conducting health care audits
Internal Ethics and Fraud Hotline Administration	Follow-up on hotline calls (both internal and external) including complaints disclosed to TRS Internal Audit through other communication means
Meetings Participation	Participate (non-voting) in various TRS-wide meetings such as Executive Council, Leadership Team, and Risk Oversight Committee
Special Requests and Surprise Inspections	Complete projects as requested by TRS management; complete surprise inspections (such as cashier's function) to gain an understanding of controls in an area and provide "perception of detection"
University of Texas Students' Projects	Policy reviews and benchmarking – policies TBD

# Audit Plan: High Risk Areas (High, Elevated, or Caution) Excluded from the Audit Plan And Areas of Interest to the SAO

Area	Reason for Exclusion
Legacy Information Systems	Systems are in process of being replaced. Internal Audit staff will participate in advisory capacity in decommissioning process and assessment of transfer of internal controls, including security controls, to new systems.
Information Security and Confidentiality	Information security follow-up audit conducted in FY14. Assurance is not planned for FY14; however, advisory work will continue in FY15 regarding implementation of outstanding recommendations.
Public Markets Operations	Tested in FY14 without any reportable findings
Purchasing and Contract Administration	Tested in FY14 without any significant findings. Payables audit scheduled for fiscal year 2015.



# **Appendix A**

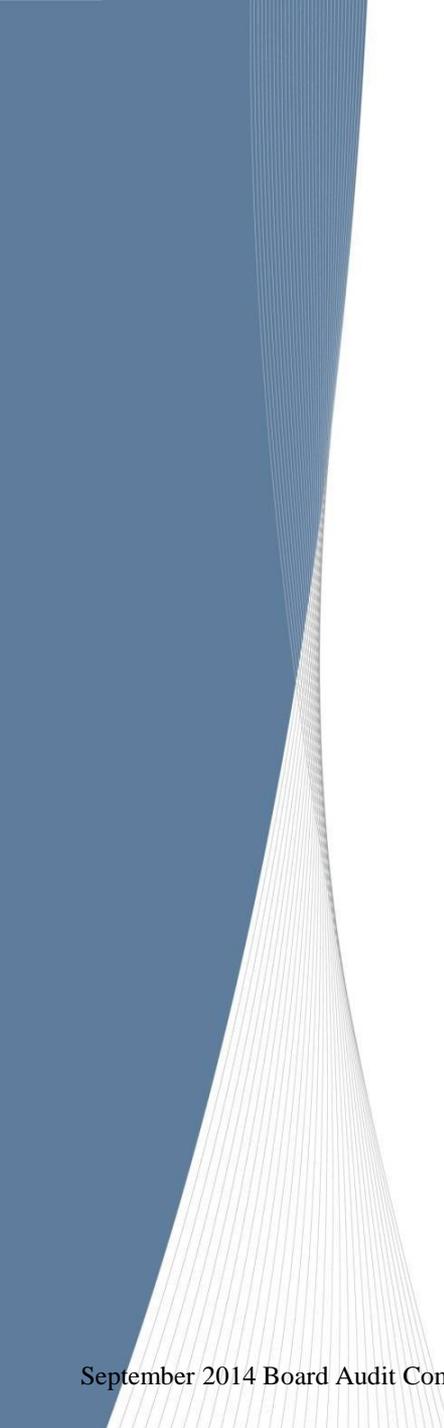
## **Internal Audit Operating Budget**

# Internal Audit Operating Budget

Line Item	Budget FY 2015	Budget FY 2014
000 – Salaries	\$977,204	\$949,133
000 – Benefits	230,556	236,053
200 – Professional Fees	652,500*	528,500
505 – Travel-In-State	14,500**	9,500
510 – Travel-Out-of-State	18,000	18,000
705 – Dues, Fees, and Staff Development	22,500	22,500
710 – Subscriptions and Reference Materials	4,500	4,500
Total Operating Budget (excluding indirect costs such as computers, office space, and utilities)	\$1,919,760	\$1,768,186
Full Time Equivalent (FTE) Positions	10.0	10.0

\* Increase primarily due to SAO CAFR audit of employer (reporting entity) census data

\*\* Increase primarily due to reporting entity audits



# **Appendix B Internal Audit Performance Measures**

# Internal Audit Goals and Performance Measures

***For the internal audit function, the FY 2015 goals and performance measures are as follows:***

## **Goal 1: Enhance Effectiveness of Internal Audit Organization**

### *Performance Measures*

- a. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services
- b. Complete an internal self-assessment and report annually on the results of the Quality Assurance and Improvement Program

## **Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment**

### *Performance Measures*

- a. Prepare an annual audit plan based on a documented risk assessment and obtain input from trustees and staff
- b. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests)
- c. Prepare a formal reporting entity risk assessment to identify reporting entities for audit.

## **Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment and Health Care**

### *Performance Measures*

- a. Enhance staff knowledge of services provided to the Investment Management Division by visiting one TRS asset manager or service provider
- b. Engage a service provider for conducting or co-sourcing health care audits

# Internal Audit Goals and Performance Measures, continued

## **Goal 4: Deliver Value-Added Consulting and Advisory Activities**

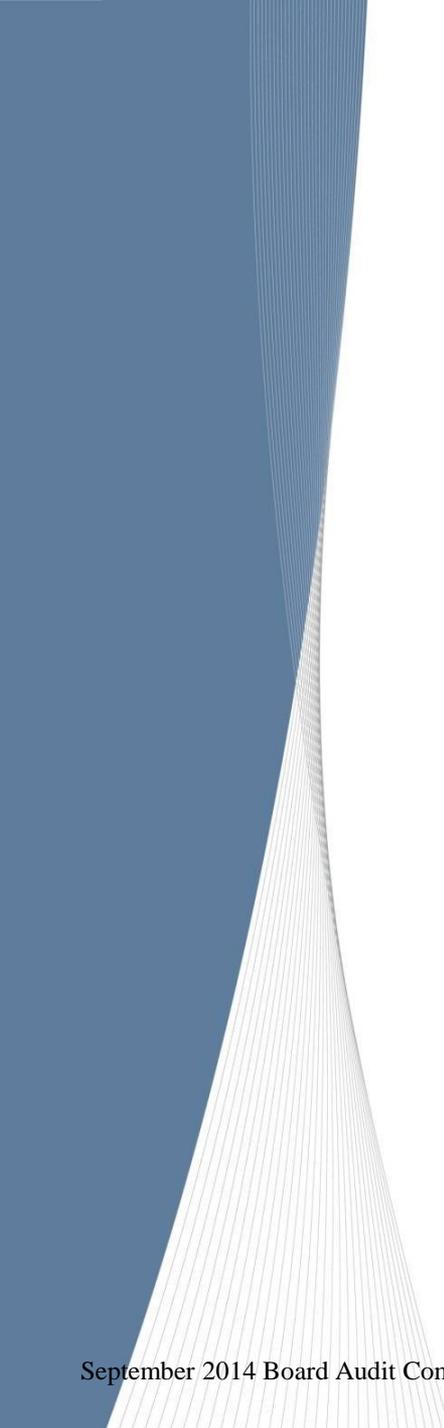
### *Performance Measures*

- a. 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
- b. Facilitate timely completion and success of State Auditor's Office (SAO) audits in fiscal year 2015 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests

## **Goal 5: Enhance Participation in Professional and Peer Organizations**

### *Performance Measures*

- a. Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SIAIF, CFA Institute) through monthly chapter meetings and participate in leadership roles in at least two of the professional organizations
- b. Support staff in obtaining additional certifications including the CFA, CPA, and CIA certifications and have a minimum of two staff seek additional professional certifications in fiscal year 2015



# Appendix C

## Audit Universe

# Audit Universe

Executive and Finance Divisions; Records Management			
<b>Governance, strategy, and risk management</b>		<b>Workforce Continuity</b>	
Board governance (FY13)	Employee recruiting and hiring practices (FY10)	<b>Accounting &amp; Reporting</b>	
Strategic planning and performance measures (FY13)	Employee training compliance (FY11)		
Enterprise Risk Management	Internal policy setting and monitoring		
Information technology governance (FY10)	<b>Communications and External Relations</b>		
<b>Open Government</b>		Social media	
Open meetings compliance	Information and communication	<b>Budget</b>	
Open records request compliance	<b>403(b)</b>		
<b>Ethics and Fraud Prevention</b>		403(b) certification process	
Employee ethics policies (FY13)	<b>Records Management</b>		
Fraud risk detection and prevention controls (FY14)	Records retention - paper (FY11)	<b>Purchasing and Contracts</b>	
<b>Regulatory, Compliance, &amp; Litigation</b>			Vendor file, encumbrance, purchasing (FY14)
Compliance: Pension Trust (FY14)	Records retention - electronic		Contract administration and monitoring (FY14)
Compliance: Health Care Trusts (FY13)	<b>Accounting &amp; Reporting</b>		
Litigation risk management	Financial/CAFR reporting including, new accounting pronouncements, reconciliations, general ledger, closing process (FY13)	Contract worker onboarding, monitoring and compliance (FY14)	
<b>Business Continuity</b>		HUB program compliance and reporting	
Business continuity plan (FY09)	Other reporting (non-financial / CAFR)	<b>Facilities and Facilities Planning</b>	
Risk management (health and safety, insurance) (FY12)	Employee leave, timekeeping, and payroll (FY12)	Facility planning and maintenance	
	Cashier (FY10)	Mail room operations (FY10)	
		Security (FY12)	
		<b>Government Relations and Legislation</b>	

IMD Processes	
<b>Governance - IMD</b>	
	Investment Governance and Management (FY14)
<b>IMD Processes</b>	
	Internal Public Markets (FY14)
	External Public Markets (FY14)
	Private Equity (FY12)
	Real Assets (FY12)
	Trade Management (FY14)
	Emerging Manager Program (FY13)
	Energy/Natural Resources (ENR) (FY14)
	Strategic Partners (FY14)
	Strategic Asset Allocation/Stable Value (FY14)
	Tactical Asset Allocation (FY13)
	Risk Management (FY12)
	Performance Analytics and Operations (FY14)
	Information Systems (FY12)
	Business Center, Reporting, and HR (FY12)
	Investment Accounting (FY12)

(FY #) - indicates last year audited

# Audit Universe

Benefits and Customer Service	
Pension Benefit Administration	Pension Benefit Administration and Customer Service
1099R	Statistical reporting (actuarial) (FY10)
Annuity payroll (FY14)	Web self service
Benefit adjustments (FY14)	Work flow (Imaging)
Benefit calculations (FY14)	TRS employee benefit administration (administered separately from non-TRS employees)
Benefit estimates	
Cash receipts (FY10)	Telephone Counseling Center (FY14)
Check payments (FY14)	
Contact management	Employer Reporting
Death benefits (FY13)	Employer setup, enrollment, and reporting (FY14)
Disability benefits (FY13)	Health Care Administration
Legal orders (FY13)	TRS-Care vendor selection and contract monitoring (FY13)
Member account maintenance (FY09)	TRS-Care TRS Administration (FY13)
Member statements	TRS-ActiveCare vendor selection and contract monitoring
Optional Retirement Plan	TRS-ActiveCare TRS Administration
Refunds (FY14)	Retiree Health Care Funding
Retirement application process	TRS-Care Finance (FY10)
Retirement system transfer	TRS-ActiveCare Sustainability
Service credit calculation and purchase	TRS-ActiveCare Finance (FY10)

Information Technology (IT) Processes and TEAM	
Governance - IT	IT Processes
Project prioritization (FY10)	Change & Configuration Management
IT risk management	Applications (FY12)
IT Strategy & Planning	Databases
Asset management	Infrastructure
Human resources	Data Center Operations
IT Security and Confidentiality	Archive management (FY13)
Identity and access management (FY14)	Facilities management (TAC202) (FY12)
Threat and vulnerability management (FY13)	Technology Management
Security awareness and training (FY11)	Standards
Security configuration management	Technology upgrades
Virtualization	User and Vendor Support
Cloud based computing (FY14 Consulting)	Problem management
Mobile device security (FY14 Consulting)	Incident response
Disaster Recovery Plan	
Co-location (FY14 Consulting)	
Disaster Recovery Management (FY09)	
TEAM	
Independent Program Oversight (FY14)	
Internal Controls Assessment	

(FY #) - indicates last year audited

TAB 8

**Teacher Retirement System of Texas**  
**SEPTEMBER 2014 Audit Committee Agenda Items Mapped to TRS Stoplight Report**

403(b)	<b>Accounting &amp; Reporting</b> <b>Agenda Item 2</b>	Active Health Care Sustainability	Budget	Business Continuity
Communications & External Relations	Credit	Customer Service	Employer Reporting	Ethics & Fraud Prevention
Facilities Planning	Governmental/ Association Relations & Legislation	Health Care Administration	<b>Information Security &amp; Confidentiality</b> <b>Agenda Item 5A</b>	<b>Investment Accounting</b> <b>Agenda Item 3</b>
<b>Investment Operations</b> <b>Agenda Items 4C, 4D, 4E</b>	Legacy Information Systems	Liquidity/Leverage	Market	<b>Open Government</b> <b>Agenda Items 5B, 6, 7, 8</b>
<b>Pension Benefit Administration</b> <b>Agenda Item 4B</b>	Pension Funding	<b>Purchasing &amp; Contracts</b> <b>Agenda Item 4A</b>	Records Management	Regulatory, Compliance & Litigation
Retiree Health Care Funding	TEAM Program	Workforce Continuity		

## Status of Fiscal Year 2014 Planned Assurance, Consulting, and Advisory Services as of August 2014

Title	Type	Status
<b>Executive</b>		
Electronic Records	Audit	Deferred to FY 2015
Fraud Investigation Procedures Development	Advisory	Complete
Internal Ethics and Fraud Hotline Administration	Advisory	Complete
University of Texas Students' Project – Best Practices for Social Media	Consulting (Added)	Complete
Meetings Participation	Advisory	Complete
Special Requests	Advisory	Complete
<b>Finance</b>		
Purchasing and Contract Administration	Audit	Complete
GASB 67 and 68 Implementation Status	Advisory	Complete
State Auditor's Office (SAO) Financial Audit Coordination	Advisory	Complete
Meetings Participation	Advisory	Complete
Special Requests and Surprise Inspections	Advisory	Complete
<b>TEAM Program</b>		
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Ongoing
TEAM Committees Participation	Advisory	Complete
TEAM Internal Controls Project	Consulting (Added)	Continue to FY 2015
<b>Pension Benefits</b>		
Cost of Living Adjustment (COLA) Calculation	Audit	Complete
Refunds, Inactive and Escheated Accounts	Audit	Complete
Special Service Buy Back Process	Audit	Complete
Telephone Counseling Center Follow-up (outsourced)	Audit	Complete
Benefits Payment Testing for SAO Financial Audit	Audit	Complete
Semi-annual Benefits Testing	Agreed-Upon Procedures	Complete
<b>Employer Reporting</b>		
TRS Employer Reporting Controls	Advisory	Complete
Employer Self-Audit Program	Advisory	Complete
Employer Reviews/Special Projects	Various	Complete

## Status of Fiscal Year 2014 Planned Assurance, Consulting, and Advisory Services as of August 2014

Title	Type	Status
<b>Health Care Benefits</b>		
Health Care Governance, Risk Management, and Reporting	Consulting	Deferred
Health Care Vendor Update Meetings	Advisory	Complete
Health Care Vendor and Auditor Selection Observation	Advisory	Complete
<b>Information Technology</b>		
Identity and Access Management, and Contractor Onboarding Process	Audit	Complete
Information Technology (IT) Security Program Follow-up (outsourced)	Audit	Complete
Emerging IT Risks (outsourced): (1) Cloud Computing (2) Mobile Device Security	Consulting	(1) Complete (2) In Progress
University of Texas Students' Project – Best Practices and Policies for Cloud Computing and Mobile Devices	Consulting (Added)	Complete
Co-Location/Disaster Recovery Planning (outsourced)	Consulting	Complete
Network Penetration Test; Security Risk Assessment Review	Advisory	Complete
Technology Committee Meetings Attendance	Advisory	Complete
<b>Investment Management</b>		
Overall Internal Control Opinion on Investment Activities (includes periodic status reports)	Audit	Complete
Quarterly Investment Testing	Agreed-Upon Procedures	Complete
Private Strategic Partner Network (SPN) Fee Calculations	Consulting	In Progress
Incentive Compensation Plan Review	Advisory	Complete
Investment Committees Attendance	Advisory	Complete
<b>Internal Audit Department</b>		
Internal Quality Assurance Review	Advisory	Complete
External Quality Assurance Reviews	Advisory	Complete
Annual Internal Audit Report	Audit	Complete
Quarterly Audit Recommendations Follow-up	Audit	Complete
Fiscal Year 2015 Audit Plan	Advisory	Complete
Health Care Audit Risk Assessment, Model 3Year Audit Plan Project	Consulting	Complete
Audit Committee Meetings Preparation	Advisory	Complete
Internal Audit Strategic Plan	Advisory	Complete

## Fiscal Year 2014 Internal Audit Advisory Services<sup>1</sup> June 2014 – August 2014

<b>BENEFIT SERVICES</b>
<b>TEAM PROJECT PARTICIPATION</b> <ul style="list-style-type: none"> <li>• Executive Steering Committee</li> <li>• Budget Committee</li> <li>• Data Management Project</li> <li>• Decommissioning Project</li> <li>• Organizational Change Management Advisory Group</li> <li>• Business Procedures and Training Project</li> <li>• Detailed Level Requirements Gathering – Refunds, Member Account Maintenance, General Line of Business</li> <li>• Internal Control Project Development</li> <li>• Monthly meetings with TEAM Project Manager</li> <li>• Core Management Team: Standing Prioritization Review Meeting</li> <li>• Independent Program Assessment Vendor Coordination and Support</li> </ul>
<b>HEALTH BENEFITS</b>
<ul style="list-style-type: none"> <li>• Health Plan Administrator (HPA) and Pharmacy Benefit Manager (PBM) Vendor Quarterly Update Meeting Participation</li> </ul>
<b>INVESTMENTS</b>
<ul style="list-style-type: none"> <li>• Internal Investment Committee (IIC) Attendance</li> <li>• Lunch and Learn Session Attendance</li> <li>• Visit to State Street Sacramento for an overview of derivatives processing, pricing, and investment accounting activities conducted there</li> </ul>
<b>FINANCIAL SERVICES</b>
<ul style="list-style-type: none"> <li>• Coordination of State Auditor’s Office on the Audit of TRS’ Fiscal Year 2014 Comprehensive Annual Financial Report and plan for GASB 67 and 68 including AICPA guidance</li> <li>• Financial System Replacement (FSR) Weekly Meetings Participation</li> </ul>
<b>EXECUTIVE</b>
<ul style="list-style-type: none"> <li>• State Auditor’s Office Quarterly Update Meetings Coordination and Support</li> <li>• Hot Line Call Facilitation</li> <li>• Executive Requests</li> </ul>
<b>INFORMATION TECHNOLOGY (IT)</b>
<ul style="list-style-type: none"> <li>• Enterprise Security Project Team Participation</li> <li>• IT Information Security Program Follow-up Audit Project Coordination</li> <li>• Cloud Computing Consulting Project Coordination</li> <li>• Mobile Devices Security Consulting Project Coordination</li> </ul>

<sup>1</sup> 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  
4th Quarter Ending August 31, 2014**

Target Performance	Activity	Status
<b>Goal 1: Enhance Effectiveness of Internal Audit Organization</b>		
1. Update the Internal Audit Strategic Plan, 2012-2016, and align with TRS mission and core values.	Internal Audit Strategic Plan for Fiscal Years 2015-2019 is located at <b>Tab 6B</b> .	Achieved
2. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services.	For fiscal year 2014, 81% of total available department hours spent on direct assurance, consulting and advisory services.	Achieved
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
<b>Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment</b>		
4. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests).	Completed 94% of audit and agreed-upon procedures projects in board approved FY 2014 Audit Plan. One audit project was deferred and the revised FY 2014 audit plan was board approved in June 2014.	Achieved
5. Complete internal self-assessment and report annually on Quality Assurance and Improvement Program.	The internal self-assessment report is located at <b>Tab 6A</b> .	Achieved
<b>Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment and Health Care</b>		
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 was implemented in the IMD overall internal control opinion located at <b>Tab 4D</b> .	Achieved
7. Enhance staff knowledge of investment due diligence key processes by visiting one TRS asset manager.	The Director of Investment Audit Services and the Senior Investment Auditor accompanied IMD staff on a visit with two asset managers in June 2014.	Achieved

**Internal Audit Goals and Performance Measures - Fiscal Year 2014  
4th Quarter Ending August 31, 2014**

<b>Goal 4: Deliver Value-Added Consulting and Advisory Activities</b>		
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 has been completed for FY 2014 and is included in the Fiscal Year 2015 Annual Audit Plan.	Achieved
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.	SAO Report on the Audit of Fiscal Year 2013 Comprehensive Annual Report (CAFR) was reported to the Audit Committee in December 2013.	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.	Internal Audit has provided feedback and suggested best practices to Legal Services regarding the draft internal investigations procedures.	Achieved
11. Coordinate with Benefit Accounting and executive management on the development of employer self-audit program and implement in fiscal year 2014.	Employer self-audit programs have been completed for Employment After Retirement, and Pension and TRS-Care Surcharges and will be piloted with volunteer school districts in FY 2015.	Achieved
<b>Goal 5: Enhance Participation in Professional and Peer Organizations</b>		
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 (QAR) of the ERS of Texas and Washington State Investment Board internal audit function. An audit manager led a QAR at the Office of the Attorney General internal audit function.	Achieved
13. Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SAIAP, CFA Institute) through monthly chapter meetings and engage in leadership roles in at least two of the professional organizations.	Internal Audit staff participated in professional organizations in FY 2014; ongoing for FY 2015. The CAE is secretary for APPFA, and one audit manager is on the Board of Governors for the Austin Chapter of the IIA.	Achieved

**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 8/31/2014**

<b>Time Period</b>	<b>Number of Calls Per Ethics and Fraud Hotline</b>	<b>Status</b>
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
12/01/2013 – 2/28/2014	0	N/A
3/01/2014 – 5/31/2014	1	Resolved
6/01/2014 – 8/31/2014	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.

## Internal Audit Staff Quarterly Accomplishments

- Nick Ballard passed level III of the Chartered Financial Analyst (CFA) exam and is an official charter-holder.
- Hugh Ohn and Nick Ballard traveled to New York to visit two External Private Markets Strategic Partners and walk through the respective fee calculations.
- Amy Barrett, Hugh Ohn, and Nick Ballard visited the Sacramento office of State Street and received an overview of the derivatives processing, pricing, and investment accounting function performed there.
- Hugh Ohn and Nick Ballard attended State Auditor's Office (SAO) training in Investments and Derivatives.
- Dorvin Handrick attended the 2014 ACL (Audit Software) Connections User Conference in Dallas.

**TEACHER RETIREMENT SYSTEM OF TEXAS**  
**Internal Audit Department**  
**August 2014**

