

Internal Audit Annual Report

Fiscal Year 2018

October 2018



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

TEACHER RETIREMENT SYSTEM OF TEXAS

BOARD AUDIT, COMPLIANCE & ETHICS COMMITTEE (As of October 09, 2018)

Christopher Moss, Chair
David Corpus
Greg Gibson, Ed.D.
James D. Nance
Nanette Sissney

BOARD MEMBERS (As of October 09, 2018)

Jarvis V. Hollingsworth, Chair
Dolores Ramirez, Vice Chair
Joe Colonna
David Corpus
John Elliott
Greg Gibson, Ed.D.
Christopher Moss
James D. Nance
Nanette Sissney

EXECUTIVE DIRECTOR

Brian Guthrie

INTERNAL AUDIT DEPARTMENT

Amy L. Barrett, CIA, CISA, CPA, Chief Audit Executive
Nick Ballard, CFA, CIA, CPA, Director, Investment Audit Services
Lih-Jen Lan, CIA, CPA, CISA, CISSP, CCSA, Senior IT Audit Manager
Kate Rhoden, CPA, CIA, Investment Audit Manager
Toma Miller, CIA, CGAP, Senior Healthcare Auditor
Simin Pang, CIA, CISA, Senior IT Auditor
Anandhi Mani, CPA, CIA, Senior Benefits Auditor
Mary Presley, CISA, Internal Audit IT Consultant
Rodrigo Dominguez, Investment Auditor
Falguni Sampat, Healthcare Auditor
Art Mata, CEBS, CPM, Senior Internal Audit Benefit Consultant
Carol Casey, CPM, Internal Audit Benefit Consultant
Karen Marino, Internal Audit Administrative Coordinator



Brian K. Guthrie
Executive Director

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1000 Red River Street
Austin, Texas 78701

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

October 9, 2018

Honorable Greg Abbott, Governor
Ms. Lisa R. Collier, CPA, First Assistant State Auditor
Members of the Legislative Budget Board
Members of the Sunset Advisory Commission
Mr. Jarvis V. Hollingsworth, Chair, TRS Board of Trustees
Mr. Christopher Moss, Chair, TRS Board Audit, Compliance and Ethics Committee
Members of the Board of Trustees, Teacher Retirement System of Texas
Mr. Brian Guthrie, Executive Director, TRS

Attached is the annual report of the Internal Audit department of the Teacher Retirement System of Texas (TRS). This report provides information on the audit plan, assurance, consulting, and advisory projects completed, and other Internal Audit activities. It also meets the annual reporting requirement of the Texas Internal Auditing Act (Texas Government Code, Chapter 2102.009 and Texas Government Code, Sections 2102.015 and 2102.0091). This report includes the following State Auditor's Office reporting guidelines:

- I. Compliance With Texas Government Code, Section 2102.015: Posting the Internal Audit Plan, Internal Audit Annual Report, and Other Audit Information on Internet Website
- II. Internal Audit Plan for Fiscal Year 2018
- III. Consulting Services and Nonaudit Services Completed
- IV. External Quality Assurance Review (Peer Review)
- V. Internal Audit Plan for Fiscal Year 2019
- VI. External Audit Services Procured in Fiscal Year 2018
- VII. Reporting Suspected Fraud and Abuse

The work performed by TRS Internal Audit contributes toward accountability, integrity, and good management practices within TRS operations. Fiscal year 2018 projects contributed to the improvement of risk management, control, and governance processes. Internal Audit (or those engaged by Internal Audit) issued 5 assurance and 10 agreed-upon procedures reports, followed-up and reported quarterly on the status of all outstanding audit recommendations, and performed advisory services in various areas including TEAM (TRS Enterprise Application Modernization) Program initiatives.

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

Sincerely,

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

TEACHER RETIREMENT SYSTEM OF TEXAS
INTERNAL AUDIT ANNUAL REPORT

FISCAL YEAR 2018

October 2018

**I. Compliance With Texas Government Code,
Section 2102.015:
Posting the Internal Audit Plan, Internal Audit Annual
Report, and Other Audit Information on Internet Website**

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2018

I. Compliance with Texas Government Code, Section 2102.015: Posting the Internal Audit Plan, Internal Audit Annual Report, and Other Audit information on Internet Web site

Texas Government Code, Section 2102.015 requires state agencies and institutions of higher education, as defined in the statute, to post agency internal audit plans and internal audit annual reports on the agency's internet website within 30 days of approval. The statute also requires entities to update the posting on the Internet to include a.) a detailed summary of the weaknesses, deficiencies, wrongdoings, or other concerns raised by the audit plan or annual report and b.) a summary of the actions taken to address concerns, if any, that are raised by the audit plan or annual report.

TRS Internal Audit follows the following procedures to ensure compliance with the requirements of Texas Government Code, Section 2102.015:

- The **TRS Annual Internal Audit Plan** is approved each fiscal year by the TRS Board of Trustees as recommended by the TRS Audit Committee. The annual audit plan, as approved by the TRS Board of Trustees, is provided by Internal Audit staff to the TRS Website coordinators and posted to the TRS Website within 30 days of approval.
- The **TRS Internal Audit Annual Report** is prepared annually by Internal Audit staff in accordance with the Texas State Auditor's Office guidelines by the required deadline. This report, once approved by the Chief Audit Executive, is submitted to the Governor's Office, the Legislative Budget Board, the Sunset Advisory Commission, the State Auditor's Office and the TRS Board of Trustees by November 1 of each fiscal year. The annual report is provided by Internal Audit staff to the TRS Website coordinators to post to the TRS Website.
- **Summaries of the weaknesses, concerns, and actions** taken to address concerns in the audit plan or annual report are provided by Internal Audit in the quarterly TRS Audit Committee materials. The audit committee materials provide audit reports completed during each quarter, quarterly status reports on management action on outstanding audit recommendations, and the status of the current fiscal year audit plan. The individual audit reports provide the results, recommendations, and management actions taken to address the audit recommendations. The TRS Audit Committee materials are posted to the TRS Website, after dissemination to TRS Board of Trustees, through an administrative process of board and committee materials prior to the scheduled Board meeting.

II. Internal Audit Plan for Fiscal Year 2018

Teacher Retirement System of Texas
Internal Audit Annual Report for Fiscal Year 2018

Fiscal Year 2018 Audit Plan Status
As of August 2018

Title and Project #	Type	Status
Executive and Finance		
Board Reporting Process and Materials Review	Consulting	Complete
General Accounting Change in Management Audit	Audit	Cancel
Capital Improvement Planning Process	Consulting	Defer
Coordination for State Auditor’s Office (SAO) Comprehensive Annual Financial Report (CAFR) Audit for Fiscal Year 2017	Advisory	Complete
Teacher Retirement Investment Company of Texas (TRICOT) Financial Audit Coordination (Grant Thornton)	Advisory	Complete
Executive Incentive Pay Testing	Agreed-Upon Procedures	Complete
New Financial System – CAPPs Implementation Meeting Participation	Advisory	Ongoing
Committee and Workgroup Meetings Participation	Advisory	Ongoing
TRS Investment Company of Texas (TRICOT) Cost-Benefit Audit	Audit	Complete
Special Requests and Emerging Issues (IT Governance – outsourced project)	Consulting	In progress
TEAM Program		
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Ongoing
TEAM Committees, Projects and Controls Assessment Participation	Advisory	Ongoing
Pension Benefits		
Annuity Payment Testing for SAO CAFR Audit of FY 2017	Audit	Complete
Annual Benefits Testing	Agreed-Upon Procedures	Complete
Employer Data Analysis Testing	Agreed-Upon Procedures	Complete
Employer Audits	Audit	Complete
TRS Reporting Entity Website Audit Information and Communication Activities	Advisory	Complete
Benefit Disbursement Review	Consulting	In Progress

Teacher Retirement System of Texas Internal Audit Annual Report for Fiscal Year 2018

Health Care		
TRS-Care Legislative Change Management Review	Consulting	Complete
TRS-ActiveCare Eligibility, Enrollment, and Billing Process Pre-implementation Audit	Audit	Complete
Vendor Procurement Audit	Audit	Complete
Health Care Administrative Expenses Audit	Audit	Defer
Health Insurance Benefit Resources Assessment	Consulting	Complete
Health Care Vendor Update Meetings Attendance	Advisory	Ongoing
Information Technology		
Disaster Recovery, Network Penetration Tests, Security Risk Assessment Review	Advisory	Complete
Investment Management		
Private Equity Management Fees and Carried Interest Desk Audits	Audit	Complete
Performance Calculations Audit	Audit	Complete
Quarterly Investment and Ethics Policies Compliance Testing	Agreed-Upon Procedures	Complete
Annual Testing of Investment Incentive Pay Plan	Agreed-Upon Procedures	Complete
Investment Committees Attendance	Advisory	Ongoing
Internal Audit Department		
Annual Internal Audit Report	Administrative	Complete
Data Analysis Process Buildout	Administrative	Complete
Quarterly Audit Recommendations Follow-up	Administrative	Ongoing
Internal Quality Assurance Review	Administrative	Complete
Fiscal Year 2019 Audit Plan	Administrative	Complete
Employer Audit Process Re-engineering	Administrative	Complete
Internal Audit Staff Training Initiative	Administrative	Complete
Audit Committee Meetings Preparation	Administrative	Ongoing

MEMORANDUM

TO: TRS Board of Trustees
 Brian Guthrie, Executive Director

FROM: Amy Barrett, Chief Audit Executive

SUBJECT: Proposed Revisions to the Audit Plan for Fiscal Year 2018

DATE: February 16, 2018

Per the approved *Fiscal Year 2018 Audit Plan*, amendments to the approved Audit Plan deemed to be significant will be submitted to the Board of Trustees for approval. The State Auditor's Office also requires notification of material changes to the Audit Plan. Below is a list of proposed changes for your consideration:

Project	Change	Reason
TRS Investment Company of Texas (TRICOT) Cost-Benefit Audit	Add	<ul style="list-style-type: none"> Validate cost-benefit of TRICOT office since inception
General Accounting (GA) Change in Management Audit	Cancel	<ul style="list-style-type: none"> Provide time for TRICOT audit Alleviate burden on General Accounting staff who are in process of implementing a new financial system (CAPPS)
Health Insurance Benefits (HIB) and Support Functions Resource Review (Consulting)	Add	<ul style="list-style-type: none"> Validate resource request of health care function proposed to Board in June
Healthcare Administrative Fees Audit	Defer	<ul style="list-style-type: none"> Provide time for HIB resource review
TRS-ActiveCare Billing, Reporting and Exceptions Process; and, Eligibility and Enrollment Process Audit	Increase scope	<ul style="list-style-type: none"> Increase scope of audit to include the eligibility and enrollment process
Vendor Procurement Audit	Refine scope	<ul style="list-style-type: none"> Expand procurement scope to include other divisions within TRS besides HIB based on planning results and feedback Defer vendor oversight assessment to future
Benefit Disbursement Review (Consulting)	Add	<ul style="list-style-type: none"> Identify fraud risk of misdirected payments Consult on any planned control changes proposed by management
Capital Projects Initiation Process Consulting	Defer	<ul style="list-style-type: none"> Provide time for Benefit Disbursement Review

III. Consulting Services and Nonaudit Services Completed

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2018

III. Consulting Services and Nonaudit Service Completed

During fiscal year 2018, Internal Audit conducted (or hired consultants to conduct) the following consulting (Nonaudit services) projects resulting in formal recommendations to management.

1. Board Reporting Process and Materials Review (Project #18-601)

Objective: The Executive Director requested that Internal Audit conduct a consulting project to identify improvement opportunities around the timeliness and content of board materials and the number of meetings.

This was achieved by conducting interviews of TRS staff and management, surveying of staff time spent preparing documents and surveying trustees for items such as the amount of board materials received, review of ongoing board reporting process improvements, and surveying other pension funds on their board reporting process. Recommendations were in four areas including timeliness of board materials, number of board meetings, board committee structure and other (strategic planning, staff recognition, presentation skills training, evaluations, public comments).

2. TRS-Care Legislative Change Management Review (Project #17-203)

Objective: To ensure all TRS-Care Participants (retirees and their dependents) are moved to the correct new insurance plan coverage and premiums on January 1, 2018 and that healthcare premiums are correctly deducted.

This was achieved by identifying data and correcting and errors before conversion, validating the data such as addresses, premiums, and prescription plan codes. Identified key resources that needed to be addresses such as the need for a business analyst and a resource to handle quality assurance.

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2018

3. Health Insurance Benefit Resources Assessment (Project#18-203)

Objective: To determine the resource capacity needs of the Health and Insurance Benefits (HIB) Division within the Teacher Retirement System (TRS).

This was achieved by conducting interviews of TRS personnel and reviewing departmental documentation, and analyzing resource levels to resource needs.

Recommendations included cross-training of phone counseling staff to answer more complex health insurance benefit inquiries, hiring an attorney specializing in Medicare to support day-to-day HIB operations, and developing proactive communications for plan or legislative changes.

Internal Audit also performed various advisory (nonaudit services) as listed in section II.

IV. External Quality Assurance Review (Peer Review)

**REPORT ON THE
EXTERNAL QUALITY ASSURANCE REVIEW
OF THE TEACHER RETIREMENT SYSTEM
INTERNAL AUDIT DEPARTMENT**

April 2016



PERFORMED BY

Benito Ybarra, CIA, CISA, CFE
Chief Audit and Compliance Officer
Texas Department of Transportation

Greg Royal, CPA, CIA, CRMA, CGAP
Chief Audit Executive
Texas Department of Insurance

Byron Williams, CPA
Chief Audit Executive
Oregon State Treasury

PERFORMED IN ACCORDANCE WITH THE
STATE AGENCY INTERNAL AUDIT FORUM
PEER REVIEW POLICIES AND PROCEDURES

OVERALL OPINION

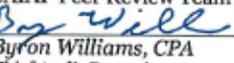
Based on the information received and evaluated during this external quality assurance review, it is our opinion that the Teacher Retirement System (TRS) Internal Audit Department receives a rating of "pass" and is in compliance with the Institute of Internal Auditors (IIA) *International Professional Practices Framework* and Code of Ethics, the United States Government Accountability Office (GAO) *Government Auditing Standards*, and the Texas Internal Audit Act (*Texas Government Code*, Chapter 2102). This opinion, which is the highest of the three possible ratings, means that policies, procedures, and practices are in place to implement the standards and requirements necessary for ensuring the independence, objectivity, and proficiency of the internal audit function.

We found that the Internal Audit Department is independent, objective, and able to render objective conclusions on the audit work performed. The staff members are qualified, proficient, and knowledgeable in the areas they audit. Individual audit projects are planned using risk assessment techniques; audit conclusions are supported in the working papers; and findings and recommendations are communicated appropriately.

The Internal Audit Department is well-managed. In addition, the Department has effective relationships with the Board of Trustees and is well-respected and supported by Executive Council management. Surveys and interviews conducted during the quality assurance review indicate that management considers Internal Audit a useful part of the agency and demonstrated a knowledge of the audit team's mission.

ACKNOWLEDGEMENTS

We appreciate the courtesy and cooperation extended to us by the Chief Audit Executive, Internal Audit staff, the Chairman of the Board of Trustees, the Audit Committee Chair, the Executive Director, and the executive managers who participated in the interview process. We would also like to thank each person who completed surveys for the quality assurance review. The feedback from the surveys and the interviews provided valuable information regarding the operations of the Internal Audit Department and its perceived value to the organization.

 Benito Ybarra, CIA, CISA, CFE Chief Audit and Compliance Officer Texas Department of Transportation SAIAF Peer Review Team Leader	04/15/16 Date
 Greg Royal CPA, CIA, CRMA, CGAP Chief Audit Executive Texas Department of Insurance SAIAF Peer Review Team Member	4/13/16 Date
 Byron Williams, CPA Chief Audit Executive Oregon State Treasury SAIAF Peer Review Team Member	4/11/16 Date

April 15, 2016

V. Internal Audit Plan for Fiscal Year 2019



Teacher Retirement System of Texas Internal Audit Department

Fiscal Year 2019 Audit Plan

September 20, 2018



Executive Summary

Professional and Statutory Requirements

This document provides the *Fiscal Year 2019 Audit Plan* (Audit Plan) as required by professional auditing standards, the *Texas Internal Auditing Act* (Act), and *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

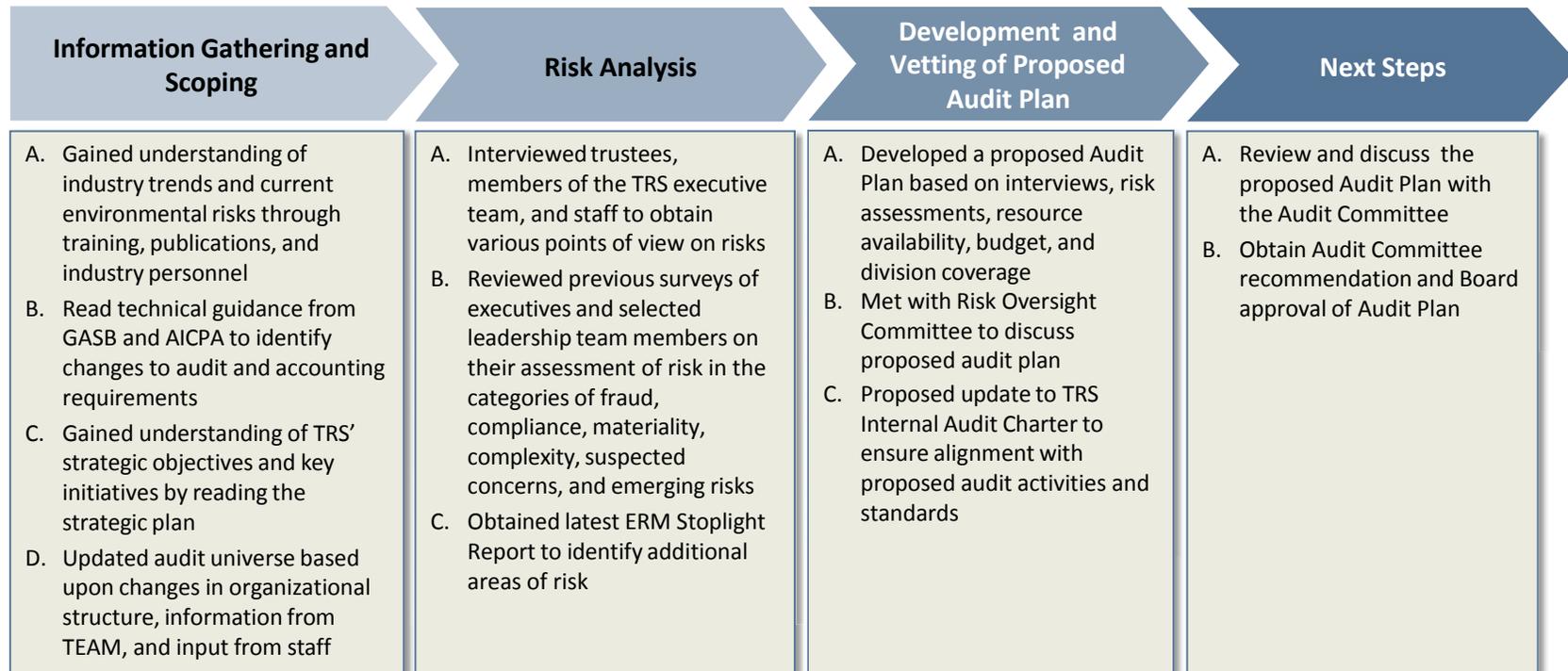
Our Audit Plan is designed to provide coverage of key risks, given the existing staff and approved budget. See the **Appendices** for information regarding the internal audit budget, performance measures, and audit plan mapped to the TRS Risk Assessment.

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 executive management and present changes to the Audit Committee at the next 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. We will also notify the State Auditor's Office of material changes to the Audit Plan.



Interviews of TRS trustees, executives and staff, risk assessment surveys from prior years, and the current TRS Risk Assessment developed by the Enterprise Risk Management (ERM) team 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:





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 Focus: Assess evidence available in order to provide assurance 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 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

- 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

- 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



Title	Type	Preliminary Scope
Communications Audit	Audit	Assess effectiveness of external communications processes, including overall strategies/plans, policies, procedures, training/awareness program, and execution of communications plans to TRS stakeholders by TRS trustees, executives, employees, and vendors
Building the Fleet Readiness Audit	Audit	Assess TRS's preparedness to build the fleet. Talent areas to evaluate may include processes and controls related to human resource strategy, governance and operational processes (recruiting, hiring, onboarding, performance management and incentives, employee separation, and termination). Other areas to evaluate may include diversity and inclusiveness programs, organization culture, work-from-home program, and the linkage of division and department performance measures to headcount plans
Executive Incentive Pay Testing	Agreed-Upon Procedures	Independently recalculate executive incentive pay in order to test the accuracy of the calculation by management
Travel Consulting	Consulting	Benchmark board travel policy with other retirement systems; review implementation of Concur travel system processes and procedures for consistency with TRS travel requirements
Special Requests and Emerging Issues	Advisory or Consulting	Set aside time to address special requests and emerging issues during the year as requested by management
Meetings Participation	Advisory	Participate (non-voting) in various TRS-wide meetings such as Executive Council, Leadership Team, and Strategy and Risk Oversight Committee



Title	Type	Preliminary Scope
TEAM Phase II Annuity Payroll Testing	Advisory	Assist management with testing of TEAM phase II annuity payroll conversion testing prior to go live
HILOB Pre-Cutover Reconciliation	Advisory	Assist with development of criteria to be used in the pre-cutover reconciliation for Health Insurance Line of Business application (HILOB)
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Coordinate and facilitate activities of the IPA vendor and ensure direct access to executive management and the board
TEAM Committees, Projects, and Controls Assessment Participation	Advisory	<p>Participate in TEAM Executive Steering Committee (ESC) and other committees and requirements-gathering sessions in a non-voting capacity, and provide advisory services related to TEAM project activities as outlined in the TEAM charter of internal audit activities. Provide input into controls identification projects. In FY 17, Internal Audit participated in the following TEAM committees and projects:</p> <ul style="list-style-type: none"> - Executive Program Oversight Committee (including TEAM budget) - Organizational Change Management Advisory Groups - Business Procedures and Training Project - Monthly meetings with TEAM program manager and DXC executives



Audit Plan: Pension Benefits and Employer Audits

The tables on this page and the following pages provide 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
Medical Board Audit	Audit	Assess the effectiveness of the process for approving disability retirements and benchmark our retirements with similar systems to determine reasonableness of payments
Annual Benefits Testing	Agreed-Upon Procedures	Recalculate a sample of benefit payments annually and determine whether documentation on file supports the calculation; scope in other tests related to benefits as agreed-upon with management
Employer Testing	Agreed-Upon Procedures	Test reports submitted to TRS based on procedures agreed to with management, especially in the areas of eligibility, compensation, contributions, and surcharges (pension and healthcare)
Employer Data Analysis Testing	Agreed-Upon Procedures	Gather and use full payroll data to risk assess reporting entities for audit, to identify noncompliance with TRS Laws and Rules, and identify errors in edit checks and missing data
TRS Reporting Entity Website Audit Information Update and Communication Activities	Advisory	Update 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



Title	Type	Preliminary Scope
Business Process Improvement Project	Consulting or Advisory	In conjunction with Enterprise Risk Management (ERM) staff, consult with Health Insurance Benefits (HIB) and Benefit Service (in areas overlapping HIB) on ways to improve efficiencies of operations and reduce rework
Pharmacy Rebate Audit Support	Advisory	Participate in external audit verifying accuracy of pharmacy rebates received by TRS-Care and TRS-ActiveCare
Health Care Vendor Update Meetings Attendance	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, when applicable



Title	Type	Preliminary Scope
Derivatives Accounting Audit	Audit	Assess the accuracy of derivatives accounting and adequacy of processes supporting those activities
Valuations Audit	Audit	Assess the accuracy of investment valuations and adequacy of processes supporting those activities
Quarterly TRS Compliance and Ethics Policies Compliance Testing	Agreed-Upon Procedures	Test compliance with TRS policies including the Investment Policy Statement, ethics policies, and other policies as agreed upon with the TRS Compliance Officer
Annual Testing of Investment Incentive Pay Plan	Agreed-Upon Procedures	Prior to payment, recalculate the investment 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 the Internal Investment Committee, Derivatives Operations, monthly staff, and other meetings such as the Annual Town Hall meeting and meeting with risk, compliance, and operations staff



Title	Type	Preliminary Scope
CAPPS IT Controls Audit	Audit	Evaluate general IT controls relating to IT change management and IT security practices administered by the Comptrollers for the CAPPS financial application
Cloud Computing Consulting	Consulting	Assess whether TRS has an effective process for evaluating cloud vendors in terms of operational efficiency, IT security, and data protection
Active Directory Audit	Audit	Determine whether Active Directory is configured to ensure effective and efficient access control to TRS systems
IT Governance Consulting	Consulting	Assess the effectiveness of processes for identifying, evaluating, approving, funding, monitoring, and closing out major IT projects
IT Risk Assessment	Advisory	Obtain an understanding of various IT processes that have not been audited in a while for purposes of determining their risk level
Disaster Recovery, Network Penetration Tests; Security Risk Assessment Review	Advisory	Observe, obtain, read, and follow-up on any issues identified during the network disaster recovery, penetration tests, and the security risk assessment conducted by the TRS Information Security Officer



Title	Type	Preliminary Scope
Comprehensive Annual Financial Report (CAFR) testing of annuity payments	Audit	Conduct pension benefits testing on behalf of the State Auditor’s Office (SAO) to be used in completion of the CAFR audit
CAFR Audit Coordination (SAO, auditors)	Advisory	Coordinate activities of the SAO to ensure deadlines are met; coordinate quarterly update meetings with executive management and the SAO; maintain SAO document request SharePoint site; walkthrough CAFR development process and identify opportunities for efficiencies
Teacher Retirement Investment Company of Texas (TRICOT) Financial Audit Coordination (Grant Thornton, auditors)	Advisory	Coordinate a financial audit of TRICOT, a wholly-owned subsidiary of TRS in London



Title	Project Description
External Quality Assurance Review	Obtain an independent assessment of Internal Audit’s compliance with auditing standards and make recommendations for improvement.
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
Data Analysis Process Buildout	Continue to build out data analysis skills of audit staff; incorporate into audit projects and annual audit plan development; and pilot analysis projects in various business units
Staff training initiative	Develop and launch auditor training in key areas including report writing, workpaper documentation, and audit risk assessment
Fiscal Year 2020 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





High Risk Areas are defined as (High, Elevated, or Caution). Areas of interest to the SAO (Procurement and IT Security) excluded from the Audit Plan.

Area	Reason for Exclusion
Records & Information Management	TRS is in process of revising its records management system and procedures
Procurement & Contracting	TRS in in process of implementing recommendations made in the prior year's procurement audit



Fiscal Year 2018 Audit Plan

Appendix A

Internal Audit Operating Budget



Appendix A Internal Audit Operating Budget

Line Item	Budget FY 2019	Budget FY 2018
000 – Salaries	\$1,188,488	\$1,094,123
000 – Benefits	297,029	280,233
200 – Professional Fees for Internal Audit Services	450,000	450,000
200 – Professional Fees for External Audit Services (CAFR, GASB Schedules, TRICOT)	382,500	442,500
505 – Travel-In-State	12,500	14,600
510 – Travel-Out-of-State	28,100	26,000
600 - Offsite Retreat	0	500
705 – Dues, Fees, and Staff Development	28,000	27,500
710 – Subscriptions and Reference Materials	2,000	2,000
Total Operating Budget	\$2,391,117	\$2,337,456
Full Time Equivalent (FTE) Positions (excluding interns)	14.0	13.0

Resources are sufficient to complete the annual audit plan.



Fiscal Year 2018 Audit Plan

Appendix B

Internal Audit Performance Measures



For the internal audit function, the FY 2019 goals and performance measures are as follows:

Goal 1: Facilitate Audit Committee Governance

Objective 1: Provide assurance and advice to the Audit Committee and executive management on risk mitigation activities related to the pension and healthcare trusts

Performance Measures

- a. 80% or more of audit and agreed-upon procedures projects are completed in the fiscal year (80% allows for flexibility due to changes in TRS business practices and special requests)
- b. 75% or more of total available department hours (excluding uncontrollable leave) are spent for internal audit staff on direct assurance, consulting, and advisory services
- c. 100% of internal audit processes are in accordance with internal auditing standards as reported in the annual quality assurance and improvement report
- d. 75% (3.0/4.0) or higher score received for audit project client surveys in overall satisfaction
- e. 80% (4.0/5.0) or higher score on staff 360 evaluations in identifying and addressing issues, critical thinking, and getting the job done



Goal 1: Facilitate Audit Committee Governance, continued

Objective 2: Improve Internal Audit communication

Performance Measures

- a. 75% (3.0/4.0) or higher score received for audit project client surveys regarding communication of the audit purpose, results, and reports
- b. 80% (4.0/5.0) or higher score on staff 360 evaluations in the area of verbal and written communication and collaborative audit perspective

Objective 3: Provide information on effective Audit Committee practices

Performance Measures

- a. 90% of relevant current “Tone at the Top” articles uploaded to Diligent



Goal 2: Support TRS Initiatives

Objective 1: Support the success of the TEAM Program and Financial Software Implementations

Performance Measures

- a. 75% (3.0/4.0) or higher score received for audit project client surveys in TEAM-related projects

Objective 2: Integrate TRS Core Values into Internal Audit activities

Performance Measures

- a. 80% (4.0/5.0) or higher score on staff 360 evaluations in the area of organizational awareness
- b. 80% (4.0/5.0) or higher score for departmental organizational health on the annual Energage Survey



Goal 3: Enhance Internal Audit Staff Competence and Expertise

Objective 1: Cultivate in-house Subject Matter Experts (SME's)

Performance Measures

- a. 75% (3.0/4.0) or higher score received for audit project client surveys regarding the usefulness of audit recommendations in improving business processes and controls
- b. 80% (4.0/5.0) or higher score on staff 360 evaluations in the area of audit acumen

Objective 2: Ensure continued competence and expertise of Internal Audit

Performance Measures

- a. 90% of audit staff complete annual training plans and obtain a minimum of 40 hours of continuing education credits
- b. 90% of audit staff maintain professional certifications or actively pursue certifications and related eligibility requirements
- c. 90% of audit staff participate in professional organizations
- d. 90% of audit staff acknowledge an understanding of their career path
- e. 80% or more of audit staff remain in internal audit or TRS (excluding retirements)



Appendix C

Audit Plan Mapped to TRS Risk Assessment



#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
1	High	TRS-Care Funding	Facilitate long-term soundness of TRS-Care in order to provide sustainable retiree health care benefits.	Inadequate funding and/or unanticipated external forces would affect solvency of the program over the current biennium and future years, requiring significant premium increases or benefit reductions.	Employer audits and data analytics of TRS-Care surcharges; Pharmacy rebate audit participation	Audits, AUP, Advisory
2	Elevated	Records & Information Management	Manage the organization, retention and disposition of TRS information and records with adherence to laws, rules, policies and best practices.	An ineffective records and information management program results in wasted resources; and does not protect, preserve, retain, dispose, or make records accessible in an accountable or transparent manner.	None. TRS is completing implementation of major records management conversion to sharepoint	n/a
3	Elevated	Employer Reporting	Accurately capture and utilize employer reported data to project and calculate future benefits of TRS members and to properly allocate the total pension liability across districts.	Incorrect reporting could lead to calculated benefits being inaccurate; Improperly allocating actuarial liability across districts.	Employer audits and data analytics of TRS-Care surcharges	Audits and AUP
4	Caution	TRS-ActiveCare Affordability	Facilitate financial soundness of TRS-ActiveCare in order to provide affordable health care benefits.	Inadequate funding by the state and participating entities and/or unanticipated external forces could affect affordability.	Pharmacy rebate audit participation	Advisory
5	Caution	TEAM Program	Implement cost effective, efficient, and sustainable processes and systems that enable TRS to serve its members, employers, and annuitants.	System design, implementation and functionality of the new processes and systems do not meet the growing demands of TRS in service of its members. Program/ project implementation schedule and cost exceeds original estimates.	IPA vendor coordination, TEAM phase II annuity payment testing; EPOC and other committee participation	Advisory
6	Caution	Pension Funding	Sustain a financially sound pension trust fund.	A lack of sound funding for the plan could lead to insufficient assets to pay for long-term benefits and financial obligations.	Employer audits and data analytics of employer contributions	Audits and AUP
7	Caution	Legacy Information Systems	Provide information systems to meet TRS' business and customer service needs.	Inability to provide adequate and consistent information in a timely fashion via the preferred delivery mechanism.	IT governance consulting, cloud computing audit, IT risk assessment	Audit, Consulting, AUP
8	Caution	Information Security & Confidentiality	Maintain the integrity, availability, and protection in the storage, use, and transfer of TRS information resources (in any form or medium).	Unauthorized or unintentional release/access of TRS confidential information could result in state or federal law violations, sanctions against TRS or its employees, and harm the best interests of TRS.	Active Directory audit, CAPPs IT controls audits, Cloud computing consulting	Audits and Consulting



#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
9	Caution	Cyber Security	To prevent malicious attacks and unauthorized access of TRS information resources.	Ineffective cyber threat controls could lead to breaches or sabotage of TRS systems.	Cloud computing consulting; DIR penetration tests	Consulting, Pen test
10	Caution	Health Care Plans Administration	Administer retiree and active member health care programs that are valued by enrollees.	Inadequate administration of the health care programs could possibly affect the quality of health care services provided to those who depend on the delivery of TRS health care benefits which would in turn increase health care costs.	Business process improvement/rework consulting	Consulting
11	Caution	Pension Benefit Services	Deliver accurate benefits and superior service to TRS participants and stakeholders.	Inadequate delivery of benefits or customer service could lead to inaccurate information or benefits/payments, dissatisfied participants, loss of credibility, adverse public perception, increased scrutiny, and oversight.	Benefit testing for SAO CAFR audit, benefit testing, work from home audit; Medical Review Board audit	Audits
12	Caution	Procurement & Contracts	Maintain effective procurement and contract management systems. Inappropriate procurement practices could result in purchases of sub-standard products and services, unfavorable pricing or contract terms, and violation of laws. Ineffective contract management could result in contractors not fulfilling their contractual obligations.	Inappropriate procurement practices could result in purchases of sub-standard products and services, unfavorable pricing or contract terms, and violation of laws. Ineffective contract management could result in contractors not fulfilling their contractual obligations.	Follow up on outstanding procurement audit recommendations	Follow Up
13	Caution	Talent Continuity	Attract, retain and develop a highly competent staff.	The delivery of member services and pension fund management could be negatively impacted by turnover, the inability to retain qualified staff, lack of a sufficient knowledge transfer program, and an inconsistent performance management process.	Culture audit: are we prepared to build the fleet?	Audit
14	Guarded	Regulatory, Compliance, & Litigation	Adhere to and analyze current laws, rules, and policies (e.g., maintain tax qualification status); Render competent advice on legal risk management and awareness, manage litigation risks, and negotiate contracts to address risks.	Non-compliance with laws and rules could lead to penalties, fines, liability and litigation; impaired ability to conduct business; burdensome oversight; third-party investigations/audits; adverse legislation; increased scrutiny; or loss of tax qualification status.	Compliance testing	AUP
15	Guarded	Open Government	Ensure compliance with laws and rules related to open records and meetings.	Non-compliance could lead to penalties and fines or voiding of board actions.	None	n/a
16	Guarded	Global Initiatives	Ensure employee safety by complying with laws and regulations and providing awareness of challenges when traveling abroad.	Not being aware of safety, compliance, and other challenges when traveling abroad could jeopardize the safety of our employees.	None	n/a



#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
17	Guarded	Facilities Management & Planning	Provide a physical work environment that is safe and enhances productivity.	Inadequate facilities management or ineffective space utilization could result in less than desirable conditions for TRS members, visitors, and staff and could jeopardize our ability to continue providing an exemplary level of service to our members.	Business process improvement/rework consulting	Consulting
18	Guarded	Ethics & Fraud Prevention	Maintain a culture that upholds ethical behavior and values that contribute and promote the fiduciary duties of prudence and loyalty, and reduces fraud risks.	A lack of ethics could undermine the duties of prudence and loyalty and create fraud risks resulting in loss of assets, credibility, and business opportunities, adverse publicity, violations of law, and increased scrutiny and oversight.	TRS compliance testing, hotline triage team participation	AUP, advisory
19	Guarded	Credit	Maintain effective management of counterparty and securities lending risks.	Unmanaged counterparty and securities lending exposures could result in losses to the investment portfolio.	Securities lending meeting attendance	Advisory
20	Guarded	Communications & External Relations	Maintain effective communication and positive relations with members, retirees, employers, TRS employees, news media, and the public.	Poor communication could lead to confusion resulting in increased calls to TRS, poor or inappropriate decision-making regarding TRS benefits, and incorrect information provided to external parties.	Communications audit	Audit
21	Guarded	Business Continuity	Recover and resume operations in the event of a major business interruption.	Members do not receive statutorily required services timely.	Observation of offsite BCP tests	Advisory
22	Guarded	Budget	Ensure TRS has appropriate budget to provide and sustain resources necessary to successfully carry out TRS' mission, goals, and objectives to serve our members.	Lack of a sufficient operating budget could jeopardize our ability to effectively serve our members.	Culture audit: Are we prepared to build the fleet?	Audit
23	Guarded	Accounting & Reporting	Maintain and monitor the integrity, accuracy, and completeness of financial information and timeliness of reporting.	Materially inaccurate financial information and reports would result in Board of Trustees and Texas Legislature decisions being made on flawed data and adverse or qualified audit opinions.	CAFR audit	Audit



#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
24	Guarded	403(b)	Maintain a list of certified companies and a list of registered products and investment options which meet requirements of law and TRS rule. Adopt fee caps to help ensure fees paid by members are competitive.	Public education employees purchase products and investment options from companies that are not on either list.	None	n/a
25	Guarded	Investment Operations	<ul style="list-style-type: none"> •Maintain the integrity of transaction, position, and investment reporting information in a risk-controlled environment for optimal investment management decisions. •To support the successful operation of the Investment Management Division. 	<ul style="list-style-type: none"> •Inefficient or ineffective transaction or position management processes which could result in losses to the fund. •Investment reports contain material inaccuracies. •Inefficient and ineffective support of IMD operations. 	Valuation and derivatives accounting audit	Audit
26	Low	Investment Accounting	Ensure all TRS Investments are properly and completely accounted for; Ensure investments are valued correctly; Ensure investment fees are accurately reported and disclosed; Ensure cash flows into and out of the Fund are complete and properly controlled; Accurately calculate performance incentive pay (PIP)	TRS investments are not properly accounted for, valued correctly or properly reported, and investment-related cash is not properly controlled.	Valuation and derivatives accounting audit, real estate management fees and carried interest audit	Audit
27	Low	Market	Maintain market risk exposures consistent with investment objectives.	Too little or too much exposure to market risk could each lead to undesirable investment outcomes.	TRS compliance testing	Advisory
28	Low	Liquidity/Leverage	Maintain levels of liquidity appropriate for the support of fund disbursements, anticipated investment funding needs and trust level leverage.	Inadequate liquidity could lead to cash shortfalls.	TRS compliance testing	Advisory
29	Low	Government Relations	Maintain effective communications and positive relations with the Legislature, associations, and other public parties.	Poor communications could lead to adverse relations, unfavorable legislation, and restricted funding.	Quarterly SAO update meetings	Advisory
30	Other	Governance and Administration	n/a	n/a	Culture audit: are we prepared to build the fleet?; IT Governance consulting	Audit and consulting

VI. External Audit Services Procured in Fiscal Year 2018

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VI. External Audit Services Procured in Fiscal Year 2018

Review of Health Plan Administration	Truven Health Analytics	In Progress
Comprehensive Annual Financial Report (CAFR) – Fiscal Year 2017	State Auditor’s Office	12/15/2017
Comprehensive Annual Financial Report (CAFR) – Fiscal Year 2018	State Auditor’s Office	In Progress
TRS Investment Company (TRICOT) Financial Audit Fiscal Year 2017	Grant Thornton	12/15/2017
TRS Investment Company (TRICOT) Financial Audit Fiscal Year 2018	Grant Thornton	In Progress

VII. Reporting Suspected Fraud and Abuse

Teacher Retirement System of Texas

Internal Audit Annual Report for Fiscal Year 2018

VII. Reporting Suspected Fraud and Abuse

TRS has taken the following actions to implement the fraud detection and reporting requirements of Section 7.09 of the General Appropriations Act and Section 321.022 of the Texas Government Code:

- Updated in September 2018, *TRS Fraud, Waste, and Abuse Policy* establishes a fraud, waste, and abuse prevention awareness program that includes employee training and guidelines for reporting suspected fraud, waste, and abuse. Key elements of the policy include definitions, covered acts, reporting procedures of detected or suspected fraud, waste, or abuse, detection and investigation, awareness training, and corrective action.
- The TRS Internet site includes the contact number of the State Auditor’s Office Hotline and a link for reporting instructions.
- Links are available on the TRS Intranet for both the State Auditor’s Office Hotline and the TRS Internal Fraud and Ethics Hotline.
- Administration of the TRS Internal Fraud and Ethics Hotline is vested with the Chief Compliance Officer & Compliance Counsel since fiscal year 2016.
- In compliance with the reporting requirement of fraud, waste, and abuse, TRS reports all instances of suspected fraud, waste, and abuse to SAO.