

Fiscal Year 2020 Audit Plan



September 19, 2019

















Executive Summary

Professional and Statutory Requirements

This document provides the *Fiscal Year 2020 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.

Risk Assessment & Audit Planning Approach

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:

Information Gathering and Scoping

Risk Analysis

d Next Step

- A. Gained understanding of industry trends and current environmental risks through training, publications, and industry personnel
- Read technical guidance from GASB and AICPA to identify changes to audit and accounting requirements
- C. Gained understanding of TRS' strategic objectives and key initiatives by reading the strategic plan
- Updated audit universe based upon changes in organizational structure, information from TEAM, and input from staff

- A. Interviewed trustees, members of the TRS executive team, and staff to obtain various points of view on risks
- B. Reviewed previous surveys of executives and selected leadership team members on their assessment of risk in the categories of fraud, compliance, materiality, complexity, suspected concerns, and emerging risks
- C. Obtained latest ERM Stoplight
 Report to identify additional areas
 of risk

A. Developed a proposed Audit Plan based on interviews, risk assessments, resource availability, budget, and division coverage

Audit Plan

- B. Met with Risk Oversight
 Committee to discuss proposed
 audit plan
- A. Review and discuss the proposed Audit Plan with the Audit Committee
- B. Obtain Audit Committee recommendation and Board approval of Audit Plan

Types of Projects to Cover Risk Areas

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 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

- 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: Executive

Title	Туре	Preliminary Scope	Timing
Enterprise Risk Management (ERM) Program Maturity Assessment	Consulting	Perform a maturity assessment of TRS' ERM program	Q1
Actuarial Audit	Advisory	Participate in the activities of the Actuarial Audit Working Group	Q1 – Q3
Follow-up of Talent Management Audit	Audit	Determine the extent to which management has implemented recommendations from Project # 19-601	Q4
Follow-up of Procurement and Contracts Audit	Audit	Determine the extent to which management has implemented recommendations from Project # 18-201	Q4
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	Q1 – Q4
Meetings Participation	Advisory	Participate (non-voting) in various TRS-wide meetings such as Executive Council, Leadership Team, and Strategy and Risk Oversight Committee	Q1 – Q4

Audit Plan: TEAM

Title	Туре	Preliminary Scope	Timing
Annility Payroll Advisory		Participate in TEAM Phase II Annuity Payroll Testing project team meetings and provide advisory services, as needed.	Q4
HILOB Pre-Cutover Reconciliation	Advisory	Participate in Health Insurance Line of Business application (HILOB) pre- cutover reconciliation project team meetings and provide advisory services, as needed.	Q4
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	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 FY17, Internal Audit participated in the following TEAM committees and projects: - 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	Q1 – Q4

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	Туре	Preliminary Scope	Timing
Review of the 1099-R Process	Audit	Determine whether TRS' 1099-R process ensures accurate and timely reporting	Q4
Review of Collections	Audit	Determine whether collections for EAR etc. are processed accurately, timely and in accordance with TRS rules, policies and procedures	Q1
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	Q4
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 surcharge (pension and healthcare)		Q1 – Q4
Employer Data Analysis and Testing			Q1 – Q4
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	Q1 – Q4

Audit Plan: Health Care

Title	Туре	Preliminary Scope	Timing
Review of Contract Oversight	Audit	Determine the extent to which HIB contract administration and oversight activities ensure HIB goals are accomplished effectively, efficiently and in compliance with relevant regulations, policies and procedures	Q2
Review of Claims Data Warehouse	Audit	Determine the extent to which HIB's Claims Data Warehouse ensures data confidentiality, integrity, accuracy, and usability	Q1
Review of Compliance with Federal Regulations	Audit	Determine the extent to which HIB has processes in place to ensure compliance with key federal regulations	Q3
Claims Data Analysis	Consultancy	Perform data analysis on claims, and share results with management. Develop data analysis scripts for future automated tests.	Q2
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	Q1 – Q4
Health Care Vendor Selection Observation	Health Care Vendor Selection Observe selection process of large vendors and service providers, when applicable		Q1

Audit Plan: Investment Management

Title	Туре	Preliminary Scope	
Quantitative Equity Strategies (QES)	Audit	Determine whether IMD's Quantitative Equity Strategies (QES) program has controls to ensure investment management goals are met effectively and efficiently, and in compliance with TRS policies and procedures	Q2
Review of Energy, Natural Resources and Infrastructure Operations	Audit	Determine whether ENRI processes ensure ENRI goals are accomplished effectively, efficiently and in compliance with relevant laws, policies and procedures	Q3
Review of Cash Management	Audit	Determine if adequate controls exist over cash management to ensure the safeguarding of assets, the effectiveness and efficiency of operations, compliance with applicable laws, and the reliability and integrity of financial and operational information. Cash management comprises several key processes, including trust rebalance, controller payment, liquidity management, trade settlement, funding and wire processing.	Q1
Follow-up of Derivatives Controls Audit			Q4
Investment Committees Attendance	Committees Advisory Internal Investment Committee, Derivatives Operations, monthly staff, and other meeting such as the Annual Town Hall meeting and meeting with risk, compliance		Q1 – Q4

Audit Plan: Technology

Title	Туре	Preliminary Scope	Timing
Follow-up of HIPAA Security and Privacy Audit	Audit	Determine the extent to which management has implemented audit recommendations from Project# 17-501	Q3
Review of Claims Data Warehouse	Audit	Determine the extent to which HIB's Claims Data Warehouse ensures data confidentiality, integrity, accuracy, and usability	
Review of Investment Data and Systems	Audit	Assess the completeness, integrity, accuracy, and reliability of TRS databases that are used for tracking and reporting investment activity.	Q4
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	Q4
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	Q1 – Q4

Audit Plan: Finance and Staff Services

Title	Туре	Preliminary Scope	Timing
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	Q1
Review of Accounting Operations	Audit	Determine whether Accounting Operations' processes ensure that TRS goals are accomplished effectively and efficiently and in a manner that complies with federal and state laws, agency policies and procedures	Q2

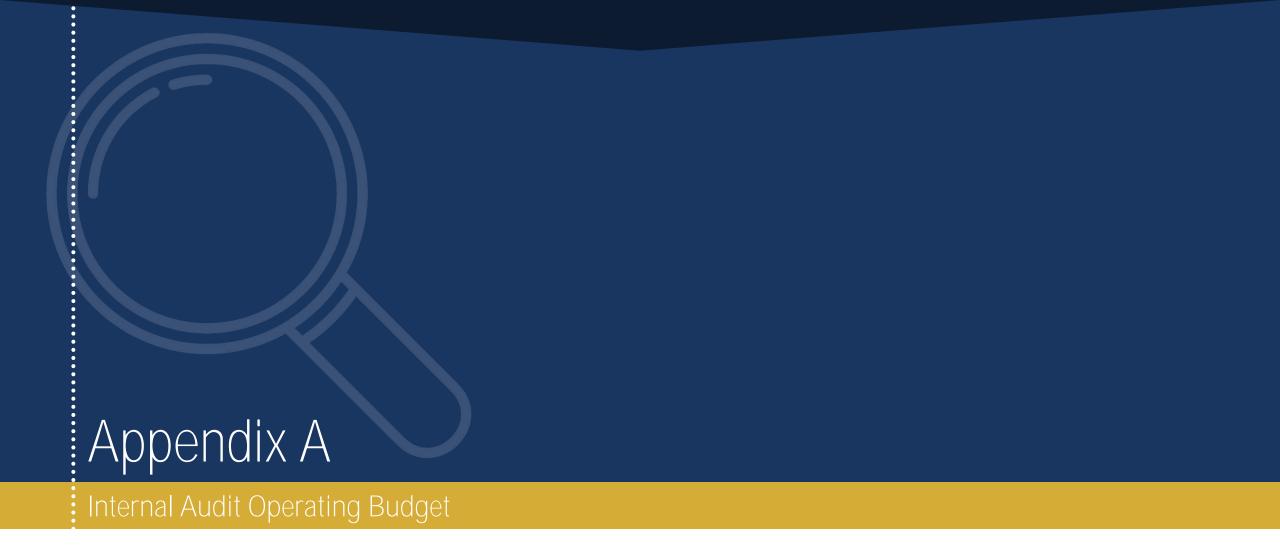
Audit Plan: Internal Audit Activities

Title	Project Description
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. Work towards a continuous auditing program by researching and developing a key risk indicator dashboard and automated scripts (reserve project)
Assurance Map	Develop and maintain an assurance map. An assurance map is a matrix comprising a visual representation of the organization's risks and the related coverage provided by all internal and external providers of assurance services. This visual depiction exposes coverage gaps and duplications, and is a useful tool in (1) developing the annual internal audit plan [Standard 2010] and (2) coordinating efforts with other assurance providers [Standard 2050]
Staff Training Initiative	Develop and launch auditor training in key areas including report writing, workpaper documentation, and audit risk assessment
Fiscal Year 2021 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, Compliance & Ethics Committee Meetings Preparation	Prepare communications and attend Audit, Compliance & Ethics Committee and Board Meetings

Audit Plan: High Risk Areas

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.

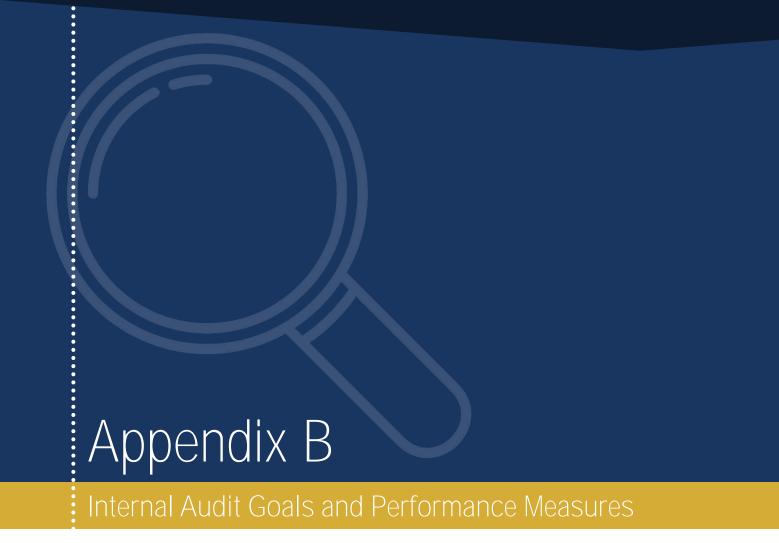
Area	Reason for Exclusion		
Cybersecurity	TRS is scheduled to undergo a Texas Cybersecurity Framework Assessment, conducted by a third-party vendor on behalf of the Department of Information Resources. Internal Audit has reviewed the methodology, scope, and timing of this assessment and plans to rely on this important assessment.		
Records Management	TRS is completing implementation of major records management conversion to SharePoint.		
Investment Accounting	Investment Accounting is in the process of documenting accounting related processes performed by the custodian bank for TRS Investment Accounting. The process documentation will cover each service area including derivatives processing, securities finance, alternative asset servicing, pricing and valuation, trade settlement and funding and wire processing. Internal Audit plans to perform control effectiveness tests on each area after the documentation is completed.		



Appendix A: Internal Audit Operating Budget

Line Item	Budget FY 2020	Budget FY 2019
000 – Salaries	1,415,900	\$1,188,488
000 - Benefits	329,400	297,029
200 – Professional Fees for Internal Audit Services	463,400	450,000
200 - Professional Fees for External Audit Services (CAFR, GASB Schedules, TRICOT)	464,600	382,500
505 – Travel-In-State	15,100	12,500
510 – Travel-Out-of-State	35,900	28,100
600 – Offsite Retreat	0	0
705 - Dues, Fees, and Staff Development	28,800	28,000
710 – Subscriptions and Reference Materials	2,100	2,000
Total Operating Budget	2,755,200	\$2,391,117
Full Time Equivalent (FTE) Positions (excluding interns)	14.0	11.0

Resources are sufficient to complete the annual audit plan.



Appendix B: Internal Audit Goals and Performance Measures

For the internal audit function, the FY 2020 goals and performance measures are as follows:

Goal 1: Facilitate Audit, Compliancee and Ethics Committee Governance

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

Performance Measures

- a. 75% or more of audit and agreed-upon procedures projects are completed in the fiscal year (75% allows for flexibility due to changes in TRS business practices and special requests)
- b. 70% 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

Appendix B: Internal Audit Goals and Performance Measures (continued)

Goal 1: Facilitate Audit, Compliance and Ethics 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

Appendix B: Internal Audit Goals and Performance Measures (continued)

Goal 2: Support TRS Initiatives

Objective 1: Support the success of the TEAM Program

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

Appendix B: Internal Audit Goals and Performance Measures (continued)

Goal 3: Enhance Internal Audit Staff Competence and Expertise

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

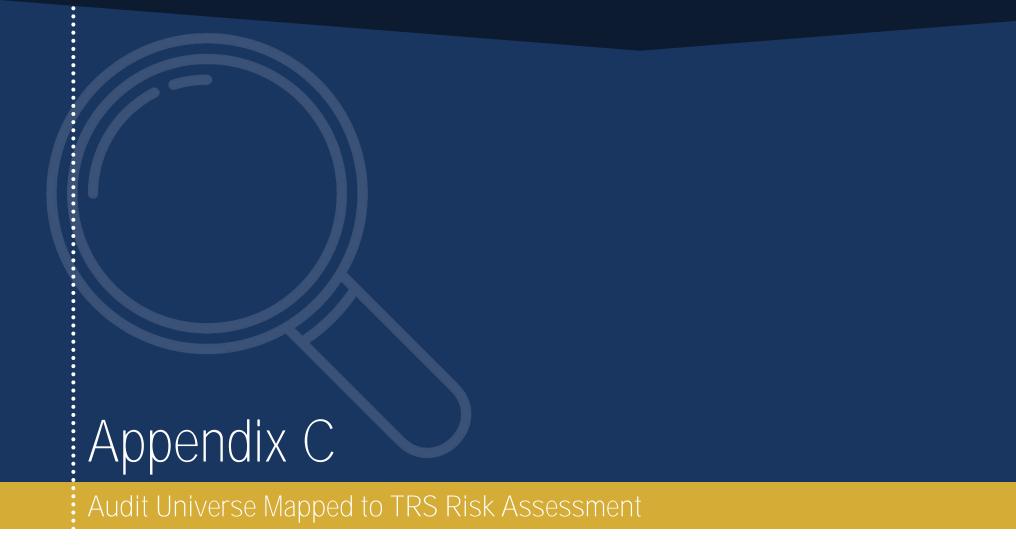
Performance Measures

- 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 Universe Mapped to TRS Risk Assessment

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
1	Elevated	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 claims data analysis, Pharmacy rebate audit participation	Audits, AUP, Consulting, 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	Elevated	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 AUP	Audits AUP
5	Elevated	Procurement & Contracts	Maintain effective procurement and contract management systems. Inappropriate procurement practices could result in purchases of substandard 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 substandard 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
6	Elevated	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
7	Elevated	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.	Participate in meetings with custodian bank.	Advisory

Appendix C: Audit Universe Mapped to TRS Risk Assessment (continued)

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
8	Caution	TRS-ActiveCare Affordability	Facilitate financial soundness of TRS-ActiveCare in order to provide affordable heath care benefits.	Inadequate funding by the state and participating entities and/or unanticipated external forces could affect affordability.	Pharmacy rebate audit participation	Advisory
9	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.	Collections Audit, 1099-R Process Audit, Employer audits and data analytics of employer contributions	Audits and AUP
10	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.	EPOC and other committee participation, IT risk assessment.	Advisory
11	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.	Follow-up of HIPPA Security and Privacy Audit, Review of Claims Data Warehouse.	Audits and Consulting
12	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.	DIR's Cybersecurity Framework Assessment; DIR penetration tests	Consulting, Pen test
13	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.	Contract Oversight; Review of compliance with Federal Regulations	Audits
14	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.	Follow-up of the Talent Management Audit	Audit
15	Caution	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.	None	n/a
16	Caution	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 Review of Accounting Operations.	External Audit Internal Audit

Appendix C: Audit Universe Mapped to TRS Risk Assessment (continued)

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
17	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.	Review of Compliance with Federal Regulations	Audit
18	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
19	Guarded	Global Travel	Ensure employee safety by complying with laws and regulations and providing awareness of challenges when traveling or working abroad.	Not being aware of safety, compliance, and other challenges when traveling or working abroad could jeopardize the safety of our employees.	None	n/a
20	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.	Hotline triage team participation	Advisory
21	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.	None. TRS is implementing recommendations from the FY 2019 Communications audit.	n/a
22	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
23	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.	Attend FTE Committee meetings	Advisory

Appendix C: Audit Universe Mapped to TRS Risk Assessment (continued)

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
24	Guarded	Investment Operations	 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. 	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.	Review of Cash Management	Audit
25	Low	Credit	Maintain effective management of counterparty and securities lending risks.	Unmanaged counterparty and securities lending exposures could result in losses to the investment portfolio.	None	n/a
26	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.	Rely on TRS compliance testing	n/a
27	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.	Review of Cash management Follow-up of Derivative Controls Audit	Audit Audit
28	Low	Governmental / Association Relations & Legislation	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
29		Global Operations (Coming Fall 2019)				