# Fiscal Year 2019 Audit Plan

*September 20, 2018*

## 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.
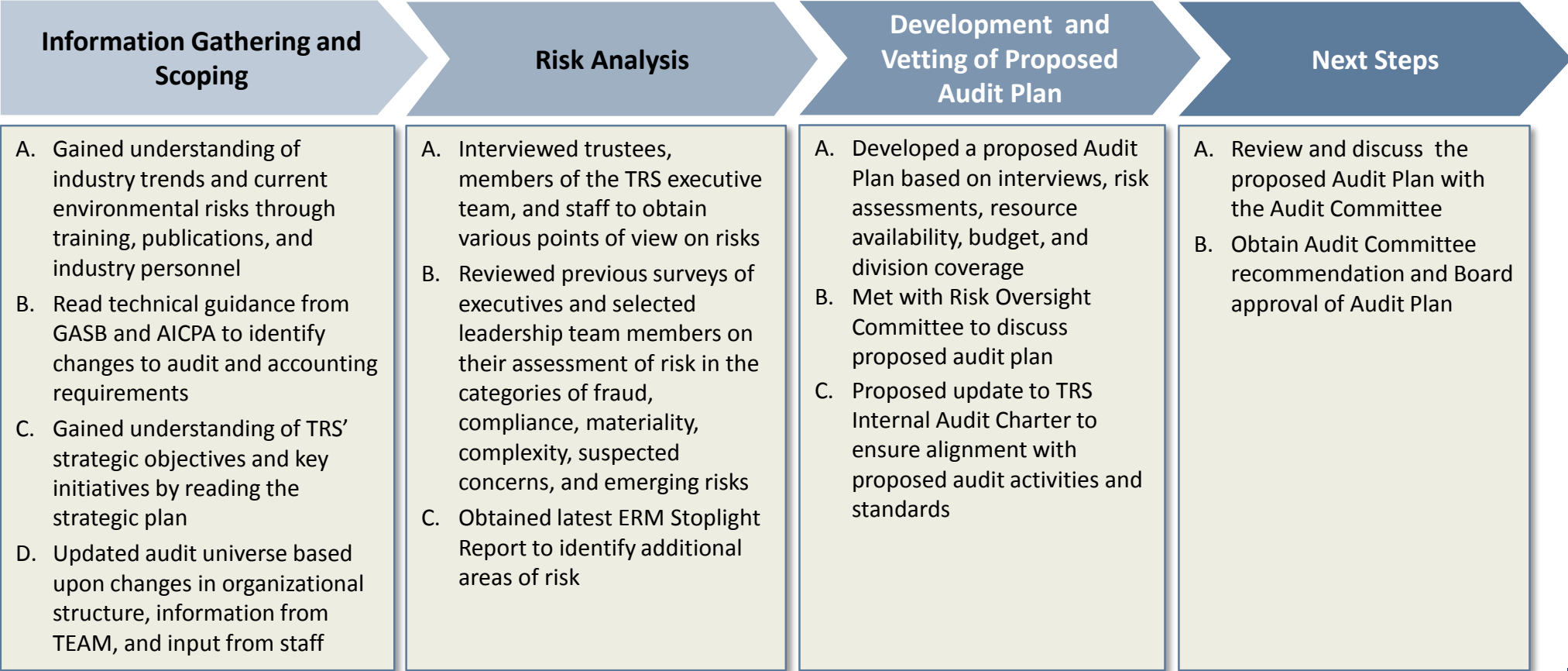
## Changes Subsequent to Approval

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.

# 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 | Development and Vetting of Proposed Audit Plan | Next Steps |
|---|---|---|---|
| A. Gained understanding of industry trends and current environmental risks through training, publications, and industry personnel | A. Interviewed trustees, members of the TRS executive team, and staff to obtain various points of view on risks | A. Developed a proposed Audit Plan based on interviews, risk assessments, resource availability, budget, and division coverage | A. Review and discuss the proposed Audit Plan with the Audit Committee |
| B. Read technical guidance from GASB and AICPA to identify changes to audit and accounting requirements | 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 | B. Met with Risk Oversight Committee to discuss proposed audit plan | B. Obtain Audit Committee recommendation and Board approval of Audit Plan |
| C. Gained understanding of TRS' strategic objectives and key initiatives by reading the strategic plan | C. Obtained latest ERM Stoplight Report to identify additional areas of risk | C. Proposed update to TRS Internal Audit Charter to ensure alignment with proposed audit activities and standards | |
| D. Updated audit universe based upon changes in organizational structure, information from TEAM, and input from staff | | | |

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# 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

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# Audit Plan: Executive

| 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 |

# Audit Plan: TEAM

| 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 | 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:<br>- Executive Program Oversight Committee (including TEAM budget)<br>- Organizational Change Management Advisory Groups<br>- Business Procedures and Training Project<br>- Monthly meetings with TEAM program manager and DXC executives |

*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 |

# Audit Plan: Health Care

| 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 |

# Audit Plan: Investment Management

| 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 |

# Audit Plan: Technology

| 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 |

# Audit Plan: Finance and Staff Services

| 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 |

# Audit Plan: Internal Audit Activities

| 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 |

# 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 |
|---|---|
| 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 |

# 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.

# 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 | •Maintain the integrity of transaction, position, and investment reporting information in a risk-controlled environment for optimal investment management decisions.<br>•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.<br>•Investment reports contain material inaccuracies.<br>•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 |
| 31 | Other | Governance and Administration | n/a | n/a | Culture audit: are we prepared to build the fleet?; IT Governance consulting | Audit and consulting |