Audit, Compliance & Ethics Committee Meeting

September 2018



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

TEACHER RETIREMENT SYSTEM OF TEXAS BOARD OF TRUSTEES AND AUDIT, COMPLIANCE AND ETHICS COMMITTEE

(Mr. Moss, Chairman; Mr. Corpus; Dr. Gibson, Ms. Sissney, Mr. Nance, Committee Members)

All or part of the September 20-21, 2018, meeting of the TRS Audit, Compliance and Ethics Committee and Board of Trustees may be held by telephone or video conference call as authorized under Sections 551.130 and 551.127 of the Texas Government Code. The Board intends to have a quorum and the presiding officer physically present at the following location, which will be open to the public during the open portions of the meeting: 1000 Red River, Austin, Texas 78701 in the TRS East Building, 5th Floor, Boardroom.

NOTE: Any item posted on the agenda may be taken up during the meeting on Thursday, September 20, 2018, or during the meeting on the following day, September 21, 2018, beginning at the time and place specified on this agenda.

The open portions of the September 20-21, 2018, meeting are being broadcast over the Internet. Access to the Internet broadcast is provided at www.trs.texas.gov.

AGENDA

September 20, 2018 – 2:00 p.m. September 21, 2018 – 8:00 a.m.

TRS East Building, 5th Floor, Boardroom

- 1. Call roll of Committee members.
- 2. Approve minutes of July 26, 2018 Audit, Compliance and Ethics Committee meeting Mr. Christopher Moss, Chair
- 3. Receive State Auditor's Office (SAO) presentations
 - A. Planned audits of TRS' Comprehensive Annual Financial Report (CAFR) for Fiscal Year 2018 Michael Clayton and Anca Pinchas, SAO
 - B. Results of the Audit of TRS' Fiscal Year 2017 Other Post-Employment Benefits (OPEB) and Employer Pension Liability Allocation Schedules Hillary Eckard and Anca Pinchas, SAO
- 4. Receive TRS Compliance reports Heather Traeger
- 5. Receive Internal Audit reports
 - A. Quarterly TRS compliance testing (Agreed-Upon Procedures) Nick Ballard, Rodrigo Dominguez, and Heather Traeger

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

- B. Private equity management fee and carried interest audits Nick Ballard, Kate Rhoden, Simin Pang, Rodrigo Dominguez, and Neil Randall
- C. Executive incentive pay testing (Agreed-Upon Procedures) Toma Miller and Falguni Sampat
- D. Annual benefits testing (Agreed-Upon Procedures) Lih-Jen Lan and Mary Presley
- Employer testing of eligibility, contribution and surcharges (Agreed-Upon Procedures) (Sharyland ISD and Alvin ISD) – Kate Rhoden, Anandhi Mani, Art Mata, and Cari Casey
- F. Internal Audit Quality Assurance and Improvement Practices (QAIP) self-assessment Jan Engler and Cari Casey
- G. Status of prior audit and consulting recommendations and update on procurement audit outstanding recommendations Amy Barrett, LaTresa Stroud, and Richard Scheel
- 6. Consider recommending to the Board of Trustees Amy Barrett
 - A. Proposed revisions to the Internal Audit Charter
 - B. Proposed Audit Plan for Fiscal Year 2019
- 7. Discuss or consider Internal Audit and TRS Compliance administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, fraud risk areas, audits for the annual internal audit plan, or auditors' ability to perform duties Christopher Moss, Amy Barrett, and Heather Traeger
- 8. Consider recommending to the Board of Trustees, in consultation with the executive director, the employment, replacement and compensation of the chief audit executive regarding the final candidates under consideration: Michael Apperley, Amanda Jenami, Kate Rhoden and Charles Wright Christopher Moss.

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



Minutes of the Audit, Compliance and Ethics Committee July 26, 2018

The Audit, Compliance and Ethics Committee of the Board of Trustees of the Teacher Retirement System of Texas met on July 26, 2018, in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas.

Committee Members present:

Mr. Chris Moss, Chair

Mr. David Corpus

Dr. Greg Gibson

Mr. James D. Nance

Ms. Nanette Sissney

Other Board Members present:

Mr. Joe Colonetta

Mr. John Elliott

Mr. Jarvis V. Hollingsworth

Ms. Dolores Ramirez

Others present:

Brian Guthrie, TRS Amy Barrett, TRS Ken Welch, TRS Heather Traeger, TRS Carolina de Onis, TRS Jan Engler, TRS Don Green, TRS Nick Ballard, TRS Jerry Albright, TRS Lih-Jen Lan, TRS Barbie Pearson, TRS Kate Rhoden, TRS Janet Bray, TRS Toma Miller, TRS Katrina Daniel, TRS Anandhi Mani, TRS

Sylvia Bell, TRS Rodrigo Dominguez, TRS

Jase Auby, TRS

Eric Lang, TRS

LaTresa Stroud, TRS

Neill Masterson, EY

Art Mata, TRS

Cari Casey, TRS

Mary Presley, TRS

Karen Marino, TRS

Audit, Compliance and Ethics Committee Chair Mr. Moss called the meeting to order at 5:40 p.m.

1. Call roll of Committee members.

Ms. Farrell called the roll. A quorum was present.

- 2. Approve minutes of April 19, 2018 Audit, Compliance and Ethics Committee meeting
 - Committee Chair Mr. Chris Moss

On a motion by Mr. Nance, seconded by Mr. Corpus, the proposed minutes for the April 19, 2018 Audit, Compliance and Ethics Committee meeting were approved as presented with Mr. Moss abstaining.

3. Receive TRS Compliance reports – Heather Traeger

Ms. Heather Traeger began her report noting the complaints received through the TRS hotline and State Auditor's Office. She stated 9 complaints were received since they last met. She said the majority of the complaints related to member questions regarding their benefits or health plans. Ms. Traeger reported there was one hotline complaint related to ethics, which was investigated and resolved.

Ms. Traeger reported two conflict determinations. She said one was regarding prudent investment letters and the other regarding the State Street enhanced custody program. She stated that State Street serves as TRS' custodian and also investment manager. If they moved forward with the enhanced custody program there could be potential conflicts with the various roles of State Street. She said upon review, State Street had walls in place for information controls and committed to reporting and monitoring on a regular basis. She noted there would be a cost savings for proceeding under this arrangement and that other State Street customers operate in this manner.

Ms. Traeger reported three IPS violations which related to restricted securities. The first regarded the violation of purchase restrictions. Ms. Traeger stated in an effort to prevent the violation from occurring again, TRS would issue two lists for the restricted securities. The second she reported regarded a compliance violation. She mentioned that one of the compliance team overrode a purchase order, therefore, they will implement a second set of eyes when it comes to the overriding process. The third violation she stated, occurred when the restricted securities list was not implemented in a timely manner.

4. Receive Internal Audit reports

A. Quarterly TRS compliance testing (Agreed-Upon Procedures) – Amy Barrett, Nick Ballard, and Heather Traeger

Ms. Kate Rhoden stated that their testing in this quarter has not identified any issues except for the ones already mentioned by Ms. Traeger.

B. TRS Investment Company of Texas (TRICOT) cost-benefit audit – Nick Ballard and Eric Lang

Mr. Nick Ballard explained that the business objective of the TRICOT cost-benefit audit is to source more investment opportunities and to identify fee saving opportunities by investing in principal or sidecar fund investments. He stated that the risks involved with the reporting of performance for TRICOT include inaccurate reporting of investment opportunities, inaccurate reporting of TRICOT performance metrics, and investing in low quality investments.

Mr. Ballard informed the committee of the positive results found in their auditing. He said for the two fiscal years that they have tested, the TRICIOT team sourced 127 investment opportunities in the UK and European markets. He added that most of the investment opportunities were in the real assets and private equity portfolios in which the team executed 15 investments. For the 15 executed investments, TRS committed 1.1 billion and generated 124 million dollars in investment gains. Additionally, Mr. Ballard added that for the 15 investments, the private markets teams estimated that those investments generated 36.8 million in fee savings.

Mr. Ballard described how the auditors reached out to two private market partners that work with TRICOT to get their feedback on how TRICOT has affected their working relationship with TRS relatively to other non UK or European based LPs. He stated that both managers provided positive feedback.

C. TRS-ActiveCare eligibility, enrollment, and billing system preimplementation audit – Toma Miller and Katrina Daniel; Neill Masterson, EY

Ms. Toma Miller informed the committee that Aetna has transitioned the TRS-ActiveCare enrollment, eligibility, and billing processes from a previous vendor to bswift, a wholly owned subsidiary of Aetna. She explained that this audit focused on the implementation process for bswift and included the following key areas: organizational and process change management; IT security processes and procedures; system design and compliance with the ActiveCare business rules; data migration and conversion process; and the electronic data interchange process. Ms. Miller noted that they made twelve recommendations to strengthen controls in bswift, none of them were considered significant. She said eight of those related to the system design elements, three of them related to IT security, and one related to data cleansing. She reported all twelve of the issues have already been addressed by bswift.

D. Vendor procurement audit - Anandhi Mani and LaTresa Stroud

Ms. Anandhi Mani started off by explaining the audit had two objectives. The first was to make sure that all procurements follow TRS laws and rules and the internal contract administration policy. For this objective, the scope included Health and Insurance Benefits Division contacts, as well as Investment Management Division contracts. The second objective was to verify that a Business Associate Agreement (BAA) was on file for contractors with access to protected health information as required by federal law. This objective included contracts related to the Health and Insurance Benefits Division and contracts related to the Health Insurance Line of Business (HILOB) system being developed by TRS.

Ms. Mani stated the results of the audit found that all of the major Health and Insurance Benefit contracts, where the largest dollars are spent, were right and had the required business associate agreements (BAAs) in place. She stated that during the course of the audit however, some other areas for improvement were identified that resulted in two significant findings. The first finding was that procurement guidance is inconsistently being used by TRS business units throughout the contracting process, particularly during the early phases of the procurement process to ensure that all requirements are met for state and federal reporting and internal TRS policy. The second

finding related to 15 contract workers that had authorized access to protected health information but their employers didn't have the associated BAAs in place.

Ms. Mani stated there were three other findings noted as well. One was that the TRS contract administration policy omitted some internal procedures required for the various business units needs and coordination. Another finding was that the Procurement and Contracts area had not consistently followed their own internal procedures throughout the contracting process. The final finding was that the Procurement and Contracts area depends on an old legacy mainframe system that is exacerbating work processes and resulting in inefficiencies.

Ms. LaTresa Stroud talked about management's plan to address these findings. She said the plans included developing processes and procedures internally for the organization, developing training, including a mandatory contract sponsor training. She said of the 15 contract workers authorized to access health information, there are now executed BAA agreements covering those workers, and a plan is being implemented to make sure it is identified when a BAA is needed going forward. She said the September implementation of the statewide financial system, CAPPS, will help to enhance monitoring of contracts.

Ms. Barrett talked about plans for FY20, where they are going to do a follow-up audit on Procurement and Contracting and the organization and look at the contract monitoring side.

E. Employer data analysis testing (Agreed-Upon Procedures) – Lih-Jen Lan and Barbie Pearson

Ms. Lih-Jen Lan discussed the two key risks that were evaluated as part of the employer data analysis testing. The first risk was related to the incorrect calculation of contributions or surcharges which would financially impact TRS and the employer. She stated that testing focused on 18 key validations within the TRUST system used to confirm the calculation of contributions and surcharges paid by employers and included testing of 106 employers and more than 1.2 million payroll records.

She stated that the second risk that testing covered was the submission of incorrect or invalid data by the employers that could impact benefit delivery. She stated that testing consisted of running reasonableness checks and data validity checks to identify missing data or data that appeared to be out of line or invalid.

Ms. Barrett stated that while discrepancies were identified and turned over to Benefits to research, the number was very low. Ms. Barrett noted that in many cases, management was already aware of the issue and working to fix it.

F. Prior audit and consulting recommendations - Amy Barrett

Ms. Amy Barrett referenced one outstanding recommendation that was past due related to HIPAA. She said it was past due because they are waiting for more information from consultants.

5. Discuss or consider Internal Audit and TRS Compliance administrative reports and matters related to governance, risk management, internal control, compliance

violations, fraud, regulatory reviews or investigations, fraud risk areas, audits for the annual internal audit plan, or auditors' ability to perform duties — Committee Chair, Amy Barrett and Heather Traeger

Ms. Barrett presented Internal Audit staff accomplishments. She included passed CIA exams from a couple of auditors, the APPFA Conference that was hosted, presidency at the Austin chapter of Society of CPAs, and the transition from using S-drive to SharePoint.

6. Discuss personnel matters concerning the Chief Audit Executive – Committee Chair and Janet Bray

At 6:42 p.m., Mr. Moss announced without objection that the Committee meeting would recess to go into executive session an agenda item number 6 under Section 551.074 of the Government Code to discuss personnel matters concerning the chief audit executive.

At 7:00 p.m. Mr. Moss reconvened the Committee meeting in open session.

Without further discussion, the meeting adjourned at 7:00 p.m.

APPROVED BY THE **AUDIT, COMPLIANCE AND ETHICS COMMITTEE** OF THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE 20th DAY OF SEPTEMBER 2018.

Christopher Moss	Date	
Chair, Audit, Compliance and Ethics Committee		
Board of Trustees		
Teacher Retirement Systems of Texas		



Fiscal Year 2018 Teacher Retirement System Financial Statement Audit

State Auditor's Office Audit Team:

Michael O. Clayton, CPA, CISA, CFE, CIDA (Audit Manager) Anca Pinchas, CPA, CISA, CIDA (Project Manager) Amadou Ngaide, CFE, CIDA (Asst. Project Manager) New and returning team members

Anca Pinchas, CPA, CISA, CIDA State Auditor's Office



Purpose and Scope of the Audit

Issue an opinion on the Teacher Retirement System's (System) fiscal year 2018 financial statements in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States.



Reporting Timeline

- Independent auditor's report (opinion on the financial statements) –planned November 20, 2018.
- Report on internal controls and on compliance and other matters (required for audits performed in accordance with generally accepted government auditing standards) –planned November 20, 2018.
- Report to the Legislative Audit Committee planned November 20, 2018.





Administrative and Other Matters

- Audit work will be conducted from August 1, 2018, through November 2018.
- Auditors will coordinate their work through the internal audit liaisons but will still have direct access to records, employees, and external service providers.
- Internal Audit will provide direct assistance through the performance of selected audit procedures as agreed upon between the State Auditor's Office and Internal Audit.
- The State Auditor's Office is independent to conduct the audit of the System's fiscal year 2018 financial statements. The State Auditor's Office conducts all projects in an environment of full independence; that is, free of any personal, external, or organizational impairment.



An Audit of the System's 2017 Schedules of Pension and Other PostEmployment Benefits (OPEB) Liability Allocation Schedules

Anca Pinchas, CPA, CIDA, CISA Managing Senior Auditor State Auditor's Office



Audit Opinions

We issued unqualified opinions dated June 8, 2018, related to the System's pension and other-post employment benefits (OPEB) liability schedules for fiscal year 2017.

Pension Liability Schedules

• We concluded that the System's Schedule of Employer's Proportionate Shares (Allocations) and the total for all entities of the columns titled net pension liability, total deferred outflow of resources, total deferred inflow of resources, and total pension expense (specified column totals) included in the Schedule of Pension Amounts by Employer and the related notes as of August 31, 2017, were materially correct and presented in accordance with accounting principles generally accepted in the United States of America.



Audit Opinions

OPEB Liability Schedules

• We concluded that the System's Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post-Employment Benefits (OPEB) Liability and the total for all entities of the columns titled net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflow of resources, total deferred inflow of resources, and total OPEB expense (specified column totals) included in the Schedule of OPEB Amounts by Employer and the related notes as of August 31, 2017, were materially correct and presented in accordance with accounting principles generally accepted in the United States of America.



New Standards

• GASB statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions is effective for fiscal year 2018. This statement requires employers to report the OPEB liability on the face of the financial statements and adds additional note disclosures.

Audit Considerations Related to Implementation of GASB Statement No. 75





Background/Overview

- Implementation of GASB 75 in fiscal year 2018 will result in changes in what other post-employment benefit (OPEB) related information is reported and how that OPEB information is audited.
- This specifically impacts plan employers, which in the System's case is the State of Texas, school districts, universities, charter schools, and education service centers.



American Institute of Certified Public Accountants (AICPA) Guidance

 The AICPA has issued audit guidance related to the auditing of GASB 75 in the form of a new chapter of the AICPA State and Local Government Audit Guide in June 2017



OPEB Schedules

- Schedule of Employer Allocations This schedule calculates the other post employment benefit contribution effort for each employer making contributions to the plan (percentage-based calculation).
- Schedule of Other Post Employment Benefit Amounts by Employer - This schedule shows the total change in other post employment benefit amounts by change type for each employer contributing to the plan.



Additional Considerations

- Plan employers will need the opinions on the schedules because they will need to rely on the information issued by the plan.
- If employer auditors cannot rely on work done by plan auditors, that could result in a situation in which employer auditors may want to do their own audit work on the plan.

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Communication with Reporting Entities

- AICPA guidance emphasizes the importance of communication with reporting entities (employers).
- Employer auditors will be relying on work done by plan auditors to issue their audit opinions.
- If employer auditors cannot rely on audit work done at the plan, that could result in employers not receiving unqualified opinions on their financial statements.

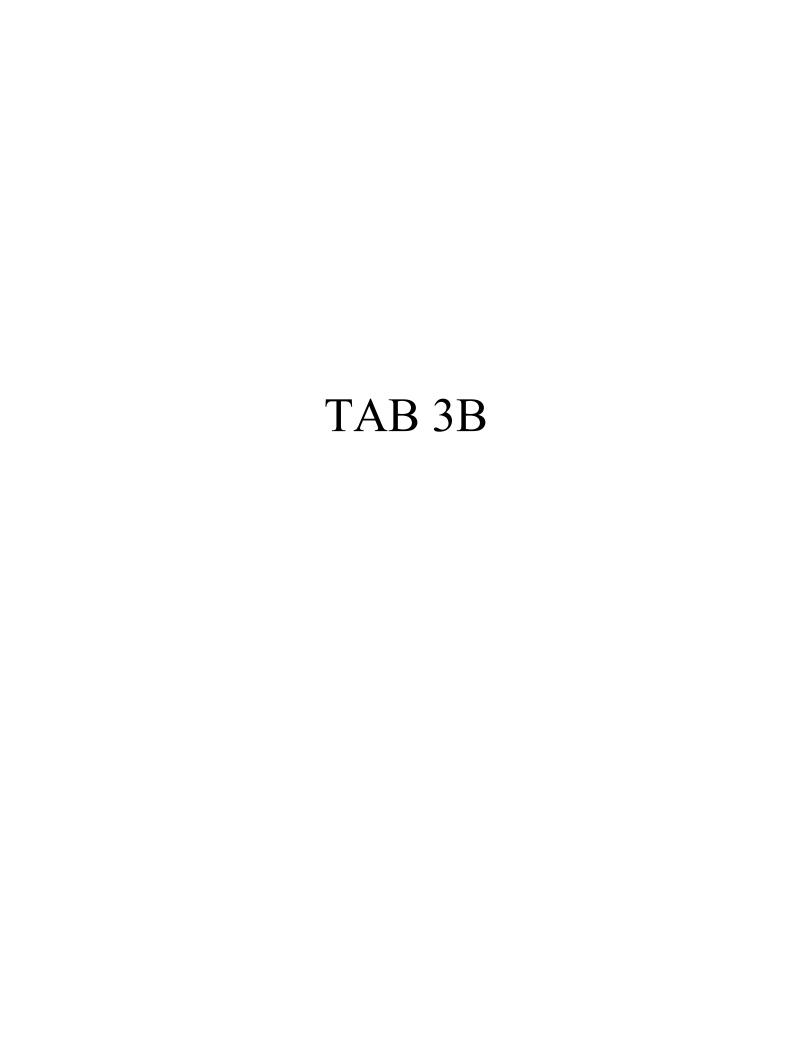


Key Items for Communication

 Ensuring that employers and their auditors know where to find the Schedule of Employer Allocations and Schedule of Other Post Employment Benefit Amounts by Employer after the audit opinion is issued on those schedules.



Questions



We have audited the Schedule of Employer's Proportionate Shares (Allocations) and the total of all entities of the columns titled net pension liability, total deferred outflow of resources, total deferred inflow of resources, and total pension expense (specified column totals) included in the Schedule of Pension Amounts by Employer and the related notes of the Teacher Retirement System (System) for the year ended August 31, 2017, and have issued our report thereon dated June 8, 2018 (Pension Liability Schedules).

Additionally, we have audited the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post-Employment Benefits (OPEB) Liability and the total for all entities of the columns titled net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflow of resources, total deferred inflow of resources, and total OPEB expense (specified column totals) included in the Schedule of OPEB Amounts by Employer and the related notes of the System for the year ended August 31, 2017, and have issued our report thereon dated June 8, 2018 (OPEB Liability Schedules).

Professional standards require that we provide you with the following information related to our audit.

No.	Item	Comments
1	The Auditor's Responsibilities Under Generally Accepted Auditing Standards	As stated in our engagement letter dated May 10, 2017, for the Pension Liability Schedules and March 20, 2018, (as amended by email dated May 1, 2018) for the OPEB Liability Schedules, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management, with your oversight, are prepared, in all material respects, in accordance with generally accepted accounting principles. Our audit of the Pension Liability Schedules and OPEB Liability Schedules does not relieve management or those charged with governance of their responsibilities.
2	Planned Scope and Timing of the Audit	We performed the audit according to the planned scope and timing previously communicated to you in our engagement letter dated May 10, 2017, for the Pension Liability Schedules and March 20, 2018, (as amended by email dated May 1, 2018) for OPEB Liability Schedules.
3	Corrected and Uncorrected Misstatements	Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those the auditor believes are trivial, and communicate them to the appropriate level of management. Auditors identified no misstatements requiring correction during this audit.

No.	Item	Comments
4	Management Representations	We have requested certain representations from management that are included in the management representation letter dated June 8, 2018. We also requested a representation letter dated June 8, 2018, from the System's general counsel regarding the existence of certain contingent liabilities that might require disclosure in the Pension and OPEB schedules.
5	Qualitative Aspects of the Entity's Significant Accounting Practices	Management is responsible for the selection and use of appropriate accounting policies. During fiscal year 2017, the System implemented GASB Statement No.75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, which requires government employers to begin recording on the face of their financial statements a liability for OPEB plans administered through trusts, rather than disclosing those amounts in the notes to their financial statements. The System prepared the audited schedules to help participating employers comply with requirements of GASB 75. Employers may use the OPEB liability schedules prepared by the System to aid them in determining their portion of the reported pension or OPEB liability. We noted no transactions entered into by the System during the fiscal year 2017 for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the Pension Liability Schedules and OPEB Liability Schedules in a period that differs from when the transactions occurred.
6	Significant Difficulties Encountered During the Audit	We did not encounter any restrictions in performing our procedures or gaining access to individuals or records. Management and staff provided us with all of the information and support we requested.
7	Other Audit Findings or Issues	We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year. Those discussions occurred in the normal course of the audit.

No.	Item	Comments
8	Disagreements with Management	We did not encounter any disagreements with management during the course of the audit. For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the Pension Liability Schedules and OPEB
		Liability Schedules or the auditor's report.
9	Management's Consultations with Other Accountants	In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the System's Pension Liability Schedules and OPEB Liability Schedules or a determination of the type of auditor's opinion that may be expressed on those schedules, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts.
		To our knowledge, there were no such consultations with other accountants.
10	Significant Findings or Issues Discussed, or Subject to Correspondence, with Management	Prior to and throughout our audit engagement, we had routine discussions, or engaged in correspondence, with management regarding the System and application of accounting principles and auditing standards.
11	Independence	The State Auditor's Office is independent to conduct the audit of the System's fiscal year 2017 Pension Liability Schedules and OPEB Liability Schedules. It is the State Auditor's Office's policy to conduct all projects in an environment free of any threats that impair independence.
12	Fraud, Abuse, or Noncompliance with Laws and Regulations, Contracts or Grant Agreements	Auditing standards require auditors to exercise professional skepticism and increased awareness to detect potential violations, fraud, and abuse. We did not find evidence that fraud, abuse, or noncompliance with laws and regulations, contracts or grant agreements, had, or might have, occurred.

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



Independent Auditor's Report

Teacher Retirement System Board of Trustees:

Mr. Jarvis V. Hollingsworth, Chairman

Ms. Dolores Ramirez, Vice Chair

Mr. Joe Colonnetta

Mr. David Corpus

Mr. John Elliott

Dr. Greg Gibson

Mr. Christopher Moss

Mr. James Dick Nance

Ms. Nanette Sissney

Report on the Schedules

We have audited the accompanying Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability of the Teacher Retirement System (System) as of and for the year ended August 31, 2017, and the related notes. We have also audited the total for all entities of the columns titled net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflows of resources, total deferred inflows of resources, and total OPEB expense (specified column totals) included in the accompanying Schedule of Other Post Employment Benefits (OPEB) Amounts by Employer of the System, as of and for the year ended August 31, 2017, and the related notes.

Management's Responsibility for the Other Post Employment Benefits Schedules

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

Auditor's Responsibility

Our responsibility is to express opinions on the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability and the specified column totals included in the Schedule of Other Post Employment Benefits (OPEB) Amounts by Employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability and specified column totals included in the Schedule of Other Post Employment Benefits (OPEB) Amounts by Employer are free from material misstatement.

Robert E. Johnson Bullding 1501 N. Congress Avenue Austin, Texas 78701

P.O. Box 12067 Austin, Texas 78711-2067

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SAO Report No. 18-323

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability and specified column totals included in the Schedule of Other Post Benefits (OPEB) Amounts by Employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedules, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability and specified column totals included in the Schedule of Other Post Benefits (OPEB) Amounts by Employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability and specified column totals included in the Schedule of Other Post Benefits (OPEB) Amounts by Employer.

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

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer's proportionate shares (allocations), net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflows of resources, total deferred inflow of resources, and total OPEB expense for the total of all participating entities for the System OPEB Plan as of and for the year ended August 31, 2017, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended August 31, 2017, and our report thereon, dated November 20, 2017, expressed and unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of System management, Board of Trustees, employers participating in the System OPEB Plan, and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Lisa R. Collier, CPA, CFE, CIDA First Assistant State Auditor

Lia R. Collier

June 8, 2018



Independent Auditor's Report

Teacher Retirement System Board of Trustees:

Mr. Jarvis V. Hollingsworth, Chairman

Ms. Dolores Ramirez, Vice Chair

Mr. Joe Colonnetta

Mr. David Corpus

Mr. John Elliott

Dr. Greg Gibson

Mr. Christopher Moss

Mr. James Dick Nance

Ms. Nanette Sissnev

Report on the Schedules

We have audited the accompanying Schedule of Employer's Proportionate Shares (Allocations) of the Teacher Retirement System (System) Pension Plan, as of and for the year ended August 31, 2017, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying Schedule of Pension Amounts by Employer of the System Pension Plan, as of and for the year ended August 31, 2017, and the related notes.

Management's Responsibility for the Pension Schedules

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

Auditor's Responsibility

Our responsibility is to express opinions on the Schedule of Employer's Proportionate Shares (Allocations) and the specified column totals included in the Schedule of Pension Amounts by Employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule of Employer's Proportionate Shares (Allocations) and specified column totals included in the Schedule of Pension Amounts by Employer are free from material misstatement.

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SAO Report No. 18-322

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule of Employer's Proportionate Shares (Allocations) and specified column totals included in the Schedule of Pension Amounts by Employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedules, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Schedule of Employer's Proportionate Shares (Allocations) and specified column totals included in the Schedule of Pension Amounts by Employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule of Employer's Proportionate Shares (Allocations) and specified column totals included in the Schedule of Pension Amounts by Employer.

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

Opinions

In our opinion, the schedules referred to above, present fairly, in all material respects, the employer's proportionate shares (allocations), net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the System Pension Plan as of and for the year ended August 31, 2017, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended August 31, 2017, and our report thereon, dated November 20, 2017, expressed and unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of System management, Board of Trustees, employers participating in the System Pension Plan, and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Lisa R. Collier, CPA, CFE, CIDA First Assistant State Auditor

June 8, 2018



Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Pension and OPEB Schedules Performed in Accordance with **Government Auditing Standards**

Independent Auditor's Report

Teacher Retirement System Board of Trustees:

Mr. Jarvis V. Hollingsworth, Chairman

Ms. Dolores Ramirez, Vice Chair

Mr. Joe Colonnetta

Mr. David Corpus

Mr. John Elliott

Dr. Greg Gibson

Mr. Christopher Moss

Mr. James Dick Nance

Ms. Nanette Sissney

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the Schedule of Employer's Proportionate Shares (Allocations) of the Teacher Retirement System's (System) Pension Plan as of and for the year ended August 31, 2017, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the Schedule of Pension Amounts by Employer of the System Pension Plan, as of and for the year ended August 31, 2017, and the related notes, and have issued our report thereon dated June 8, 2018 (Pension Schedules).

Additionally, we have audited the Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post Employment Benefits (OPEB) Liability of the System as of and for the year ended August 31, 2017, and the related notes. We have also audited the total for all entities of the columns titled net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflows of resources, total deferred inflows of resources, and total OPEB expense (specified column totals) included in the Schedule of Other Post Employment Benefits (OPEB) Amounts by Employer of the System, as of and for the year ended August 31, 2017, and the related notes, and have issued our report thereon dated June 8, 2018 (OPEB Schedules).

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> Phone: (512) 936-9500

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Internal Control Over Financial Reporting

In planning and performing our audit of the schedules, we considered the System's internal control relevant to the System's preparation and fair presentation of the schedules (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the schedules, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the System's schedules will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's schedules are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Auditors communicated certain issues that were not material or significant to the audit objectives in writing to the System's management.

Purpose of this Report

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

Lisa R. Collier, CPA, CFE, CIDA

First Assistant State Auditor

June 8, 2018





The Audit of the Teacher Retirement System's Fiscal Year 2017 Employer Pension and Other Post Employment Benefits Liability Allocation Schedules

June 14, 2018

Members of the Legislative Audit Committee:

We have issued two audit reports dated June 8, 2018, related to the Teacher Retirement System's (System) pension and other postemployment benefits (OPEB) liability schedules for fiscal year 2017.

Pension Liability Schedules

We concluded that the System's Schedule of Employer's Proportionate Shares (Allocations) and the total for all entities of the columns titled net pension liability, total deferred outflow of resources, total deferred inflow of resources, and total pension expense (specified column totals) included in the Schedule of Pension Amounts by Employer and the related notes as of August 31, 2017, were materially correct and presented in accordance with accounting principles generally accepted in the United States of America (see text box for pension liability reporting requirements).

OPEB Liability Schedules

We concluded that the System's Schedule of Employer's Proportionate Shares (Allocations) of the Collective Net Other Post-Employment Benefits (OPEB) Liability and the total for all entities of the columns titled net OPEB liability beginning of year, net OPEB liability end of year, total deferred outflow of resources, total deferred inflow of resources, and total OPEB expense (specified column totals) included in the Schedule of OPEB Amounts by Employer and the related notes as of August 31, 2017, were materially correct and presented in accordance with accounting principles generally accepted in the United States of America (see text box for OPEB liability reporting requirements).

Pension and OPEB Liability Reporting Requirements

Pension Reporting Requirements:

Governmental Accounting Standards Board Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68), which became effective for fiscal years beginning after June 15, 2014, requires governments to begin recording on the face of their financial statements a liability for pension plans administered through trusts, rather than disclosing those amounts in the notes to their financial statements.

OPEB Reporting Requirements:

Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75), which became effective for fiscal years beginning after June 15, 2017, requires governments to begin recording on the face of their financial statements a liability for OPEB plans administered through trusts, rather than disclosing those amounts in the notes to their financial statements.

Employers in the respective plans will need to recognize their portion of the reported pension and/or OPEB liability in the financial statements they produce.

The System prepared the audited schedules to help participating employers comply with requirements of GASB 68 and GASB 75. Employers may use the pension and OPEB liability schedules prepared by the System to aid them in determining their portion of the reported pension or OPEB liability.

Sources: GASB 68 and 75 and the American Institute of CPAs State and Local Government Expert Panel Pension Whitepapers Series, Governmental Employer Participation in Cost-Sharing Multiple Employer Plans: Issues Related to Information for Employer Reporting.

The System intends to post the Pension Liability Schedules and the OPEB Liability Schedules and our audit reports on its Web site at http://www.trs.texas.gov/.

SAO Report No. 18-033

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Members of the Legislative Audit Committee June 14, 2018 Page 2

We also issued a report on internal control over financial reporting of the schedules and on compliance and other matters as required by auditing standards. Our procedures did not identify any material weaknesses in internal control over financial reporting or any noncompliance with laws or regulations that materially affected the schedules. In addition, the major internal controls that we tested for the purpose of forming our opinions on the schedules were operating effectively.

Our procedures were not intended to provide an opinion on internal control over financial reporting or to provide an opinion on compliance with laws and regulations. Accordingly, we do not express an opinion on the effectiveness of the System's internal control over financial reporting or on compliance with laws and regulations.

Auditors communicated certain issues that were not material or significant to the audit objectives in writing to the System's management. As required by auditing standards, we will also communicate to the System's Board of Trustees certain matters related to the conduct of this audit.

We appreciate the System's cooperation during this audit. If you have any questions, please contact Hillary Eckford, Audit Manager, or me at (512) 936-9500.

Sincerely,

Lisa R. Collier, CPA, CFE, CIDA First Assistant State Auditor

cc: The Honorable Greg Abbott, Governor

Teacher Retirement System Board of Trustees

Mr. Jarvis V. Hollingsworth, Chairman

Ms. Dolores Ramirez, Vice Chair

Mr. Joe Colonnetta

Mr. David Corpus

Mr. John Elliott

Dr. Greg Gibson

Mr. Christopher Moss

Mr. James Dick Nance

Ms. Nanette Sissney

Mr. Brian Guthrie, Executive Director, Teacher Retirement System



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TAB 4

The information for this agenda item is confidential.





TAB 5.1:A

Quarterly TRS Compliance Testing
Internal Audit September 2018



Business Objectives

- All information required by Investment Policy Statement (IPS) is reported to the TRS Board of Trustees
- Investments made are within delegated limits and established selection criteria
- Risk limits are followed for other investment programs and activities (IPS, Securities Lending Policy, Proxy Voting Policy, wire transfers)
- Ethics policy requirements are met





- Board is not informed of key investment decisions and critical information
- Approvals and findings exceed delegated limits
- Risks exceed Board-established tolerances or management policies and procedures
- Ethics policy requirements are not completed



Agreed-Upon Procedures

Testing period – April to June 30, 2018

Board Reports

- Compare Board reports to IPS requirements
- Trace sample information included in Board reports to supporting documentation

Investment Selection and Approval

 Trace investments approved by the Internal Investment Committee (IIC) to supporting documentation



Agreed-Upon Procedures

Other Investment Policies and Processes

- Reporting of managers/funds added or removed
- Securities lending diversification requirements were met
- Wire transfers are reconciled between State Street and TRS
- Confirm TRS managers' awareness of any compliance violations

Ethics Policies

- Employees filed disclosure statements and completed annual ethics training
- Obtain evidence that Trustees filed financial information with the executive director and completed annual ethics training



Test Results

- All reporting requirements were met
- All investments tested were in compliance with statutory and policy approval limits
- All policy and procedure requirements tested were met
- All employee and Trustees ethics requirements were met



Questions?



QUARTERLY TRS COMPLIANCE TESTING

INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), WIRE TRANSFER PROCEDURES, PROXY VOTING POLICY (PVP), EMPLOYEE ETHICS POLICY, AND BOARD OF TRUSTEES ETHICS POLICY

CALENDAR QUARTER ENDED JUNE 30, 2018

Business Objectives	Board Reports All required information is reported to the TRS Board of Trustees	Investment Selection and Approval Investments made are within delegated limits and established selection criteria	3. Other (IPS, SLP, PVP, Wire Transfers, Other Reporting) Risk limits are followed for other investment programs and activities	Ethics Policies Ethics policy requirements are met
Business Risks	Board is not informed of key investment decisions and critical information	Approvals and fundings exceed delegated limits	Risks exceed Board-established tolerances or management policies and procedures	Ethics policy requirements are not completed
Management Assertions	All required information is reported to the Board	Approvals and fundings are within delegated limits and made for qualified managers	Programs are within risk limits and activities follow established policies and procedures	Ethics policies and requirements are being followed
Agreed-Upon Procedures	Compare Board reports to IPS requirements Trace sample information included in Board reports to supporting documentation	Trace investments approved by the Internal Investment Committee (IIC) to supporting documentation Compare approval amounts of new investments with IPS limits, including Emerging Managers Obtain evidence that Placement Agent Questionnaires (PAQs) were received prior to funding investments approved Obtain evidence that TRS complied with investment restrictions	Obtain evidence of IMD's reporting of managers/funds added or removed Obtain evidence that securities lending agent met the diversification requirements Verify wire transfers are reconciled between State Street Bank and TRS Confirm senior managers' awareness of any compliance violations	Obtain evidence that employees filed required statements and completed annual ethics training Obtain evidence that Trustees filed financial information with the executive director and completed annual ethics training
Test Results	 All reporting requirements were met Documentation provided support for the information tested 	 All investments tested were in compliance with statutory and policy approval limits PAQs were obtained for all investments tested 	All policy and procedure requirements tested were met	 All employee ethics requirements were met All Trustees ethics requirements were met
Management Responses	N/A	N/A	N/A	N/A





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512.542.6400 1000 Red River Street Austin, Texas 78701

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

September 6, 2018

Carolina de Onis, TRS General Counsel

Subject: Report on Independent Testing of TRS Compliance

We have completed the **Quarterly TRS Compliance Testing** for the quarter ended June 30, 2018, as included in the Fiscal Year 2018 Audit Plan. The scope of this engagement included the requirements of the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Proxy Voting Policy (PVP), Employee Ethics Policy, Board of Trustees Ethics Policy, and Wire Transfer Procedures. We have also considered any compliance violations that came to our attention as of the report date.

We performed the procedures that were agreed to by the TRS Legal and Compliance division. These procedures include tests that supplement the current compliance monitoring procedures performed by State Street Bank and the Chief Compliance Officer.

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

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

Our testing procedures and results are included in **Appendix A.**

We were not engaged to and did not perform an examination, the objective of which would be the expression of an opinion. Accordingly, we do not express an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

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

* * * * *

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

Amy Barrett, CIA, CPA, CISA Chief Audit Executive Nick Ballard, CIA, CPA, CFA Director of Investment Audit Services

Rodrigo Dominguez Investment Auditor

APPENDIX A AGREED-UPON PROCEDURES AND RESULTS

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
1	1	IPS Article 1.7a - 1.7o – Obtain evidence that requirements tested were reported to Board of Trustees. Quarterly: investment performance, policy compliance monitoring, asset class exposures, external investments under consideration, external investment activities, liquidity positions, and consultant engagements. Semi-annual: outstanding derivatives, risk limits, leverage, transparency reports, Placement Agent Disclosures. Annual: reports include staffing, Private Markets strategy review, and Governing Boards participation.	Obtain all information required to be reported to Board of Trustees and compare to reporting requirements per Investment Policy Statement (IPS). Trace sample information (1.7 g, h, and i) included in Board reports to supporting documentation. Trace Transparency Report Market Snapshot updates to supporting documentation.	Information required to be reported to Board of Trustees complied with IPS requirements. Obtained support for information tested. Obtained support for information tested.	No response required
2	2	IPS Article 1.8d – Obtain evidence that Restricted Securities lists were updated and reports were filed	 Verify that the trading system was updated based on the latest restricted securities lists Ensure that responsible staff have updated the restricted lists 	 The trading system was updated correctly Restricted securities lists were updated 	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
			Obtain evidence that TRS complied with the following requirements: (a) to notify the Comptroller's Office regarding holdings of restricted company securities; (b) to divest holdings; and (c) to file annual report of Sudan/Iran and companies that boycott Israel investment activity to the Legislature and the Attorney General	TRS complied with the notification requirement	
3	2	IPS Article 2.5 – Obtain evidence that the Investment Management Division (IMD) evaluated hedge fund classification	 Select sample of approved investments in hedge funds and external managers Obtain analysis indicating whether each investment is hedge fund or not. If analysis is unavailable, inconclusive, or erroneous, report that result For any analysis requiring Board approval of classification, obtain Board minutes to test whether approval was obtained 	Each of the approved investments in hedge funds and external managers tested had analysis indicating whether the investment was a hedge fund or not. No Board approval was required.	No response required
4	2	IPS Article 2.6a – Obtain existence of Internal Investment Committee (IIC) approval of all private and relevant public markets fund investments.	For the private and public markets funds approved during the quarter, obtain existence of IIC approval	IIC approval existed for all funds we tested during the quarter	No response required
5	2	IPS Article 2.6d – Obtain information about the allocation of funds added to previously approved investments for purposes of rebalancing or adjusting risks to ensure that they did not exceed 2% of associated portfolios	Obtain the Quarterly Rebalance Authority tracking spreadsheet and trace amounts to the appropriate Rebalance Authority form to ensure that additional investments or allocations did not exceed 2% of Hedge Fund Portfolio, External Manager Portfolio, or Other Absolute Return Portfolio (as appropriate) per investment on a monthly basis	Additional funds added to previously approved investments for purposes of rebalancing or adjusting risks did not exceed 2% of associated portfolios	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
6	2	IPS Article 7 – Obtain evidence that new investments in emerging managers meet size and track record requirements.	For sample of approved investments obtain evidence that: • Each is an independent private investment management firm with less than \$2 billion assets under management • Each has a performance track record as a firm of less than 5 years, or both	New investments in emerging managers met the policy requirements	No response required
7	2	IPS Article 12 - Obtain evidence of existence of placement agent questionnaire (PAQ) for each new investment selected for testing and test for inclusion in summary report to the Board.	 For each investment selected for testing, obtain copies of the placement agent questionnaire (PAQ) to ensure that IMD obtained responses to the questionnaire Obtain evidence that responses were obtained prior to funding. Obtain evidence that all responses are reported to the Board at least semi-annually 	Each investment tested had a completed questionnaire and was included in the summary report to the Board	No response required
8	2	IPS Appendix B – Obtain evidence that investments approved are within policy limits.	 Select sample of approved investments, obtain tear sheet for each, and observe the approved amounts are within authorized limits a) Initial allocation – .50% b) Additional or follow-on – 1% c) Total Manager Limits – 3% d) Total limit each manager organization – 6% Trace tear sheet calculations to the supporting documentation to ensure that the above authorized limits were not exceeded by any manager or partner organization Inquire if any "Special Investment Opportunities" were made for the quarter 	For the sample investments tested, no manager or partner organization exceeded the authorized limits and documentation existed for IMD staff calculations of authorized limits. There were no Special Investment Opportunities.	No response required
9	2	IPS Appendix G – Obtain evidence that participation in external advisory committees or boards meet	Obtain evidence that the LPAs for the approved public markets investments contained the following requirements:	Obtained evidence that IMD is in compliance with this policy	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE TEST DESCRIPTION TEST R		TEST RESULT	MANAGEMENT RESPONSE
		the requirement of the IPS by requesting a sample of limited partnership agreements (LPA's).	 TRS employee representative may not serve in a position that has general liability to third parties Agreement must be in writing and address certain limitations External entity's insurance/indemnification will be primary relative to any available TRS insurance/indemnification Compensation/reimbursement of expenses will be paid directly to TRS 		
10	3	Quarterly Compliance Certification – Obtain evidence that all known compliance violations have been reported.	Confirm with the Chief Compliance Officer that she has received compliance certification from IMD management, Legal Investment staff, and CIO regarding any known compliance violations that occurred during the testing period	Obtained confirmation from the Chief Compliance Officer. No compliance exceptions were identified as a result of the quarterly compliance certification	No response required.
11	3	Wire Transfer Procedures – Obtain evidence that TRS Investment Accounting's record of processed investment funding was complete.	Obtain evidence that TRS Investment Accounting investment funding log reconciles to State Street outgoing wires log to determine if the funding log is complete and accurate.	The Investment Accounting funding log reconciled to the State Street Outgoing wires log for the period tested.	No response required
12	3	Securities Lending Policy – Obtain evidence that IMD reviews the securities lending program and performance of lender.	Obtain evidence from the monthly securities lending program performance reviews conducted by the TRS Asset Allocation team and the Securities Lending Agent that investments in the securities lending program comply with the following policy requirements: Sec 4.5. On an annual basis, the lending agent will furnish a list of potential borrowers and corresponding loan limits	Obtained Information about approved borrowers, including loan limits. Diversification requirements are met. No investments in structured notes are included in investment holdings.	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE	
			Sec 4.7. Diversification requirements Sec 4.8. Investments in structured notes are prohibited			
13	3	Proxy Voting Policy – Obtain evidence that at least on an annual basis, the Proxy Committee shall review any voting guidelines recommended by the independent advisory service to ensure that they are appropriate for TRS and that the Proxy Committee shall maintain, or cause to be maintained, a record of votes on all proxy issues, including the exception votes report to the Board.	Obtain evidence that: The Proxy Committee reviewed and discussed the voting guidelines provided by the independent advisory service firm IMD maintains record of votes on all proxy issues and proxy exceptions report is presented to the board.	The Proxy Committee reviewed and discussed the voting guidelines. The Proxy Committee keeps record of all proxy records. Obtained evidence that proxy exception reports are included in Board Transparency Reports.	No response required	
14	4	Employee Ethics Policy – Obtain evidence that Key Employees acknowledge their Key Employee status through the annual Ethics Compliance Statement and filed enhanced disclosure statements with the executive director; within sixty days of the date of employment new employees filed a completed ethics and	 Select a sample of TRS employees and determine whether: Key Employees acknowledged their key employee status by 4/30/18 Key Employees filed disclosure statements by 4/30/18 New employees filed ethics compliance statements within 60 days of employment Employees participated in annual ethics training 	Key employees acknowledged their key employee status through the annual ethics compliance statements and filed enhanced disclosure statements timely. New employees filed ethics compliance statements timely. All new employees completed training within a year of employment. All employees completed training timely.	No response required	

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
		compliance statement; and employees participated in annual ethics training.			
15	4	Board of Trustees Ethics Policy – Obtain evidence that Trustees disclose to the Executive Director financial information required by state law, any legal matters, and matters relating to co-fiduciary responsibility; attended ethics training annually.	Obtain evidence that all Trustees filed financial information with the Executive Director and attended ethics training.	All Trustees filed personal financial statements and attended ethics training	No response required

Note: Testing procedures for the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Proxy Voting Policy (PVP), Employee Ethics Policy, Board of Trustees Ethics Policy, and Wire Transfer Procedures are for the activities for the quarter ending June 30, 2018.

TAB 5B



Tab 5.2:B

Private Equity Fees and Carried Interest Audit Internal Audit September 2018



Business Objective

To ensure that private equity fund fees and expenses are charged and reported to TRS in accordance with legal documents.

Business Risks

Incorrect amount of allocations to TRS for:

- Capital called for investments
- Management fees
- Partnership expenses
- Distributions
- Carried interest profit share



Audit Process

Selected five private equity funds to test.

Test fund activity for reasonable allocations to TRS by recalculating contributions, distributions and carried interest.

Recalculation Criteria

- Fund legal terms
- TRS' percentage commitment to fund
- Supporting documentation available to TRS



Results

Positive Results

- Recalculation of values for the five selected funds supported reported amounts, including \$799 million in contributions, \$310 million in distributions, and \$99 million in carried interest
- TRS records were sufficient to perform recalculations
- Private equity managers were thorough and prompt in responding to requests

Significant Findings

None



Improvement Opportunities

 Complete evaluation of monitoring processes for private equity fund activity using cost-benefit analysis

Management Response

 We agree and will complete evaluation of private equity monitoring processes by August 31, 2019



Questions?



PRIVATE EQUITY MANAGEMENT FEES AND CARRIED INTEREST

August 29, 2018

TRS Internal Audit Department

Business **Objective**

To ensure that private equity fund fees, expenses, and carried interest are charged and reported to TRS in accordance with limited partnership agreements, including side letters and amendments.

Business Risks

- Incorrect amount of capital called for investments, management fees, and expenses allocated to TRS
- Incorrect amount of distributions allocated to TRS
- Incorrect amount of carried interest profit share allocated to TRS

Management **Controls**

- Monitoring fund performance
- · Receiving audited financial statements and other reports for the fund
- · Reconciling quarterly beginning and ending fund net asset value

Controls Tested

Testing focused on assessing reasonability of allocations of capital calls, distributions, and profit by comparing reported amounts with amounts recalculated using fund legal document terms, TRS' percentage commitment to the fund, and supporting documentation available to TRS.

Results

- Contributions for investments, management fees, and expenses; distributions; and carried interest for five selected funds were allocated reasonably to TRS.
- · Available documentation was sufficient to recalculate fund transactions and fund managers were responsive to requests for additional information.

Recommended Actions

- TRS has an opportunity to strengthen monitoring processes by recalculating private equity fund management fees, expenses, and carried interest. Management is evaluating current monitoring processes.
- Management should complete its evaluation of the sufficiency of private equity fund monitoring processes using a cost-benefit analysis. The analysis should identify whether additional monitoring processes will be implemented, and where ownership for these activities will reside.

Management Responses

We agree with the issue identified and will coordinate efforts between the TRS Financial Services Division and the Investment Management Division to complete evaluation of private equity fees monitoring processes by August 31, 2019.

Legend of Results:



Red - Significant to TRS

Orange -Green

Significant to Business Objectives

Positive Finding or No Issue



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1000 Red River Street Austin, Texas 78701 Amy L. Barrett, CIA, CISA, CPA Chief Audit Executive

August 29, 2018

Audit, Compliance, and Ethics Committee, Board of Trustees Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the audit of **Private Equity Management Fees and Carried Interest**, as included in the *Fiscal Year 2018 Audit Plan*. The business objective related to private equity fund management fees, expenses, and carried interest¹ is to ensure that these transactions are charged and reported to TRS in accordance with limited partnership agreements, including side letters and amendments.

We tested five private equity funds using documentation available to TRS and additional information provided by the managers. The fund population includes \$799 million in contributions, \$310 million in distributions, and \$99 million in carried interest profit share. Testing included recalculating capital calls for investments, management fees, expenses, distributions of capital, and carried interest allocations. We did not test TRS or selected private equity manager controls, or source documentation for management fee offsets,² invoices for expenses, or valuation processes for portfolio companies.

We did not identify any significant issues. Our testing showed that transactions and profit share were allocated reasonably to TRS. We also found that TRS records were sufficient to perform recalculations, and that managers were thorough and prompt in responding to requests.

During the audit, we learned that management is evaluating current monitoring practices for private equity funds management fees, expenses, and carried interest. Management should complete its evaluation of the sufficiency of private equity fund monitoring processes using a cost-benefit analysis. The analysis should identify whether additional monitoring processes will be implemented, and where ownership for these activities will reside.

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

¹ Carried Interest – The share of any profits that fund managers receive as compensation for investment performance

² Management Fee Offsets – Credits against management fees for private equity manager monitoring, transaction, and other costs charged to portfolio companies

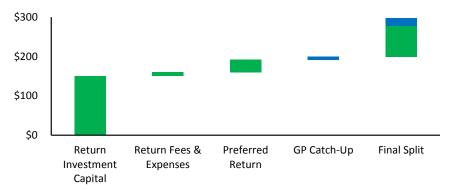
BACKGROUND

The TRS Investment Policy Statement targets an allocation to the private equity asset class at 13% of the Trust.³ As of December 31, 2017, the private equity portfolio market value is \$19.6 billion and represents approximately 12.9% of the Trust.⁴

Private equity managers charge management fees and partnership expenses to cover operating costs. Managers also collect carried interest profit share as a reward for positive fund performance in excess of a specified benchmark rate of return. All fees and profit sharing terms are included in the Limited Partnership Agreements (LPA), side letters, and amendments. For the calendar year ended June 30, 2017, private equity investment management fees totaled \$171,852,529 and reported carried interest totaled \$271,646,001.⁵

The Illustration below provides an example of how fund capital is returned to limited partners and fund profits are allocated between the general partner (GP) and limited partners (LP). Sample fund terms are included below the illustration.

Limited Partners (Green) and General Partner (Blue)



Return Investment Capital Return of Fees & Expenses Preferred Return General Partner Catch-up

Final Split

100% to LP 100% to LP

100% to LP (8% rate applied to LP-provided capital) Capital required to bring the GP's profit share to 20% of the total profits allocated

Remaining profit allocated 80% to LPs/20% to GP

³ Source: Investment Policy Statement effective October 1, 2016

⁴ Source: State Street Bank Records

⁵ Source: TRS fiscal year 2017 Comprehensive Annual Financial Report (CAFR)

BUSINESS OBJECTIVE, RISKS, AND CONTROLS

For the audit of private equity management fees, carried interest, and partnership expenses, we obtained information about the following business objective, as well as the related risks and the controls management established to mitigate these risks:

Business Objective	To ensure that private equity fund fees and expenses are charged and reported to TRS in accordance with limited partnership agreements, including side letters and amendments.
Business Risks	 Incorrect amount of capital called for investments allocated to TRS Incorrect amount of management fees allocated to TRS Incorrect amount of partnership expenses allocated to TRS Incorrect amount of distributions allocated to TRS Incorrect amount of carried interest profit share allocated to TRS
Management Controls	 Monitoring fund performance Receiving audited financial statements and other reports for the fund Reconciling quarterly beginning and ending fund net asset value
Controls Tested	Testing focused on assessing reasonability of allocations of capital calls, distributions, and profit by comparing reported amounts with amounts recalculated using fund legal document terms, TRS' percentage commitment to the fund, and supporting documentation available to TRS. Testing included: • Recalculation of capital called for investments allocated to TRS, including whether select allocation amounts are in line with TRS' commitment percentage of the fund • Recalculation of management fees allocated to TRS, including whether select allocation amounts are in line with TRS' commitment percentage of the fund • Recalculation of partnership expenses allocated to TRS, including whether select allocation amounts are in line with TRS' commitment percentage of the fund • Recalculation of distributions allocated to TRS, including whether select allocation amounts are in line with TRS' commitment percentage of the fund • Recalculation of total carried interest allocated to TRS. • Reconciliation of net cash flows from TRS custodian bank records and private equity manager documentation

RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

We did not identify any significant issues. Our testing found that investment capital calls, management fees, partnership expenses, capital distributions, and carried interest for the five funds selected were allocated reasonably to TRS. The positive test results and other reportable test results are described below.

POSITIVE RESULTS

1. Recalculation of Values for Five Selected Funds Supported Reported Amounts

Our testing found that capital called for investments, management fees, partnership expenses, capital distributions, and carried interest profit allocation for the five funds selected were allocated reasonably to TRS. The population of transactions for the five funds tested is included in the table below.

Summary of Fund Transactions Reported amounts in millions, as of December 31, 2017								
	Fund 1 Fund 2 Fund 3 Fund 4 Fund 5 Total							
Invested Capital	\$134	\$154	\$151	\$194	\$125			
Management Fees	\$8	\$12	\$5	(\$4)	\$4			
Expenses	<u>\$2</u>	<u>\$1</u>	<u>\$4</u>	<u>\$3</u>	<u>\$6</u>			
Contributions	\$144	\$167	\$160	\$193	\$135	\$799		
Distributions	\$46	\$26	\$138	\$82	\$18	\$310		
Carried Interest	\$17	\$7	\$19	\$48	\$8	\$99		

Notes: The table presents total transactions for the five funds. Testing included sampling of transactions. For Fund 4, offsets exceeded management fees, resulting in negative amount.

2. Available Documentation and Manager Responsiveness

Documentation available through TRS records and selected private equity manager investor portals was sufficient to recalculate the allocation of contributions, distributions, and carried interest for each of the five funds tested. During the audit, we requested additional documentation from external fund managers and all managers were prompt and thorough in their responses.

SIGNIFICANT RESULTS⁶

None.

⁶ Significant Result - defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.

OTHER REPORTABLE RESULTS

1. Complete Evaluation of the Cost-Benefit for Implementing Additional Processes to Validate and Monitor Private Equity Fees, Expenses, and Carried Interest

For the calendar year ended June 30, 2017, private equity investment management fees totaled \$171,852,529 and reported carried interest totaled \$271,646,001. Current processes for validating and monitoring private equity fees, expenses, and carried interest include TRS investment staff monitoring of fund performance, TRS accounting staff quarterly reconciliations of fund beginning and ending net asset values, and collection of fund reports, including quarterly partner capital statements and audited annual financial reports.

Current monitoring procedures may not identify errors in fees, expenses, and carried interest allocated to TRS. TRS has an opportunity to strengthen monitoring processes by recalculating private equity fund management fees, expenses, and carried interest for reasonableness, using information readily available to limited partners. Management is evaluating adding recalculation procedures to its current processes.

Recommendation

Management should complete its evaluation of the sufficiency of monitoring processes for private equity fund management fees, expenses, and carried interest. This evaluation should include a cost-benefit analysis. The analysis should identify whether additional monitoring will be performed, the methodology for implementing any new processes, and where ownership for these activities will reside (i.e. the TRS Financial Services Division, the Investment Management Division, or a service provider).

Potential benefits:

- Greater assurance over the accuracy of fees and carried interest disclosed in the unaudited portion of the TRS Comprehensive Annual Financial Report
- Recovery of overpayments

Potential costs:

- Staff time to gather and analyze fund activity and follow-up on questions
- Limited recovery of overpayments

Management Response

We agree with the issue identified and will coordinate efforts between the TRS Financial Services Division and the Investment Management Division to complete evaluation of private equity fees monitoring processes by August 31, 2019.

* * * * *

We appreciate Investment Management Division and TRS Finance Division staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate support provided by the selected private equity fund staff.

Amy Barrett, CIA, CPA, CISA Chief Audit Executive Nick Ballard, CIA, CPA, CFA Director of Investment Audit

Kate Rhoden, CIA, CPA Investment Audit Manager Simin Pang, CIA, CISA, MBA Senior IT Auditor

Rodrigo Dominguez Investment Auditor

APPENDIX A

AUDIT OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

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

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

AUDIT OBJECTIVE

To determine if management fees, carried interest, and partnership expenses charged and reported to TRS for select private equity funds are reasonable and in accordance with limited partnership agreements, including side letters and amendments.

SCOPE

The scope of the audit included testing five select funds in TRS' private equity portfolio for allocations of the following:

- Capital calls for investments
- Management fees
- Partnership expenses
- Capital distributed
- Carried interest profit sharing

The scope included fund activity through December 31, 2017.

The audit scope did not include review of source documentation for management fee offsets (i.e. costs charged by the manager to the portfolio companies) or partnership expenses (i.e. invoices). We also did not test valuation processes for portfolio companies.

METHODOLOGY

Our methodology included obtaining information on management's business objectives and risks. We conducted testing using a desk audit approach focused on performing recalculations of capital calls for investments, fees, expenses, and by performing recalculations of distributions of capital and carried interest profit allocations.

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

- Selected five funds with four TRS private equity managers to test. The team selected domestic funds, funds with vintage years between 2010 and 2015, and funds that represented the four strategies within the private equity portfolio. To select the funds, the team also solicited private equity team staff input.
- Assessed allocations of costs, distributions, and profit for reasonableness by comparing reported amounts with amounts recalculated using fund legal document terms, TRS' percentage commitment to the fund, supporting documentation available to TRS, and additional information requested and provided by fund managers.
- Tested reasonableness of reported allocations for fund management fees, partnership expenses, capital calls for investments, capital distributions, and total carried interest. Testing performed on sample basis.
- Surveyed other retirement systems to benchmark TRS' processes against peers.
- Reviewed other documentation, including management reports, to gather information on current portfolio processes and statistics.
- We did not test TRS or selected private equity manager controls. We also did not test
 certain inputs to fees, expenses and profit sharing allocation, including documentation for
 management fee offsets, invoices for partnership expenses, or valuation processes for
 portfolio companies.

CONCLUSION

Based on our audit work, we did not identify any significant issues. Our testing found that investment capital calls, management fees, partnership expenses, capital distributions, and carried interest for the five funds selected were reasonably allocated to TRS. We also found that documentation was sufficient for recalculating fund transactions and that fund managers were responsive to requests for additional documentation.

During the audit, we learned that management is evaluating current monitoring practices for private equity funds management fees, expenses, and carried interest. Management should complete its evaluation of the sufficiency of private equity fund monitoring processes using a cost-benefit analysis. The analysis should identify whether additional monitoring processes will be implemented, and where ownership for these activities will reside.

TAB 5C



TAB 5.3:C

Independent Testing of the Executive Incentive Pay Calculation
Internal Audit September 2018



Independent Testing of the Executive Incentive Pay Calculation

Business Objective

To calculate and award performance incentive compensation amounts accurately and in accordance with the Executive Performance Incentive Pay Plan

Agreed-upon Procedures

- Independently obtain performance variables from source data
- Develop and use calculation worksheets containing correct formulas to independently calculate the performance incentive pay score and pay amount
- Verify whether independently calculated performance results match calculations performed by Organizational Excellence staff
- Reconcile any identified difference and provide any observations for process improvements to Organizational Excellence management
- Report the results to TRS management and the Audit, Compliance and Ethics Committee of the Board



Independent Testing of the Executive Incentive Pay Calculation

Test Results

Internal Audit calculated a 15% incentive award which did not match Organizational Excellence's preliminary calculation as included in July 2018 Board materials. Differences were reconciled and agreement reached on final incentive award to be reported at the September 2018 Board meeting.



INDEPENDENT TESTING OF EXECUTIVE PERFORMANCE INCENTIVE PAY CALCULATION

Plan Year Covering July 1, 2017 through June 30, 2018

TRS Internal Audit Department

Business **Objectives**

To calculate and award performance incentive compensation amounts accurately and in accordance with the Executive Performance Incentive Pav Plan

Business Risks

- Incorrect performance or benchmark data used
- Incorrect formulas included in calculation worksheets
- Mathematical errors
- Manual entries or overrides

Management Assertions

- Correct metrics, peer group performance, and qualitative scores are used for calculations
- Calculation worksheets contain correct formulas are free from mathematical errors

Agreed-upon **Procedures**

- Independently obtain performance variables from source data
- Develop and use calculation worksheets containing correct formulas to independently calculate the performance incentive pay score and pay amount
- Verify whether independently calculated performance results match calculations performed by Organizational Excellence staff
- Reconcile any identified difference and provide any observations for process improvements to Organizational Excellence management
- Report the results to TRS management and the Audit, Compliance and Ethics Committee of the Board

Test Results

Internal Audit calculated a 15% incentive award which did not match Organizational Excellence's preliminary calculation as included in July 2018 Board materials. Differences were reconciled and agreement reached on final incentive award to be reported at the September 2018 Board meeting.

Management Comment

N/A

Legend of Test Results: Red



Significant to TRS

Yellow - Other Reportable Exception



Orange - Significant to Business Objectives

Green - Positive Test Result/No Exception



800.223.8778 512.542.6400 www.trs.texas.gov

1000 Red River Street Austin, Texas 78701 Amy L. Barrett, CIA, CISA, CPA Chief Audit Executive

September 04, 2018

Janet Bray, Plan Administrator

Subject: Report on Independent Testing of Executive Performance Incentive Pay Calculation

We have completed the **Testing of Executive Performance Incentive Pay Calculation** for the Leadership Incentive Compensation component of the *Executive Performance Incentive Pay Plan* effective for the period from July 1, 2017 through June 30, 2018. We performed the procedures that were agreed to by you as summarized in the table below.

Testing of the Investment Management Oversight Incentive Compensation calculation will be performed by Internal Audit in conjunction with the annual testing of the *Investment Incentive Pay Plan*.

AGREED-UPON PROCEDURES AND RESULTS

Independent Calculation Procedure		Result
1.	Independently obtain source data and performance variables used in the calculation	Obtained all variables. No exceptions.
2.	Develop and use calculation worksheets to independently calculate the performance incentive pay score and pay amount	Created calculation worksheets and performed calculation.
3.	Verify whether independently calculated performance results match calculations performed by the Organizational Excellence (OE) department	Calculated a 15% incentive award which did not match OE's preliminary calculation as included in July 2018 Board materials.
4.	Reconcile any identified difference and provide any observations for process improvements to Organizational Excellence's management	Differences were reconciled and agreement reached on final incentive award to be reported at the September 2018 Board meeting. One observation related to the enhancement of OE's documented award calculation procedures was provided to management.
5.	Report the results to TRS management and the Audit, Compliance and Ethics Committee	Report issued.

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

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

We were not engaged to and did not conduct an examination, the objective of which would be the expression of an opinion. Accordingly, we do not express an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

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

* * * * *

We express our appreciation to management and key personnel of the Organizational Excellence department for their cooperation and professionalism shown to us during this project.

Amy Barrett, CIA, CPA, CISA Chief Audit Executive Toma Miller, CIA, CGAP Senior Internal Auditor

Falguni Sampat Internal Auditor Kate Rhoden, CIA, CPA Investment Audit Manager





Annual Benefits Testing Project Internal Audit September 2018



Business Objective

To deliver retirement and related benefits authorized by law for members and their beneficiaries.

Agreed-Upon
Procedure (AUP)
Objective

To identify anomalies in benefit payments during the current testing period and deviations from management's benefit processing controls.



Business Risks

Fraud/Errors

Benefit payments could be incorrect or fraudulent in these areas:

- > Benefit payments to recent retirees
- Benefit payment changes
- > Benefit payments with an expiration date

Eligibility

- Wrong eligibility and benefit payment amount determination based on incorrect membership tier
- Member could retire with full normal-age retirement benefits without meeting the retirement eligibility requirements

Manual Voucher Payments

Manual voucher payments could be processed incorrectly or without proper authorization



Management Assertions

- ➤ All benefit payments are valid and are paid in accordance with TRS Laws and Rules
- All active and retired members are assigned to the correct membership tier
- > All retirees who received benefit payments are eligible
- All manually processed voucher payments are valid



Agreed-upon Procedures

For April to August 2017 benefit payments, selected payments were matched to the supporting documents on random or exception basis in the following areas:

- > Recent retiree benefit recalculations
- > Benefit payment changes from prior year
- Benefit payment expiration date exceptions
- Recalculate the member's tier for active and retired members
- Recalculate the normal-age retirement eligibility for all recent normal-age service retirements
- Manually processed voucher payments



Test Results

Fraud/Errors

No exceptions identified

Eligibility

No exceptions identified

Manual Voucher Payments

No exceptions identified



ANNUAL BENEFITS TESTING APRIL - AUGUST 2017

TRS Internal Audit Department

Business Objectives To deliver retirement and related benefits authorized by law for members and their beneficiaries.					
Business Risks	Fraud / Errors Benefit payments could be incorrect or fraudulent in these areas: Benefit payments to recent retirees Benefit payment changes Benefit payments with an expiration date	Eligibility Wrong eligibility and benefit payment amount determination based on incorrect membership tier Member could retire with full normal-age retirement benefits without meeting the retirement eligibility requirements	Manual Voucher Payments Manual voucher payments could be processed incorrectly or without proper authorization		
Management Assertions	All benefit payments are valid and are paid in accordance with TRS Laws and Rules	All active and retired members are assigned to the correct membership tier All retirees who received benefit payments are eliaible	All manually processed voucher payments are valid		
Agreed-upon Procedures	Match benefit payments to supporting documents on random or exception basis in three areas: 1. Recent retiree benefit recalculations 2. Benefit payment changes from prior year 3. Benefit payment expiration date exceptions	Match benefit payments to supporting documents on random or exception basis in two areas: 4. Recalculate the member's tier for active and retired members 5. Recalculate the normalage retirement eligibility for all recent normal-age service retirements	6. Match randomly selected manually processed voucher payments to supporting documentation		
	No For P	N. 5	No Eventions		
Test Results	No Exceptions	No Exceptions	No Exceptions		
Management Responses	N/A	N/A	N/A		



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

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



800.223.8778 www.trs.texas.gov

512.542.6400 1000 Red River Street Austin, Texas 78701

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

August 29, 2018

Barbie Pearson, Chief Benefit Officer

Subject: Report on Independent Annual Benefits Testing

We have completed the project, **Annual Benefits Testing**, for the period April through August 2017, as included in the Fiscal Year 2018 Audit Plan

We performed the procedures agreed to by you. These procedures included six data-mining tests designed to identify anomalies in benefit payments during the current testing period and deviations from management's benefit processing controls. High level description of these six tests are:

- 1. gross payment amounts made to recent retirees
- 2. benefit payment changes from prior year
- 3. expiry dates for both five- or ten-year guaranteed period payments and disability retirement payment calculations for retirees with less than ten years of service
- 4. membership tier verification for both active and retired members
- 5. normal-age retirement criteria
- 6. manual benefit payments

No exceptions were notes as the result of the test procedures performed. The detailed procedures and results of our testing are explained in Appendix A.

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

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

We were not engaged to and did not conduct an examination, the objective of which would be the expression of an opinion. Accordingly, we do not express an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

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

* * * * *

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

Amy Barrett, CIA, CPA, CISA Chief Audit Executive Mary Presley
IT Audit Consultant

Lih-Jen Lan, CPA, CIA, CISA, CISSP Senior IT Audit Manager Art Mata, CEBS, CPM Senior Internal Audit Consultant

APPENDIX A

AGREED-UPON PROCEDURES AND RESULTS

1. <u>Test Purpose</u>: Identify gross annuity payments to recent retirees (April 2017 or later retirements) from April to August 2017 that are not calculated in accordance with *TRS Laws and Rules*.

<u>Test Description</u>: Select all gross annuity payments from the *April to August 2017 Benefit Payments Data File* that are related to recent member retirements since April 2017 and randomly select three service retirement sample items and three disability retirement sample items from each month for a total of 30 sample items. Recalculate the gross payment amount by recalculating the annuitant's standard annuity payment based on the member's number of years of service and the average salary amount at the time of retirement and adjusting the payment amount by the applicable option, Partial Lump Sum Option (PLSO), or early-age reduction factors. Agree the recalculations to the supporting documentation in the TRS *Imaging System* and identify any monthly gross payment discrepancies greater than five dollars.

<u>Test Result</u>: No exceptions identified.

2. <u>Test Purpose</u>: Identify changes in an annuitant's total monthly gross payment amount from the prior year that are invalid or that does not agree with supporting documentation.

<u>Test Description</u>: Identify annuitants with a total monthly gross payment amount difference for the period of April to August 2017 on the *Benefit Payments Data File* when compared to the same month from the prior year period of April to August 2016 on the *Benefit Payments Data File*. From those months, where an annuitant had a total gross payment amount difference, select a random sample of 30 items. Trace and agree these total monthly gross payment amount differences to the supporting documents maintained in the TRS *Imaging System* and identify any exceptions.

<u>Test Result</u>: No exceptions identified.

3. <u>Test Purpose</u>: Identify expiration dates to stop the annuity payments timely that are not recorded in the system in accordance with TRS procedures.

<u>Test Description</u>: Identify expiration date exceptions for annuity payments from April to August 2017 and trace to supporting documentation for the two groups described below.

- a. Expiration date of guaranteed-period annuity options retirement Select all payments from the *April to August 2017 Benefit Payments Data File* with guaranteed-period (5-year and 10-year) annuity options where TRS is paying the beneficiary because the retiree was deceased before the guaranteed period ended, and perform the following tests to identify exceptions. Trace all exceptions to the supporting documentation and report unsupported differences.
 - i.) Select all records where the expiration date is greater than the retirement date plus the guaranteed period.
 - ii.) Select all records where the payee is not the member.

- iii.) Select all records where the member is not deceased.
- iv.) Select all records where the beneficiary is receiving payments past the guarantee period.
- b. Expiration date of disability retirement with less than 10 years of service

A disability retiree with less than 10 years of service should receive a standard benefit amount of \$150 per month for the shortest period of the retiree's disability period, the retiree's life, or the total number of creditable service months. Select all payments from the *April to August 2017 Benefit Payments Data File* to disability retirees with less than 10 years of service, and perform the following tests to identify exceptions. Trace all exceptions to the supporting documentation and report unsupported differences.

- i.) Select all records with a retiree death date where payment status is still active.
- ii.) Select all records where the gross payment amount is not the standard amount of \$150.
- iii.) Select all records where the expiration date has expired but the payment status is still active.
- iv.) Select all records where the member is not the payee.
- v.) Select all instances where the expiration date is greater than the retirement date plus the member's creditable service.

Test Results:

- a. Expiration date of guaranteed-period annuity options retirement No exceptions identified.
- b. Expiration date of disability retirement with less than 10 years of service No exceptions identified.
- 4. <u>Test Purpose</u>: Identify the membership tiers that are not properly calculated in accordance with *TRS Laws and Rules* for active and retired members.

<u>Test Description</u>: Recalculate membership tiers for both active and retired members as described below.

a. Active Members

Select all current active members from the *Member Records file as of August 31, 2017*, identify the member's tier for each record selected, stratify the selected records by the member's tier into tier groups, and select a random sample of ten sample items from each tier group. We reduced the testing to 30 of 60 selected sample items with management agreement. Recalculate the membership tier for each sample item and agree to the supporting documentation. Identify any exceptions.

b. Retired Members

Select all recent retirees with gross annuity payments from the *April to August 2017 Benefit Payments Data File* that have retired since April 2017 and randomly select three service retirement sample items and three disability retirement sample items from each month for a total of 30 sample items. Recalculate the membership tier for each sample item and agree to the supporting documentation. Identify any exceptions.

Test Results:

- a. <u>Active Members</u> No exceptions identified.
- b. <u>Retired Members</u>
 No exceptions identified.
- 5. <u>Test Purpose</u>: Identify recent retirees who retired with normal-age service retirement benefits from April to August 2017 who did not meet the normal-age retirement eligibility requirements based on their membership tier.

<u>Test Description</u>: Select all payments from the *April to August 2017 Benefit Payments Data File* that are related to normal-age service retirements since April 2017. Exclude all proportionate retirements, early age retirements, and disability retirements. Calculate the annuitant's retirement age based on the year and month of the member's retirement date and birth date in the annuity system records. Identify the annuitant's membership tier by the TRS start date of their current membership, their "grandfathered" status, and by their amount of TRS service credit as of August 31, 2014. Recalculate the annuitant's normal-age retirement eligibility according to the eligibility requirements for their membership tier. Compare eligibility calculation with the following requirements:

- For all Tiers Minimum retirement age of 65 with at least five years of service.
- For Tiers 1 and 2 Meets Rule of 80 (member's age plus years of service credit total at least 80 years) with at least five years of service
- For Tiers 3 and 4 Minimum retirement age of 60 and meets Rule of 80 with at least five years of service
- For Tiers 5 and 6 Minimum retirement age of 62 and meets Rule of 80 with at least five years of service

<u>Test Result</u>: No exceptions identified.

6. <u>Test Purpose</u>: Identify manual voucher payments that are not paid in accordance with *TRS Laws* and *Rules* and that do not agree with supporting documentation.

<u>Test Description</u>: Select a random sample of 25 manual voucher payments from the *April to August 2017 Benefit Payments Data File*. Trace and agree these manual voucher payments to the supporting documents maintained in the TRS *Imaging System*.

<u>Test Results</u>: The 25 manual voucher payments randomly selected to test consisted of eight premium refunds, one annuity pop-up, six qualified domestic relations order (QDRO) related payments, two payment re-issued due to returned payments, four retiree requests to re-issue payment, and four payments re-issued due to retiree/beneficiary death. No exceptions were noted.

TAB 5E



Tab 5.5:E

Employer Testing of Eligibility, Contributions and Surcharges (Agreed-Upon Procedures)

Internal Audit

September 2018



Business Objectives

Receive complete and accurate reports from the Reporting Entity Partners (REPs):

- eligibility
- employee demographics (census data)
- contributions and surcharges

Business Risks

- Improper determination of TRS membership eligibility
- Inaccurate census data provided to TRS results in erroneous actuarial data
- Incorrect calculations of contributions and surcharges



Pilot project – first time use of TRUST data

Agreed-Upon
Procedures and
Results

Alvin ISD and Sharyland ISD

Test month – December 2017

- Validate Census Data no exceptions
 Name, Date of Birth, SSN, Gender, Salary, etc.
- Recalculate creditable compensation no exceptions
- Recalculate contributions and surcharges four minor exceptions



Determine eligibility for TRS membership

Agreed-Upon
Procedures and
Results

- Employees reported as eligible no exceptions
- Employees reported as non-eligible:
 - 46% determined eligible for TRS membership
 - substitutes working in vacant positions
 - bus drivers prior to certification
 - over \$2,700 additional contributions due





- Emphasis on eligibility testing
- Test more Reporting Entity Partners
- Reduce testing of calculations automated in TRUST



Management Responses

- Reporting Entity coaches will research the test results and contact the district with instructions to make any necessary corrections
- Benefit Accounting will communicate the instructions to REPs no later than December 31, 2018



Questions?



EMPLOYER TESTING OF ELIGIBILITY, CONTRIBUTIONS AND **SURCHARGES (ALVIN ISD AND SHARYLAND ISD)**

TRS Internal Audit Department August 28, 2018

Business **Objectives**

Receive the complete and accurate reports from the Reporting Entities (REs) related to eligibility, employee demographics, member contributions, employer contributions, and surcharges

Business Risks

- Improper determination of TRS membership eligibility
- Inaccurate census data provided to TRS results in erroneous actuarial data 0
- Incorrect calculations of contributions and surcharges

Management Assertions

- REs are knowledgeable of TRS Laws and Rules
- REs provide accurate census data to TRS
- Validation rules are built into TRUST and calculations for contribution and surcharges are correct

Agreed-upon **Procedures**

Test month - December 2017 Recalculate creditable compensation

Recalculate contributions and surcharges:

- o Pension contribution
- New Member contribution
- Federal Fund/Private Grants contribution
- Statutory Minimum contribution
- Non-OASDI contribution 0
- Pension and TRS-Care Surcharges

Test month - December 2017 Validate Census Data:

- Name
- SSN
- Date of Birth
- Gender
- Date of Birth o Gender Salary vear of Entry
- Years of Service

Determine eligibility for TRS membership, per TRS Laws and Rules for test sample, retirees working as substitutes, independent contractors, or who work for third-party entities providing services to the REs

Creditable compensation – no exceptions

Statutory Minimum contribution - one overpayment of \$15 and one underpayment of \$16 out of 35 employees tested related to RE using incorrect salary step and incorrect number of contract days

Non-OASDI contribution – one overpayment of \$4 and one underpayment of \$3 out of 59 employees tested related to RE using incorrect salary step and incorrect number of contract

Census Data - no exceptions

Eligibility – six employees out of 13 tested were determined to be eligible for TRS membership, but were not reported to TRS. resulting in additional contributions due:

- \$ 721 New Member contribution
- \$ 255 Non-OASDI contribution
- \$1,470 Pension contribution
- \$ 124 Member TRS-Care contribution
- \$ 143 RE TRS-Care contribution

Management Responses

Test Results

Reporting Entity coaches will research the test results and contact the district with instructions to make any necessary corrections. Benefit Accounting will communicate the instructions to REs no later than December 31, 2018.



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

Green -

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

800.223.8778 512.542.6400 www.trs.texas.gov

1000 Red River Street Austin, Texas 78701

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

August 28, 2018

Barbie Pearson, Chief Benefit Officer

Subject: Employer Agreed-Upon Procedures Test Program

We have completed the project, Employer Agreed-Upon Procedures Test Program, as included in the Fiscal Year 2018 Audit Plan.

We performed the procedures agreed to by you. These procedures include testing of data submitted to TRS for the test month of December 2017 by two Reporting Entity Partners¹ (REPs), Alvin Independent School District and Sharyland Independent School District. Tests performed related to the following areas:

- 1. Census Data
- 2. Compensation
- 3. New Member contribution
- 4. Federal Funds/Private Grant contribution
- 5. Statutory Minimum contribution
- 6. Non-OASDI² contribution
- 7. Substitutes
- 8. Pension and TRS-Care surcharges
- 9. Third-Party Entities and Independent Contractors
- 10. Eligibility for TRS membership
- 11. Pension and TRS-Care contributions
- 12. Federal TRS-Care contribution

The detailed procedures and results are described in **Appendix A**.

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

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

We were not engaged to and did not conduct an examination, the objective of which would be the expression of an opinion. Accordingly, we do not express an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

¹ "Reporting Entity Partner" is the "Employer" for the purposes of this test

² The Old Age, Survivors, and Disability Insurance program (Social Security)

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

* * * * *

We express our appreciation to management and key personnel of Benefit Services and to the reporting officials at Alvin ISD and Sharyland ISD for their cooperation and professionalism shown to us during the testing.

Amy Barrett, CIA, CPA, CISA

Anandhi Mani, CIA, CPA, FCCA (UK)

Chief Audit Executive Senior Internal Auditor

Art Mata, CEBS, CPM Carol Casey, CPM
Senior Benefit Audit Consultant Benefit Audit Consultant

Jan Engler, CIA, CISA, CFE

Director of Benefit Audit Services

Kate Rhoden, CIA, CPA

Investment Audit Manager

APPENDIX A AGREED-UPON PROCEDURES AND RESULTS

TEST #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT*
1	Census data - obtain evidence that census data for TRS eligible employees working at reporting entity partners (REPs) is correct	Agree census data (name, social security number, date of birth, gender, date of hire, years of service, compensation, job classification) provided by the REP to TRS	Alvin ISD - one employee out of 30 tested had position reported incorrectly Sharyland ISD - No exceptions
2	Compensation - obtain evidence that REPs are reporting the correct compensation amounts to TRS	Obtain REPs payroll registers and compare to what was reported as compensation to TRS	No exceptions
3	New Member contribution - obtain evidence that REPs are reporting the correct amounts for the required state contribution for new TRS members during the first 90 days of employment	Calculate the new member contribution for new members and agree it to TRS records and the supporting documentation	Alvin ISD - N/A. There were no new members in the sample of 30. Sharyland ISD - No exceptions
4	Federal Funds/Private Grant contribution – obtain evidence that REPs are reporting the correct amounts of compensation paid from federal funds and private grants to TRS-eligible employees	Identify employees paid with federal funds or private grant money. Recalculate the compensation and contributions.	No exceptions
5	Statutory Minimum contribution – obtain evidence that REPs are reporting the correct amount for the state contribution for employees subject to the statutory minimum	Identify employees subject to the statutory minimum and calculate the contribution based on the state formula	Alvin ISD - one overpayment of \$15 and one underpayment of \$16 out of 22 employees tested Sharyland ISD - No exceptions

^{*} Management response is presented at the end of the table

TEST #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT*
6	Non-OASDI contribution – obtain evidence that REPs are reporting the correct amount for employees that do not contribute to Social Security	Identify employees subject to Non-OASDI and calculate the contribution	Alvin ISD - one overpayment of \$4 and one underpayment of \$3 out of 30 employees tested Sharyland ISD - No exceptions
7	Substitutes - obtain evidence that TRS retirees working as substitutes are reported correctly to TRS	Agree that TRS retirees, retired after September 1, 2005, reported as substitutes, worked in the place of an absent employee. If the position was vacant, agree that total days worked in the same vacant position do not exceed 20 days in the year.	Alvin ISD – reported working hours in TRUST for 39 substitutes. However, REP represented to Internal Audit that ten of the 39 retirees did not work in the test month. Sharyland ISD - one employee out of 34 tested was improperly reported as a substitute in the test month. One additional employee was improperly reported as a substitute for January, February, April, and May 2018.
8	Pension and TRS-Care surcharges – obtain evidence that TRS retirees performing services for the REPs were correctly reported and if applicable pension and TRS-Care surcharges were remitted	Identify TRS retirees, retired after September 1, 2005, and working more than one-half time in the calendar month. Calculate the pension and TRS- Care surcharges due for the identified retirees.	No exceptions
9	Third-Party Entities and Independent Contractors – obtain evidence that TRS retirees employed by a third-party entity providing services to the REP or as independent contractors are reported correctly to TRS	Search REP check register for third- party entities. For independent contractors, match Social Security Numbers from REP 1099-MISC file to TRS retirement records.	No exceptions

^{*} Management response is presented at the end of the table

TEST #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT*
10	Eligibility - obtain evidence that eligible employees are correctly reported to TRS, and employees not eligible for TRS membership are not reported.	Obtain TRS eligibility evidence for a sample of (i) employees reported as eligible by the REPs and (ii) employees reported as ineligible by the REPs	(i) All employees originally reported as eligible were properly reported by both REPs (ii) Non-member employees reported as ineligible by the REP: Alvin ISD - four non-member employees out of six tested were found to be eligible Sharyland ISD - two non-member employees out of seven tested were found to be eligible These non-member employees resulted in two incorrectly reported employee positions; underpayments of new member contributions of \$721; underpayments of Non-OASDI contributions of \$255; and in one instance, we were unable to conclude the statutory minimum and non-OASDI contributions due.

^{*} Management response is presented at the end of the table

TEST #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT
11	Pension and TRS-Care contributions – obtain evidence that the amount of (1) member and employer contributions, (2) member TRS-Care contributions, and (3) REP TRS-Care contributions are properly calculated and paid	Calculate the amount of member pension, member TRS-Care, and REP TRS-Care contribution for each TRS eligible employee	Alvin ISD - four non-member employees out of six tested were found to be eligible, resulting in underpayments of TRS member contributions of \$1,151; member TRS-Care contributions of \$97; and REP TRS-Care contributions of \$112; for a total \$1,360 underpayment. Sharyland ISD - two non-member employees out of seven tested were found to be eligible, resulting in underpayments of TRS member contributions of \$319, member TRS-Care contributions of \$27, and REP TRS-Care contributions of \$31, for a total \$377 underpayment
12	Federal TRS-Care contributions — Obtain evidence that the amount of REP TRS-Care contributions (due from Federal funds or private grants) are properly calculated and paid	Calculate the amount of TRS-Care contribution due from Federal funds or private grants for TRS-eligible employees	No exceptions

Management response: Reporting Entity coaches will research the test results and contact the district with instructions to make any necessary corrections. Benefit Accounting will communicate the instructions to REs no later than December 31, 2018.

TAB 5F



QAIP Self-Assessment Internal Audit

September 2018



Business Objectives

 Teacher Retirement System (TRS) Internal Audit conforms with professional auditing standards, Texas Internal Auditing Act, auditor codes of ethics, and Internal Audit's Quality Assurance and Improvement Program (QAIP)

Business Risks

- Audits may not address significant organizational risks
- Audit processes may be inefficient and ineffective
- Assurance could be unreliable without effective quality control



Management Controls

- Internal Audit Charter, organizational chart, board minutes
- Job descriptions, resumes, training records, performance evaluations
- Work papers, work programs, reports, quality control processes
- Annual risk assessment, audit plan
- Internal Audit policies and procedures
- TRS Internal Audit Quality Assurance and Improvement Program (QAIP)



Key Controls Tested

 Conducted self-assessment to validate Internal Audit activities conform with applicable professional standards and state law using the self-assessment tool developed by the State Agency Internal Audit Forum (SAIAF). These tests include steps to assess implementation of Internal Audit's QAIP.





- Based on our self-assessment, we determined that TRS' Internal Audit department "generally conforms" (highest possible rating) with professional auditing standards, related codes of ethics, Texas state law, and Internal Audit's QAIP.
- During the self-assessment, we identified opportunities for improvement in six areas, which are described below.



Improvement Opportunities

- Implement a formal process to update automated project templates when needed and provide staff with training
- Enhance current performance measurement by adding routine trend analysis
- Formalize and expand collaboration with internal risk oversight groups by interpreting/sharing risk information
- Administer business unit training opportunities on the audit project and audit follow-up processes
- Create a user-friendly, centrally-located Internal Audit department management tool box for guidance documents in key areas
- Develop a process to ensure maintenance of current department job descriptions



Management Responses

The Chief Audit Executive agrees with the recommendations and plans the following:

- Implement a formal process to update templates & provide training by December 31, 2018
- Trend & report performance data when two years are available by December 31, 2018
- Develop staff goals for risk group participation as outlined in policy by December 31, 2018
- Develop audit-related processes training opportunities for business units by August 31, 2019
- Create central storage site for management guidance documents by September 30, 2018
- Implement annual verification process for staff job descriptions by September 30, 2018



INTERNAL AUDIT QUALITY ASSURANCE SELF-ASSESSMENT

August 16, 2018

TRS Internal Audit Department

Business Objectives

Teacher Retirement System (TRS) Internal Audit conforms with professional auditing standards, Texas Internal Auditing Act, auditor codes of ethics, and Internal Audit's Quality Assurance and Improvement Program

Business Risks

- · Audits may not address significant organizational risks
- Audit processes may be inefficient and ineffective
- Assurance could be unreliable without effective quality control

Management Controls

- Internal Audit Charter, organizational chart, board minutes
- Job descriptions, resumes, training records, performance evaluations
- Work papers, work programs, reports, quality control processes
- Annual risk assessment, audit plan
- · Internal Audit policies and procedures
- TRS Internal Audit Quality Assurance and Improvement Program (QAIP)

Tests Performed

Conducted self-assessment to validate Internal Audit activities conform with applicable professional standards and state law using the self-assessment tool developed by the *State Agency Internal Audit Forum* (SAIAF). These tests included steps to assess implementation of Internal Audit's QAIP.

Results

- TRS Internal Audit department received a generally conforms rating (highest possible rating) for compliance with professional auditing standards, related codes of ethics, Texas state law, and Internal Audit's QAIP.
- During the self-assessment, we identified opportunities for improvement in six areas, which are described below.

Improvement Opportunities

- 1. Implement a formal the process to update automated project templates when needed and provide staff with training
- 2. Enhance current performance measurement by adding routine trend analysis
- 3. Formalize collaboration with internal risk groups by interpreting/sharing risk information
- 4. Administer business unit training opportunities on the audit project and audit follow-up processes
- 5. Create a user-friendly, centrally-located Internal Audit department *management tool box* for guidance documents in key areas
- 6. Develop a process to ensure maintenance of current department job descriptions

Management Responses

The Chief Audit Executive agrees with the recommendations and plans the following:

- 1. Implement a formal process to update templates & provide training by December 31, 2018
- 2. Trend & report performance data when two years are available by December 31, 2018
- 3. Develop staff goals for risk group participation as outlined in policy as of December 31, 2018
- 4. Develop audit-related processes training opportunities for business units by August 31, 20195. Create central storage site for management guidance documents by September 30, 2018
- 6. Implement annual verification process for staff job descriptions by September 30, 2018
- o.p.o...o. a....aa. vo....aaa. p.ooooo o.. otaa. joo aooo...p.ooo ay oopto...aa

Legend of Results:



- Significant to TRS

Yellow - Other Reportable Issue



Orange - Significant to Business Objectives

Green - Positive Finding or No Issue



800.223.8778 512.542.6400 www.trs.texas.gov

1000 Red River Street Austin, Texas 78701 Amy L. Barrett, CIA, CISA, CPA Chief Audit Executive

August 16, 2018

Audit, Compliance and Ethics Committee Board of Trustees Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the **Internal Audit Quality Assurance Self-Assessment**, as included in the *Fiscal Year 2018 Audit Plan*. Annually, TRS Internal Audit staff conducts a self-assessment as an integral part of Internal Audit's *Quality Assurance and Improvement Program* (QAIP).

The objective of the self-assessment conducted in fiscal year 2018 was to determine whether the TRS Internal Audit department (Internal Audit) *generally conforms*¹ with requirements of The Institute of Internal Auditors (IIA) International Standards for the Professional Practice of Internal Auditing (Standards), the U.S. Government Accountability Office's (GAO) *Government Auditing Standards*, the IIA and GAO *Codes of Ethics*, the *Texas Internal Auditing Act*, and Internal Audit's QAIP.

Based on the results of the self-assessment, we concluded that the TRS Internal Audit department (Internal Audit) *generally conforms* with the requirements of professional audit standards and related codes of ethics, state law, and Internal Audit's QAIP.

Results of our procedures are presented in more detail in the **Results and Recommendations** section. The objective, scope, methodology and conclusion are described in **Appendix A**. The Internal Audit organizational chart is found at **Appendix B**. The self-assessment results with the individual conformance levels are detailed in **Appendix C**.

BACKGROUND

The Chief Audit Executive (CAE) is responsible for the Internal Audit's QAIP, which covers all types of internal audit activities. The QAIP is designed to ensure that Internal Audit:

- Complies with professional auditing standards, codes of ethics, and state law
- Provides unbiased and independent assurance activities
- Adds value and improves organizational operations
- Includes both periodic and ongoing internal assessments

¹ The term *generally conforms* is the highest possible rating as described in Appendix C of this report.

• Includes an external quality assurance review (peer review) at least once every three years, the results of which are communicated to executive management and the TRS Board Audit, Compliance and Ethics Committee (ACE Committee)

INTERNAL ASSESSMENT

Ongoing Reviews of internal audit activities are conducted through:

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

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

- Routine independent customer surveys and participation in 360-surveys
- Regular activity and performance reporting to executive management and the ACE Committee
- Annual risk assessment for the purpose of annual audit planning
- Annual self-assessment reviews to assess compliance with internal policies and procedures, auditing standards, achievement of performance metrics, and benchmarking of best practices

OVERALL CONCLUSION

Based on the results of the self-assessment, we concluded that the TRS Internal Audit department *generally conforms* with the requirements of professional audit standards and related codes of ethics, state law, and Internal Audit's QAIP.

This conclusion is based on completion of a self-assessment using the State Agency Internal Audit Forum (SAIAF) Master Peer Review Program, and the review of a complete set of work papers of an assurance, consulting, and agreed-upon procedures projects using a Working Paper Review Tool in Teammate². We identified six opportunities to enhance our processes and documentation as described in the **Results and Recommendations** section of this report.

² Electronic project work paper application

RESULTS AND RECOMMENDATIONS

Opportunities for Improvement

1. Implement a formal process to update automated project templates when needed and provide staff with training

Automated project templates are a key control for auditors to ensure that all the required audit, consulting, and agreed-upon procedures project steps and actions are completed by the project's team members, including the quality control reviewer as well as the Chief Audit Executive, who provides the final project signoff. Internal Audit has an informal process in place to review and refresh these templates whenever changes in professional audit standards occur or opportunities to gain project effectiveness and efficiencies are identified.

The current informal process is not enough to ensure that the department is responsive to these changes. For example, minor reorganizational-type changes referenced in GAO requirements were effective for agreed-upon procedures project reports dated on or after May 1, 2017 and other changes to project templates desired by staff have not been incorporated in the current templates and no definite plans to review and update the automated templates exist.

Recommendation

Internal Audit should implement a formal process to update automated project templates when needed and provide staff members with training.

Management Responses

Agree. Internal Audit will develop an annual checklist that includes review of changes in auditing standards that have implications to the audit template and staff survey of requested changes. Changes will be vetted through the Internal Audit Management Committee and changed by the Teammate Administrator. The checklist will be finalized by September 30, 2018 and changes to the templates finalized by December 31, 2018.

2. Enhance current performance measurement by adding routine trend analysis

A metric is a meaningful measurement taken over a period of time that communicates vital information about a process or activity, leading to fact-based decisions. Internal Audit collects and compiles performance data on its own internal work processes and reports the results for each quarter as well as cumulatively for the year to the ACE Committee.

With the performance data currently collected by Internal Audit, the department is now poised to take its performance data collection and analysis to the next level by developing and routinely applying its own trend analysis techniques.

Recommendation

Internal Audit should develop and routinely apply trend analysis techniques to its performance data that the department is already collecting and reporting on a regular basis.

Management Responses

Agree. Internal Audit will trend and report performance data when two years are available by December 31, 2018.

3. Formalize and expand collaboration with internal risk oversight groups by interpreting and sharing risk information received

Internal Audit staff members regularly meet with other internal risk oversight groups within TRS to work collaboratively to identify and address possible threats to the organization.

Formalizing and expanding current collaboration efforts with these groups by interpreting and sharing the risk information received would be useful to the department in identifying emerging risks, in annual audit planning and in individual projects, as well as serve as a benefit to the organizational risk management as a whole.

Recommendation

Internal Audit should formalize and expand collaboration efforts with internal risk oversight groups by interpreting and sharing the risk information received in identifying emerging risks, annual audit planning, and individual projects.

Management Responses

Agree. As part of goal setting for the annual review process, all staff will identify internal risk groups to participate in. Participation expectations and reporting requirements will be defined in an internal policy and maintained on SharePoint. Implementation will be effective December 31, 2018.

4. Administer business unit training opportunities on the audit project and audit followup processes

As part of this year's annual self-assessment project, the Internal Audit department conducted one-on-one interviews with seven key business unit management-level staff members from select areas across the organization. We asked for their feedback on what the Internal Audit department did well and what areas could be improved.

We received positive comments as well as helpful suggestions that we plan to incorporate into our department operations. Two such suggestions were for Internal Audit to provide specialized training opportunities for business unit management:

- a. Use a *mock audit* to illustrate the standard audit process
- b. Walk-through the automated steps needed to provide audit recommendation implementation status updates

Recommendation

Internal Audit should administer specialized business unit training on the audit project and audit follow-up processes.

Management Responses

Agree. Internal Audit will develop trainings on audit and audit follow-up processes by August 31, 2019.

5. Create a user-friendly, centrally-located Internal Audit department *management tool box* for guidance documents in key areas

Internal Audit staff members have developed an array of useful management guidance documents. However, they are not all stored in a centralized location. Having the most current version of these documents stored in a central location (such as a SharePoint library) would help provide a more consistent understanding and application of Internal Audit internal management expectations and practices.

More specifically, Internal Audit could improve its internal management activities with central location for management tools and guidance for key areas, including: hiring and compensation/reward/recognition, communication, training plans/career path, periodic evaluation, goals/benchmarks, and monitoring templates, budgets, and succession planning.

Recommendation

Enhance Internal Audit operations and management activities by creating a central location for storage of department management tools and guidance documents.

Management Responses

Agree. Internal Audit will create a storage site for manager guidance on Sharepoint and communicate to relevant staff about the materials it contains. Implementation date is September 30, 2018.

6. Develop a process to ensure maintenance of current job descriptions

It is each Internal Audit manager's responsibility to ensure their staff members have current job descriptions that match their job duties. Our internal self-assessment showed that the Internal Audit department does not have one of the required fourteen current job descriptions for staff member positions due to a lateral transfer between subject matter areas.

Current job descriptions provide the foundation for communicating individual staff member job performance expectations and support the subsequent evaluation process.

Recommendation

Internal Audit should develop a process to ensure maintenance of current department job descriptions.

Management Responses

Agree. As part of the checklist developed in the first recommendation, Internal Audit will add an item to obtain current job descriptions maintained by Organizational Excellence (OE) and verify that they are current. Implementation is September 30, 2018 for the checklist and for identifying job descriptions that are outdated and communicate that result to OE for action.

* * * * *

We express our appreciation to the TRS Board of Trustees, Audit, Compliance and Ethics Committee of the Board, executive management, senior management, and staff who consistently support Internal Audit and audit activities.

Amy Barrett, CIA, CPA, CISA Chief Audit Executive Jan Engler, CIA, CISA, CFE Director of Benefit Audits

Cari Casey, CPM Internal Audit Benefit Consultant Karen Marino
Internal Audit Administrative Coordinator

APPENDIX A

OBJECTIVE, SCOPE, METHODOLOGY, AND CONCLUSION

OBJECTIVE

The objective of the self-assessment conducted in fiscal year 2018 was to determine whether the TRS Internal Audit department (Internal Audit) *generally conforms*³ with the requirements of professional audit standards and related codes of ethics, state law, and Internal Audit's QAIP.

SCOPE

The self-assessment review period was fiscal year 2017. We used *State Agency Internal Audit Forum* (SAIAF) procedures and steps that included the requirements of the professional audit standards and related codes of ethics, state law, and Internal Audit's QAIP requirement to conduct the annual TRS Internal Audit Quality Assurance Self-Assessment.

METHODOLOGY

We evaluated conformance with the following statutes and professional standards:

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

During fieldwork, we performed the following procedures:

- Reviewed the most current *TRS Internal Audit Charter, Annual Audit Plan*, TRS Internal Audit job descriptions, TRS Internal Audit certifications and continuing professional education hours, and follow-up documentation of the past QAIP recommendations
- Reviewed work paper documentation of one fiscal year 2017 audit, one consulting project, and one agreed-upon procedures project
- Interviewed seven TRS staff members from various business units to obtain feedback on what Internal Audit is doing well and what areas could be improved

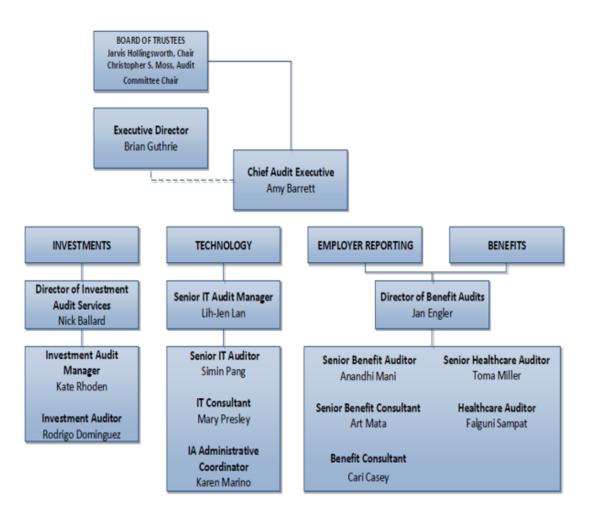
CONCLUSION

TRS Internal Audit *generally conforms* with the requirements of professional audit standards and related codes of ethics, state law, and Internal Audit's QAIP.

 $^{^{3}}$ The term *generally conforms* is the highest possible rating as described in Appendix C of this report.

APPENDIX B

INTERNAL AUDIT ORGANIZATIONAL CHART



APPENDIX C

TRS 2018 SELF-ASSESSMENT

Generally Conforms	Partially Conforms	Does Not Conform
Pass		
Pass		
Pass		
	Pass Pass	Conforms Pass Pass

COMPLIES WITH:

- INSTITUTE OF INTERNAL AUDITORS STANDARDS ATTRIBUTE STANDARDS (AS), PERFORMANCE STANDARDS (PS)
- GENERALLY ACCEPTED GOVERNMENT AUDIT STANDARDS (GAGAS) AND ATTESTATION STANDARDS (A),
- THE TEXAS INTERNAL AUDIT ACT (IA) AS FOLLOWS:

Independence and Objectivity Organizational independence, individual objectivity	Pass	
Proficiency and Due Professional Care Continued professional development	Pass	
Quality Assurance and Improvement Program Maintains a Quality Assurance and Improvement Program (QAIP), conducts internal and external assessments, reports on QAIP, use of "Conforms with International Standards for Professional Practice of Internal Auditing," disclosure of nonconformance	Pass	
Managing the Internal Audit Activity Planning, communications, resource management, policies and procedures, coordination, reporting to senior management and the board	Pass	
Nature of Work Governance, risk management, control	Pass	

	Generally Conforms	Partially Conforms	Does Not Conform
Engagement Planning Planning considerations, engagement objectives, scope, resource allocation, engagement work program	Pass		
Performing the Engagement Identifying information, analysis and evaluation, documenting, supervision	Pass		
Communicating Results Criteria for and quality of communications, errors and omissions, use of "Conforms with International Standards for Professional Practice of Internal Auditing," disclosure of nonconformance	Pass		
Monitoring Progress	Pass		
Resolution of Senior Management's Acceptance of Risks	Pass		

Definitions of conformance ranking system:

Generally Conforms -

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

Partially Conforms –

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

Does Not Conform -

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



TRS Internal Audit Summary of Audit Recommendations Status As of August 2018

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
17-305	Commission Credit (soft dollar) Audit				
	Strengthen monitoring of contractual allowance balances to ensure no available amounts are lost	Implemented	Significant to Business	12/2017	12/2017
17-503	Audit of Trust Expenses Allocation				
	Develop and implement a written, comprehensive, and approved cost allocation policy that emphasizes the fiduciary duty in the equitable allocation of fund expenses; and that includes definitions, defined roles and responsibilities, and the basis for each allocated cost	Implemented	Other Reportable	8/2018	8/2018
	Develop procedures to implement the new comprehensive cost allocation policy that include documented approvals to be obtained for methodologies used and final year-end calculations	Implemented	Other Reportable	8/2018	8/2018
	Develop procedures to implement the new comprehensive cost allocation policy that include materiality thresholds for determining whether a year-end adjusting journal entry is required to ensure equitable fund allocations	Implemented	Other Reportable	8/2018	8/2018
	Develop procedures to implement the new comprehensive cost allocation policy that include defined roles and processes for the initial and periodic assessment of new capital projects to determine the appropriate method of finance	Implemented	Other Reportable	8/2018	8/2018
	Develop procedures to implement the new comprehensive cost allocation policy that include a routinely reviewed and approved schedule of direct and indirect costs by TRS department	Implemented	Other Reportable	8/2018	8/2018

Significant to Business Objectives

-	J
	Past <i>original</i> estimated completion date, and
	 No management action plan or No progress on management action plan
	Past <i>original</i> estimated completion date
	Progress on management action plan
	Original estimated completion date has not changed
	Progress on management action plan
	Satisfactory implementation of management action plan or Acceptance of
	risk by management
	Implementation of management action plan pending Internal Audit validation

Other Reportable

risk by management

Past first revised estimated completion date
 No management action plan or No progress on management action plan
 Past first revised estimated completion date
 Progress on management action plan
 Within original or first revised estimated completion date
 Progress on management action plan
 Satisfactory implementation of management action plan or Acceptance of

TRS Internal Audit Summary of Audit Recommendations Status As of August 2018

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
17-503	Audit of Trust Expenses Allocation (continue)				
	Develop procedures to implement the new comprehensive cost allocation policy that include defined roles for department managers in the determination and approval of rates used for facilities costs	Implemented	Other Reportable	8/2018	8/2018
	Develop procedures to implement the new comprehensive cost allocation policy that include defined roles for department managers in the determination of rates used to allocate indirect costs and in the confirmation that the rates reflect current conditions	Implemented	Other Reportable	8/2018	8/2018
18-201	Vendor Procurement Audit				
	1.1 Procurement Guidance should be used throughout the contracting process - Training	In Progress	Significant	3/2019	
	1.2 Procurement Guidance should be used throughout the contracting process - Job aides, guides, manuals	In Progress	Significant	12/2018	
	2.1 Obtain BAAs for the contracts with the employers with access to PHI	Implemented	Significant	7/2018	7/2018
	2.2 Process for contracts associated with PHI have an associated BAA - risk assessment questionnaire	In Progress	Significant	12/2018	
	2.3 Process for contracts associated with PHI have an associated BAA - guidance and procedure	In Progress	Significant	9/2019	
	3. Include in TRS CAP referenced procedural guidance where needed	In Progress	Other Reportable	9/2019	
	4. Follow internal procedures throughout contracting process	In Progress	Other Reportable	12/2018	
	5.1 Work with management to overcome the following short cummings of the current legacy system - RFI	Implemented	Other Reportable	7/2018	8/2018
	5.2 Work with management to overcome the following shortcomings of the current legacy system - RFO	In Progress	Other Reportable	12/2018	
SAO Au	udits of FY 2014 - 2017 Comprehensive Annual Financial Report				
	Strengthen controls over census data	Implemented	Significant	8/2016	06/2018

TRS Internal Audit Summary of Audit Recommendations Status As of August 2018

Status of Reporting Entity Audit Recommendations

	Audit Project #	Audit Report Date	Reporting Entity (RE)	Status
1	17-401b	8/31/2017	Dallas ISD	In Progress (See note below)

Note: The Benefit Accounting Reporting Team has resolved the issue with the school. Fixes to system defects have been implemented on 6/28/2018. Inputs into the TRUST system are being made. This is taking longer than expected due to the large number of manual entries required.

Statuses:

- Under Legal Services Review TRS Benefits team has requested Legal Services review before taking any further action
- In Progress TRS Benefits team is working with RE on corrections/adjustments
- Closed TRS Benefits team has resolved all RE audit findings
- No Audit Findings the audit resulted in no audit findings

TAB 6A

TEACHER RETIREMENT SYSTEM OF TEXAS INTERNAL AUDIT CHARTER

ROLE OF INTERNAL AUDIT

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

DEFINITION AND MISSION

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

The mission of Internal Audit is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight.

OBJECTIVES AND SCOPE OF WORK

Objectives of Assurance Services

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

Objectives of Attestation Engagements: Agreed-Upon Procedures

Agreed-upon procedures consist of auditors performing specific procedures on the subject matter and issuing a report of findings based on the agreed-upon procedures. In an agreed-upon procedures engagement, the auditor does not express an opinion or conclusion, but

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

only reports on agreed-upon procedures in the form of procedures and findings related to the specific procedures applied.²

Objectives of Consulting and Advisory Services

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

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

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

Scope of Work of Internal Audit

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

- Programs are operating within the highest fiduciary standards and are directed toward the requirements defined in the federal and state constitutions, laws, regulations, and TRS policies and procedures.
- Risks within and outside the organization are appropriately identified and managed.
- Risk and control information is effectively communicated throughout the organization.
- Ethics-related programs and activities are effective.
- Significant financial, managerial, and operating information is accurate, reliable, and timely.
- Significant legislative or regulatory issues impacting the organization are recognized and addressed appropriately.
- Interaction with appropriate internal committees occurs as needed.
- Employee actions are in compliance with policies, standards, procedures, and applicable laws and regulations.

2	Government Au	diting S	Standards o	f the	United	States	Government	Accountability	Office	2011 F	Revision

- Employer (reporting entity) data and contributions reported to TRS are accurate, complete, and in compliance with applicable laws and rules.
- Resources are acquired economically, used efficiently, and adequately protected.
- Programs, plans, and objectives are monitored and achieved in line with the TRS mission
- Quality and continuous improvement are fostered in the organization's control process.
- Internal controls are in place and are functioning effectively to accomplish business and strategic objectives.
- Information technology controls including information systems security controls are in place and are functioning effectively.
- Contractors are meeting the obligations of their contracts while in conformance with applicable laws, regulations, policies, procedures, and best practices.
- Specific operations, processes and programs are reviewed at the request of management or the Audit, Compliance and Ethics Committee.

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

AUTHORITY

Legal Basis for the Internal Audit Function

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

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

Delegation of Authority Relevant to the Performance of Engagements

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

- Have unrestricted access to all TRS divisions, departments, personnel, activities, confidential and non-confidential data and records, information systems, physical property, and contractors relevant to the performance of engagements, subject to applicable state and federal laws.
- Have access to contractor records and files in line with contract terms and specifically the "right to audit" section.
- Have unrestricted access to the chair of the Audit, <u>Compliance and Ethics</u>
 Committee, Audit, <u>Compliance and Ethics</u>
 Committee members, and the executive director.

- Allocate resources, set frequencies, select subjects, determine scope of work, and apply the techniques required to accomplish assurance and consulting objectives.
- Obtain the necessary assistance of personnel in units of the organization where audits are performed, as well as other specialized services from within or outside the organization.
- Obtain timely reports from management on actions proposed and taken pertaining to audit recommendations.

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

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

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

INDEPENDENCE AND OBJECTIVITY

Organizational Placement

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

RESPONSIBILITIES AND ACCOUNTABILITY

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

- Develop a flexible annual audit plan using an appropriate risk-based methodology, considering any risks or control concerns identified by management and the Board of Trustees, and submit that plan to the Audit, Compliance and Ethics Committee for review and recommendation for approval by the Board.
- Develop short-term and long-term strategic goals for Internal Audit.
- Implement the approved audit plan including appropriate plan amendments, and special projects requested by management and the Audit, <u>Compliance and Ethics</u> Committee.
- Provide quarterly reports comparing actual results to the annual audit plan.
- Assess the adequacy and effectiveness of the organization's processes for controlling its activities and managing its risks in the areas set forth under the

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- mission and scope of work, including the effectiveness of the Enterprise Risk Management (ERM) and Investment Compliance programs.
- Report significant issues related to the processes for controlling the activities of the
 organization including potential improvements to those processes.
- Provide quarterly reports to the Audit, <u>Compliance and Ethics</u> Committee and management summarizing the results of audit activities including the implementation status of prior audit recommendations.
- Provide copies of audit reports to management, the Audit. Compliance and Ethics
 Committee, the Board of Trustees and oversight agencies specified in state law.
- Evaluate and assess significant new or changing functions, services, processes, operations, information systems and internal controls concurrent with their development, implementation, and/or expansion.
- Partner with management for all operations to understand the internal control environment, risks, and risk mitigation activities.
- Participate in a consulting or advisory capacity in the planning, design, development, implementation, and modification phases of major information systems to determine whether:
 - adequate controls are incorporated during the development phases of business processes and systems before implementation
 - adequate project and risk management processes are in place and functioning effectively to mitigate risks that may hinder achieving project goals and objectives
 - o thorough systems testing is performed at appropriate development phases
 - information security is addressed at appropriate development phases and at implementation
 - o processes are in place and functioning effectively to develop and maintain complete and accurate systems documentation
 - the intended purpose and objectives of the system implementation or modifications have been met
- Facilitate and coordinate activities of the TRS Enterprise Application Modernization (TEAM) program Independent Program Assessment vendor and ensure direct access to executive management and the Board of Trustees.
- Select, train, develop and retain professional audit staff members who collectively
 have the knowledge, skills, abilities, experience, expertise, and professional
 certifications to meet the requirements of this charter.
- Maintain an effective quality assurance and improvement program to include supervision, training, internal reviews, and external reviews.
- Keep management and the Audit, <u>Compliance and Ethics</u> Committee informed of emerging trends and successful practices in risk management, control, and governance through training and other forms of communication.

- Provide the Audit, <u>Compliance and Ethics</u> Committee a list of Internal Audit annual performance goals and results and the *Annual Internal Audit Report* required by state law.
- Provide the Audit. Compliance and Ethics Committee periodic reports on the sufficiency of Internal Audit resources.
- Assist in the deterrence of fraud by examining and evaluating the adequacy and the
 effectiveness of the system of internal controls and the administration of the
 internal fraud and ethics hot line.
- In conjunction with the Executive Director, ensure timely reporting of any known
 incident of significant fraud to the Audit, <u>Compliance and Ethics</u> Committee, the
 Board of Trustees, and the State Auditor's Office.
- Conduct or participate as appropriate in the investigation of suspected illegal or fraudulent activities within the organization and report results to executive management and the Audit, <u>Compliance and Ethics</u> Committee.
- Act as the primary point of contact related to audits, investigations, or inquiries of the State Auditor's Office and other external audit groups.
- Consider the scope of work of external auditor groups as appropriate for the purpose of providing optimal audit coverage to the organization at a reasonable overall cost.
- Coordinate with other control and monitoring functions (risk management, legal, accounting, ethics, investments compliance, and physical and information systems security).

STANDARDS OF AUDIT PRACTICE

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

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

The Internal Audit Charter revision was adopted by the Retirement System of Texas on September 21, 2018.		1
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		Deleted: , 2016
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Chair, Audit, Compliance and Ethics Committee	Chair	
Board of Trustees	Board of Trustees	Deleted: R. David Kelly
		Deleted:
Amy L. Barrett, CIA, CISA, CPA	Brian Guthrie	Deleted: ¶
Chief Audit Executive	Executive Director	

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APPENDIX A

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

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

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

Rules of Conduct

1. Integrity

Internal auditors:

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

2. Objectivity

Internal auditors:

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

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3. Confidentiality

Internal auditors:

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

4. Competency

Internal auditors:

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

Generally Accepted Government Auditing Standards (GAGAS) of the United States Government Accountability Office, Code of Ethics

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

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

The Public Interest

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

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

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Integrity

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

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

Objectivity

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

Proper Use of Government Information, Resources, and Positions

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

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

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

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

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

Professional Behavior

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

APPENDIX B

Core Principles for the practice of Internal Auditing:

- 1. Demonstrates integrity
- 2. Demonstrates competence and due professional care
- 3. Is objective and free from undue influence (independent)
- 4. Aligns with the strategies, objectives, and risks of the organization
- 5. Is appropriately positioned and adequately resourced
- 6. Demonstrates quality and continuous improvement
- 7. Communicates effectively
- 8. Provides risk-based assurance
- 9. Is insightful, proactive, and future-focused
- 10. Promotes organizational improvement

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TAB 6B



Teacher Retirement System of Texas Internal Audit Department

Proposed 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.





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
- B. Read technical guidance from GASB and AICPA to identify changes to audit and accounting requirements
- Gained understanding of TRS' strategic objectives and key initiatives by reading the strategic plan
- D. 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
- B. Met with Risk Oversight Committee to discuss proposed audit plan
- C. Proposed update to TRS
 Internal Audit Charter to
 ensure alignment with
 proposed audit activities and
 standards

- 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
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-fromhome 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	Туре	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: - 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	Туре	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	Туре	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	Туре	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	Туре	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





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

<u>Performance Measures</u>

- 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 <u>Performance Measures</u>

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 <u>Performance Measures</u>

- 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. 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.	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



TAB 7

Chief Audit Executive Goals for FY 2018 *

Goal 1

Sustain a Financially Sound
Pension System

Provide assurance on performance calculations

Coordinate CAFR and TRICOT financial audits

Provide assurance on TRICOT cost benefit

Test compliance with investment policies

Provide assurance on private equity fees

Goal 2

Continuously Improve Our Benefit Delivery

Analyze full payroll data and provide assurance on employer reports

Consult on benefit disbursements

Coordinate TEAM program assessment vendor activities

Review key TEAM Phase I controls and participate in TEAM activities

Test benefit annuity payments

Goal 3

Facilitate Access to Competitive, Reliable, Health Care Benefits

Test implementation of select TRS-Care legislative changes

Provide assurance on TRS procurement

Provide assurance on TRS-ActiveCare billing, procurement and administrative fees

Follow-up on outstanding HIPAA audit recommendations



-- Complete



-- In Progress



-- Planned



Chief Audit Executive Goals for FY 2018

Goal 4

Align People to Achieve the TRS Mission

Test investment incentive compensation

Participate in the management continuity program and nominate staff for leadership program

Develop new auditor training modules and revisit career paths

Test executive incentive compensation

Goal 4

Align Processes to Achieve the TRS Mission

Consult on board reporting timeliness

Communicate on reporting entity audit issues found

Measure and trend internal audit activities and present on audit value add

Participate in Executive Council & Risk Oversight Committees

Re-engineer reporting entity audit processes

Participate in hotline triage team

Implement department records management changes

Participate in TRS rules review related to reporting entities

Goal 4

Align Technology to Achieve the TRS Mission

Follow up on innovation top 10

Advise on the CAPPS project

Review info security tests and risk assessments

Observe disaster recovery and business continuity tests *



^{*} No DR tests were conducted in FY18 due to contract and vendor changes. IA will participate in future testing.

Internal Audit Goals and Performance Measures Fiscal Year 2018 – 4th Quarter Ending August 2018

Target Performance		Annual Target	Cumulative Score	Activity / Comment	Status		
Go	Goal 1: Facilitate Audit Committee Governance						
1.	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)	80%	100%	Activity through June 2018	Achieved		
2.	70% or more of total available department hours (excluding uncontrollable leave) are spent for internal audit staff on direct assurance, consulting, and advisory services	70%	78%		Achieved		
3.	100% of internal audit processes are in accordance with internal auditing standards as reported in the annual quality assurance and improvement (QAIP) report	100%	N/A	QAIP to be completed in September 2018	N/A		
4.	80% (4.0/5.0) or higher score received for audit project client surveys in overall satisfaction	80%	92%	Score based on nine responses from five projects.	Achieved		
5.	76% (3.8/5.0) or higher score on staff 360 evaluations in accountability, critical thinking, and initiative	76%	79%	Score based on staff 360 evaluations completed in October 2017	Achieved		
6.	90% (4.5/5.0) or higher score received for CAE 360 evaluation in "Leads the Agency" (aka Firm Leadership) and "Leads the Team" (aka Managerial Leadership)	90%	N/A	CAE 360 evaluation cancelled	N/A		
7.	80% (4.0/5.0) or higher score received for audit project client surveys regarding communication of the audit purpose, results, and reports	80%	90%	Score based on nine responses from five projects	Achieved		
8.	80% (4.0/5.0) or higher score on staff 360 evaluations in the area of verbal and written communication and collaborative audit perspective	80%	81%	Score based on staff 360 evaluations completed in October 2017	Achieved		
9.	100% of relevant current "Tone at the Top" articles uploaded to Diligent	100%	100%	Score based on 25% per quarter.	Achieved		
10.	One speaker on the topic of the benefits of an effective audit function presents at the February board meeting	1	1	Jim Pelletier from the IIA presented at the February 2018 board meeting	Achieved		

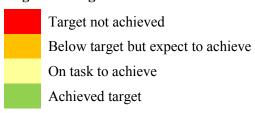
Internal Audit Goals and Performance Measures Fiscal Year 2018 – 4th Quarter Ending August 2018

Target Performance		Annual Target	Cumulative Score	Activity / Comment	Status		
Go	Goal 2: Support TRS Initiatives						
1.	86% (4.3/5.0) or higher score for CAE 360 evaluation in contribution goals	86%	N/A	CAE 360 evaluation cancelled	N/A		
2.	80% (4.0/5.0) or higher score received for audit project client surveys in TEAM-related projects, when applicable	80%	N/A	No formal projects scheduled	N/A		
3.	80% (4.0/5.0) or higher score on staff 360 evaluations in the area of organizational awareness	80%	81%	Score based on staff 360 evaluations completed in October 2017	Achieved		
4.	83% (5.0/6.0) or higher score for departmental organizational health on the annual Workplace Dynamics Survey	83%	N/A	Survey results to be reported in September 2018	N/A		
Go	Goal 3: Enhance Internal Audit Staff Competence and Expertise						
1.	80% (4.0/5.0) or higher score received for audit project client surveys regarding the usefulness of audit recommendations in improving business processes and controls	80%	94%	Score based on nine responses from five projects	Achieved		
2.	80% (4.0/5.0) or higher score on staff 360 evaluations in the area of audit acumen	80%	79%	Score based on staff 360 evaluations completed in October 2017	Not Achieved		
3.	92% (4.6/5.0) or higher score for CAE 360 evaluation in "Leads the Self" (aka Technical Leadership)	92%	NA	CAE 360 evaluation cancelled	N/A		
4.	100% of audit staff complete annual training plans and obtain a minimum of 40 hours of continuing education credits	100%	100%	Staff expected to complete 40 hours/each towards year end	Achieved		
5.	100% of audit staff maintain professional certifications or actively pursue certifications and related eligibility requirements	100%	100%	Staff expected to maintain or pursue professional certifications during year	Achieved		
6.	100% of audit staff participate in professional organizations	100%	100%		Achieved		

Internal Audit Goals and Performance Measures Fiscal Year 2018 – 4th Quarter Ending August 2018

	Target Performance	Annual Target	Cumulative Score	Activity / Comment	Status
7.	100% of audit staff acknowledge an understanding of their career path	100%	100%	March 2018 survey results indicate that one staff member is uncertain of his/her career path	Achieved
8.	92% or more of audit staff remain in internal audit or TRS (excluding retirements and transfers)	92%	93%	One staff member left TRS in FY 2018	Achieved

Legend: Target Status



Fiscal Year 2018 Audit Plan Status As of August 2018

Title and Project #	Туре	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

Fiscal Year 2018 Audit Plan Status As of August 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				

Internal Audit Advisory Services¹ Fiscal Year 2018 – 4th Quarter

BENEFIT SERVICES

- Participated in the TEAM Program
 - Enterprise Projects Oversight Committee (EPOC)
 - Organizational Change Management Advisory Group (OCM)
 - o Monthly meetings with TEAM Program Manager and vendor personnel
 - o Independent Program Assessment (IPA) Vendor Coordination
 - Facilitated discussions on observations around TRUST access controls and segregation of duties controls

HEALTH INSURANCE BENEFITS (HIB)

- Attended the Health Plan Administrator (HPA) and Pharmacy Benefit Manager (PBM) Vendor Quarterly Update Meetings
- Participated in discussions with Legal and Compliance related to outstanding audit recommendations from the HIPAA Gap Assessment Project

INVESTMENT MANAGEMENT DIVISION (IMD)

- Attended Internal Investment Committee (IIC) meetings
- Participated in quarterly Proxy Voting Committee meeting
- Participated in monthly Securities Lending monitoring calls
- Participated in discussions related to Fiscal Year 2018 Investment Policy Statement (IPS) revision
- Participated in discussions related to Fleet Fee Savings estimate calculation

FINANCIAL SERVICES

- Liaison for the State Auditor's Office (SAO) Fiscal Year 2018 Comprehensive Annual Financial Report (CAFR) Audit and associated Census Data and Allocation Schedule Audits
- Participated in project team meetings for Centralized Accounting and Payroll/Personnel System (CAPPS)
- Participated in workgroup discussions related to obtaining and monitoring of Business Associate Agreements associated with the procurement process
- Participated in a workgroup discussions relating to review of current agency-wide procurement guidance documents

EXECUTIVE

- Facilitated SAO's Quarterly Update Meetings
- Participated in the Risk Oversight Committee
- Participated in Health and Safety Committee Quarterly Meetings
- Participated in monthly collaboration meetings with Enterprise Risk Management (ERM) management
- Participated in the Records Management Cross-functional Workgroup

INFORMATION TECHNOLOGY (IT)

- Tracking outstanding audit recommendations from HIPAA Gap Assessment Project and Audit of On/Off Boarding Processes of Non-TRS Workers
- Liaison for an outsourced consulting project on IT Governance
- Participated in the Information Security Advisory Team (ISAT) meetings
- Participated as core team members in TRS Pension Administration and Healthcare Data Governance Council

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

Internal Audit Staff Accomplishments

New Staff

New Internal Audit Staff - Falguni Sampat joined TRS in August 2018 as a Healthcare Auditor.

Falguni worked as an Internal Auditor and as a Compliance Specialist in the Healthcare Industry prior to joining TRS. She is currently a Certified Quality Process Analyst (CQPA) and will be working to obtain her Certified Internal Audit designation. Prior to working in the audit and compliance field, Falguni worked in an Administrative role for a public school district in Minnesota for 11 years. Outside of work, Falguni is involved with various non-profit organizations to give back to the community and loves to travel and spend time with friends & family.

Promotions and Certifications

Nick Ballard passed the Certified Internal Auditor (CIA) exam and obtained the CIA designation in July

Professional Organization Activities and Conferences

- Toma Miller attended the Government Quality and Improvement training offered through the
 University of Texas LBJ School of Public Affairs. The course utilized proven techniques from Lean,
 Theory of Constraints, and Six Sigma to teach attendees how to lead an improvement project to
 eliminate backlog, reduce cycle times, improve quality, increase customer satisfaction, and
 increase cost effectiveness in state government.
- Simin Pang served as a member of Academic Relations Committee of Austin ISACA chapter.

Internal Audit Training Initiative

Toma Miller led a training session for the Department on root cause analysis.

Retirements

Jan Engler, Director of Benefit Audits, announced her retirement on September 30, 2018 after 15 years of service with TRS and 27 years of service with the state.