

Audit Committee Meeting

September 2017



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

**TEACHER RETIREMENT SYSTEM OF TEXAS
BOARD OF TRUSTEES
AND
AUDIT COMMITTEE**

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

*All or part of the September 22, 2017, meeting of the TRS Audit 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.***

AGENDA

**September 22, 2017 – 8:00 a.m.
TRS East Building, 5th Floor, Boardroom**

1. Call roll of Committee members
2. Approve minutes of July 13, 2017 Audit Committee meeting
– Mr. Christopher Moss, Chair
3. Receive State Auditor’s Office presentations
 - A. Planned audits of TRS’ Comprehensive Annual Financial Report (CAFR) including work on Other Post-Employment Benefits (OPEB) for Fiscal Year 2017 – Michael Clayton and Anca Pinchas, State Auditor’s Office
 - B. Results of the Audit of TRS’ Fiscal Year 2016 Employer Pension Liability Allocation Schedules – Kelley Ngaide, State Auditor’s Office
4. Receive TRS Compliance reports – Heather Traeger
5. Receive Internal Audit Compliance Testing and Investment Management Division reports
 - A. Quarterly TRS compliance testing (Agreed-Upon Procedures) – Hugh Ohn and Heather Traeger
 - B. Private equity fee pilot project – Hugh Ohn; Danielle Valkner, PwC
 - C. Commission credits and contractual allowance audit – Hugh Ohn and Sylvia Bell
6. Receive Internal Audit Benefit Services Division reports – Jan Engler, Nick Ballard, Art Mata and Barbie Pearson
 - A. Annual benefits testing (Agreed-Upon Procedures)
 - B. Employer audit reports (Dallas ISD and Pleasanton ISD)
 - C. Employer audit of pension and TRS-Care surcharges (30 ISDs)
 - D. Higher education pilot and audit program development
7. Receive Internal Audit Executive Division reports
 - A. Trust expense allocation audit – Nick Ballard

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

- B. Executive Performance Incentive Pay calculation testing (Agreed-Upon Procedures) – Toma Miller
 - C. Internal Audit Quality Assurance and Improvement Program (QAIP) self-assessment – Amy Barrett
 - D. Status of prior audit and consulting recommendations – Amy Barrett
8. Consider recommendations to the Board of Trustees for the Proposed Audit Plan for Fiscal Year 2018 – Amy Barrett
9. Discuss or consider Internal Audit 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 and Amy Barrett

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

TAB 2

TEACHER RETIREMENT SYSTEM OF TEXAS
AUDIT COMMITTEE MEETING MINUTES
July 13, 2017

The Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas met on July 13, 2017, 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
Ms. Karen Charleston
Mr. David Corpus
Dr. Greg Gibson

Other Trustees:

Mr. David Kelly
Mr. Joe Colonna
Mr. John Elliot
Ms. Dolores Ramirez

Others present:

Brian Guthrie, TRS
Ken Welch, TRS
Amy Barrett, TRS
Don Green, TRS
Carolina de Onis, TRS
Katherine Farrell, TRS
Lih-Jen Lan, TRS

Audit Committee Chair Mr. Moss called the meeting to order at 10:06 a.m.

1. Call roll of Committee members

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

2. Approve minutes of June 2, 2017 Audit Committee meeting – Christopher Moss

On a motion by Dr. Gibson, seconded by Mr. Corpus, the proposed minutes for the June 2, 2017, Audit Committee meeting were approved as presented.

3. Evaluate the performance of the Chief Audit Executive and consider a recommendation to the Board regarding the performance appraisal and compensation of the Chief Audit Executive – Brian Guthrie; Keith Robinson, Focus Consulting.

At 10:07 a.m., Mr. Moss announced that the Committee would go into executive session on agenda item 3 under Section 551.074 of the Government Code to discuss confidential personnel matters.

TEACHER RETIREMENT SYSTEM OF TEXAS
AUDIT COMMITTEE MEETING MINUTES
July 13, 2017

At 11:10 a.m., Mr. Moss reconvened the Committee meeting in open session.

On a motion by Mr. Corpus, seconded by Dr. Gibson, the Audit Committee voted to recommend that the Board of Trustees approve the proposed performance appraisal of the Chief Audit Executive for Fiscal Year 2017.

The Audit Committee adjourned at 11:11 a.m.

Approved by the Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas on September 22, 2017

Attested by:

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

Date

TAB 3

TAB 3A

Fiscal Year 2017 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)

Jackie Thompson, CFE (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 2017 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) – November 20, 2017 (estimated).
- Report on internal controls and on compliance and other matters (required for audits performed in accordance with generally accepted government auditing standards) – November 2017.
- Report to the Legislative Audit Committee – November 2017.





Administrative and Other Matters

- Audit work will be conducted from August 1, 2017, through November 20, 2017.
- 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 2017 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 2016 Schedule of Employer's Proportionate Shares (Allocations) and Schedule of Pension Amounts by Employer

Kelley NGaide, CIA, CFE
Audit Manager
State Auditor's Office



Audit Opinion

- Auditors issued an unqualified opinion on the System's 2016 Schedule of Employer's Proportionate Shares (Allocations) and totals for the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources and total pension expense on the Schedule of Pension Amounts by Employer.
- Auditors did not have any written findings for System management as part of this audit engagement.



New Standards

- Governmental Accounting Standards Board (GASB) statement No. 72, *Fair Value Measurement and Application*, implemented in fiscal year 2016. This statement establishes a hierarchy used to measure the fair value of investments, expands financial statement disclosures for investments and enhances the fair value measurement and definition.
- GASB statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* is effective for fiscal year 2017. This statement addresses financial reports of defined benefit OPEB plans administered through a trust and requires more note disclosures and required supplementary information related to OPEB liabilities.
- GASB statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* is effective for fiscal year 2018. This statement requires reporting the OPEB liability on the face of the financial statements and more 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 and the 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**



TRS Care Plan Changes

- The legislative changes to the TRS Care Plan will have a significant impact on the OPEB liability calculation this year
- Auditors will closely examine the OPEB plan assumptions used by the TRS Actuaries due to anticipated changes to some key assumptions (plan election rate, claims costs etc)
- The SAO has hired our own actuarial expert to assist us in the review of the OPEB plan liability calculation.



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.



Audit Considerations for New Schedules

- The AICPA suggests that plan management should obtain auditor opinions on the **Schedule of Employer Allocations** and the **Schedule of Other Post Employment Benefit Amounts by Employer**.
- Guidance on the auditing of these additional schedules is still evolving so there is the potential for new requirements to be issued by the AICPA or GASB



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.
- Issuance of the opinions increases the overall audit risk for plan auditors.



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

TAB 3B

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System’s Fiscal Year 2016 Employer Pension
Liability Allocation Schedules

We have audited the 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 accompanying Schedule of Pension Amounts by Employer (Schedules) and the related notes of the Teacher Retirement System (System) for the year ended August 31, 2016, and have issued our report thereon dated May 31, 2017. 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 March 10, 2017, our responsibility, as described by professional standards, is to express an opinion about whether the Schedules prepared by management, with your oversight, are prepared, in all material respects, in accordance with generally accepted accounting principles. Our audit of the 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 March 10, 2017.
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.
5	Management Representations	We have requested certain representations from management that are included in the management representation letter dated May 31, 2017. We also requested a representation letter dated May 31, 2017, from the System’s general counsel regarding the existence of certain contingent liabilities that might require disclosure in the Schedules.

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System’s Fiscal Year 2016 Employer Pension
Liability Allocation Schedules

No.	Item	Comments
6	Qualitative Aspects of the Entity’s Significant Accounting Practices	<p>Management is responsible for the selection and use of appropriate accounting policies.</p> <p>During fiscal year 2016, the Governmental Accounting Standards Board clarified that the Schedules should present the collective (i.e. cumulative) amounts rather than an individual year amount by employers. This is a change in the Schedules from the prior year (fiscal year 2015).</p> <p>We noted no transactions entered into by the System during fiscal year 2016 for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the Schedules in a period that differs from when the transactions occurred.</p>
7	Significant Difficulties Encountered During the Audit	<p>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.</p>
8	Other Audit Findings or Issues	<p>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.</p>
9	Disagreements with Management	<p>We did not encounter any disagreements with management during the course of the audit.</p> <p>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 Schedules or the auditor’s report.</p>
10	Management’s Consultations with Other Accountants	<p>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 Schedules or a determination of the type of auditor’s opinion that may be expressed on Schedules, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts.</p> <p>To our knowledge, there were no such consultations with other accountants.</p>

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System’s Fiscal Year 2016 Employer Pension
Liability Allocation Schedules

No.	Item	Comments
11	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.
12	Independence	The State Auditor’s Office is independent to conduct the audit of System’s fiscal year 2016 Schedules. It is the State Auditor’s Office’s policy to conduct all projects in an environment free of any threats that impair independence.
13	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 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. R. David Kelly, Chairman
Ms. Dolores Ramirez, Vice Chair
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. John Elliott
Dr. Greg Gibson
Mr. Christopher Moss

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, 2016, and the related notes. We have also audited 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 accompanying Schedule of Pension Amounts by Employer of the System Pension Plan, as of and for the year ended August, 31, 2016, and the related notes.

Management's Responsibility for the 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 an opinion 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.

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 opinion.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer's proportionate shares (allocations) and net pension liability, total deferred outflow of resources, total deferred inflow 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, 2016, 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, 2016, and our report thereon, dated November 17, 2016, expressed an 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, and 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

May 31, 2017



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

Independent Auditor's Report

Teacher Retirement System Board of Trustees:

Mr. R. David Kelly, Chairman
Ms. Dolores Ramirez, Vice Chair
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. John Elliott
Dr. Greg Gibson
Mr. Christopher Moss

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 (System) Pension Plan, as of and for the year ended August 31, 2016, and the related notes. We have also audited 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 of the System Pension Plan, as of and for the year ended August 31, 2016, and the related notes, and have issued our report thereon dated May 31, 2017.

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 entity's financial statements 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

May 31, 2017



An Audit Report on

The Audit of Teacher Retirement System's Fiscal Year 2016 Employer Pension Liability Allocation Schedules

June 5, 2017

Members of the Legislative Audit Committee:

In our audit report dated May 31, 2017, we concluded that the 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 accompanying Schedule of Pension Amounts by Employer and the related notes as of August 31, 2016, for the Teacher Retirement System (System) were materially correct and presented in accordance with accounting principles generally accepted in the United States of America. The System intends to post the schedules and our audit report on its Web site at <http://www.trs.texas.gov/>.

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 of the schedules 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 opinion on the schedules were operating effectively.

Our procedures were not intended to provide an opinion on internal control over financial reporting of the schedules 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 of the schedules 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.

Pension Liability 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. Specifically, a government will incur a "net pension liability" if the total obligation to members exceeds the value of the net assets the government has set aside to pay those benefits.

Employers in the plan will need to recognize their portion of the reported pension liability in the financial statements they produce.

The System prepared the Schedule of Employer's Proportionate Shares (Allocations) and the Schedule of Pension Amounts by Employer to help participating employers comply with requirements of GASB 68. Employers may use the pension liability schedules prepared by the System to aid them in determining their portion of the reported pension liability.

Sources: Government Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions*, 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*.

SAO Report No. 17-037

Members of the Legislative Audit Committee

June 5, 2017

Page 2

We appreciate the System's cooperation during this audit. If you have any questions, please contact Michael Clayton, 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
Members of the Teacher Retirement System Board of Trustees
Mr. R. David Kelly, Chairman
Ms. Dolores Ramirez, Vice Chair
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. John Elliott
Dr. Greg Gibson
Mr. Christopher Moss
Mr. Brian Guthrie, Executive Director, Teacher Retirement System



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TAB 4

The information for this agenda item is confidential.

TAB 5

TAB 5A

QUARTERLY TRS COMPLIANCE TESTING
INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), PERFORMANCE INCENTIVE PAY (PIP) PLAN, WIRE TRANSFER PROCEDURES, PROXY VOTING POLICY (PVP), EMPLOYEE ETHICS POLICY, AND BOARD OF TRUSTEES ETHICS POLICY
CALENDAR QUARTER ENDED JUNE 30, 2017, EXCEPT AS NOTED

Business Objectives	1. <u>Board Reports</u> All required information is reported to the TRS Board of Trustees	2. <u>Investment Selection and Approval</u> Investments made are within delegated limits and established selection criteria	3. <u>Other (IPS, SLP, PVP, Wire Transfers, Other Reporting)</u> Risk limits are followed for other investment programs and activities	4. <u>Ethics Policies</u> 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	<ul style="list-style-type: none"> Compare Board reports to IPS requirements Trace sample information included in Board reports to supporting documentation 	<ul style="list-style-type: none"> Trace investments approved by the Internal Investment Committee (IIC) to supporting documentation Compare approval amounts of new investments with IPS limits Obtain evidence that Placement Agent Questionnaires (PAQs) were received prior to funding investments approved Obtain evidence that TRS complied with Sudan/Iran investment restrictions 	<ul style="list-style-type: none"> 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 SSB and TRS Recalculate Internal Public Markets staff's PIP alpha for the quarter ended 3/31/2017. Confirm senior managers' awareness of any compliance violations 	<ul style="list-style-type: none"> Obtain evidence that employees filed required statements and completed annual ethics training Obtain evidence that Trustees filed financial information with the executive director
Test Results	<ul style="list-style-type: none"> All reporting requirements were met Documentation provided support for the information tested 	<ul style="list-style-type: none"> All investments tested were in compliance with statutory and policy approval limits PAQs were obtained for all investments tested 	All requirements of the IPS, SLP, PIP, PVP, and wire transfer procedures were met	<ul style="list-style-type: none"> Two employees did not complete annual ethics training required. All other ethics requirements were met.
Management Responses	N/A	N/A	N/A	Legal and Compliance is working with Human Resources to identify remedial measures.

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



Brian K. Guthrie
Executive Director

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 6, 2017

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, 2017, as included in the *Fiscal Year 2017 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, Wire Transfer Procedures, and Performance Incentive Pay (PIP) Plan.

We performed the procedures that were agreed to by the TRS Legal & Compliance division. These procedures include tests that supplement the current compliance monitoring procedures performed by State Street 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 the specified users of the 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**.

Internal Control Structure

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

Had we performed additional procedures, or had we made an examination of the system of internal control, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified below and does not extend to the internal control structure.

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

* * * * *

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

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

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

Rodrigo Dominguez
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 - 1.7p – Obtain evidence that all requirements were reported to Board of Trustees. Quarterly reporting requirements include investment performance, asset class exposures, and external investments under consideration. Semi-annual reports include outstanding derivatives, leverage, and liquidity positions, and risk limits.	Obtain all information required to be reported to Board of Trustees and compare to reporting requirements per Investment Policy Statement (IPS)	Information required to be reported to Board of Trustees complied with IPS requirements.	No response required
2	2	IPS Article 1.8d – Obtain evidence that TRS complied with Chapters 806 and 807 of the Government Code relating to prohibitions on investments in Sudan and Iran, respectively.	<ul style="list-style-type: none"> • Verify that the trading system was updated based on the latest Sudan/Iran restricted securities lists and that TRS did not hold these securities according to State Street Banks daily compliance reports • Obtain evidence that TRS complied with the following requirements: (a) to notify the Comptroller’s Office and the Pension Review Board regarding holdings of restricted company securities; (b) to divest holdings; and (c) to file annual report of Sudan/Iran investment activity to the Legislature and the Attorney General 	<ul style="list-style-type: none"> • The trading system was not updated timely. However, TRS did not hold or trade any of the Sudan/Iran securities. • TRS complied with the notification requirement • TRS complied with divestment requirements. • TRS complied with the annual report requirements. 	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
3	2	IPS Article 1.3c – Obtain evidence of existence of IMD’s prudent underwriting objectives for advisor’s due diligence.	Select sample of Private Market investments approved during testing period, obtain evidence of existence of advisor’s report stating investment opportunity meets prudent underwriting standards and merits inclusion within respective portfolios	For selected Private Markets approved investments for the quarter, verified that the prudence letter from the advisor was included in the Internal Investment Committee (IIC) materials.	No response required
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 7 – Obtain evidence that new investments in emerging managers meet size and track record requirements.	For sample of approved investments obtain evidence that: <ul style="list-style-type: none"> • Each is 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
6	2	IPS Article 12 - Obtain evidence of existence of placement agent questionnaire for each new investment selected for testing and test for inclusion in summary report to the Board.	<ul style="list-style-type: none"> • 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 to the questionnaires were compiled and all results 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
7	2	IPS Appendix B – Obtain evidence that investments approved are within policy limits.	<ul style="list-style-type: none"> • Select sample of approved investments, obtain tear sheet for each, and observe the approved amounts are within authorized limits <ol style="list-style-type: none"> a) Initial allocation – .50% b) Additional or follow-on – 1% 	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	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
			c) Total Manager Limits – 3% d) Total limit each manager organization – 6% <ul style="list-style-type: none"> 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 	were no Special Investment Opportunities.	
8	2	IPS Appendix G – Obtain evidence that participation in external advisory committees or boards meet the requirement of the IPS by requesting a sample of limited partnership agreements (LPA’s).	Obtain evidence that IMD compiled and reported all board positions to the Board.	Obtained evidence that IMD is in compliance with this policy.	No response required
9	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 occurred during the testing period	Obtained confirmation from the Chief Compliance Officer. Chief Compliance Officer disclosed that two employees did not complete required annual ethics training.	Legal & Compliance is working with Human Resources to identify remedial measures.
10	3	Wire Transfers 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
11	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	Obtained Information about approved borrowers, including loan limits. Diversification requirements are met.	No response required

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
			<p>securities lending program comply with the following policy requirements:</p> <p>Sec 4.5. On an annual basis, the lending agent will furnish a list of potential borrowers and corresponding loan limits</p> <p>Sec 4.7. Diversification requirements</p> <p>Sec 4.8. Investments in structured notes are prohibited</p>	No investments in structured notes are included in investment holdings.	
12	3	Proxy Voting Policy - Obtain evidence 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 IMD maintains record of votes on all proxy issues and proxy exceptions report is presented to the board.	The Proxy Committee keeps record of all proxy records. Obtained evidence that proxy exception reports are included in Transparency Reports.	No response required
13	4	Employee Ethics Policy – Obtain evidence that Key Employees acknowledge their Key Employee status through the annual Ethics Compliance Statement; filed enhanced disclosure statements; new employees filed a completed ethics and compliance statement; and employees participated in annual ethics training.	<p>Select a sample of TRS employees and determine whether:</p> <ul style="list-style-type: none"> • Key Employees acknowledged their key employee status • Key Employees filed disclosure statements. • New employees filed ethics compliance statements within 60 days of employment • Employees participated in annual ethics training 	<p>Key employees acknowledged their key employee status through the annual ethics compliance statements and filed enhanced disclosure statements.</p> <p>New employees filed ethics compliance statements but not all employees participated in annual ethics training.</p>	See the response in Step #9 above.

STEP #	BUS. OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
14	4	Board of Trustees Ethics Policy –Trustees must disclose to the Executive Director financial information required by state law, any legal matters, and matters relating to co-fiduciary responsibility.	Obtain evidence that all Trustees filed financial information with the Executive Director.	All Trustees filed personal financial statements	No response required
15	3	Performance Incentive Pay Plan (PIP) – Verify that investment performance results used in quarterly Internal Public Markets (IPM) portfolio matches data from performance applications and custodian bank and that the excess return calculations for individual portfolio managers and sector managers are correct	<p>Trace quarterly IPM individual component calculations to investment performance application data and TRS custodian data.</p> <p>Test whether employee assignments were approved by Senior Director in IPM prior to quarter start by obtaining approval email from Senior Director to Investment Operations Performance Analyst. If any assignment changes are included in the approval, compare the approved changes to the assignments in the quarterly IPM individual component calculations.</p> <p>Test whether formulas in the quarterly IPM individual component calculation spreadsheet are correct by recalculating investment return totals by portfolio manager and sector manager, and comparing total investment returns to returns provided by the custodian bank.</p>	There were no data, employee assignment, or formula errors included in the quarterly IPM individual component calculation spreadsheet. Thus, excess return calculations for individual portfolio managers and sector managers for the IPM portfolio were correct for the quarter ended March 31, 2017.	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, 2017. Testing procedures for the Performance Incentive Pay Plan are for the quarter ended March 31, 2017.

TAB 5B



Private Equity Fee Pilot Project

TRS Internal Audit

September 2017



Agenda

- I. Objectives of Private Equity Fee Pilot
 - II. Project Approach
 - III. Private Equity Firm and Fund Selection
 - IV. Private Equity Fund Structure and Fee Diagram
 - V. Review Areas as Part of Pilot
 - VI. Project Deliverable
 - VII. Observations
 - VIII. Consideration for Next Steps
- Appendix – Private Equity Review Areas

I. Objectives of Private Equity Fee Pilot

- To examine private equity fee calculation practices
- To develop a standard audit program to test private equity fee calculations on a go-forward basis

II. Project Approach

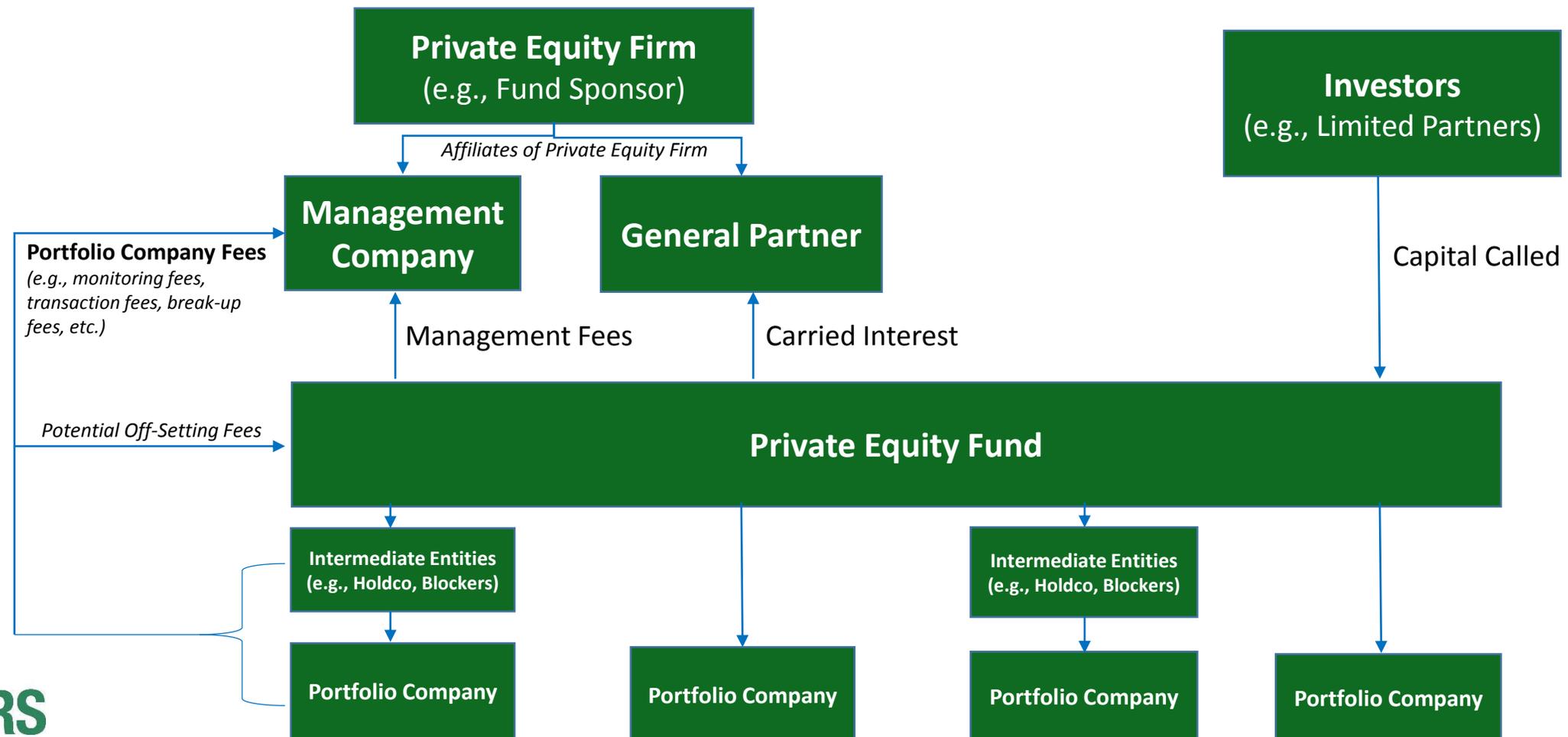
- Partnered with a firm that has knowledge and experience of private equity firms
- Selected a private equity firm to learn about their fee calculation processes
- Gathered relevant information about fee calculations through document reviews and correspondences
- Selected sample fee transactions and requested supporting documents and records, including detailed calculation worksheets
- Reviewed methodologies applied in accordance with the Limited Partnership Agreement (LPA) and recalculated select samples for accuracy
- Conducted onsite visit for process inquiries and walkthroughs

III. Private Equity Firm and Fund Selection

- Consideration for Manager Selection
 - TRS Private Equity Premier List
 - Firm Size
 - Operational Complexity – Less Complex One
 - Inputs from IMD (PE and Investment Ops)
- Consideration for Selection of Two Funds
 - First Fund – with Early Vintage Year to cover the entire fund cycle
 - Second Fund – With Recent Vintage Year to focus on recent policies and procedures

IV. Private Equity Fund Structure and Fee Diagram

The diagram below is a simplified example of a Private Equity Fund Structure and the flow of fees. Each of the flows noted is specific to a particular investment firm and underlying fund based on the limited partnership agreement between the investment firm and the limited partners.



V. Review Areas as Part of Pilot

- Management Fee Calculations
- Management Fee Waivers, Credits, and Offsets
- Carried Interest Calculations
- Capital Calls
- Capital Distributions
- Other Common Fund Expenses (e.g. transaction expenses)
- Valuation Practices
- Back Office and Accounting Function
- LPA Compliance Function

VI. Project Deliverable

- Standardized project management tools, including engagement letter, document request list, and on-site visit agenda
- Detailed standard Private Equity Fee audit program, including audit objectives and testing procedures

VII. Observations

- Lots of information available in Limited Partner Portal – Possibly sufficient for desk audits or reviews
- More beneficial if audit time spent on more complex managers that incur large amounts of travel expenses, consulting fees, and transaction fees and expenses
- Due diligence possibly enhanced if asking for external validation, such as partnership interest audits and Service Organization Control (SOC) reports
- PE firms dealing with confidential data under federal and state law

VIII. Consideration for Next Steps

- Option 1 - Expanding Private Equity fee audits to multiple managers and/or funds in the future – Start with desk reviews of information available in LP Portal
 - Our peer group survey indicates several funds perform desk reviews of management fees but none of carried interest
 - Will evaluate potential risk assessment tools to help facilitate desk reviews
- Option 2 - Initiating a pilot project on Real Estate manager and funds

Appendix

Private Equity Review Areas

Management Fee Calculations

Key Elements

- Tied to capital commitment or invested capital
- Lower rate applied to the invested capital after the commitment period or when manager launches a new fund
- Management fees are typically not charged to co-investors or related parties (e.g., employees of the private equity firm)
- Mainly used to cover operating expenses of the Management Company

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Wrong amount calculated and/or charged due to:<ul style="list-style-type: none">○ System problems○ Human errors○ Spreadsheet issues• Incorrect credit or offset amounts applied to the fee	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Automated system• Supervisory review and approval• Audited financial statements• Institutional Limited Partners Association (ILPA) templates

Management Fee Waivers, Credits, and Offsets

Key Elements

- Per LPA, fee waiver schedule estimated at the beginning of the fund
- Fee offset tracking and allocation among the fund, management company, and portfolio company is important
- Fees paid by the portfolio company such as advisory fees are used as offset against management fees
- Common offset percentages are 80% and 100%

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Wrong fee waiver amounts applied• No credit given for overcharged fee amount in prior period• Applicable expenses not applied as offsets• Wrong offset percentage used	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Fee waiver schedule• Supervisory review and approval• Audited financial statements• ILPA templates

Carried Interest Calculations

Key Elements

- Tied to the net profit of the fund or after the preferred return rate is achieved
- Gains and/or losses on each investment are tracked
- Typical carry split is 80%/20% between LP and GP
- Preferred returns are common practices
- Claw back provisions may be triggered if too much carry was paid to GP early in the fund's lifecycle

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Incorrect gains or losses amounts calculated or tracked• Spreadsheet errors• Incorrect carry percentage applied• Incorrect expenses tracked• Incorrect LP partnership percentage used• Incorrect application of the carried interest waterfall	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Automated system• Supervisory review and approval• Audited financial statements

Capital Calls

Key Elements

- Driven by the purchase price of investments and fund expenses
- Capital calls for investments are estimated based on the purchase price near deal-closing and adjusted at subsequent calls or distributions
- More funds using a credit facility for fast access to capital (instead of calling capital from LPs)
- Increased use of ILPA Capital Call and Distribution templates

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Call amount not supported by deal cost• Incorrect capture of expenses• Incorrect partnership percentage used for LP allocation• Estimated call amount not adjusted in subsequent period• Impact of the use of credit facility on the returns and cost of capital	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Source documents showing purchase price of investment• Automated system tracking expenses• Supervisory review and approval• Automated system tracking partnership interest• Audited financial statements• ILPA templates

Capital Distributions

Key Elements

- Driven by the sales of and income earned on investments
- Distribution waterfall is usually specified in the LPA
- Increased use of ILPA Capital Call and Distribution templates

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Distribution amount not supported by proceeds received• Incorrect partnership percentage used for LP allocation• Waterfall order not followed correctly	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Automated system tracking gains from the sale and related expenses• Supervisory review and approval• Automated system tracking partnership interest• Audited financial statements• ILPA templates

Other Common Fund Expenses

Key Elements

- Other Common Fund Expenses include, but are not limited to:
 - Investment-related expenses, such as expenses relating to the evaluation, acquisition, holding and disposition of investments, legal, consultants, valuation firms, creation and disposition of special purpose entities and alternative investment vehicles
 - Partnership related expenses, such as expenses relating to audit, tax, administrator, custodian, insurance, advisory board, interest expense, and commitment fees; and
 - Organizational and Start-Up related expenses, such as expenses relating to legal, accounting, regulatory filings, and capital raising activities
- Expense allocation policy, defining eligibility and allocation methodology
- Automated system used to allocate expenses

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Improper allocation of expenses to or between funds• Duplicate payments to GP from funds• Inaccurate allocation of expenses to LPs• Inaccurate allocation of expenses to funds	<ul style="list-style-type: none">• Written Expense Allocation Policy• Automated system / workflow• Supervisory review and approval• Audited financial statements

Valuation Practices

Key Elements

- Documented and detailed valuation policy
- Independent Valuation by Third Party Expert
- Valuation Committee, including Committee Approval
- Review of Supporting Information by Deal Teams
- Review of Valuation by the Advisory Board

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• No periodic valuation occurred• Incorrect value determined on investments• Valuation methods used not consistent with industry guide• Not complying with Valuation Policy	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Valuation policy• Industry valuation guide• Independent valuation by third party expert• Valuation committee• Audited financial statements

Back Office and Accounting Function

Key Elements

- Experienced and competent back office staff (e.g., CPAs, industry experience, big four accounting)
- Supervision and approval
- Written policies and procedures
- Use of automated systems

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Lack of appropriate resources• Manual processing or outdated information systems used• Unreliable report or information generated• Disruption in business• Fraud	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Written policies and procedures• Supervision and approval• Business continuity and disaster recovery plan• Vendor monitoring tools, including Service Organization Control (SOC) reports required• Segregation of duties

LPA Compliance

Key Elements

- All registered investment advisors to have a Chief Compliance Officer
- Detailed written policies and procedures (“Compliance Manual”), tailored to the managers business and not generic
- Annual training provided for staff
- Compliance certifications provided to Limited Partners

Potential Risk	Mitigating Control
<ul style="list-style-type: none">• Lack of qualified personnel, systems, or policies and procedures• Non-compliance with LPA or policies• Regulatory fines, sanctions, and/or scrutiny which could result in LP’s reputational risk	<ul style="list-style-type: none">• Limited Partnership Agreement (LPA) provision• Compliance policy (“Compliance Manual”), including annual training and compliance certification requirements• Regulatory examinations and/or third party reviews



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

www.trs.texas.gov

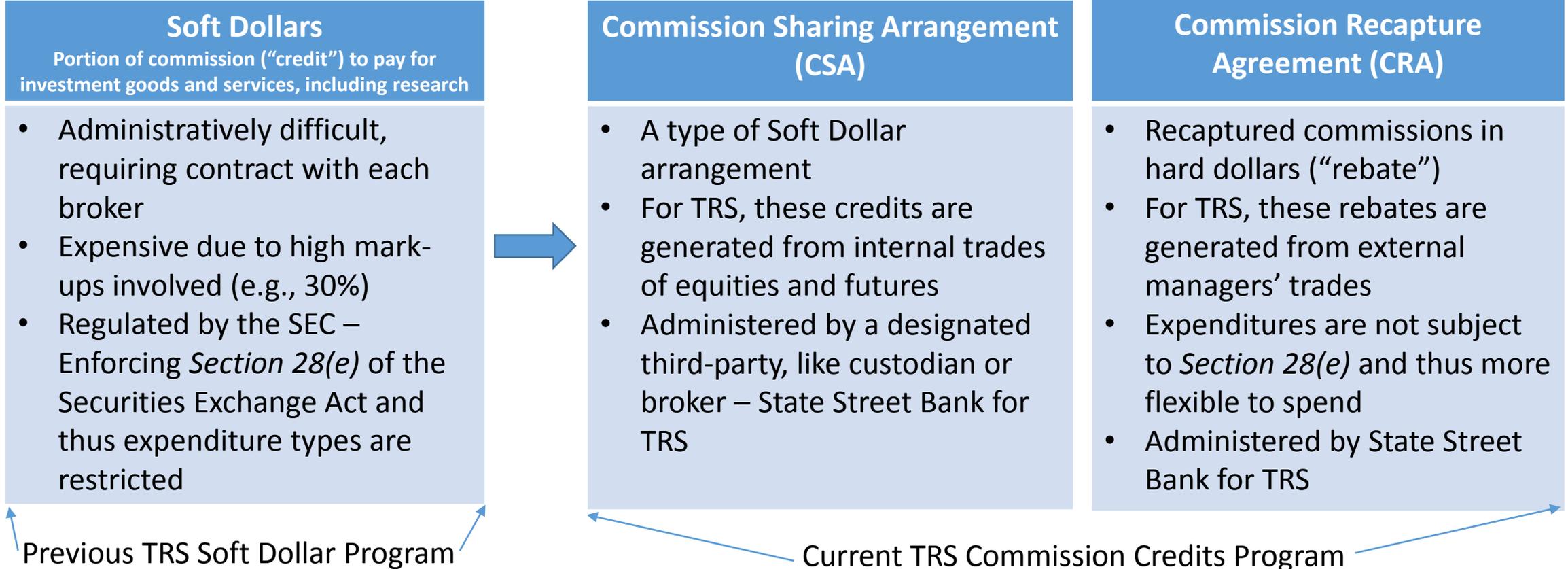
TAB 5C



Audit of Commission Credits and Contractual Allowance
TRS Internal Audit
September 2017

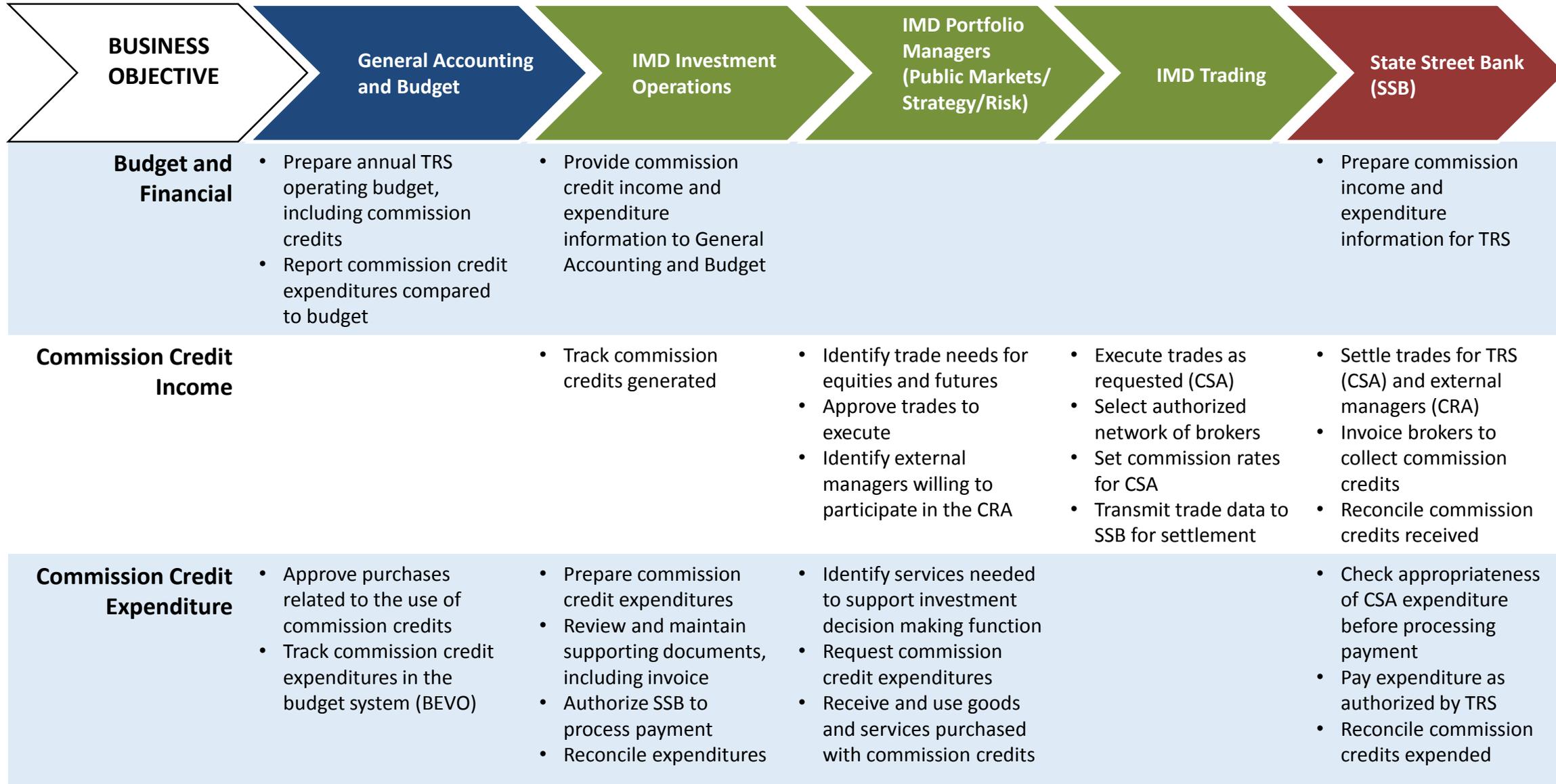


Commission Credits (Formerly Soft Dollars)

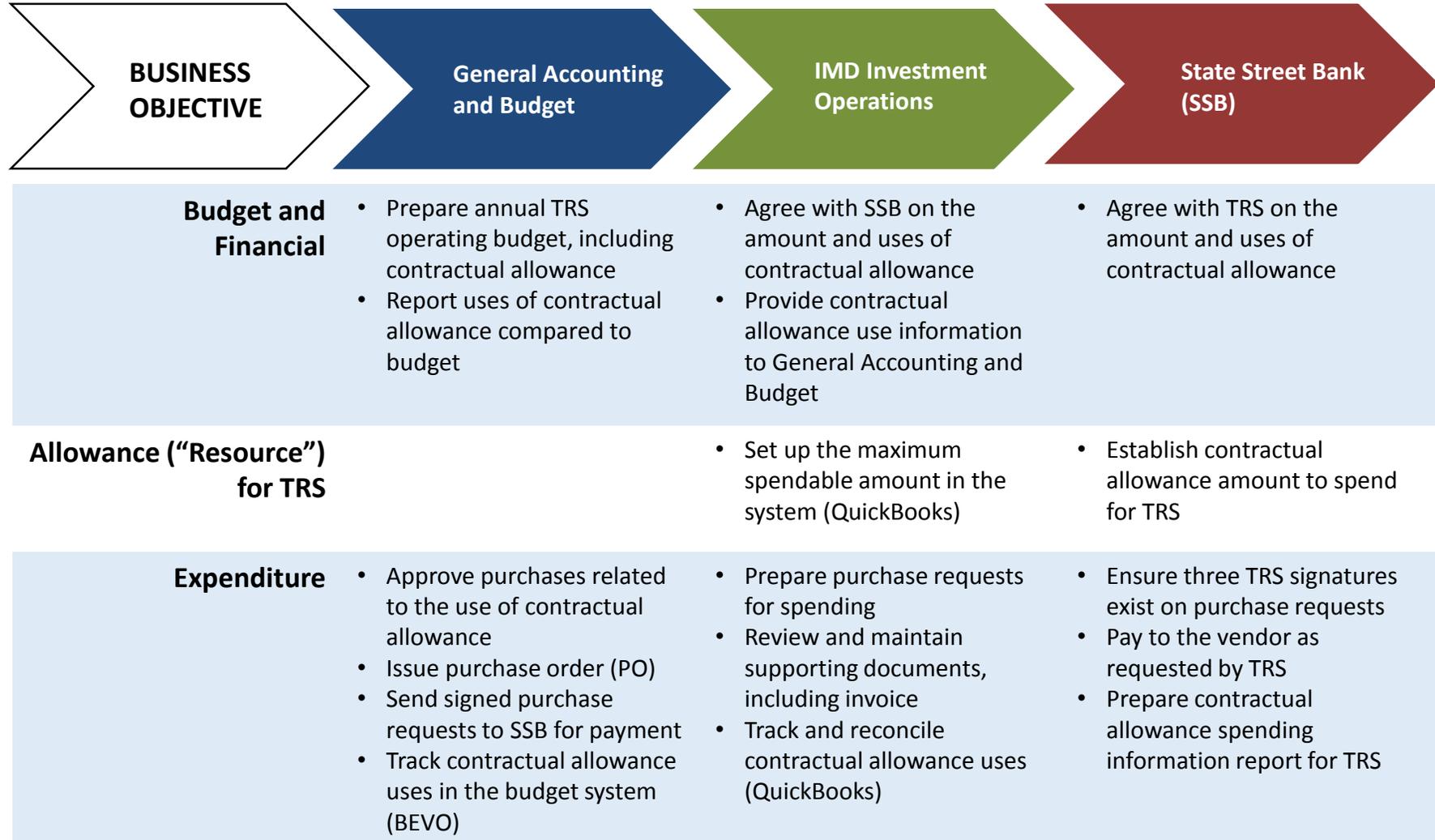


TRS Commission Credits must be used to support the investment decision-making function of TRS

Process Map - Commission Credits (CSA & CRA)



Process Map - SSB Contractual Allowance



Audit Objective and Scope

Audit Objective:

To determine whether internal controls are in place and working effectively to achieve business objectives

Audit Scope Areas:

No	Audit Area	FY 17 Budget (in million)
1	Commission Sharing Arrangement (CSA)	\$17.6
2	Commission Recapture Arrangement (CRA)	\$0.8
3	Contractual Allowance Account with State Street Bank	\$6.0
	TOTAL =	\$24.4

Not In Audit Scope: \$12 million/year in TRS Trust for investment research

Audit Process

Planning

- ▶ Identify Business Objectives, Risks, and Management Controls
- ▶ Determine Key Management Controls To Test
- ▶ Perform Data Analytics

Fieldwork Testing

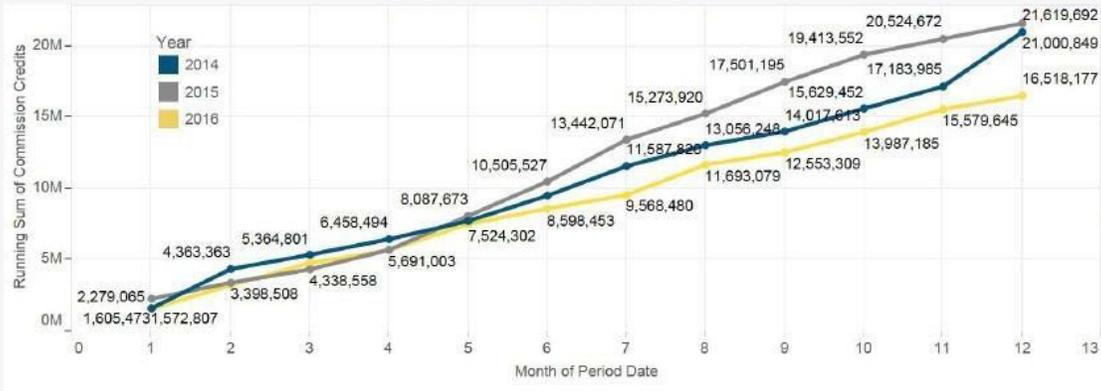
- ▶ Determine if Management Controls Are In Place and Working Effectively
- ▶ Validate Management Controls through Testing of Sample Transactions
- ▶ Incorporate Data Analytic Indicators into Sample Selection

Reporting

- ▶ Report Results of the Audit, including Recommendations and Management Responses
 - ❑ One-Page Summary Report
 - ❑ Detailed Audit Report

Background – From Data Analytics

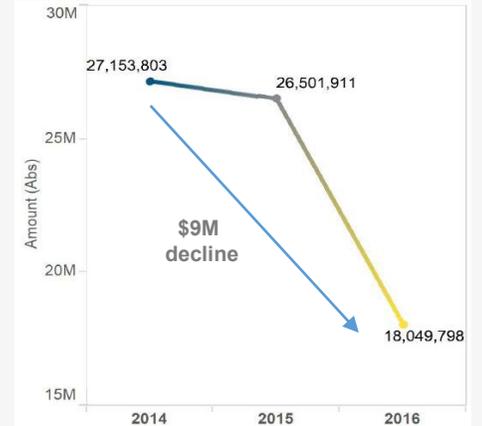
Commission Credits: Yearly Comparison



Overall, TRS commission credits are trending down, which is a direct result of TRS decision to decrease commission rates and pay research with hard dollars

Expenditures: Yearly Comparison

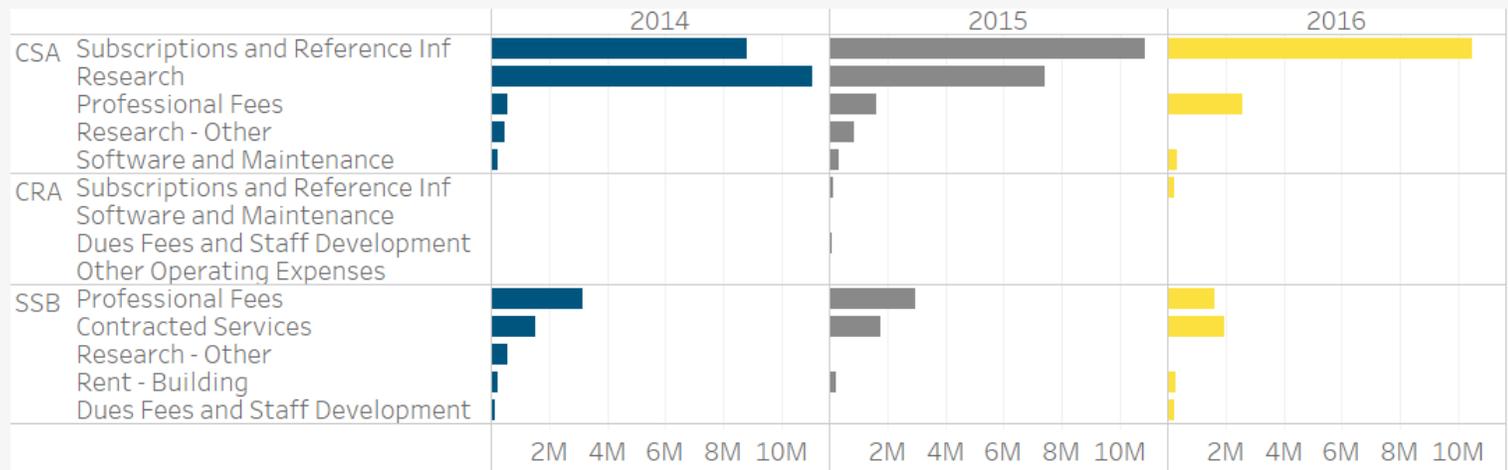
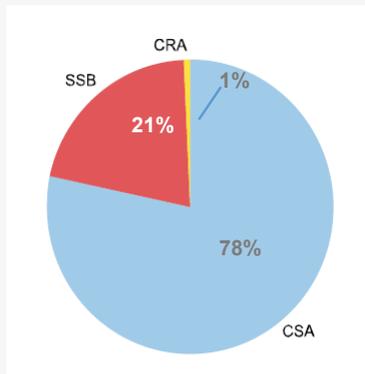
Including the \$6M contractual allowance with SSB, total expenditures have declined \$9M in the past 3 years



Expenditures Breakout by Account Type and Expense Category

Top 5 categories represent 99% of expenditures across account types:

1. Subscriptions
2. Professional Fees
3. Contracted Services
4. Research
5. Software and Maintenance



Use of Data Analytics for Audit

Question	Data Analytics Applied (During Planning)	Audit Consideration (During Fieldwork)
Are trades executed with TRS authorized brokers?	Sorted brokers by name for past three years' trades and compared them with TRS authorized broker lists	Included two brokers in the sample trades selected for commission credit income testing
Are commission credit amounts generated consistent with the commission rates?	Compared commission credit rates applied to trades with agreed-upon TRS commission rates with brokers for past three years' trades	Tested commission credit amounts as part of sample commission credit income testing
Are commission credits used for eligible expenses per policy?	Sorted three-year expenditure data by major categories	Selected sample transactions from each of major expenditure categories as part of eligibility testing
Are there any unusual trends or transactions?	By looking at three-year data, identified declining commission credit income and expenditures between 2015 and 2016	Identified reasons for the declined commission credits by confirming the decreased commission rates and the conversion to some hard dollar pays

Audit Recommendations & Management Responses

Strengthen Monitoring of State Street Contractual Allowance to Minimize Amount of Unused Balances

TRS did not fully spend the \$6 million allowance negotiated with SSB as part of the TRS custody fee agreement. Unused balance cannot be carried forward.

IMD will implement better monitoring to minimize unused balances by Dec. 31, 2017.

Update Commission Credits Guidelines and Procedures Required by the Policy

IMD has not updated guidelines and procedures for commission credits ("Soft Dollar Manual") since fiscal year 2012.

IMD will update the Guidelines by Nov. 30, 2017

Apply Consistent Processes for Access to Commission Credit Payment Service

Several terminated IMD employees remained on the list of people who have access to the commission credit payment service.

IMD will use consistent processes of adding and deleting users by Sept. 30, 2017

AUDIT OF COMMISSION CREDITS (CC) AND CONTRACTUAL ALLOWANCE

September 7, 2017

TRS Internal Audit Department

Business Objectives	CC Income: To generate commission credits through trades in line with budget	CC Expenditure: To obtain goods and services to support investment operations	Contractual Allowance: To obtain additional resources to support Investment Division
Business Risks	<ul style="list-style-type: none"> No CC policy or budget adopted Excessive trading mainly to generate CC Capture incomplete or inaccurate CC from trades Unable to generate CC amounts budgeted 	<ul style="list-style-type: none"> Unauthorized uses of CC Spending for ineligible products or services Overpaying for low quality products or services Spending over budget Non-compliance with policy Fraud 	<ul style="list-style-type: none"> No budget or reporting on uses Inappropriate or inconsistent uses per agreement Not fully spending the maximum amount available
Management Controls	<ul style="list-style-type: none"> Board approval of CC policy and budget IMD team's monitoring of CC income generated System setup of commission splits Monthly reconciliation of CC income 	<ul style="list-style-type: none"> Segregation of duties TRS approval required Supporting documentation required prior to payment Limited system access Payment reconciliation Tracking of expenditure compared to budget 	<ul style="list-style-type: none"> Bi-weekly expenditure report Monthly reconciliation Invoice required prior to payment Authorized TRS signatures required
Controls Tested	<ul style="list-style-type: none"> IMD team's monitoring of CC income generated System setup of commission splits Monthly reconciliation of CC income 	<ul style="list-style-type: none"> Segregation of duties TRS approval required Supporting documentation Limited system access Payment reconciliation 	<ul style="list-style-type: none"> Bi-weekly expenditure report Monthly reconciliation Invoice required Authorized TRS signatures
Results	Management controls are operating effectively to achieve business objective.	Management controls are operating effectively. However, operating guidelines require updating and access to CC system could be improved.	Management controls related to monitoring of available balances could be improved to reduce unused State Street allowance.
Recommended Actions	None	<ul style="list-style-type: none"> Update CC Procedures required by the Policy Apply consistent processes to review access to CC system 	Strengthen monitoring of contractual allowance balances through enhanced monitoring
Management Responses	NA	IMD agrees and will implement recommendations by November 30, 2017.	IMD agrees and will implement by December 31, 2017.

Legend of Results: Red - Significant to TRS Orange - Significant to Business Objectives
Yellow - Other Reportable Issue Green - Positive Finding or No Issue



September 7, 2017

Audit Committee, Board of Trustees
Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the audit of **Commission Credits and Contractual Allowance**, as included in the *Fiscal Year 2017 Audit Plan*. Business objectives related to the TRS Commission Credits and Contractual Allowance programs are as follows:

- To establish and monitor commission credit budget while reporting on the uses of commission credits as compared to the budget
- To generate commission credits through trades in accordance with the budget and IMD needs
- To obtain investment-related goods and services, as authorized in the Commission Credits Policy, using commission credits generated
- To obtain additional resources for IMD support through contractual allowance from vendors

Based on our audit results, we determined that management controls related to commission credits are operating effectively to achieve business objectives while management controls related to contractual allowance from State Street Bank could be improved. We did not identify any significant issues. Opportunities to improve controls are related to: (a) monitoring of contractual allowance balances; (b) operating procedures of commission credits; and (c) access to Commission Credit Payment Service.

Results of our procedures are presented in more detail in the **Results and Recommendations** section (page 7). The audit objective, scope, methodology and conclusion are described in **Appendix A** (page 11).

BACKGROUND

TRS has been using soft dollars for many years to obtain products and services that provide support for investment-related activities and decisions. Soft dollars refers to the means of paying providers of goods and services through a portion of commissions rather than through hard dollars. A few years ago, TRS expanded its soft dollars program to the commission credits program to include a commission recapture program which is a type of commission rebate program.

The TRS Board of Trustees (Board) adopted a formal Commission Credits Policy (Policy) and approves an annual commission credits and contractual allowance budget as part of the TRS operating budget. The TRS commission credits budget for fiscal year 2017 is \$24.4 million and consists of the following three components:

Program Component	FY 2017 Budget
Commission Sharing Arrangement (CSA)	\$17.6 million
Commission Recapture Arrangement (CRA)	\$0.8 million
State Street Bank Contractual Allowance	\$6.0 million
TOTAL	\$24.4 million

The Commission Sharing Arrangements, Commission Recapture Arrangements, and State Street Bank Contractual Allowance provide additional resources for the Investment Management Division (IMD). These programs are very similar in their structure and all are administered by State Street Bank. However, there are a few differences, and these differences can be summarized as follows:

Commission Sharing Arrangement (CSA)

- A type of soft dollar arrangements
- Authorized by *Section 28(e)* of the Securities Exchange Act
- Regulated by the Securities and Exchange Commission (SEC)
- TRS CSA credits are generated from internal trades on equities and futures
- Spending is governed by the eligibility rules under *Section 28(e)* and the SEC’s interpretations

Commission Recapture Arrangement (CRA)

- A method of unbundling commission to capture a portion in the form of rebate
- Governed by the Department of Labor (DOL) rules, including Technical Bulletin 86-1 (*Statement on Policies Concerning Soft Dollar and Directed Commission Arrangements*)
- TRS CRA credits are generated from participating external managers’ trades
- Governed by fiduciary standards to spend the commissions recaptured

Contractual Allowance Agreement with State Street Bank

- Agreed-upon arrangements between TRS and State Street Bank (a master custodian and securities lending agent)
- Governed by the formal contract between TRS and State Street Bank
- Annual spending amount is capped to \$6 million
- Unspent amount is not allowed to be carried over to the next year
- Spending is governed by fiduciary standards

BUSINESS OBJECTIVES, RISKS, AND CONTROLS

For the audit of Commission Credits and Contractual Allowances, we obtained information about the following four business objectives, as well as the related risks and the controls management established to mitigate these risks:

Business Objective	Inherent Risks (without considering controls)	Management Controls	Management Controls Selected for Testing
1. To establish and monitor commission credit budget while reporting on the uses of commission credits as compared to the budget	(1) No commission credits budget adopted	A) Commission Credits Policy B) Commission Credit guidelines and procedures (previously called “Soft Dollar Manual”) C) Board adoption of TRS operating budget, including soft dollar budget	No controls selected for testing
	(2) Commission credit budget usage not tracked or monitored	A) Annual CSA and CRA budgets B) Budget tracking and reporting (by Red River Financial Group) C) Operating procedures D) BEVO system E) Board approval of TRS operating budget F) IMD Budget Tracking Spreadsheet	<ul style="list-style-type: none"> • Budget tracking and reporting • IMD Budget Tracking Spreadsheet
	(3) Inaccurate or incomplete reporting on commission credit budget or usage	A) Annual adoption of TRS operating budget B) Financial reporting C) Automated systems used (e.g., BEVO and QuickBooks)	<ul style="list-style-type: none"> • Financial reporting
2. To generate commission credits through trades in accordance with the budget and IMD needs	(4) Executing trades mainly to generate commission credits	A) Segregation of duties between Portfolio Management and Trading – e.g., Trading cannot initiate trades B) Investment staff’s review of portfolio performance C) Annual CSA budget D) Periodic estimate of trading volume (to meet the budget) E) IMD CSA Monitoring Team's quarterly monitoring of commission credits generated	<ul style="list-style-type: none"> • IMD CSA Monitoring Team’s quarterly monitoring of commission credits generated
	(5) Capturing incomplete or incorrect commission credits from internal trades (i.e., CSA) or from external manager trades (i.e., CRA)	A) Electronic transfer of trade information to the custodian B) Investment Operations staff's reconciliation of trades C) Commission rate schedule (showing CSA split ratios) D) Trading staff’s setup of commission splits in Eze Castle (ReCap) E) Trading staff’s reconciliation of trades executed (between Bloomberg and ReCap) F) TRS’ direction letter to external managers (CRA) G) Use of independent party (SSB) to collect commission credits from	<ul style="list-style-type: none"> • Trading staff’s setup of commission splits in ReCap • TRS’ direction letter to external managers • SSB’s monthly reconciliation of commission credits collected from brokers

Business Objective	Inherent Risks (without considering controls)	Management Controls	Management Controls Selected for Testing
		brokers (CSA and CRA), including monthly reports H) SSB's monthly reconciliation of commission credits collected from brokers	
	(6) Unable to generate sufficient commission credit amounts budgeted	A) Annual CSA budget approved B) IMD CSA Monitoring Team's quarterly monitoring of commission credits generated	<ul style="list-style-type: none"> IMD CSA Monitoring Team's quarterly monitoring of commission credits generated
	(7) Unable to collect or access CSA credits accumulated (e.g., due to broker default or other legal issues)	A) TRS broker selection process (CSA) B) SSB broker network (CRA) C) Commission credit contract established between TRS and State Street D) Legal recourse available	No controls selected for testing
3. To obtain investment-related goods and services, as authorized in the Commission Credits Policy, using commission credits generated	(8) Unauthorized uses of commission credits, including fraudulent and duplicate payments	A) Segregation of duties among payment authorization, paying, and record-keeping B) TRS authorization required prior to SSB's payment C) Supporting documentation required before authorizing payment D) State Street's SEC 28(e) compliance checks (for CSA) E) Department of Labor's regulation, Technical Bulletin 86-1 (for CRA) F) Investment Ops staff's review of State Street's payment records G) Limited access to payment authorization systems	<ul style="list-style-type: none"> Segregation of duties among payment authorization, paying, and record-keeping TRS authorization required prior to SSB's payment Supporting documentation required before authorizing payment – K2 payment system Limited access to payment authorization systems
	(9) Use of commission credits for ineligible or inappropriate products or services	A) Eligible products or services specified in the policy B) Supporting documentation required before authorizing payment C) Investment Ops staff's review before authorizing payments D) Payment reconciliation by IMD and State Street staff E) Consultation with Legal staff F) Recurring nature of most commission credit payments	<ul style="list-style-type: none"> Eligible products or services specified in the policy Supporting documentation required before authorizing payment – K2 payment system Payment reconciliation by IMD and State Street staff
	(10) Paying for products or services not received or overpaying for low quality products or services	A) Supporting documentation required before authorizing payment B) Policy to pay after research products/services were received	<ul style="list-style-type: none"> Supporting documentation required before authorizing payment

Business Objective	Inherent Risks (without considering controls)	Management Controls	Management Controls Selected for Testing
		C) Feedback by product or service users	– K2 payment system
	(11) Spending commission credits over the credit accumulated or the budget	A) Annual soft dollar/CSA budget approved by Board B) Investment director's allocation of quarterly research dollars well under budget C) State Street's policy of not paying above the accumulated commission credits D) Investment Ops staff's tracking of commission credit expenditures compared to budget and commission credit amount available E) Monthly revenue statement for CRA from SSB's Firm58 system F) Availability of CSA revenue and expenditure information in the Recap system	<ul style="list-style-type: none"> • Investment Ops staff's tracking of commission credit expenditures compared to budget and commission credit amount available • Monthly revenue statement for CRA from SSB's Firm58 system • Availability of CSA revenue and expenditure information in the Recap system
	(12) Commission Credits Policy not consistent with laws and regulations (i.e., SEC 28e for CSA and DOL TB 86-1 for CRA)	A) Legal staff's involvement in policy development B) Board-adopted Commission Credits Policy (in-line with SEC guidelines and fiduciary duties) C) TRS not required to comply with SEC or Department of Labor (DOL) regulations	No controls selected for testing
	(13) Non-compliance with commission credit policies	A) Commission credit policy B) Investment Ops staff's prior approval/authorization of commission credit expenditures C) Quarterly report of commission credit expenditures for goods and services D) SSB's determination of CSA eligibility of expenditures E) Involvement by Legal staff including Chief Compliance Office	<ul style="list-style-type: none"> • Investment Ops staff's prior approval/authorization of commission credit expenditures
4. To obtain additional resources for IMD support through contractual allowance from vendors	(14) No budget, expense tracking, or information reporting exists on contractual allowance available to IMD	A) Policy requiring adoption of agency operating budget B) Process map C) Form 146 required to process invoices D) Use of BEVO system E) SSB Tracking Spreadsheet (in Excel) F) Bi-weekly SSB expense reports G) IMD monthly reconciliation (SSB Budget Tracker/Quick Books/BEVO) H) Annual SSB reconciliation (between Tracking Spreadsheet and Payable system ("Markview"))	<ul style="list-style-type: none"> • Bi-weekly SSB expenditure report • IMD monthly reconciliation

Business Objective	Inherent Risks (without considering controls)	Management Controls	Management Controls Selected for Testing
	(15) Inappropriate or inconsistent use of contractual allowances per agreement	A) Written agreement on contractual allowance B) Segregation of duties among IMD, Red River and SSB C) TRS (both IMD and Red River) approval required (i.e., three TRS signatures) D) Invoice required prior to processing E) SSB review of TRS signatures and invoices F) SSB policies and procedures for payables	<ul style="list-style-type: none"> • TRS approval required (i.e., three signatures) • Invoice required prior to processing
	(16) Not fully spending the maximum allowance amount available	A) Maximum amount specified in the contract B) SSB bi-weekly expense reports C) IMD monthly reconciliation D) IMD oversight by Finance and Administrative Operations (FAO) E) Investment Accounting's monitoring of securities lending income and expenses	<ul style="list-style-type: none"> • Bi-weekly SSB expense reports • IMD monthly reconciliation • Investment Accounting's monitoring of securities lending income and expenses

RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

Based on the audit test results, we determined that management controls related to commission credits are operating effectively to achieve business objectives while management controls related to contractual allowance from State Street Bank could be improved. No significant issues were identified. The positive test results as well as opportunities to improve management controls are described below.

POSITIVE RESULTS

A. Controls for Commission Credits Budget and Reporting

- TRS Operating Budget included commission credits and State Street contractual allowance as line items.
- IMD tracked commission credits and contractual allowance budgets on a monthly basis.
- General Accounting and Budget tracked and reported expenditures on a semi-annual basis.

B. Controls for Commission Credits Income

- Agreed-upon CSA rates (i.e., split from execution rates) are established with the TRS broker network.
- Equities and futures trades were executed with authorized brokers.
- The accurate CSA credit rates were set up in both the trading system (i.e., Bloomberg) and the commission credit capture system (i.e., ReCap).
- State Street collected and reconciled commission credit income on a monthly basis.
- IMD CSA Monitoring Team regularly met to review CSA income and expenditure status.

C. Controls for Commission Credits Expenditures

- Segregation of duties existed for commission credit payments. In other words, different parties authorized, paid, and reconciled for the payments.
- CSA and CRA payments were properly authorized by TRS prior to being paid by State Street Bank.
- CSA and CRA expenditures were made for eligible products and services.
- Supporting documents, including invoices, existed for the CSA and CRA payments made.
- CSA and CRA expenditures were reconciled on a monthly basis.

D. Controls for Contractual Allowance Account with State Street Bank

- TRS received bi-weekly reports on the use of contractual allowance from State Street Bank.
- IMD performed reconciliation of State Street Bank contractual allowance uses on a monthly basis.

- Payments from State Street Bank contractual allowance account were properly authorized by TRS prior to being paid.
- Supporting documents, including invoices, existed for contractual allowance payments made.

SIGNIFICANT RESULTS¹

No significant issues and recommendations were identified.

OTHER REPORTABLE RESULTS

1. Strengthen Monitoring of Contractual Allowance Balances To Ensure No Available Funds are Unspent

In the past three years, TRS did not fully spend the \$6 million per year that State Street allowed TRS to use as part of the custodial contract. The amounts unspent for 2014, 2015, and 2016 were approximately \$649,819, \$586,554, and \$1,798,413, respectively. Similar to the TRS operating budget, these contractual allowance amounts cannot be carried over to the next year. The main reasons for these lapses were:

- IMD was budgeting and tracking the expenditures on fiscal year basis while State Street Bank on a calendar year basis.
- Certain expenditures, such as contracted work expenses, were not easily predictable about the timing and the exact amount of expenditures, which made it difficult for IMD's precise planning and spending.
- There was not an agreed upon methodology between allocating IMD professional fees between Operating, Commission Credit and SSB Contractual Allowance budgets.

As we stated in the previous Positive Results section, several controls exist to monitor spending of contractual allowance with State Street. However, controls could be enhanced by addressing the above reasons for the lapses.

Recommendation

We recommend that IMD strengthen monitoring of contractual allowance balances in order to minimize the potential for the unused SSB contractual allowances. Monitoring could be strengthened by improved reporting from State Street on both a calendar and fiscal year end. It could also be improved by outlining a stated methodology for which expenses will be charged to which budget each year and when that should be changed.

Management Response

Management agrees with the recommendation. IMD will implement better monitoring of the SSB contractual allowance to minimize potential of unused balances. The target implementation date of enhanced monitoring is December 31, 2017.

¹ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.

2. Update Commission Credits Guidelines and Procedures Required by the Policy

The IMD has not updated guidelines and procedures for commission credits since fiscal year 2012. There is some confusion about which department – IMD or General Accounting – is responsible for developing and/or maintaining these guidelines and procedures. The Commission Credits Policy (Policy) requires that these internal guidelines and procedures be approved by the Chief Financial Officer while the 2013 version of the internal soft dollar procedures state that IMD is responsible for developing policy and procedures. Additionally, the Policy requires that the IMD provide copies of these to the Board as part of TRS’ annual budget process.

Recommendation

We recommend that IMD work with General Accounting to update the Commission Credits Guidelines and Procedures required by the Commission Credits Policy.

Management Response

Management agrees with the recommendation. IMD will work with General Accounting to update the Commission Credit Guidelines and Procedures by November 30, 2017.

3. Apply Consistent Processes for Access to Commission Credit Payment Service

Several terminated IMD employees remained on the list of people who have access to the commission credits payment service provided by an outside company. This commission credits payment servicer is required by State Street Bank commission credit program and is paid for by State Street Bank. TRS can designate users for the payment service system but has no other ability to change the system. Thus, the access to these systems is similar to the access to subscription services – The IMD logs the user lists through a system (i.e., Quick Base) and notifies the subscription service provider of additions/deletions as they occur. Although IMD has processes established for these subscription services user updates, TRS did not apply them to the commission credits payment subscription service.

Recommendation

We recommend that IMD consistently apply the processes similar to its subscription services to review and update access to information technology systems provided by outside companies to ensure that no terminated or inappropriate employees have access to the systems.

Management Response

Management agrees with the recommendation. IMD will apply the same process of adding and deleting users for the commission credit payment system as we do for other subscription service systems. The target date for implementation is September 30, 2017.

* * * * *

We appreciate IMD management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate support provided by State Street Bank staff.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

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

Anandhi Mani, CIA, CPA
Senior Investment Auditor

Rodrigo Dominguez
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

The audit objective was to determine whether internal controls are in place and are working effectively to achieve the business objectives stated below and mitigate significant risks to meeting those objectives.

- To establish and monitor commission credit budget while reporting on the uses of commission credits as compared to the budget
- To generate commission credits through trades in accordance with the budget and IMD needs
- To obtain investment-related goods and services, as authorized in the Commission Credits Policy, using commission credits generated
- To obtain additional resources for IMD support through contractual allowance from vendors

SCOPE

The scope of the audit included the activities and transactions related to TRS commission credits accounts (both CSA and CRA) as well as the contractual allowance received from State Street. The audit scope included the budget, income, and expenditure activities of these three programs for the past three calendar years (i.e., 2014, 2015 and 2016). However, our sample transaction testing focused more on the calendar year 2016.

The audit scope did not include investment research payments paid out of TRS trust fund. In addition, our scope did not include contractual allowances received from other business partners. Our scope on contractual allowances was limited to the contractual allowance arranged with State Street.

METHODOLOGY

Our methodology included obtaining information on management's business objectives and risks, and focused on key processes and monitoring controls that management has established to address significant risks. To meet the audit objectives, we specifically performed the following procedures:

- Obtained relevant background information governing the CSA and CRA programs, including the regulatory guidance such as Section 28(e) of the Securities Exchange Act of 1934 as well as the Department of Labor's Technical Bulletin 86-1
- Reviewed TRS Commission Credits Policy
- Conducted interviews with management and staff members of TRS divisions, including IMD, General Accounting, Investment Accounting
- Conducted interviews with external CSA and CRA administrators
- Analyzed CSA, CRA and Contractual Allowance transaction data for the past three years
- Identified unusual transactions based on data analysis of past three year transaction data
- Verified that the split rates of total commission between execution and commission were consistent in the automated systems
- Reviewed monthly reconciliations of commission credit transactions
- Tested sample CSA, CRA, and Contractual Allowance transactions (both income and expenditures) for year 2016
- Assessed appropriateness of access levels of TRS staff for the information technology system used (i.e., ReCap)

CONCLUSION

Based on our audit results, we determined that management controls related to commission credits are operating effectively to achieve business objectives while management controls related to contractual allowance from State Street Bank could be improved. We did not identify any significant issues. Opportunities to improve controls are related to: (a) monitoring of contractual allowance balances; (b) operating procedures of commission credits; and (c) access to Commission Credit Payment Service.

TAB 6

TAB 6A

**ANNUAL BENEFITS TESTING
JULY 2016 – MARCH 2017
TRS Internal Audit Department**

Business Objectives	To deliver retirement and related benefits authorized by law for members and their beneficiaries		
Business Risks	<p align="center">Fraud / Errors</p> <p>Benefit payments could be incorrect or fraudulent in these areas:</p> <ul style="list-style-type: none"> Benefit payments to recent retirees Benefit payment changes Benefit payments with an expiration date 	<p align="center">Eligibility</p> <ul style="list-style-type: none"> 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 	<p align="center">Manual Voucher Payments</p> <p>Manual voucher payments could be processed incorrectly or without proper authorization</p>
Management Assertions	All benefit payments are valid and are paid in accordance with <i>TRS Laws and Rules</i>	<ul style="list-style-type: none"> 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	<p>Match benefit payments to supporting documents in three areas:</p> <ol style="list-style-type: none"> Recent retiree benefit recalculations Benefit payment changes from prior year Benefit payment expiration date exceptions 	<ol style="list-style-type: none"> Recalculate the member's tier for active and retired members Recalculate the normal-age retirement eligibility for all recent normal-age service retirements 	<ol style="list-style-type: none"> Match randomly selected manually processed voucher payments to supporting documentation
Test Results	One recent retiree's annuity was overstated by \$8.66 per month due to an incorrect highest salary calculation.	No Exceptions	No Exceptions
Management Responses	Management agrees with the test results and is taking corrective actions including correcting the annuity amount and collecting the overpayments already issued.	N/A	N/A

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



August 10, 2017

Barbie Pearson, Chief Benefit Officer

Subject: Report on Independent Annual Benefits Testing

We have completed the project, **Annual Benefits Testing**, for the period July 2016 through March 2017, as included in the *Fiscal Year 2017 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. For this testing period, the tests included gross payment amounts made to recent retirees, benefit payment changes from prior year, manual benefit payments, normal-age retirement criteria, 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, and membership tier verification for both active and retired members. We identified one exception as a result of the test procedures performed. The detailed procedures and results of our testing are explained in **Appendix A**.

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

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

Internal Control Structure

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

Had we performed additional procedures, or had we made an examination of the system of internal control, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified above and does not extend to the internal control structure.

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

* * * * *

We express our appreciation to management and key personnel of 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

Dorvin Handrick, CISA, CDP
IT Audit Manager

Jan Engler, CIA, CISA, CFE
Director of Benefit Audits

APPENDIX A

AGREED-UPON PROCEDURES AND RESULTS

1. Test Purpose: Identify gross annuity payments to recent retirees (June 2016 or later retirements) from July 2016 to March 2017 that are not calculated in accordance with *TRS Laws and Rules*.

Test Description: Select all gross annuity payments from the *July 2016 to March 2017 Benefit Payments Data File* that are related to recent member retirements since June 2016 and randomly select three service retirement sample items and two disability retirement sample items from each month for a total of 45 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.

Test Result: We identified one exception resulting in an overpayment of \$8.66 per month in the member's monthly annuity payment.

Management Response: Management agrees with the test results. The exception was due to a mismatch between the final monthly salary listed on the *Notice of Final Deposit Before Retirement* form and the actual final salary that was reported by the reporting entity. Benefit Processing has a report in place to identify these types of mismatches; however, due to an administrative error, staff did not identify this particular mismatch. The retiree's gross annuity amount is being changed to the correct amount, and the overpayment will be collected from the retiree.

2. Test Purpose: 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.

Test Description: Identify annuitants with a total monthly gross payment amount differences for the period of July 2016 to March 2017 on the *Benefit Payments Data File* when compared to the same month from the prior year period of July 2015 to March 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.

Test Result: No exceptions identified.

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

Test Description: Identify expiration date exceptions for annuity payments from July 2016 to March 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 *July 2016 to March 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 *July 2016 to March 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. Test Purpose: Identify the membership tiers that are not properly calculated in accordance with *TRS Laws and Rules* for active and retired members.

Test Description: 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 January 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 for a total of 60 sample items. 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 *July 2016 to March 2017 Benefit Payments Data File* that have retired since June 2016 and randomly select three service retirement sample items and two disability retirement sample items from each month for a total of 45 sample items. Recalculate the membership tier for each sample item and agree to the supporting documentation. Identify any exceptions.

Test Results:

a. Active Members

No exceptions identified.

b. Retired Members

No exceptions identified.

5. Test Purpose: Identify recent retirees who retired with normal-age service retirement benefits from July 2016 to March 2017 who did not meet the normal-age retirement eligibility requirements based on their membership tier.

Test Description: Select all payments from the *July 2016 to March 2017 Benefit Payments Data File* that are related to normal-age service retirements since June 2016. 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

Test Result: No exceptions identified.

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

Test Description: Select a random sample of 30 manual voucher payments from the *July 2016 to March 2017 Benefit Payments Data File*. Trace and agree these manual voucher payments to the supporting documents maintained in the *TRS Imaging System*.

Test Results: No exceptions identified. The 30 manual voucher payments randomly selected to test consisted of six premium refunds, three annuity pop-ups, seven qualified domestic relations

order (QDRO) related payments, one payment re-issued due to returned payments, six retiree requests to re-issue payment, four payments re-issued due to retiree/beneficiary death, and three other related manual payments.

TAB 6B



**EMPLOYER AUDITS
SEPTEMBER 22, 2017**



Types of Employer-Focused Audits

I. Employer Audits

- Dallas ISD (approximately 20,000 employees)
- Pleasanton ISD (approximately 530 employees)

II. Surcharges Audit that included 30 ISDs

- Selection criterion - No surcharges paid in FY 2016

III. Higher Education Audit - Pilot Project



Overall Audit Results

Identified Areas Needing Improvement

Employer Recordkeeping:

- ✓ **Identifying TRS retirees that return to work as:**
 - Substitutes
 - Independent contractors
 - Employees working for Third-Party Entities
- ✓ **Tracking and reporting actual hours worked**
 - Maintaining supporting documentation



Overall Audit Results

Identified Areas Needing Improvement

Employer Understanding of TRS Reporting Requirements:

- Employment After Retirement (EAR) Area 1 and 2
- Pension & TRS-Care Surcharges
- Statutory Minimum
- Non-OASDI (Old Age, Survivor and Disability Insurance)



Higher Education Audit Pilot Project

Aided by these Collaborative Volunteers:

- University of Texas at San Antonio
- University of Texas Health Science Center at San Antonio



Outcome: Employer Audit Manual for Institutions of Higher Education

- Estimated to be available on the TRS Employer Audit Web page, January 2018
- Actively encourage University Internal Audit functions to use as a **self-audit tool**
- TRS Internal Audit will solicit feedback to **continuously improve** the audit manual

TASBO Presentations 2016 - 2017

Texas Association of School Business Officials

has approximately 6,500 members and 28 regional affiliates, representing more than 850 public school districts in Texas.

TRS invited by TASBO to present in 2016-2017:

- Internal Audit Academy, Austin
- Accounting & Finance Symposium, Sugarland
- Personnel & Payroll Academy, Austin
- Accounting & Finance Symposium, Allen
- TASBO FEST, Austin
- Relax, Refresh, Recharge Retreat, Fort Worth
- TASBO Summer Conference, Galveston



AUDIT OF DALLAS INDEPENDENT SCHOOL DISTRICT (DALLAS ISD)

AUGUST 31, 2017

TRS Internal Audit Department

Audit Objectives

To determine the following:

- Completeness, accuracy, and timeliness of Statutory Minimum, Non-OASDI¹, and Employment After Retirement (EAR) reports submitted to the Teacher Retirement System (TRS) by the employer² for the test months
- Accuracy of census data information (date of birth, gender, amount of salary, year of entry, years of service)

Risks

- Incorrect contributions and surcharges submitted to TRS
- Inaccurate pension liability due to inaccurate census data

Conclusions and Results

Initial Audit Scope Results:

- Statutory Minimum, Non-OASDI, and EAR reports were incomplete and inaccurate (see detail of adjustments to reports, page 5).
- Sampled census data information reported to TRS was accurate.
- Our initial assessment of the EAR surcharges and contributions for Statutory Minimum, and Non-OASDI for September 2016 found a total dollar error rate of 4.01%. For EAR, this error rate is based on self-reported information provided by Dallas ISD. During this assessment, we also learned that Dallas ISD policies do not require employees classified as professionals to track actual hours worked. Based on this information, we determined that current processes may not consistently support complete and accurate reporting; we expanded our scope to include October 2016 through March 2017 so that we could obtain adequate evidence to conclude on our audit objectives.

Expanded Scope Results:

- During our expanded scope testing, we confirmed that payroll, timekeeping, and personnel records did not consistently exist to support that:
 - TRS retiree actual hours worked are recorded.
 - TRS retirees working in substitute positions are performing work in a position that is not vacant, and that their reported position classification is correct.
 - All eligible earnings are included in pension surcharge calculations.
 - Independent contractors are reviewed to determine whether they are TRS retirees and whether they are employees for TRS reporting purposes.
 - Personnel provided by third-party entities are reviewed to determine whether they are TRS retirees and whether they are employees for TRS reporting purposes.
- Where documentation was available, our testing of sampled retiree monthly records found \$12,258³ in additional EAR surcharges due to TRS. As a result of missing documentation noted above, we estimated total surcharges may be understated by \$496,047⁴, or 43.81% of the \$1,132,377 total surcharges reported by Dallas ISD for the six-month period.

Positive Findings:

Dallas ISD officials were prompt in responding to audit requests and questions.

¹ OASDI - defined as old age, survivors, and disability insurance tax, which funds the Social Security Program.

² Employer - defined in Texas Government Code, Title 8, Subtitle C, Chapter 821.001.

³ All dollar amounts and numbers in this report are rounded to the nearest whole number.

⁴ Questioned costs - equal an estimate of the potential total cost that could be due resulting from errors in the population. Calculated by applying the sampled error rate to the population from which the sample was selected. See calculation on page 6.

Recommended Actions

We recommend that Dallas ISD management:

- Work with TRS Benefit Reporting coaches to correct reports by a time period agreed to with TRS Benefits Reporting Team.
- Ensure personnel receive training as needed and are knowledgeable of applicable *TRS Laws and Rules*.
- Track hours worked for all TRS retirees working for Dallas ISD and ensure that the retirees are correctly reported, and that surcharges are correctly calculated and paid.
- Ensure that time worked by TRS retirees in a substitute position is monitored, including documenting names of employees for which the substitutes worked. For substitutes working more than 20 days in the same vacant position during a school year, ensure that employees are correctly reported, and that related surcharges are correctly paid.
- Ensure that pension surcharges are calculated based on total applicable eligible earnings.
- Implement a process to identify independent contractors who are TRS retirees. For TRS retirees, track hours worked and ensure that the retirees are correctly reported, and that related surcharges are correctly paid.
- Implement a process to identify personnel provided by third-party entities who are TRS retirees. For TRS retirees, track hours worked and ensure that the retirees are correctly reported, and that related surcharges are correctly paid.

Reporting Entity Response

- Dallas ISD will work with the Reporting coaches to make necessary corrections once we agree on the timing of them.
- Dallas ISD has already notified retired rehires employees that effective September 1, 2017, they are required to use the biometric clock in and out to capture the actual hours worked.
- Dallas ISD will make sure that the vacancies are clearly identified when retired substitutes are filling in, and will capture any retired substitute working more than 20 days in the same vacant position.
- Dallas ISD will ensure that Independent Contractors, if they are TRS retirees, are identified in the contract and their hours are tracked for determining any surcharge liability.
- Dallas ISD will implement process with Third-party entities to identify any TRS retiree. We will request the information from the vendor on the employee SSN, the hours worked and the amounts paid to determine surcharges liability.

Background

- The *Annual Audit Plan* approved by the TRS Board of Trustees includes audits of employers to confirm member eligibility and accuracy of contributions and fees.
- Criteria are taken from applicable TRS laws and rules. TRS laws and rules state requirements for Statutory Minimum and Non-OASDI contributions for TRS participants; and state reporting and surcharge requirements for return-to-work TRS retirees.
- The Governmental Accounting Standards Board (GASB) requires that employers' census data be audited. Additionally, the AICPA issued the *Audit and Accounting Guide for State and Local Governments* and we have included census data testing (date of birth, gender, salary, year of entry, and years of service) in the scope of this audit.
- The State Auditor's Office is performing audits of employers' census data as part of the audit of the *TRS Comprehensive Annual Financial Report*.
- Employers chosen for audit were selected based on criteria including frequency of adjustments and corrections to reports, complaints about the employer, warrant holds, TRS management requests, etc. The population of employers included all Texas public schools.
- We conducted this 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.

Initial Scope – September 2016

We tested census data and the Statutory Minimum, Non-OASDI, and Employment After Retirement reports submitted to TRS.

- To test completeness, accuracy, and timeliness of reports submitted to TRS:
 - Tested 30 of the population of members reported to TRS, as this gives us a 90% confidence of reflecting the entire population and results can be projected to the test month.
 - Tested all TRAQS Reports submitted to TRS for timely submission and confirmed totals reported by tracing to the employer's detailed supporting documentation.
 - Obtained employer certification of retiree hours worked in a non-substitute position for the test month, and where applicable, performed additional testing of time sheet documentation of hours worked.
- To test accuracy of census data information:
 - Assessed supporting documentation for each sample item to confirm date of birth, hire date and years of service, eligible compensation, gender, and dates of termination or retirement.

We did not test:

- Whether salary amounts reported to TRS in the Regular Payroll report were complete, accurate, and authorized.
- New Member or Federal Fund/Private Grant reports.
- Whether TRS retirees that returned to work were subject to forfeiture of their monthly annuity payment(s).
- Internal controls of the employer.

Expanded Scope – October 2016 through March 2017

To test accuracy of EAR reports and surcharges submitted to TRS:

- **TRS Retiree Substitutes and Employees** - Requested substitute and employee timekeeping records and surcharge calculations for retirees working at the reporting entity.
 - Substitute Employees: Traced to personnel and timekeeping records to determine whether retirees substituted in the same vacant position for more than 20 days since September 1, 2016, which would cause the retirees to be classified as full or one-half time.
 - Employees (Non-Substitute): We tested a sample of individual monthly earnings for full-time or one-half time or less TRS retirees. We traced selected retiree monthly earnings to timekeeping records to determine whether retirees worked more than one-half time during the test months.
- **Pension and TRS-Care Surcharges** – For certain TRS retirees identified as working more than one-half time during test months, calculated Pension and TRS-Care surcharges due.
- **TRS Retiree Independent Contractors and Third-Party Entities** - Obtained list of independent contractors and list of personnel provided by third-party entities that performed work for or provided services to Dallas ISD. Traced lists to TRS records to identify TRS retirees. Obtained support for work performed by TRS retirees, and assessed employment status for TRS reporting purposes. For those TRS retirees that were working for or providing services to Dallas ISD as independent contractors, or those TRS retirees that were working as personnel provided by third-party entities that should have been identified as employees for TRS reporting purposes; we calculated surcharges due and surcharges that may be due.

Scope,
Methodology,
and Tests,
(Continued)

- **Questioned Costs** - Because personnel and timekeeping records were not consistently available, we estimated surcharges potentially due based on documentation provided. Test result error percentages were applied to the population from which the TRS retirees were selected to calculate total questioned costs.

All test results are based on documentation provided by Dallas ISD by the week ending August 18, 2017. During that week, Dallas ISD provided an updated September 2016 Employment After Retirement (EAR) Area 1 retiree list that included an additional 33 TRS retirees not previously reported to TRS. The audit team did not review these additional 33 TRS retirees for possible surcharges due but did include these retirees in the initial scope results as improperly excluded from the Area 1 report.

The audit conclusions contained in this report are limited to and based solely on the results of the sample items tested for the test months. Users of this report should not use the information contained in this audit report for any purpose beyond the stated audit objectives and scope.

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We appreciate Dallas ISD management and staff for their cooperation, courtesy, and professionalism extended to us during this audit.

**DALLAS ISD INITIAL AUDIT SCOPE
DETAIL OF ADJUSTMENTS TO REPORTS FOR SEPTEMBER 2016**

I. TEST OF EMPLOYER AND EMPLOYEE CONTRIBUTIONS - SAMPLE SIZE = 30 EMPLOYEES

STATUTORY MINIMUM REPORT								
# OF ERRORS	DESCRIPTION	CONTRIBUTIONS REPORTED	CONTRIBUTIONS FOR 30 TESTED	UNDER STATED	OVER STATED	CONTRIBUTIONS DUE FOR EMPLOYEES TESTED	NUMBER % ERROR	DOLLAR % ERROR
2	Overpaid contributions				\$127			
2		\$1,400,000	\$1,736	\$0	\$127	\$1,609	6.67%	7.33%

NON-OASDI REPORT								
# OF ERRORS	DESCRIPTION	CONTRIBUTIONS REPORTED	CONTRIBUTIONS FOR 30 TESTED	UNDER STATED	OVER STATED	CONTRIBUTIONS DUE FOR EMPLOYEES TESTED	NUMBER % ERROR	DOLLAR % ERROR
4	Underpaid contributions			\$109				
4		\$262,590	\$1,392	\$109	\$0	\$1,501	13.33%	7.86%

II. TEST OF EMPLOYMENT AFTER RETIREMENT - ALL RETIREES WORKED AND/OR PAID IN MONTH - SAMPLE SIZE = 915

EMPLOYMENT AFTER RETIREMENT AREA 1 AND 2 REPORT						
# OF ERRORS	DESCRIPTION	TOTAL REPORTED	UNDER STATED	OVER STATED	TOTAL SHOULD BE REPORTED	NUMBER % ERROR
240	AREA 1 REPORT	85	238	2	321	282.35%
142	AREA 2 REPORT	600	7	135	472	23.67%

III. TEST OF SURCHARGES - ALL RETIREES WORKED AND/OR PAID IN MONTH THAT RETIRED AFTER 9/1/2005 - SAMPLE SIZE = 516

PENSION SURCHARGE FOR RETIREES REPORT								
# OF ERRORS	DESCRIPTION	TOTAL SURCHARGES REPORTED	SURCHARGES TESTED	UNDER STATED	OVER STATED	SURCHARGES DUE FOR RETIREES TESTED	NUMBER % ERROR	DOLLAR % ERROR
12	PENSION SURCHARGES	\$118,175	\$118,175	\$3,072	\$1,576	\$119,670	2.33%	3.93%

TRS-CARE SURCHARGE FOR RETIREES REPORT								
# OF ERRORS	DESCRIPTION	TOTAL SURCHARGES REPORTED	SURCHARGES TESTED	UNDER STATED	OVER STATED	SURCHARGES DUE FOR RETIREES TESTED	NUMBER % ERROR	DOLLAR % ERROR
5	TRS-CARE SURCHARGES	\$67,410	\$67,410	\$2,675	\$0	\$70,085	0.97%	3.97%

TOTALS	DOLLAR ADJUSTMENTS	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	CORRECT TOTAL DOLLARS TESTED	DOLLAR % ERROR
		\$188,713	\$5,856	\$1,703	\$192,865	4.01%
TOTALS	REPORT ADJUSTMENTS	TOTAL NUMBER TESTED	TOTAL NUMBER ERRORS	DOLLAR % ERROR		
		2,922	405	13.86%		

**DALLAS ISD EXPANDED AUDIT SCOPE SUMMARY RESULTS
OCTOBER 2016 TO MARCH 2017**

SUMMARY OF FIVE TESTS PRESENTED BELOW								
		Test Results					Questioned Costs ⁷	
		Potential Errors ⁵		Known Errors ⁶			(Sum of Results Below)	
	Sampled	Count		Count		Amount	Count	Amount
Pension Surcharges	239	29		6		\$2,093	189	\$248,877
TRS-Care Surcharges	53	20		6		\$10,165	137	\$247,170
Total						\$12,258		\$496,047

I. TEST FULL/HALF TIME EMPLOYEES EARNING ≥\$2,000 PER MONTH; POPULATION: 133 RETIREES INCLUDING 100 TRS-CARE PARTICIPANTS

TRS RETIREE FULL AND ONE-HALF TIME EMPLOYEES									
		Test Results					Questioned Costs		
		Potential Errors		Known Errors			(Total Error %) x Population		
	Sampled	Count	Percent (a)	Count	Percent (b)	Amount	Total Percent (a+b)	Count	Amount
Pension Surcharges	20	12	60.0%	4	20.0%	\$1,807	80.0%	106	\$185,228
TRS-Care Surcharges	16	11	68.8%	3	18.8%	\$1,605	87.5%	88	\$181,900
Total						\$3,412			\$367,128

II. TEST SUBSTITUTE EMPLOYEES EARNING ≥\$2,000 PER MONTH; POPULATION: 114 RETIREES INCLUDING 92 TRS-CARE PARTICIPANTS

TRS RETIREE SUBSTITUTE EMPLOYEES ⁸									
		Test Results					Questioned Costs		
		Potential Errors		Known Errors			(Total Error %) x Population		
	Sampled	Count	Percent (a)	Count	Percent (b)	Amount	Total Percent (a+b)	Count	Amount
Pension Surcharges	23	12	52.2%	0	0.0%	\$0	52.2%	60	\$58,454
TRS-Care Surcharges	19	9	47.4%	0	0.0%	\$0	47.4%	44	\$48,150
Total						\$0			\$106,604

III. TESTING OF TRS RETIREE PENSION SURCHARGE CALCULATIONS FOR OCTOBER 2016; POPULATION: 171 RETIREES

TRS RETIREE PENSION SURCHARGE CALCULATIONS									
		Test Results					Questioned Costs		
		Potential Errors		Known Errors			(Total Error %) x Population		
	Sampled	Count	Percent (a)	Count	Percent (b)	Amount	Total Percent (a+b)	Count	Amount
Pension Surcharges	171	0	0.0%	2	1.2%	\$286	1.2%	12	\$1,715
Total						\$286			\$1,715

IV. TEST INDEPENDENT CONTRACTORS; POPULATION: 19 TRS RETIREES INCLUDING 15 TRS-CARE PARTICIPANTS

TRS RETIREE INDEPENDENT CONTRACTORS ⁹									
		Test Results					Questioned Costs		
		Potential Errors		Known Errors			(Total Error %) x Population		
	Sampled	Count	Percent (a)	Count	Percent (b)	Amount	Total Percent (a+b)	Count	Amount
Pension Surcharges	19	0	0.0%	0	0.0%	\$0	0.0%	0	\$0
TRS-Care Surcharges	15	0	0.0%	0	0.0%	\$0	0.0%	0	\$0
Total						\$0			\$0

V. TEST PERSONNEL PROVIDED BY THIRD-PARTY ENTITIES; POPULATION ESTIMATE: 12 TRS RETIREES INCLUDING 6 TRS-CARE PARTICIPANTS

TRS RETIREE THIRD-PARTY ENTITY PERSONNEL ¹⁰									
		Test Results					Questioned Costs		
		Potential Errors		Known Errors			(Total Error %) x Population		
	Sampled	Count	Percent (a)	Count	Percent (b)	Amount	Total Percent (a+b)	Count	Amount
Pension Surcharges	6	5	83.3%	0	0.0%	\$0	83.3%	10	\$3,480
TRS-Care Surcharges	3	0	0.0%	3	100.0%	\$8,560	100.0%	6	\$17,120
Total						\$8,560			\$20,600

⁵Potential Error - Error resulting from documentation being incomplete.

⁶Known Error - Error results from complete documentation for sampled retirees.

⁷Questioned Costs - Equal an estimate of total errors and is calculated by multiplying the sum of the potential and known error percentages from sampled retirees by the estimated population of retirees.

⁸For tested TRS retirees that worked as a substitute for more than 20 days in a position for which no individual was identified, calculated questioned costs are based on all tested months that the TRS retiree earned more than \$2,000.

⁹Two independent contractors tested were TRS retirees and were determined to be employees for TRS reporting purposes. They were not reported to TRS.

¹⁰Six personnel provided by third-party entities were TRS retirees and were determined to be performing work that is otherwise performed by employees of the school district. They were not reported to TRS.

AUDIT OF PLEASANTON INDEPENDENT SCHOOL DISTRICT

June 22, 2017

TRS Internal Audit Department

Audit Objectives	<p>To determine the following:</p> <ul style="list-style-type: none">• Completeness, accuracy, and timeliness of Statutory Minimum, Non-OASDI, and Employment After Retirement Reports submitted to the Teacher Retirement System (TRS) by employer¹ for the test month• Accuracy of census data information (name, date of birth, gender, amount of salary, year of entry, years of service)
Risks	<ul style="list-style-type: none">• Incorrect calculations of contributions and surcharges• Inaccurate actuarial data because census data provided to TRS is not correct
Conclusions and Results	<p>Test Results:</p> <ul style="list-style-type: none">• Statutory Minimum, Non-OASDI, and Employment After Retirement reports were incomplete and inaccurate; however, all reports were submitted timely (see detail of adjustments to reports, page 3). The combined total dollar error rate for these reports was 4.89%• Census data information reported to TRS was accurate <p>Positive Findings:</p> <ul style="list-style-type: none">• Pleasanton ISD officials were prompt in responding to questions and providing supporting documentation; officials also maintain well-organized timekeeping records for retirees
Recommended Actions	<p>We recommend that the Reporting Official:</p> <ul style="list-style-type: none">• Work with TRS Benefit Reporting coaches to correct reports by July 2017• Ensure personnel receive training as needed and are knowledgeable of applicable <i>TRS Laws and Rules</i>
Reporting Entity Responses	<p>Employer's management agrees with the recommendation.</p>

¹ An "employer" is defined in Texas Government Code, Title 8, Subtitle C, Chapter 821.001.

Background

- The *Annual Audit Plan* approved by the Teacher Retirement System of Texas (TRS) Board of Trustees includes audits of employers to confirm member eligibility and accuracy of contributions and fees
- The Governmental Accounting Standards Board (GASB) requires that employers' census data be audited. Additionally, the AICPA issued the *Audit and Accounting Guide for State and Local Governments* and we have included census data testing (date of birth, gender, salary, year of entry, and years of service) in the scope of this audit
- The State Auditor's Office is performing audits of employers' census data as part of the audit of the *TRS Comprehensive Annual Financial Report*
- Employers chosen for audit were selected based on criteria including frequency of adjustments and corrections to reports, complaints about the employer, warrant holds, TRS management requests, etc. The population of employers included all Texas public schools.
- We conducted this 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.
- Testing criteria were the *TRS Laws and Rules*.

Scope, Methodology, and Tests

Test month – September 2016

With the exception of the superintendent's salary, we did not test whether salary amounts reported to TRS in the Regular Payroll report were complete, accurate, and authorized. We did not test New Member or Federal Fund/Private Grant reports. We did not test the eligibility to receive an annuity of those retirees who returned to work. We did not test internal controls of the employer. We tested Census Data and the Statutory Minimum, Non-OASDI, and Employment After Retirement reports submitted to TRS.

- To test completeness, accuracy, and timeliness of reports submitted to TRS:
 - Tested 30 of the population of members reported to TRS, as this gives us a 90% confidence of reflecting the entire population and results can be projected to the test month
 - Tested all TRAQS Reports submitted to TRS for timely submission and confirmed totals reported by tracing to the employer's detailed supporting documentation
 - Obtained employer certification of retiree hours worked in a non-substitute position for the test month, and where applicable, performed additional testing of timesheet documentation of hours worked
- To test accuracy of census data information:
 - Assessed supporting documentation for each sample item to confirm date of birth, hire date/years of service, eligible compensation, gender, and dates of termination/retirement

The audit conclusions contained in this report are limited to and based solely on the results of the sample items tested for the test month. Users of this report should not use the information contained in this audit report for any purpose beyond the stated audit objectives and scope.

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We appreciate Pleasanton ISD management and staff for their cooperation, courtesy, and professionalism extended to us during this audit.

PLEASANTON ISD DETAIL OF ADJUSTMENTS TO REPORTS

I. TESTING OF EMPLOYER AND EMPLOYEE CONTRIBUTIONS - SAMPLE SIZE = 30

STATUTORY MINIMUM REPORT								
# OF ERRORS		GRAND TOTAL DOLLARS REPORTED	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	REVISED TOTAL DOLLARS TESTED	NUMBER % ERROR	DOLLAR % ERROR
4	Incorrectly calculated and underpaid contributions			\$ 90.48				
1	Incorrectly calculated and overpaid contributions				\$ 6.18			
5		\$ 12,671.89	\$ 1,382.04	\$ 90.48	\$ 6.18	\$ 1,466.34	16.67%	6.99%

NON-OASDI REPORT								
# OF ERRORS		GRAND TOTAL DOLLARS REPORTED	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	REVISED TOTAL DOLLARS TESTED	NUMBER % ERROR	DOLLAR % ERROR
1	Incorrectly calculated and underpaid contributions			\$ 1.37				
7	Incorrectly calculated and overpaid contributions				\$ 35.96			
8		\$ 23,132.60	\$ 1,358.71	\$ 1.37	\$ 35.96	\$ 1,324.12	26.67%	2.75%

II. TESTING OF EMPLOYMENT AFTER RETIREMENT - TESTED ALL RETIREES WORKED AND/OR PAID IN THE TEST MONTH - SAMPLE SIZE = 10

EMPLOYMENT AFTER RETIREMENT AREA 1 AND 2 REPORT (DOLLARS NOT APPLICABLE)							
# OF ERRORS		GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL SHOULD BE REPORTED	NUMBER % ERROR	
AREA 1 REPORT							
# OF ERRORS							
	No exceptions						
0		5	-	-	5	0.00%	
AREA 2 REPORT							
# OF ERRORS							
	No exceptions						
0		5	-	-	5	0.00%	

PENSION SURCHARGE FOR RETIREES REPORT								
# OF ERRORS		GRAND TOTAL DOLLARS REPORTED	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	REVISED TOTAL DOLLARS TESTED	NUMBER % ERROR	DOLLAR % ERROR
	No exceptions							
0	TOTAL			\$ -	\$ -	\$ -	0.00%	0.00%

TRS-CARE SURCHARGE FOR RETIREES REPORT								
# OF ERRORS		GRAND TOTAL DOLLARS REPORTED	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	REVISED TOTAL DOLLARS TESTED	NUMBER % ERROR	DOLLAR % ERROR
	No exceptions							
0	TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%	0.00%

TOTALS	GRAND TOTAL DOLLAR ADJUSTMENTS	TOTAL DOLLARS TESTED	UNDER STATED	OVER STATED	REVISED TOTAL DOLLARS TESTED	DOLLAR % ERROR
		\$ 2,740.75	\$ 91.85	\$ 42.14	\$ 2,790.46	4.89%
TOTALS	GRAND TOTAL NUMBER ERRORS	TOTAL NUMBER TESTED	TOTAL NUMBER ERRORS		NUMBER % ERROR	
		86	13		15.12%	

TAB 6C

**EMPLOYER AUDIT OF PENSION AND TRS-CARE SURCHARGES
(30 INDEPENDENT SCHOOL DISTRICTS)
AUGUST 31, 2017**

TRS Internal Audit Department

<p align="center">Audit Objective</p>	<p>To determine the completeness and accuracy of the following reports submitted to the Teacher Retirement System (TRS) by employers¹ for September 2016:</p> <ul style="list-style-type: none"> • Reporting Entity Pension Surcharge for Reported Retirees Report • Reporting Entity TRS-Care Surcharge for Reported Retirees Report • Employment of Retired Members Report (EAR)
<p align="center">Risks</p>	<ul style="list-style-type: none"> • Incorrectly reporting/not reporting retirees who have returned to work • Incorrect calculations and payment of surcharges owed
<p align="center">Conclusions and Results</p>	<p>Pension and TRS-Care Surcharge Reporting</p> <p>For the test month September 2016, not all employer reports were complete and accurate. Combined errors for the 30 employers tested are as follows:</p> <ul style="list-style-type: none"> • Pension surcharge – of the \$1,382.00 reported to TRS from all 30 employers, nine employers had errors and an additional \$8,626.70 is owed to TRS • TRS-Care surcharge – of the \$1,070.00 reported to TRS from all 30 employers, eight employers had errors and an additional \$8,560.00 is owed to TRS <p>Three of the 30 employers communicated that they do not track actual time worked for all retirees. Therefore, we could not conclude whether surcharges were due. For these employers, we calculated <i>questioned costs</i>² for pension and TRS-Care surcharges for six retirees for the test month. The additional questioned costs equal:</p> <ul style="list-style-type: none"> • \$3,518.39 for pension surcharges • \$2,675.00 for TRS-Care surcharges <p>The combination of known surcharge error amounts plus questioned cost amounts equal:</p> <ul style="list-style-type: none"> • \$12,145.09 for pension surcharges • \$11,235.00 for TRS-Care surcharges <p>Area 1 and 2 Reporting</p> <ul style="list-style-type: none"> • 26 employers had Area 1 reporting errors • 25 employers had Area 2 reporting errors <p>We could not conclude on two contract workers as to whether or not they should be reported as employees in the EAR reports. Documentation was provided to TRS Legal Services for final determination.</p> <p>See details of adjustments to reports on page three and a list of the 30 employers on page four</p>
<p align="center">Recommended Actions</p>	<p>We recommend that the Reporting Officials:</p> <ul style="list-style-type: none"> • Work with TRS Benefit Reporting coaches to correct reports by the September 2017 report • Ensure personnel receive training as needed and are knowledgeable of <i>TRS Laws and Rules</i> • Maintain sufficient and accurate records of actual time worked for all retirees
<p align="center">Reporting Entity Responses</p>	<p>All employers, as applicable, agreed with the recommendations.</p>

¹ Employer - defined in Texas Government Code, Title 8, Subtitle C, Chapter 821.001.

² Questioned costs - equal an estimate of the potential total cost that could be due resulting from errors in the population. Calculated by applying the sampled error rate to the population from which the sample was selected.

Background

- The *Annual Audit Plan* approved by the Teacher Retirement System of Texas (TRS) Board of Trustees includes audits of employers to confirm member accuracy of reports submitted to TRS for Employment After Retirement (EAR).
- Employers chosen for audit were selected based on criteria including no surcharges submitted to TRS during Fiscal Year 2016, complaints about the employer, negative news articles/reports from oversight agencies, TRS management requests, etc., and the population used to select employers for audit included all Texas public schools.
- We conducted this 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.

Scope, Methodology, and Tests

Test month – September 2016

We selected 30 employers from the population of public schools that did not pay pension and TRS-Care surcharges for Fiscal Year 2016.

Testing criteria were the *TRS Laws and Rules*. We did not test the eligibility to receive an annuity of those retirees who returned to work. We did not test internal controls of the employer.

To test completeness and accuracy of reports submitted to TRS:

- Tested all EAR TRAQS Reports submitted to TRS to employer's detailed supporting documentation
- Obtained employer certification of retiree hours worked in a non-substitute position for the test month, and where applicable, performed additional testing of time sheet documentation of hours worked
- Reviewed contracts/invoices/work agreements of five vendors/independent contract workers paid in the test month
- Tested the type of work performed by staff if employed by a third-party entity

Questioned Costs – Because personnel and timekeeping records were not consistently available, we estimated surcharges potentially due based on documentation provided for three reporting entities tested. Test result error percentages were applied to the population from which the TRS retirees were selected to calculate total questioned costs.

The audit conclusions contained in this report are limited to and based solely on the results of the sample items tested for the test month. Users of this report should not use the information contained in this audit report for any purpose beyond the stated audit objectives and scope.

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We appreciate the cooperation, courtesy, and professionalism extended to us during this audit by each employer.

EMPLOYER AUDIT OF PENSION AND TRS-CARE SURCHARGES DETAILS OF ADJUSTMENTS TO REPORTS

EMPLOYMENT AFTER RETIREMENT AREA 1 AND 2 REPORT (Dollars not applicable)		TOTAL # RETIREEES REPORTED	UNDER STATED	OVER STATED	TOTAL # RETIREES THAT SHOULD HAVE BEEN REPORTED	# OF ERRORS	NUMBER % ERRORS
1	Errors in Area 1 Reports	384	73	17	440	90	23.44%
2	Errors in Area 2 Reports	428	80	35	473	115	26.87%
TOTAL		812	153	52	913	205	25.25%

PENSION SURCHARGE FOR RETIREES REPORT	GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL	TOTAL # RETIREEES TESTED	# OF ERRORS	NUMBER % ERRORS	DOLLAR % ERRORS
TOTAL	\$ 1,382.00	\$ 8,626.70	\$ -	\$ 10,008.70	660	21	3.18%	624.22%
TRS-CARE SURCHARGE FOR RETIREES REPORT	GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL	TOTAL # RETIREEES TESTED	# OF ERRORS	NUMBER % ERRORS	DOLLAR % ERRORS
TOTAL	\$ 1,070.00	\$ 8,560.00	\$ -	\$ 9,630.00	660	16	2.42%	800.00%
GRAND TOTAL DOLLAR ADJUSTMENTS FOR KNOWN ERRORS	GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL	TOTAL # RETIREEES TESTED	# OF ERRORS	NUMBER % ERRORS	DOLLAR % ERRORS
TOTAL	\$2,452.00	\$17,186.70	\$ -	\$19,638.70	1,320	37	2.80%	700.93%

	GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL	TOTAL # RETIREEES TESTED	# OF ERRORS	NUMBER % ERRORS	DOLLAR % ERRORS
QUESTIONED COSTS PENSION SURCHARGE	\$0.00	\$3,518.39	\$ -	\$3,518.39	6	6	100.00%	100.00%
QUESTIONED COSTS TRS-CARE SURCHARGE	\$0.00	\$2,675.00	\$ -	\$2,675.00	6	5	83.33%	100.00%

DOLLAR ADJUSTMENTS KNOWN ERRORS AND QUESTIONED COSTS	GRAND TOTAL REPORTED	UNDER STATED	OVER STATED	REVISED TOTAL	TOTAL # RETIREEES TESTED	# OF ERRORS	NUMBER % ERRORS	DOLLAR % ERRORS
PENSION SURCHARGE	\$ 1,382.00	\$ 12,145.09	\$ -	\$13,527.09	964	27	2.80%	878.81%
TRS-CARE SURCHARGE	\$ 1,070.00	\$ 11,235.00	\$ -	\$12,305.00	964	21	2.18%	1050.00%
GRAND TOTALS	\$ 2,452.00	\$ 23,380.09	\$ -	\$25,832.09	1,928	48	2.49%	953.51%

**Employer Audit of Pension and TRS-Care Surcharges
(30 Employers)**

Independent School District (ISD) Name and City

- Alamo Heights ISD, San Antonio
- Brenham ISD, Brenham
- Burkburnett ISD, Burkburnett
- Burleson ISD, Burleson
- Canutillo ISD, Canutillo
- Canyon ISD, Canyon
- Carroll ISD, Southlake
- Castleberry ISD, Fort Worth
- Clint ISD, El Paso
- Crosby ISD, Crosby
- DeSoto ISD, DeSoto
- Deer Park ISD, Deer Park
- Donna ISD, Donna
- Dripping Springs ISD, Dripping Springs
- Dumas ISD, Dumas
- Edgewood ISD, Edgewood
- Gregory-Portland ISD, Portland
- La Feria ISD, La Feria
- Lake Dallas ISD, Lake Dallas
- Lampasas ISD, Lampasas
- Los Fresnos Consolidated ISD, Los Fresnos
- Lufkin ISD, Lufkin
- Marble Falls ISD, Marble Falls
- Northwest ISD, Fort Worth
- Plano ISD, Plano
- Port Neches-Groves ISD, Port Neches
- Shallowwater ISD, Shallowwater
- South Texas ISD, Mercedes
- Willis ISD, Willis
- Windham School District, Huntsville

TAB 6D

Teacher Retirement System of Texas

Employer Audit Program for Higher Education Institutions Eligibility, Contributions, Employment after Retirement and Related Surcharges

January 2018



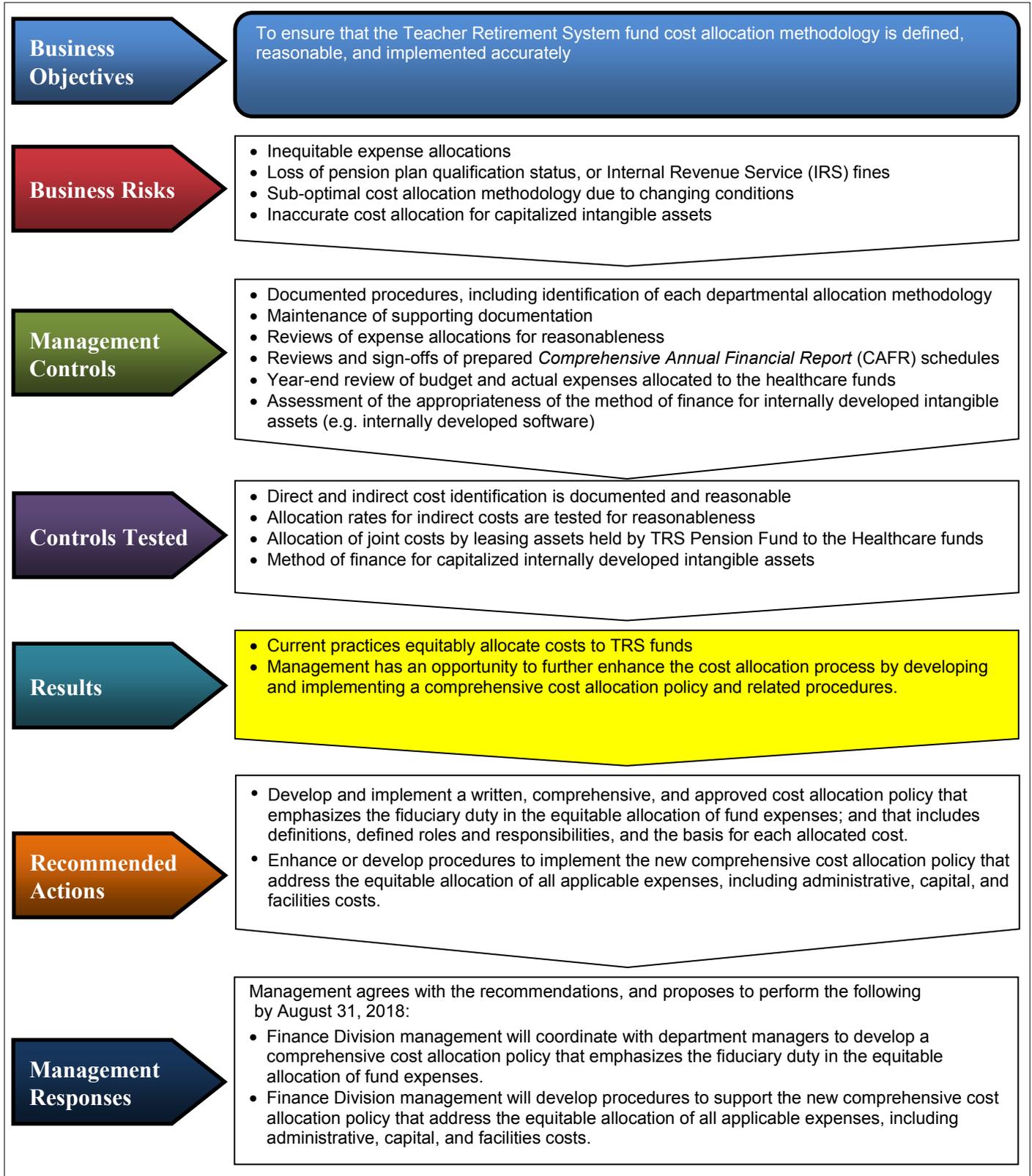
TAB 7

TAB 7A

TRUST EXPENSE ALLOCATION

August 31, 2017

TRS Internal Audit Department



Legend of Results:



Red - Significant to TRS
Yellow - Other Reportable Issue



Orange - Significant to Business Objectives
Green - Positive Finding or No Issue



August 31, 2017

Audit Committee, Board of Trustees
Brian Guthrie, Executive Director

EXECUTIVE SUMMARY

We have completed the audit of Trust Expense Allocation, as included in the *Fiscal Year 2017 Audit Plan*.

The primary business objective related to Teacher Retirement System of Texas' (TRS) allocation of trust expenses to the pension fund, TRS-Care and TRS-ActiveCare funds, and the 403(b) certification program is to ensure that the TRS fund cost allocation methodology is defined, reasonable, and implemented accurately.

At TRS, the cost allocation process is important because TRS simultaneously manages various funds, each of which has its own group of participants, assets held in trust, funding scheme, and related legal requirements. To maintain a qualified pension plan, TRS has a legal requirement to ensure that the pension assets are used only for the exclusive benefit of its members. Similarly, as a fiduciary of the TRS healthcare funds and the 403(b) certification program, TRS has a responsibility to ensure that expenses attributed to these funds are equitable.

Based on our audit work, we determined that management controls are operating effectively to achieve the business objective. We did not identify any significant issues. However, we found that management has an opportunity to further enhance current processes and strengthen controls by developing:

1. 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.
2. Procedures to implement the new comprehensive cost allocation policy that address the equitable allocation of all applicable expenses, including administrative, capital, and facilities costs. Additionally, the procedures should include:
 - a. A routinely reviewed and approved schedule of direct and indirect costs by TRS department¹
 - b. 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

¹ US Department of Labor Definitions:

Direct Costs - Costs that can be identified specifically with the operation of and/or for the benefits of a fund.

Indirect Costs - Costs incurred for common or joint objectives and therefore cannot be readily and specifically identified with a particular activity or objectives of a fund.

- c. Defined roles for department managers in the determination and approval of rates used for facilities costs
- d. Defined roles and processes for the initial and periodic assessment of new capital projects to determine the appropriate method of finance
- e. Materiality thresholds for determining whether a year-end adjusting journal entry is required to ensure equitable fund allocations
- f. Documented approvals to be obtained for methodologies used and final year-end calculations

The audit objective, scope, and methodology are described in **Appendix A**.

BACKGROUND

TRS Administrative Budget

The State of Texas appropriated an administrative operations budget for the TRS Pension Trust Fund of \$119,188,758 and \$77,162,229 for fiscal years 2016 and 2017, respectively. Included in the 2016-2017 appropriation, is \$3,800,000 for repair or rehabilitation of building and maintenance, and \$41,958,768 for acquisition of information resource technologies, including \$40,348,768 for the TRS Enterprise Application Modernization Program (TEAM). For fiscal year 2016, total non-investment administrative costs were \$51,797,817, and total internal administrative investing activity expenses were \$50,285,489. The fiscal year 2017 annual budget by fund is included in **Appendix B**.

TRS Manages Multiple Funds

TRS simultaneously manages various funds, each of which has its own group of participants, assets held in trust, funding scheme, and related legal requirements. Approved by Texas voters in 1936, enabling legislation formed the Teacher Retirement System of Texas in 1937. Currently, the system is established and operates under Section 67, Article XVI of the *Texas Constitution*. While its mission to provide retirement benefits remains essentially unchanged, TRS received additional program responsibilities through the following legislative actions:

- 1985 – Legislation establishing the TRS-Care program, a statewide health benefit program for public school retirees, became effective on September 1, 1985. TRS-Care coverage began on September 1, 1986.
- 1999 – Legislation establishing the optional long-term care insurance program for eligible active members and retirees became effective on May 29, 1999. This insurance became available on October 1, 2000.
- 2001 – Legislation establishing the TRS-ActiveCare program, a statewide health benefit program for employees of school districts, open enrollment charter schools, regional education service centers, and other educational districts whose employees are members of TRS, became effective on September 1, 2001. TRS-ActiveCare coverage began on September 1, 2002.
- 2001 – TRS received administrative responsibilities for the 403(b) certification program for annuity and mutual fund companies that offer their investment products to employees of Texas school districts and open enrollment charter schools.

Accounting Systems

To store and track its budgeted fund information, TRS relies on BEVO, an automated system developed in-house more than 20 years ago. According to management, because BEVO is a legacy² system developed when TRS only had one fund (pension fund), it now has marked limitations causing the budget process to be largely system driven, rather than process driven. As a result, TRS is set to transition to the Centralized Accounting and Payroll/Personnel System (CAPPS) by August 31, 2018.

The CAPPS system is Texas' statewide Enterprise Resource Planning (ERP) system maintained by the Texas Comptroller of Public Accounts. CAPPS provides a single Financial and Human Resources (HR)/payroll administration software solution for Texas state agencies. It is expected that the transition to the CAPPS system will reduce the number of manual processes currently used to allocate expenses to TRS Funds.

Expense Allocations

To maintain a qualified pension plan, TRS must ensure that pension trust assets are used only for the exclusive benefit of its members. Similarly, as a fiduciary of the TRS healthcare funds and the 403(b) certification program, TRS has a responsibility to ensure that expenses attributed to these funds are equitable. As a result, the pension trust fund should not cover the costs for the other funds and programs. Even though TRS uses indirect cost allocations based on estimates, it is important to management that allocated amounts are supportably accurate based on established methodologies.

To allocate indirect expenses, TRS uses the joint cost allocation method. This method identifies various drivers such as square footage, weighted full-time employees and salaries, and percentage of documents processed. These drivers are used to allocate indirect administrative costs to the appropriate fund.

BUSINESS OBJECTIVES, RISKS, AND CONTROLS

The business objective is to ensure that the Teacher Retirement System fund cost allocation methodology is defined, reasonable, and implemented accurately.

Allocation amounts are calculated each fiscal year end and are expected to equitably reflect the benefit received by each fund administered by TRS. TRS management faces the risk of not allocating expenses fairly among the funds if allocation amounts are not based on reasonable identification and accurate, supportable calculations. This risk may result in:

- Loss of pension plan qualification status, or Internal Revenue Service (IRS) fines
- Sub-optimal cost allocation methodology due to changing conditions
- Inaccurate cost allocation for capitalized intangible assets

To help ensure successful achievement of the business objective, management conducts several processes:

² A **legacy system** is an old method, technology, computer system, or application that continues to be used, typically because it still functions for the users' needs, even though newer technology or more efficient methods of performing a task are now available (Wikipedia).

- Documented procedures, including identification of each departmental allocation methodology
- Maintenance of supporting documentation
- Reviews of expense allocations for reasonableness
- Reviews and sign-offs of prepared *Comprehensive Annual Financial Report (CAFR)* schedules
- Year-end review of budget and actual expenses allocated to the healthcare funds
- Assessment of the appropriateness of the method of finance for internally developed intangible assets (e.g. internally developed software)

RESULTS AND RECOMMENDATIONS

OVERALL RESULTS

Based on our audit work, we determined that management controls are operating effectively to achieve the business objective. We did not identify any significant issues. However, we found that management has an opportunity to further enhance the cost allocation process by developing and implementing a comprehensive cost allocation policy and related procedures.

To improve existing controls over the allocation process, other less significant items identified during the audit were discussed with TRS Finance Division management and Benefit Services Division management.

POSITIVE RESULTS

On a quarterly basis, the budget team leader meets with management to obtain information on upcoming budget needs or to find out if there will be excess budget that could be used by other areas that have a business need and require additional funds. This approach provides open communication between management and the budget team to monitor future budget needs or issues throughout the fiscal year. In addition, the quarterly meetings are an opportunity to provide more detailed budgeted expense allocation guidance to management of support functions, such as Human Resources, Legal Services, Information Technology, and Communications, which submit cost allocation rate information to the budget team each fiscal year end.

SIGNIFICANT RESULTS³

None.

OTHER REPORTABLE RESULTS

1. Develop a Comprehensive Policy Stating the Purpose of the Trust Expense Allocation

To maintain a qualified pension plan, TRS has a legal requirement to ensure that the pension assets are used only for the exclusive benefit of its members. Similarly, as a fiduciary of the

³ A significant result is defined as a control weakness that is likely to create a high risk of not meeting business objectives if not corrected.

TRS healthcare funds and the 403(b) certification program, TRS has a responsibility to ensure that expenses attributed to these funds are equitable.

TRS operating and capital expenses include costs that are directly attributable to the TRS funds, and administrative costs that are allocated to the funds by cost drivers. Additionally, certain capital assets held by the TRS pension fund are leased to the TRS healthcare funds.

Establishing a consistent and comprehensive cost allocation policy would help provide a framework that emphasizes the fiduciary role for the equitable allocation of these costs.

Recommendation

Management should 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.

Management Response

Management agrees with the recommendation and proposes the following actions:

1. Finance Division management will coordinate with department managers to develop a comprehensive cost allocation policy that emphasizes the fiduciary duty in the equitable allocation of fund expenses.
2. Finance Division management will ensure that the following elements are assessed when developing a comprehensive cost allocation policy:
 - a. Definition of terms, including direct and indirect costs
 - b. Defined roles and responsibilities, including Finance Division, Health Insurance Benefits Division, and departmental management responsibilities
 - c. The basis for each allocated cost, including any allocated costs that require management discretion (e.g. the basis for the allocation of costs for internally developed intangible assets or the rate per square foot used to lease facilities costs to healthcare funds)

Finance Division management will plan to implement the proposed policy by August 31, 2018.

2. Enhance or Develop Allocation Process Procedures to Support New Cost Allocation Policy

While current practices equitably allocate costs to TRS funds, comprehensive cost allocation procedures would ensure that the annual allocation of costs, including administrative, capital, and facilities costs, is consistently appropriate, reviewed, and approved. Processes identified during our audit that contribute to the overall allocation of costs; and that could be incorporated in comprehensive cost allocation procedures, include:

- a. Classification of Administrative Costs as Direct and Indirect Expenses
Administrative costs are manually determined to be directly or indirectly allocated among funds.

b. Indirect Costs

The audit found one instance where allocation percentages that were based on staff time should have been revised due to the process being automated. For indirectly allocated costs, procedures require solicitation of percentage allocations from department managers annually but do not require confirmation that the manager's departmental rate methodology is reasonable based on current conditions. The fiscal year 2016 TRS schedule of indirect cost drivers by department is included in **Appendix C**.

c. Leased Facilities and Rate Review

TRS facilities are owned by the TRS pension fund and leased to the healthcare funds. Prior to TRS fiscal year 2017, the lease rate was based on market rate. In 2017 the rate was lowered to a cost recovery rate. While both rates provide a reasonable basis for allocating these costs to the healthcare funds, there is no formal procedure for periodically reviewing the rates, or obtaining management agreement for the rates charged.

d. Internally Developed Intangible Assets

Costs for internally developed intangible assets (e.g. internally developed software) have been historically borne by the TRS pension fund. In fiscal year 2017, TRS management determined that a component of the TEAM project directly benefited the healthcare funds. This component was separately identified in January 2017 as the Health Insurance Line of Business (HILOB). In April 2017, TRS Board approved an \$800,000 budget increase for TRS-Care to fund HILOB development. TRS procedures do not specify an initial and ongoing review of the method of finance for internally developed software costs.

e. Year-End Adjusting Journal Entry

In fiscal year 2016, the TRS Finance Division compared costs allocated to the healthcare funds to budgeted costs. This process found that actual costs incurred by the healthcare funds had exceeded budgeted costs by approximately one full-time equivalent employee. To correct this discrepancy, the fiscal year 2017 healthcare funds' budgeted full-time equivalent employees were increased by one employee.

Current procedures do not specify a materiality threshold for whether an allocation of costs for reporting purposes should result in a year-end adjusting journal entry to ensure the correct costs are attributed to each fund.

f. Preparer and Reviewer Roles

While preparer and reviewer functions are occurring for year-end cost allocation approvals, these roles are not specified in current procedures.

Recommendation

Management should enhance or develop procedures to implement the new comprehensive cost allocation policy that address the equitable allocation of all applicable expenses, including administrative, capital, and facilities costs. The procedures should include:

- a. A routinely reviewed and approved schedule of direct and indirect costs by TRS department
- b. 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

- c. Defined roles for department managers in the determination and approval of rates used for facilities costs
- d. Defined roles and processes for the initial and periodic assessment of new capital projects to determine the appropriate method of finance
- e. Materiality thresholds for determining whether a year-end adjusting journal entry is required to ensure equitable fund allocations
- f. Documented approvals to be obtained for methodologies used and final year-end calculations

Management Response

Management agrees with the recommendation and proposes the following actions:

1. Finance Division management will develop procedures to support the new comprehensive cost allocation policy that address the equitable allocation of all applicable expenses, including administrative, capital, and facilities costs.
2. Finance Division management will ensure that, at a minimum, the elements listed in the recommendation will be considered when developing the comprehensive procedures.

Finance Division management will plan to complete proposed procedures by August 31, 2018.

* * * * *

We appreciate TRS Finance Division management and staff for their cooperation, courtesy, and professionalism extended to us during this audit. We also appreciate support provided by the TRS Executive Division, Benefit Services Division, Health and Insurance Benefits Division, and Information Technology Division.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Jan Engler, CIA, CISA, CFE
Director of Benefit Audit Services

Nick Ballard, CFA, CPA
Senior Auditor/Project Lead

Anandhi Mani, CIA, CPA
Senior 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

The audit objective was to determine whether internal controls are in place and are working effectively to achieve the business objective stated below and mitigate significant risks to meeting this objective.

- Business Objective: To ensure that the Teacher Retirement System fund cost allocation methodology is defined, reasonable, and implemented accurately.

SCOPE

The audit scope included the following:

- Administrative and Investment expense allocations in Schedule 2 and Schedule 3 of the TRS 2016 *Comprehensive Annual Financial Report* (CAFR). These schedules include the allocation of costs to the pension fund as well as to the healthcare funds and 403(b) certification program.
- TRS allocation methodology through July 31, 2017 for administrative, facilities, and capitalized internally developed intangible assets (i.e. internally developed software) costs.
- Legacy computer system applications used to maintain financial information. The audit did not include tests of system controls.

METHODOLOGY

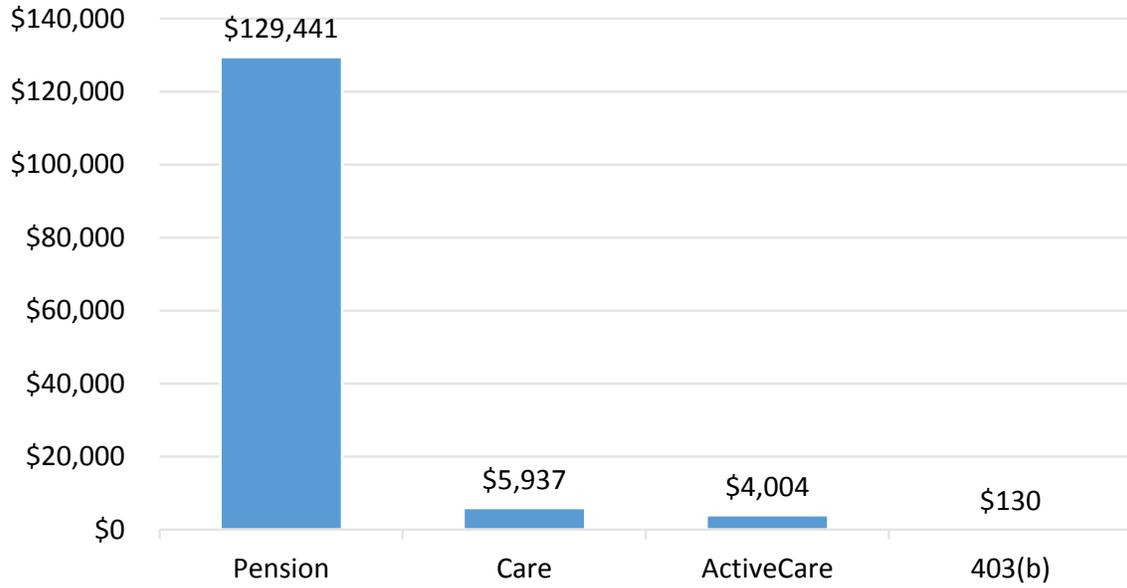
Our methodology included obtaining information on management's business objectives and risks, and focused on key processes and monitoring controls that management has established to address significant risks. To meet the audit objectives, we specifically performed the following procedures:

- Reviewed past year-end allocation calculations for consistent methodology.
- Determined that allocation calculation work papers and Excel spreadsheets contain evidence of final supervisory review of key calculations and key totals.
- Determined supporting documentation exists for allocation totals.
- Interviewed several key process participants to determine how allocation percentages are determined.

CONCLUSION

Based on our audit work, we determined that management controls are operating effectively to achieve the business objective. We did not identify any significant issues. However, we found that management has an opportunity to further enhance the cost allocation process by developing and implementing a comprehensive cost allocation policy and related procedures.

APPENDIX B
FISCAL YEAR 2017 BUDGET BY FUND
(As of the July 2016 TRS Board Meeting, Values in Thousands)



APPENDIX C
FISCAL YEAR 2016 INDIRECT COST ALLOCATION DRIVERS

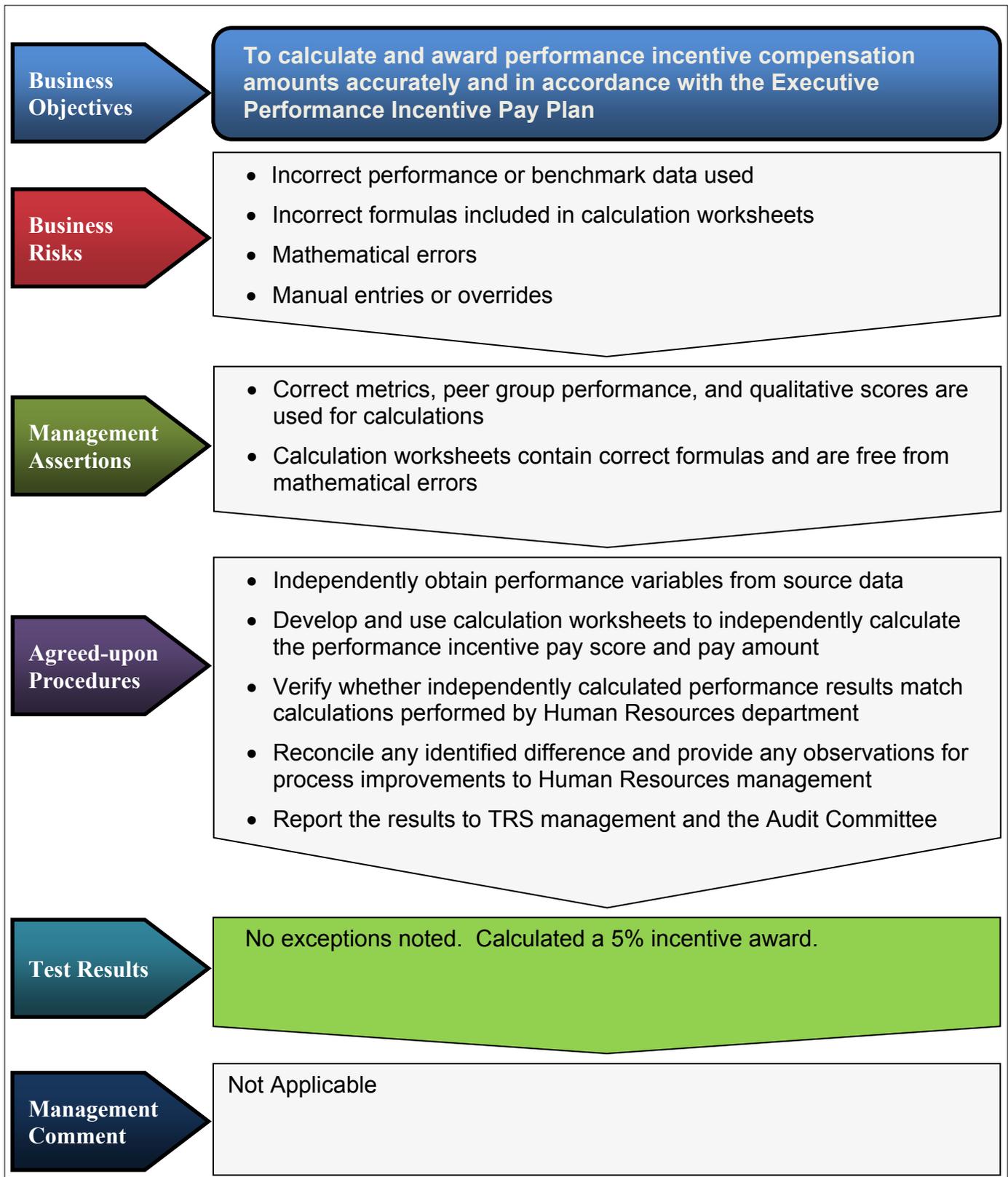
Department	Cost Driver	Rate Support
Board of Trustees	Weighted Salaries & FTEs	Calculated Rate
Executive	Weighted Salaries & FTEs	Calculated Rate
Internal Audit	Staff Hours by Project	Timesheets
Legal Services	Allocation by FTE	Staff Assignment to Specialized Area
Governmental Relations	Weighted Salaries & FTEs	Calculated Rate
Communications	Weighted Salaries & FTEs	Calculated Rate
Organizational Excellence	Weighted Salaries & FTEs	Calculated Rate
Program Management Office	Weighted Salaries & FTEs	Calculated Rate
Strategic Initiatives	Weighted Salaries & FTEs	Calculated Rate
Executive Agency Wide	Weighted Salaries & FTEs	Calculated Rate
Risk Management & Strategic Planning	Weighted Salaries & FTEs	Calculated Rate
Benefit Processing	Time Spent on Care Estimates	Percent used from previous year
Benefit Counseling	Time Spent on Care Activities	Office Visits & Telephone Counseling
Financial	Weighted Salaries & FTEs	Calculated Rate
General Accounting	Weighted Salaries & FTEs	Calculated Rate
Records Management	Estimated Percent	Imaged Documents
Information Technology	Weighted Salaries & FTEs	IT Department weighting
Enterprise Infrastructure Services	Weighted Salaries & FTEs	IT Department weighting
Information Systems Green Team	Weighted Salaries & FTEs	IT Department weighting
Client Services	Weighted Salaries & FTEs	IT Department weighting
Information Systems Gold Team	Weighted Salaries & FTEs	IT Department weighting
Information Systems Architect	Weighted Salaries & FTEs	IT Department weighting
Information Security	Weighted Salaries & FTEs	IT Department weighting
Staff Services	Weighted Salaries & FTEs	Calculated Rate
Facilities Services	Weighted Salaries & FTEs	Calculated Rate
Printing, Mail & Supply Services	Weighted Salaries & FTEs	Calculated Rate

TAB 7B

TESTING OF EXECUTIVE PERFORMANCE INCENTIVE PAY PLAN CALCULATION

Plan Year Covering July 1, 2016 through June 30, 2017

TRS Internal Audit Department



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



August 10, 2017

Janet Bray, Plan Administrator

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

We have completed the **Testing of Executive Performance Incentive Pay Plan Calculation** effective for the period from July 1, 2016 through June 30, 2017. We performed the procedures that were agreed to by you as summarized in the table below.

AGREED-UPON PROCEDURES AND RESULTS

Independent Calculation Procedure	Result
1. Independently obtain source data and performance variables used in the calculation	Obtained all variables.
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 Human Resources department	Calculated a 5% incentive award which matched Human Resources calculation
4. Reconcile any identified difference and provide any observations for process improvements to Human Resources management	No differences noted; one opportunity for improvement noted relating to rounding methodology provided to Human Resources
5. Report the results to TRS management and the Audit 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.

Internal Controls

We were not engaged to and did not perform an examination of the internal controls nor the operating effectiveness pertaining to the subject areas tested. Accordingly, we do not express an opinion on the suitability of the design of internal controls nor the operating effectiveness of the subject areas tested. Had we performed additional procedures, or had we made an examination of the system of internal controls, other matters might have come to our attention that would have been reported to you. This report relates only to the procedures specified above and does not extend to the internal control structure.

This report is intended solely for information and use by TRS management, the Board of Trustees, and 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 Human Resources and Legal Services departments for their cooperation and professionalism shown to us during this project.

Amy Barrett, CIA, CPA, CISA
Chief Audit Executive

Jan Engler, CIA, CISA, CFE
Director of Benefit Audits

Toma Miller, CIA, CGAP
Senior Internal Auditor

TAB 7C

INTERNAL AUDIT QUALITY ASSURANCE SELF-ASSESSMENT

August 9, 2017

Teacher Retirement System Internal Audit Department

Business Objectives	<p>The Teacher Retirement System 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)</p>
Inherent Risks Without Controls	<ul style="list-style-type: none">• Audits may not address significant organizational risks• Audit processes may be inefficient and ineffective• Assurance could be unreliable without effective quality control
Internal Audit Controls	<ul style="list-style-type: none">• <i>Internal Audit Charter</i>, 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
Tests Performed	<p>Conducted self-assessment to validate Internal Audit activities conform with applicable professional standards and state law using the self-assessment tool developed by the <i>State Agency Internal Audit Forum (SAIAF)</i>. These tests included steps to assess implementation of Internal Audit's QAIP.</p>
Results	<p>TRS Internal Audit department received a <i>generally conforms</i> rating (highest possible rating) for compliance with professional auditing standards, related codes of ethics, Texas state law, and Internal Audit's Quality Assurance and Improvement Program (QAIP).</p> <p>During Fiscal Year 2017, Internal Audit initiated the use of an agreed-upon procedures project template to enhance compliance with standards for these types of projects.</p>
Recommended Actions	<p>None required</p>
Internal Audit Responses	<p>None required</p>

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

August 09, 2017

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

EXECUTIVE SUMMARY

We have completed the **Internal Audit Quality Assurance Self-Assessment** as included in the *Annual Audit Plan* for fiscal year 2017. 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 2017 was to determine whether the TRS Internal Audit department (Internal Audit) generally conforms 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.

CONCLUSION

Based on the results of the self-assessment, we concluded that TRS Internal Audit *generally conforms*¹ with the IIA *International Standards for the Professional Practice of Internal Auditing*, the GAO *Government Auditing Standards*, the IIA and GAO *Codes of Ethics*, the *Texas Internal Auditing Act*, and Internal Audit's QAIP.

Results of our procedures are presented in more detail in the **Detailed Results** section. The scope, methodology, and conclusion are described in **Appendix A**. The Internal Audit organization 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 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

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

- Adds value and improves organizational operations
- Includes both periodic and ongoing internal assessments
- Includes an external quality assurance review (peer review) at least once every three years, the results of which are communicated to executive management and the TRS Board Audit Committee (Audit Committee)

INTERNAL ASSESSMENT

Ongoing Reviews of internal audit activities are conducted through:

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

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

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

OVERALL CONCLUSION

After completing the self-assessment for fiscal year 2017, our conclusion is that the Teacher Retirement System of Texas (TRS) Internal Audit function *generally conforms* with *The Institute of Internal Auditor’s (IIA) International Standards for the Professional Practice of Internal Auditing*, the U.S. Government Accountability Office’s (GAO) *Government Auditing Standards*, the IIA and GAO *Codes of Ethics*, the *Texas Internal Auditing Act*, and Internal Audit’s 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 working papers of an assurance and agreed-upon-procedures projects using the SAIAF Working Paper Review Tool in *TeamMate*². We identified an opportunity to enhance our processes and

² Electronic project work paper application

documentation as described in the **Detailed Results** section of this report entitled “Opportunities for Improvement.”

DETAILED RESULTS

Opportunities for Improvement

The U.S. Government Accountability Office’s (GAO) Government Auditing Standards and GAO Standards for Agreed-Upon Procedure Engagements

As part of our annual self-assessment procedures, we examined one assurance audit project and two agreed-upon procedures projects performed during fiscal year 2016. Based on this review, we determined that Internal Audit adheres to professional standards for planning, performing, and reporting for assurance audits. For the two agreed-upon procedures projects, we noted that some of the required documentation related to understandings of the client responsibilities was not included.

Prior to fiscal year 2017, Internal Audit had not yet developed its automated template for agreed-upon procedures projects, which prompts the auditor to include the required documentation. fiscal year 2017 agreed-upon procedures projects are now using the appropriate automated template that will help to ensure compliance with standards for this type of project.

* * * *

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

APPENDIX A

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

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

Scope

The self-assessment review period was fiscal year 2016. We used *State Agency Internal Audit Forum* (SAIAF) procedures and steps that included the *International Standards for the Professional Practice of Internal Auditing*, *Generally Accepted Government Auditing Standards* (GAGAS), *Texas Internal Auditing Act*, and Internal Audit's QAIP requirements to conduct the annual TRS Internal Audit Quality Assurance Self-Assessment.

Methodology

We evaluated conformance with the following statutes and professional standards:

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

During fieldwork, we performed the following procedures:

- Reviewed the most current *TRS Internal Audit Charter*, *Annual Audit Plan*, TRS Internal Audit job descriptions, TRS Internal Audit certifications and continuing professional education hours, Request for Qualifications (RFQ) documentation, and follow-up documentation of the past audit recommendations
- Reviewed one fiscal year 2016 audit and two agreed-upon procedures projects
- Interviewed the Chief Audit Executive and other TRS Internal Audit Staff

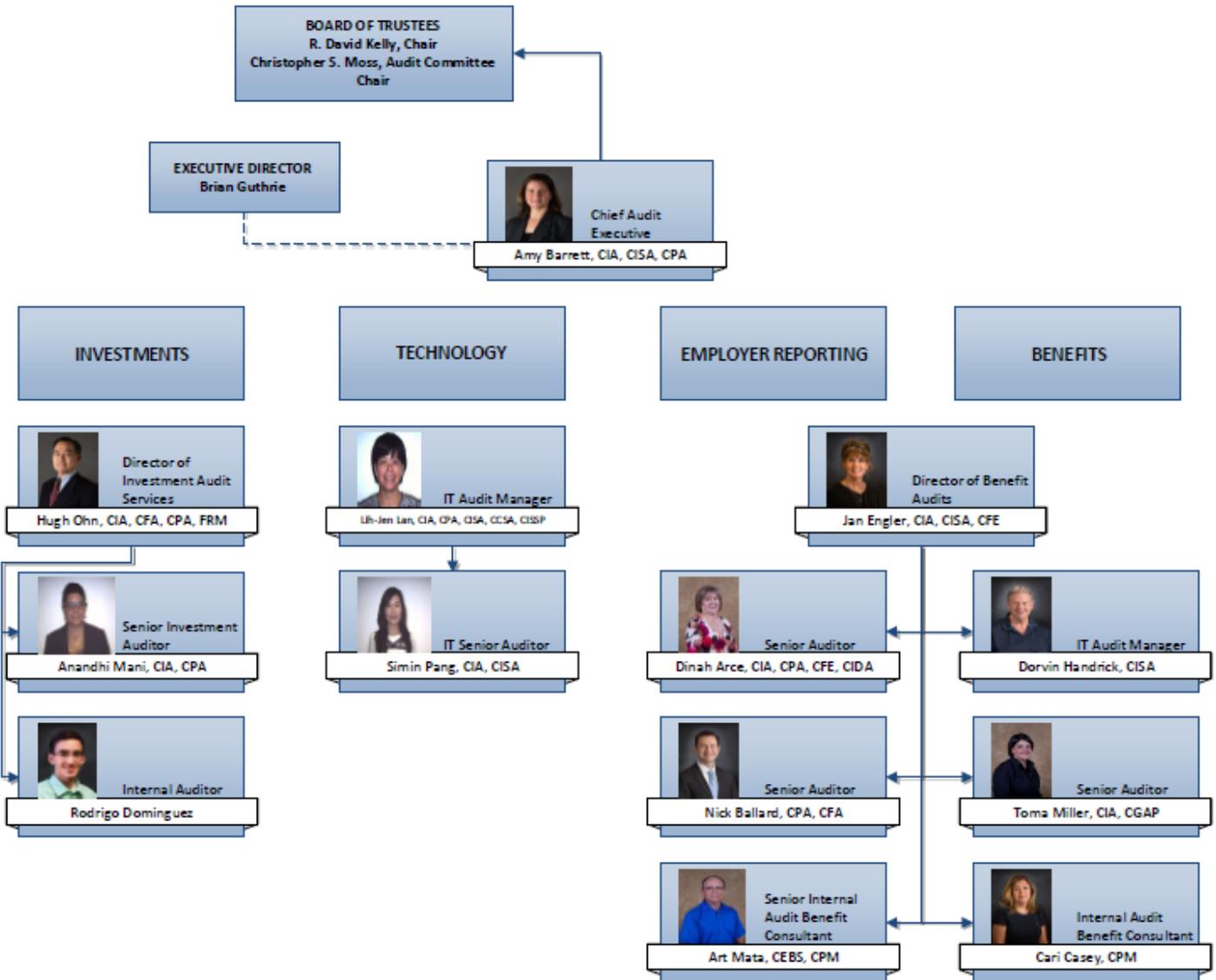
Conclusion

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

APPENDIX B

TRS INTERNAL AUDIT ORGANIZATIONAL CHART

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



APPENDIX C

TRS FISCAL YEAR 2017 SELF-ASSESSMENT

	Generally Conforms	Partially Conforms	Does Not Conform
OVERALL CONCLUSION	Pass		
IIA CODE OF ETHICS			
	Pass		
TEXAS INTERNAL AUDITING ACT			
	Pass		
COMPLIES WITH: <ul style="list-style-type: none"> • 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 AS 1100 – 1110 GAGAS 1.19, 3.08, 3.09, 3.24, 3.31, 3.46, 3.59, 3.88	Pass		
Proficiency and Due Professional Care Continued professional development AS 1200 – 1230 GAGAS 3.70, 3.72, 3.76, 3.78 – 3.81,	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 AS 1300, 1310 – 13.12, 1320 – 1322, GAGAS 2.23, 3.105, 3.83 – 3.85, 3.95-3.96 IA 2101	Pass		
Managing the Internal Audit Activity Planning, communications, resource management, policies and procedures, coordination, reporting to senior management and the board PS 2000 – 2060 IA 2102	Pass		
Nature of Work Governance, risk management, control PS 2100 – 2130 IA 2102	Pass		

	Generally Conforms	Partially Conforms	Does Not Conform
Engagement Planning Planning considerations, engagement objectives, scope, resource allocation, engagement work program PS 2200 – 2240 GAGAS 6.06 – 6.12	Pass		
Performing the Engagement Identifying information, analysis and evaluation, documenting, supervision PS 2300, 2320, 2340 GAGAS 6.53 – 6.85	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 PS 2400 – 2431 GAGAS 7.03 – 7.04, 7.08, 7.44, A7.02	Pass		
Monitoring Progress PS 2500	Pass		
Resolution of Senior Management’s Acceptance of Risks PS 2600	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.

TAB 7D

**TRS Internal Audit
Summary of Audit Recommendations Status
As of August 2017**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
17-601 403(b) Provider Compliance Audit					
	Require Records of Provider’s Verification of License and Qualification As Part of Annual Demonstration	In Progress	Other Reportable	8/2017	12/2017
	Start Tracking the Cost of Program Administration For Fee-Setting Purpose	Implemented	Other Reportable	9/2017	8/2017
17-306 Funston Evaluation of TRS Real Assets Investment Program					
	Board should consider adopting a stand-alone Compliance Policy in order to place Board emphasis on the importance of compliance and greater clarity to the respective roles and responsibilities throughout TRS respecting this area.	In Progress	Other Reportable	12/2017	
	<p>TRS Board should consider several options to improve reporting and coordination of compliance and other oversight activities:</p> <p>A. Consider whether the ability to use and comprehend the various investment information from all sources provided to trustees would be enhanced by developing a map, or guide, to the various sources and their purpose as a part of trustee training or in a manual.</p> <p>B. Although overall reporting is robust, TRS may benefit by shifting more regular reporting responsibilities to the Chief Compliance Officer and moving the Chief Audit Executive towards the role of assessing the effectiveness of the compliance function.</p>	In Progress	Other Reportable	A - 5/2017 B – 5/2017	A – 9/2017 B – 9/2018

Significant to Business Objectives

	<ul style="list-style-type: none"> Past <i>original</i> estimated completion date, and No management action plan <u>or</u> No progress on management action plan
	<ul style="list-style-type: none"> Past <i>original</i> estimated completion date Progress on management action plan
	<ul style="list-style-type: none"> <i>Original</i> estimated completion date has not changed Progress on management action plan
	Satisfactory implementation of management action plan <u>or</u> Acceptance of risk by management
	Implementation of management action plan pending Internal Audit validation

Other Reportable

	<ul style="list-style-type: none"> Past first <i>revised</i> estimated completion date No management action plan <u>or</u> No progress on management action plan
	<ul style="list-style-type: none"> Past first <i>revised</i> estimated completion date Progress on management action plan
	<ul style="list-style-type: none"> Within <i>original</i> <u>or</u> first <i>revised</i> estimated completion date Progress on management action plan
	Satisfactory implementation of management action plan <u>or</u> Acceptance of risk by management

**TRS Internal Audit
Summary of Audit Recommendations Status
As of August 2017**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
17-306 Funston Evaluation of TRS Real Assets Investment Program (Continue..)					
	The PI program, or other approach, should be used as needed to “wrap” managers with multiple investments to replicate aspects of the Strategic Partner Network (SPN) and secure the best possible terms and deal flow (i.e., to gain benefits similar to strategic partners with those managers).	In Progress	Other Reportable	12/2017	
	Real Assets should undertake a cost/benefit analysis of the potential for active direct real estate investing.	In Progress	Other Reportable	12/2017	
	A plan to selectively conduct targeted fee audits should be developed and implemented on a partial-portfolio rolling basis.	Implemented	Other Reportable	9/2017	8/2017
	Valuation audits could be performed on rolling basis, and/or independent valuations could be required/requested for selected investments.	Implemented	Other Reportable	9/2017	8/2017
SAO Audit of Fiscal Year 2014 Comprehensive Annual Financial Report (15-305)					
	Strengthen controls over census data	In Progress	Significant	8/2016	9/2017
Audit of TRICOT Fiscal Year 2016 Comprehensive Annual Financial Report by GT (17-411)					
	Develop written policies and procedures over the financial accounting and reporting of TRICOT’s expenses recognition	Implemented	Significant	8/2017	3/2017

TAB 8



Teacher Retirement System of Texas Internal Audit Department

Proposed Fiscal Year 2018 Audit Plan

September 22, 2017

Amy Barrett, CIA, CISA, CPA
Chief Audit Executive

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

Brian Guthrie
Executive Director

R. David Kelly
Chair, Board of Trustees





Executive Summary

Professional and Statutory Requirements

This document provides the *Fiscal Year 2018 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.

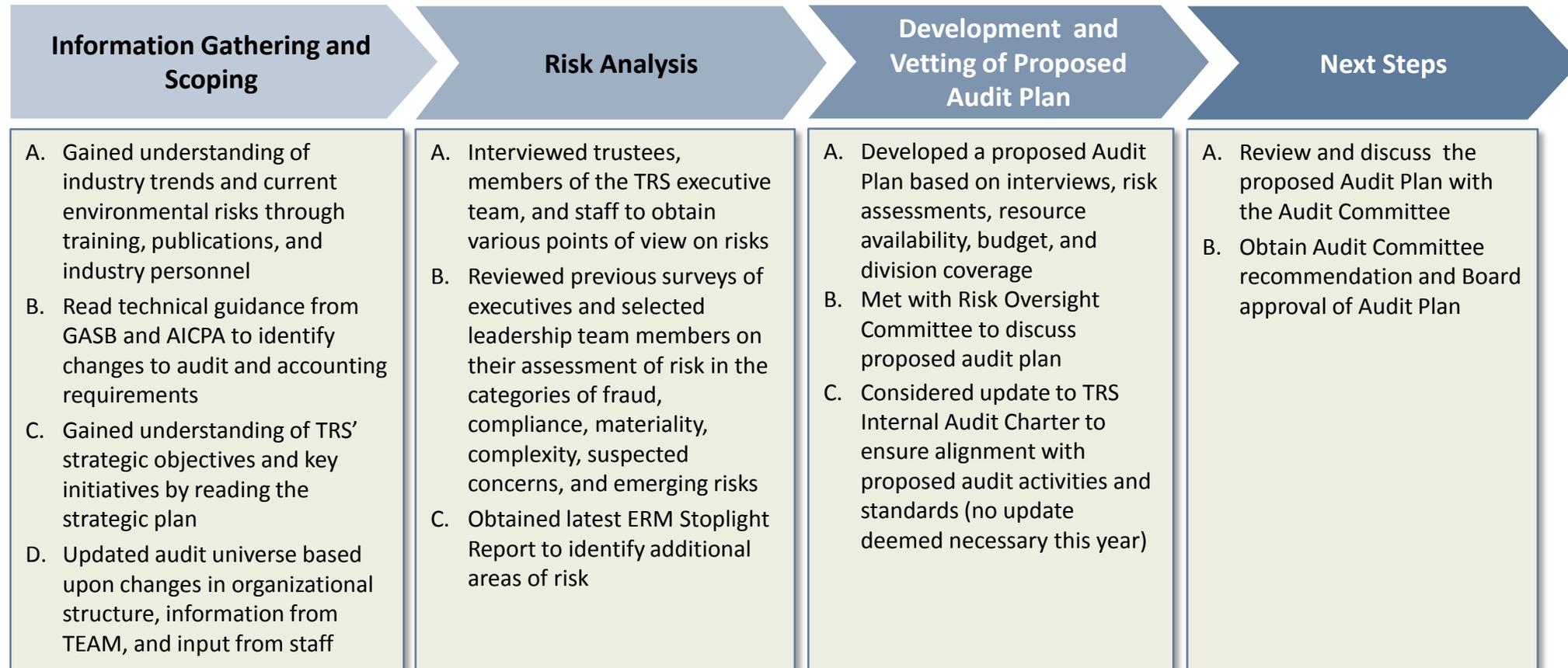
Changes Subsequent to Approval

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:





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: Pension Benefits and Employer Audits

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

Title	Type	Preliminary Scope
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 Audits	Audit	Determine whether information reported to TRS is complete and accurate, especially in the areas of eligibility, compensation, contributions, surcharges (pension and healthcare)
Employer Data Analysis Testing	Agreed-Upon Procedures	Gather and use full payroll data to risk assess reporting entities for audit and to identify noncompliance with TRS Laws and Rules
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
TRS-ActiveCare Billing, Reporting, and Exceptions Process Audit	Audit	Assess whether the billing process used by subcontractor results in bills that are complete and accurate; determine whether reporting entities are reconciling bills and reporting errors to subcontractor; assess the effectiveness of the exceptions process; assess the completeness and accuracy of reports provided to TRS by subcontractor and contractor including eligibility reports
TRS-Care and TRS-ActiveCare Vendor Procurement and Oversight Audit	Audit	Using recent healthcare procurements, validate that the processes were followed in accordance with the state procurement manual and TRS policies and procedures
Health Care Administrative Expenses audit	Audit	Validate completeness and accuracy of administrative expenses charged to TRS-Care and TRS-ActiveCare
TRS-Care Legislative Change Management Review	Consulting	Review legislative changes effective January 1 requiring programming changes by IT for accuracy
Health Care Vendor Update Meetings Attendance	Advisory	Attend quarterly meetings with health care vendors to understand results, issues, and TRS management's monitoring controls
Health Care Vendor Selection Observation	Advisory	Observe selection process of large vendor and service providers, when applicable

Audit Plan: Investment Management

Title	Type	Preliminary Scope
Private Equity Management Fees and Carried Interest Desk Audits	Audit	Assess the accuracy of management fees and carried interest using information contained in Limited Partnership portals as a starting point and other information as needed
Performance Calculations Audit	Audit	Assess whether pension trust and incentive pay plan investment returns are accurate, consistent, and based on accepted industry performance standards
Quarterly Investment and Ethics Policies Compliance Testing	Agreed-Upon Procedures	Assess compliance with TRS ethics policies and the Investment Policy Statement (IPS) requirements; assess select operating procedures
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: Finance and Staff Services

Title	Type	Preliminary Scope
General Accounting Change in Management Audit	Audit	Determine whether key management controls are in place and functioning as intended. Key management controls could include account reconciliations, access controls, departmental policies and procedures, TRS-wide policies and procedures, segregation of duties, etc.
Capital Improvement Planning Process Review	Consulting	Review TRS' process for requesting and planning capital improvements and make recommendations for increased formalization
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
CAPPS Implementation	Advisory	Participate in meetings associated with CAPPS and provide input into controls identification projects.
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: Executive

Title	Type	Preliminary Scope
Board Reporting Process and Materials Review	Consulting	Walk through the process for developing board materials; interview staff about challenges with timely board reporting and provide suggestions for improving timeliness
Executive Incentive Pay Testing	Agreed-Upon Procedures	Independently recalculate executive incentive pay in order to test the accuracy of the calculation by management
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 Risk Oversight Committee



Audit Plan: TEAM and Technology

Title	Type	Preliminary Scope
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Coordinate and facilitate activities of the IPA vendor and ensure direct access to executive management and the board
TEAM Committees, Projects, and Controls Assessment Participation	Advisory	<p>Participate in TEAM Executive Steering Committee (ESC) and other committees and requirements-gathering sessions in a non-voting capacity, and provide advisory services related to TEAM project activities as outlined in the TEAM charter of internal audit activities. Provide input into controls identification projects. In FY 17, Internal Audit participated in the following TEAM committees and projects:</p> <ul style="list-style-type: none"> - Executive Program Oversight Committee (including TEAM budget) - Organizational Change Management Advisory Groups - Business Procedures and Training Project - Monthly meetings with TEAM program manager and DXC executives
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: Internal Audit Activities

Title	Project Description
Internal Quality Assurance Review	Assess Internal Audit’s audit and administrative practices in order to make recommendations for continuous improvement. This project includes Internal Audit performance measure tracking and reporting
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
Employer audit process re-engineering	Revise approach to auditing reporting entities including audit procedures, templates, documentation, internal communications, and reports
Fiscal Year 2019 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, Elevated, or Caution) and Areas of Interest to the SAO (Procurement and IT Security) excluded from the Audit Plan

Area	Reason for Exclusion
Information Security & Confidentiality	TRS is in process of implementing recommendations made from two IT security-related audits in the prior year
Cybersecurity	TRS is in process of implementing recommendations made from two IT security-related audits in the prior year. TRS uses Department of Information Resources (DIR) services for network penetration testing
Records & Information Management	TRS is in process of revising its records management system and procedures
TEAM Program	TRS is in process of replacing its benefits systems (an effort known as the TEAM Program) and is using an independent program assessment vendor to assess the sufficiency of risk mitigation activities



Appendix A

Internal Audit Operating Budget



Appendix A

Internal Audit Operating Budget

Line Item	Budget FY 2018	Budget FY 2017
000 – Salaries	\$1,094,123	\$1,086,970
000 – Benefits	280,233	279,344
200 – Professional Fees for Internal Audit Services	450,000	450,000
200 – Professional Fees for External Audit Services (CAFR, TRICOT, and Fiduciary Review)	442,500	500,000
505 – Travel-In-State	14,600	13,500
510 – Travel-Out-of-State	26,000	23,000
600 - Offsite Retreat	500	0
705 – Dues, Fees, and Staff Development	27,500	25,000
710 – Subscriptions and Reference Materials	2,000	2,000
Total Operating Budget	\$2,337,456	\$2,379,814
Full Time Equivalent (FTE) Positions (excluding interns)	13.0	12.0

Resources are sufficient to complete the annual audit plan.



Appendix B

Internal Audit Performance Measures



Appendix B

Internal Audit Goals and Performance Measures

For the internal audit function, the FY 2018 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. 70% or more of total available department hours (excluding uncontrollable leave) are spent for internal audit staff on direct assurance, consulting, and advisory services
- c. 100% of internal audit processes are in accordance with internal auditing standards as reported in the annual quality assurance and improvement report
- d. 80% (4.0/5.0) or higher score received for audit project client surveys in overall satisfaction
- e. 76% (3.8/5.0) or higher score on staff 360 evaluations in accountability, critical thinking, and initiative
- f. 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)



Appendix B

Internal Audit Goals and Performance Measures

Goal 1: Facilitate Audit Committee Governance, continued

Objective 2: Improve Internal Audit communication

Performance Measures

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

Objective 3: Provide information on effective Audit Committee practices

Performance Measures

- a. 100% of relevant current “Tone at the Top” articles uploaded to Diligent
- b. One speaker on the benefits of an effective audit function presents at the February board meeting



Appendix B

Internal Audit Goals and Performance Measures

Goal 2: Support TRS Initiatives

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

Performance Measures

- a. 86% (4.3/5.0) or higher score for CAE 360 evaluation in contribution goals
- b. 80% (4.0/5.0) or higher score received for audit project client surveys in TEAM-related projects, when applicable

Objective 2: Integrate TRS Core Values into Internal Audit activities

Performance Measures

- a. 80% (4.0/5.0) or higher score on staff 360 evaluations in the area of organizational awareness
- b. 83% (5.0/6.0) or higher score for departmental organizational health on the annual Workplace Dynamics Survey



Appendix B

Internal Audit Goals and Performance Measures

Goal 3: Enhance Internal Audit Staff Competence and Expertise

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

Performance Measures

- a. 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
- b. 80% (4.0/5.0) or higher score on staff 360 evaluations in the area of audit acumen
- c. 92% (4.6/5.0) or higher score for CAE 360 evaluation in "Leads the Self" (aka Technical Leadership)

Objective 2: Ensure continued competence and expertise of Internal Audit

Performance Measures

- a. 100% of audit staff complete annual training plans and obtain a minimum of 40 hours of continuing education credits
- b. 100% of audit staff maintain professional certifications or actively pursue certifications and related eligibility requirements
- c. 100% of audit staff participate in professional organizations
- d. 100% of audit staff acknowledge an understanding of their career path
- e. 92% or more of audit staff remain in internal audit or TRS (excluding retirements and transfers)



Appendix C

Audit Plan Mapped to TRS Risk Assessment



Appendix C

Audit Universe Mapped to TRS Risk Assessment

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
1	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 of TRS-Care surcharges; Healthcare administrative expenses	Audit
2	Elevated	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.	TRS-ActiveCare billing audit; Healthcare administrative expenses	Audit
3	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 project in process	n/a
4	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 analysis; updates to external communications about audits	Audit; 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.	TEAM oversight vendor coordination; participation in oversight committees; employer full payroll data analysis	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	Audit
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.	TRS-Care legacy change management review	Consulting
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.	Quarterly follow up on prior year HIPAA and access controls audits	Advisory
9	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.	TRS-ActiveCare billing; vendor procurement and oversight; Healthcare administrative expenses	Audit

Appendix C

Audit Universe Mapped to TRS Risk Assessment

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
10	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.	Quarterly follow up on prior year HIPAA audit; DIR and other consultant Pen tests	Advisory
11	Guarded	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.	Executive and investment incentive pay testing	AUP
12	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.	Employer audits; quarterly investment policy testing; annual benefits testing	Audit, Agreed-Upon Procedures (AUP)
13	Guarded	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.	Vendor procurement and oversight audit	Audit
14	Guarded	Pension Benefit Administration	Accurate delivery of benefits to TRS members, retirees and beneficiaries, including systems monitoring and controls related to accurate calculations and benefit payments to others.	Ineffective delivery of benefits could lead to inaccurate information, inaccurate benefits/ payments, dissatisfied members, retirees, or beneficiaries, and loss of credibility, adverse public perception, increased scrutiny, and oversight.	CAFR benefits payment testing; annual benefits testing	SAO Audit, 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	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.	Incentive pay testing; SAO CAFR audit; private equity management fee/carried interest audit; performance calculation audit; quarterly investment compliance testing	AUP, SAO audit, audit
17	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.	TRICOT Financial Audit	Audit



Appendix C

Audit Universe Mapped to TRS Risk Assessment

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
18	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.	Capital improvement planning process project	Consulting
19	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.	Ethics policies compliance testing as part of investment policies compliance quarterly testing; participation in triage team	AUP
20	Guarded	Customer Service	Deliver superior service to members and internal/external customers.	Inadequate customer service could result in dissatisfied members or customers and could lead to increased scrutiny and oversight.	None (management is implementing consulting recommendations)	n/a
21	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.	Attendance at monthly securities lending calls; quarterly investment compliance testing	Advisory, AUP
22	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.	Update employer audits webpage; make presentations on employer audit initiatives and common findings	Advisory
23	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 disaster recovery and business continuity exercises/tests	Advisory
24	Guarded	Budget	Ensure TRS has appropriate budget to provide and sustain resources necessary to successfully carry out TRS' mission, goals, and objectives to serve our members.	Lack of a sufficient operating budget could jeopardize our ability to effectively serve our members.	Attend TEAM budget meetings	Advisory
25	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.	General Accounting Change in Management Audit; SAO CAFR Audit; CAPPs implementation participation	Audit, SAO Audit; Advisory



Appendix C

Audit Universe Mapped to TRS Risk Assessment

#	TRS Risk Level	TRS Risk Category	TRS Goal	TRS-Assessed Overall Risk	Planned Approach	Project Type
26	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 (audited in prior year)	n/a
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.	Quarterly investment compliance testing and reporting	Advisory
28	Low	Liquidity	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.	Quarterly investment compliance testing and reporting; updating meetings with risk officer	Advisory
29	Low	Performance Reporting	Maintain the integrity of investment information - reporting and disclosure, accuracy, completeness and valuation; Develop and disseminate customized investment reporting for both management and governance to enhance making better strategic and tactical investment decisions.	Performance reports contain material inaccuracies.	Performance calculation audit	Audit
30	Low	Private Market Operations	Maintain integrity of the transaction settlement and position information for optimal investment management decisions.	Inefficient or ineffective transaction settlement or position management process could result in losses to the fund.	Private market fee/carried interest audits	Audit
31	Low	Public Market Operations	Maintain the integrity of the transaction settlement and position information for optimal investment management decisions.	Inefficient or ineffective transaction settlement or position management process could result in losses to the fund.	Quarterly investment compliance testing and reporting; TRS Compliance monitors IMA compliance; IIC attendance	AUP, Advisory
32	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.	None	n/a
33	Other	Governance and Administration	n/a	n/a	Board materials project; executive incentive pay testing; General Accounting change in management audit; participation in various committees	Consulting, Audit, AUP, Advisory

TAB 9

Teacher Retirement System of Texas
September 2017 Audit Committee Agenda Items Mapped to TRS Stoplight Report

403(b)	Accounting & Reporting Agenda Items 3A,3B, 7A	Budget Agenda Item 7A	Business Continuity	Communications & External Relations
Credit	Customer Service	Employer Reporting Agenda Items 3B, 6B-6D	Ethics & Fraud Prevention Agenda Item 4	Facilities Management & Planning
Governmental / Association Relations & Legislation	Health Care Plans Administration	Information Security & Confidentiality	Investment Accounting Agenda Items 5B	Investment Operations Agenda Item 5C
Legacy Information Systems	Liquidity / Leverage	Market	Open Government Agenda Items 7C, 7D, 8, 9	Pension Benefit Administration Agenda Item 6A
Pension Funding Agenda Items 6B-6D	Purchasing & Contracts	Records Management	Regulatory, Compliance & Litigation Agenda Items 4, 5A	Talent Continuity Agenda Items 7B
TEAM Program	TRS-ActiveCare Affordability	TRS-Care Funding Agenda Items 6B, 6C		

Fiscal Year 2017 Audit Plan Status As of August 2017

Title and Project #	Type	Status
Executive and Finance		
Records Management Audit Follow-Up (17-410)	Audit	Complete
403(b) Provider Compliance (17-601)	Audit	Complete
Federal Labor Standards Act (FLSA) Compliance (17-605)	Consulting	Complete
Coordination for State Auditor's Office (SAO) Comprehensive Annual Financial Report (CAFR) Audit for Fiscal Year 2016	Advisory	Complete
Teacher Retirement Investment Company of Texas (TRICOT) Financial Audit Coordination (Grant Thornton)	Advisory	Complete
Testing of Executive Performance Incentive Pay Calculations (17-606)	Agreed-Upon Procedures	Complete
The University Of Texas at Austin Student Project (17-608)	Consulting	Complete
Enterprise Risk Management (ERM) Fraud Risk Assessment	Advisory	Complete
Committee and Workgroup Meetings Participation	Advisory	Ongoing
Special Requests and Emerging Issues – Healthcare Legislative Changes (17-203)	Consulting	Ongoing
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 2016 (17-100)	Audit	Complete
Annual Benefits Testing (17-101)	Agreed-Upon Procedures	Complete
Reporting Entity Audits (6 to 10 ISDs) (17-401s)	Audit	Completed 2 in FY17
Employer Audit Follow-up (17-402)	Audit	Complete
Employer Audit of Pension and TRS-Care Surcharges (17-403)	Audit	Complete
Higher Education Pilot and Audit Program Development (17-404)	Advisory	Complete
TRS Reporting Entity Website Audit Information and Communication	Advisory	Ongoing

Fiscal Year 2017 Audit Plan Status As of August 2017

Health Care		
Health Insurance Portability and Accountability Act (HIPAA) Gap Assessment and Validation (17-501)	Audit	Complete
Trust Expense Allocation Audit (17-503)	Audit	Complete
TRS-ActiveCare Open Enrollment Readiness Assessment Follow-Up (17-201)	Audit	Complete
TRS-ActiveCare Eligibility Pilot and Audit Program Development	Advisory	Deferred due to higher management priorities
Health Care Vendor Selection Observation	Advisory	Complete
Health Care Vendor Update Meetings	Advisory	Ongoing
Information Technology		
Contractor Onboarding and Off-boarding (17-502)	Audit	Complete
Disaster Recovery, Network Penetration Tests; Security Risk Assessment Review	Advisory	Complete
Investment Management		
Private Equity Fees (17-304)	Audit	Complete
Soft Dollars and Commission Sharing Arrangements (17-305)	Audit	Complete
Quarterly Investment and Ethics Policies Compliance Testing (17-302)	Agreed-Upon Procedures	Complete
Annual Testing of Investment Incentive Pay Plan (17-303)	Agreed-Upon Procedures	Complete
Investment Fiduciary Audit Coordination	Advisory	Complete
Investment Committees Attendance	Advisory	Ongoing
Internal Audit Department		
Annual Internal Audit Report (17-603)	Audit	Complete
Data Analysis Processes	Advisory	Deferred due to healthcare legislative changes project
Quarterly Audit Recommendations Follow-up	Audit	Ongoing
ERS Audit Quality Assurance Review	Audit	Complete
Internal Quality Assurance Review (17-602)	Advisory	Complete
Fiscal Year 2018 Audit Plan	Advisory	Complete
Internal Audit Strategic Plan Update	Advisory	Complete
Audit Committee Meetings Preparation	Advisory	Ongoing

Internal Audit Advisory Services¹ Fiscal Year 2017 – 4th Quarter

BENEFIT SERVICES
<ul style="list-style-type: none"> • Participated in the TEAM Program <ul style="list-style-type: none"> ○ Enterprise Projects Oversight Committee (EPOC) ○ Organizational Change Management Advisory Group (OCM) ○ Business Procedures and Training ○ Monthly meetings with TEAM Program Manager and vendor personnel ○ Reporting Entity Outreach (REO) Core Team ○ Independent Program Assessment (IPA) Vendor Coordination • TRUST Phase 1 Key Internal Controls Review in Refunds and Special Services Buy Back areas
HEALTH INSURANCE BENEFITS (HIB)
<ul style="list-style-type: none"> • Attended the Health Plan Administrator (HPA) and Pharmacy Benefit Manager (PBM) Vendor Quarterly Update Meetings
INVESTMENT MANAGEMENT DIVISION (IMD)
<ul style="list-style-type: none"> • Attended Internal Investment Committee (IIC) meetings • Participated in Proxy Voting Committee meeting • Participated in Securities Lending monitoring calls
FINANCIAL SERVICES
<ul style="list-style-type: none"> • Liaison for the State Auditor’s Office (SAO) Fiscal Year 2017 Comprehensive Annual Financial Review (CAFR) Audit • Participated in selection process for Director of Accounting • Participated in project team meetings for new financial system replacement
EXECUTIVE
<ul style="list-style-type: none"> • Facilitated SAO’s Quarterly Update Meetings • Participated in the Risk Oversight Committee • Participated in Health and Safety Committee Quarterly Meetings • Collaboration with Enterprise Risk Management on the upcoming enterprise-wide fraud risk assessment • Participated in the Records Management Cross-functional Workgroup • Participated in the <i>Open Government Risk Assessment</i> led by Enterprise Risk Management • Attended a public hearing on proposed 403(b) rule changes
INFORMATION TECHNOLOGY (IT)
<ul style="list-style-type: none"> • Disaster Recovery Exercise Observation – Recovery Exercise of TRUST system • Brainstorm with IT personnel on system change management risks and controls matrix • TRUST Phase 1 Security Requirements and Testing assessment

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 Goals and Performance Measures - Fiscal Year 2017
4th Quarter Ending August 2017

Target Performance	Activity	Status
Goal 1: Enhance Effectiveness of Internal Audit Organization		
1. Spend a minimum of 75% of total available department hours (excludes uncontrollable leave) for professional staff on direct assurance, consulting, and advisory services	Achieved 82% for fiscal year 2017	Achieved
2. Complete an internal assessment and report the results of the Quality Assurance and Improvement Program	The assessment is scheduled for completion in the 4 th quarter	Achieved
Goal 2: Develop and Implement Internal Audit Annual Audit Plan based on Formal Risk Assessment		
3. Prepare an annual audit plan based on a documented risk assessment and obtain input from trustees and staff	The audit planning and risk assessment was performed. The proposed audit plan for FY18 is completed and presented for AC Board review and approval in Agenda #8	Achieved
4. Execute 80% of audit and agreed-upon procedures projects (80% allows for flexibility due to changes in TRS business practices and special requests)	Planned audit and agreed-upon procedures projects are on schedule and assigned to staff	Achieved
5. Update the formal reporting entity risk assessment to identify reporting entities for audit	The formal reporting entity risk assessment has been updated and completed	Achieved
Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Assurance Practices		
6. Update data analytics roadmap identified by external advisor and complete year two activities	Internal Audit completed two pilot projects using data analysis: Audit of Commission Credits and Consulting of Federal Labor Standards Act (FLSA) compliance. Other activities in the data analytics roadmap and implementation plan has been deferred to FY 18 due to a new consulting project on healthcare legislative changes requested by HIB management.	Partially Implemented
7. Collaborate with an institution of higher education to pilot a reporting entity audit program; develop and distribute the audit program to other high education auditors and request that they conduct these audits	Pilot projects in two institutions of higher education were completed. A discussion of the pilot audit program is included in Agenda #6.D.	Achieved

**Internal Audit Goals and Performance Measures - Fiscal Year 2017
4th Quarter Ending August 2017**

Target Performance	Activity	Status
Goal 4: Deliver Value-Added Consulting and Advisory Activities		
8. Facilitate coordination of TEAM Independent Program Assessment (IPA) vendor by coordinating meetings with Executive Director, Executive Steering Committee (ESC) and Core Management Team (CMT), quarterly presentations to the TRS Board of Trustees, and other contractual activities	Coordination and support of IPA vendor is ongoing as planned	Achieved
9. Facilitate timely completion and success of State Auditor's Office (SAO) audits in fiscal year 2017 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests	Internal Audit staff provided support and coordination for the following SAO audits: <ul style="list-style-type: none"> • Audit of FY16 Comprehensive Annual Financial Report (CAFR) • Fiduciary Review of TRS' Investment Practices and Performance • Audit of FY16 Employer Pension Liability Allocation Schedules and Census Data Audits 	Achieved
Goal 5: Enhance Participation in Professional and Peer Organizations		
10. Participate in professional organizations (APPFA, IIA, ISACA, ACFE, SAIAF, CFA Institute) through monthly chapter meetings and participation in leadership roles in at least one professional organization.	Participation in professional organizations is ongoing: <ul style="list-style-type: none"> • CAE is secretary for APPFA • One IT Audit Manager is the web administrator for APPFA • One senior auditor is involved with the planning of the upcoming IIA Southern Regional Conference and participates with an IIA Chapter group to develop test questions for the IIA CIA exam 	Achieved
11. Support staff in obtaining additional certifications such as the CFA, CPA, and CIA certifications and have all staff obtain a minimum of 24 continuing professional education hours in a fiscal year and a minimum of 80 hours for a two year period.	<ul style="list-style-type: none"> • One staff made a progress in obtaining the CIA certification by passing first two parts of the CIA examination • Staff planned and attended professional development training every quarter 	Achieved

Legend: Target Status

	Target not achieved
	Behind in achieving target or partially complete
	On task to achieve target
	Achieved target



Update on CAE Performance Goals

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
1	<p>TRS Goal 1: Sustain a financially sound pension trust fund (investments).</p>	<p>Support an effective investment governance structure. Perform regular investment audit and consulting activities.</p>	<p>Facilitate and coordinate the external audits of the TRS Investment Company of Texas (TRICOT – London Office), Investment Fiduciary Review of Real Assets, and Comprehensive Annual Financial Audit.</p> <p>Pilot one to two audits of private equity funds to assess accuracy of fees, compliance with contractual provisions, and support for investment valuations.</p> <p>Provide assurance on compliance with commission credit policy, Investment Policy Statement, TRS ethics policies, and incentive pay plan.</p> <p>Continue buildout of internal investment audit dashboard for soft dollar expenditures, private market fees, and other areas as resources permit.</p>	<p>Complete. The TRICOT and investment fiduciary audits were reported in February 2017 and the CAFR audit was reported in December 2016.</p> <p>Complete. Two private equity audits were completed and the results of the pilot and lessons learned were presented at the September audit committee.</p> <p>Complete. The commission credit audit was reported in September. Incentive pay was reported in February. IPS and ethics policies testing results are reported quarterly.</p> <p>Partially complete. Analytics for external public markets and commission credits have been developed. Private markets analysis has been deferred due to time and budget constraints.</p>



Update on CAE Performance Goals

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
2	<p>TRS Goal 2: Continue to improve benefit delivery (pension).</p>	<p>Facilitate TEAM oversight function. Identify cost recovery opportunities at employers. Obtain greater audit coverage at higher education employers. Perform regular pension audit and consulting activities.</p>	<p>Enable full access of TEAM independent program assessment vendor to people and documents</p> <p>Participate in TEAM and TEAM committees as an advisor on internal controls.</p> <p>Identify opportunities for recovery of underpayments for employment after retirement (EAR) surcharges by conducting targeted audit of EAR for multiple entities.</p> <p>Pilot two university audits to develop an audit program to disseminate to higher education internal auditors.</p> <p>Provide assurance to TRS members and retirees by validating the accuracy of annuity payments and manual payments.</p> <p>Assist TRS management in its oversight of 403(b) providers by providing assurance on internal controls and compliance with statutes.</p>	<p>Ongoing. Internal Audit continues to coordinate Bridgepoint oversight activities and worked with management to add an additional Bridgepoint resource.</p> <p>Ongoing. Audit completed informal testing of controls for Phase 1A and Phase 1B prior to go live.</p> <p>Complete. Audit completed testing of EAR surcharges for 30 entities and reported results in September.</p> <p>Complete. Two university audit-related projects were completed in service of developing an audit program with results reported in September.</p> <p>Complete. Benefits testing is complete with results reported in September.</p> <p>Complete. Results of the 403(b) audit were reported at the December audit committee.</p>



Update on CAE Performance Goals

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
3	TRS Goal 3: Facilitate access to competitive, reliable health care benefits for our members (health care).	Perform regular healthcare audit and consulting activities.	Assist TRS in assessing its preparedness for undergoing a federal HIPAA audit by conducting a gap assessment of HIPAA compliance (IT Security Rule, Privacy Rule, and Breach Notification Rule).	Complete. The results of the HIPAA audit were reported at the June Audit Committee.
			Obtain evidence that Aetna and WellSystems have implemented requested controls related to open enrollment.	Complete. The results of the open enrollment audit were reported at the June Audit Committee.
			Provide feedback on the reasonableness of expense allocations to healthcare trusts.	Complete. Audit results were reported at the September Audit Committee.



Update on CAE Performance Goals

	TR Strategic Plan	CAE Goals	Key Performance Indicators	Status
4	<p>TRS Goal 4: Attract, retain, and develop highly competent staff.</p>	<p>Update the audit strategy and activities. Develop managers and staff. Implement an auditor recognition program. Enhance leadership skills.</p>	<p><u>Update departmental goals and activities:</u></p> <ul style="list-style-type: none"> a. Update the internal audit strategic plan using the internal audit capability maturity model with significant input from audit staff. b. Update the annual audit plan using risk assessment techniques and feedback from key stakeholders. <p><u>Implement staff development goals:</u></p> <ul style="list-style-type: none"> a. Develop an auditor staffing plan that links the auditor competency framework, skills inventory, and training plans. b. Identify areas of expertise where internal audit can serve as a resource for TRS stakeholders and professional organizations. Continue to develop competencies in areas identified such as data analysis skills. c. Form an audit management team to steer the direction of the audit department and provide for optimal decision-making and communication among teams. 	<p>Complete. The strategic plan was presented at the June Audit Committee.</p> <p>Complete. The annual audit plan was presented to the Audit Committee in September.</p> <p>In progress. A competency framework and training expectations have been created and discussed with staff. Individual training plans will be created as part of the annual evaluation process which ends October 31.</p> <p>In progress. An inventory of expertise has been developed. Training plans for data analysis skills are being formalized.</p> <p>Complete. The audit management team consists of three director-level staff and the CAE. We meet twice per month.</p>

Continue on next slide.



Update on CAE Performance Goals

	TR Strategic Plan	CAE Goals	Key Performance Indicators	Status
4	<p>TRS Goal 4: Attract, retain, and develop highly competent staff.</p>	<p>Update the audit strategy and activities. Develop managers and staff. Implement an auditor recognition program. Enhance leadership skills.</p>	<p><u>Implement staff development goals, continued:</u></p> <p>d. Simplify auditor evaluations and provide more feedback after each project. Link annual evaluations to merit pay.</p> <p>e. Develop and communicate career paths for staff within the department and link to the departmental succession plan</p> <p>f. Implement a staff recognition program that recognizes excellent work of others and encourages high achievement</p> <p><u>Implement personal development goals:</u></p> <p>a. Serve on the Association of Public Pension Fund Auditors (APPFA) board, lead the ERS audit quality assessment review, participate in the advisory committee for the State Agency Internal Audit Forum’s (SAIAF) Internal Audit Leadership Development Program (IALDP), and encourage staff to take leadership positions in professional organizations.</p>	<p>Complete. Staff evaluations were revised and project evaluations developed. Evaluations have a numerical score used for determining merit pay recommendations.</p> <p>Complete. A succession plan including career paths for each staff was developed and communicated to audit staff.</p> <p>Complete. Staff identified three areas where they desire additional recognition. These areas were implemented by August 31.</p> <p>Complete. ERS quality review presented to ERS audit committee in December. SAIAF IALDP participation occurred from January – April. Requirement for leadership positions by staff implemented in December.</p>

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Update on CAE Performance Goals

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
4	<p>TRS Goal 4: Attract, retain, and develop highly competent staff.</p>	<p>Update the audit strategy and activities. Develop managers and staff. Implement an auditor recognition program. Enhance leadership skills.</p>	<p><u>Implement personal development goals, continued:</u></p> <ul style="list-style-type: none"> b. Study frameworks for organization performance excellence through online resources, training participation, and discussion with other organizations who have implemented them. Consider adopting a framework for the Internal Audit Department and gathering information in conjunction with TRS Strategic Planning staff to identify elements which might be beneficial for TRS to incorporate. c. Learn more about staff, peers, and audit clients through asking open-ended “power” questions and applying emotional intelligence techniques. d. Practice active listening and summarizing meeting discussions to ensure input of participants is understood and incorporated. e. Continue personal recovery through regular physical therapy, exercise, and mindfulness techniques. 	<p>Ongoing. Read Maximize Performance by the StuderGroup and attended a two day training on Evidenced-Based Leadership (EBL) in February. Obtained overview from Schertz-Cibolo-Universal City ISD on their implementation of EBL. Met with Director of Strategic Planning on takeaways from the training and what could be implemented at TRS.</p> <p>Ongoing. During audit planning process, met with trustees, executives, and audit staff to ask power questions and obtain feedback.</p> <p>Ongoing. Practicing informally. Will utilize summarizing as part of audit planning process.</p> <p>Ongoing. Undergoing weekly physical therapy. Exercising and meditating daily.</p>

Internal Audit Staff Accomplishments

- Simin Pang provided training to IT developers on how to run pre-written audit reports in TRUST
- Toma Miller attended *Accessibility Training* in July to gain an understanding of how to create accessible Audit Committee and Board materials as required by the United States Access Board
- Art Mata attended and successfully completed the training program at Texas State Auditor's Office *2017 Audit Conference* in Austin, TX.
- The TRS Employer Audit team consisting of Art Mata and Cari Casey, provided a presentation at the *2017 Summer Conference* hosted by the Texas Association of School Business Officials (TASBO) in Galveston, TX. The Summer Conference is TASBO's most comprehensive conference of the year with over 3,000 school business professionals attending from around the state.

