

Audit Committee Meeting

April 2016



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; Ms. Palmer; & Ms. Sissney, Committee Members)

AGENDA

**April 7, 2016 – 8:00 a.m.
TRS East Building, 5th Floor, Boardroom**

1. Approve minutes of November 20, 2015 Audit Committee meeting
– Christopher Moss, Chair
2. Receive State Auditor’s Office reports
 - A. Audit of TRS’ Comprehensive Annual Financial Report for Fiscal Year 2015 – Angelica Ramirez and Michael Clayton, State Auditor’s Office
 - B. Audit of Net Pension Liability Beginning of Year for Fiscal Year 2014 – Anglica Ramirez and Michael Clayton, State Auditor’s Office
3. Receive an overview of the TRS-ActiveCare Enrollment and Billing Readiness Review – Amy Barrett and Katrina Daniel; Neill Masterson, Lara Perlman, and Garrison Phillis, EY
4. Receive reports on Information Technology projects
 - A. Audit of SharePoint Governance and Security – Ron Franke, Myers and Stauffer LC
 - B. Wireless Network Security Assessment (Agreed-Upon Procedures) – Ron Franke, Myers and Stauffer LC
5. Receive Internal Audit reports
 - A. Semi-Annual Testing of Investment Controls (External Public Markets and Public Strategic Partnership and Research) – Hugh Ohn
 - B. Quarterly Investment Testing (Agreed-Upon Procedures) – Hugh Ohn
6. Receive report on status of prior audit and consulting recommendations – Amy Barrett
7. Consider Recommendation to the Board of Trustees Regarding Revisions to the Audit Plan for Fiscal Year 2016 – Amy Barrett
8. Discuss or consider Internal Audit administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, new and outstanding complaints, 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 1



**TEACHER RETIREMENT SYSTEM OF TEXAS
AUDIT COMMITTEE MEETING
November 20, 2015**

The Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas met on Friday, November 20, 2015 in the boardroom located on the fifth floor of the East Building of TRS' offices located at 1000 Red River Street, Austin, Texas 78701. The following persons were present:

TRS Board Members

Christopher Moss, Audit Committee Chair
Nanette Sissney, Board Vice Chair, Audit Committee Member
Anita Smith Palmer, Audit Committee Member
T. Karen Charleston, Audit Committee Member
David Corpus, Audit Committee Member
R. David Kelly, Board Chair
Dolores Ramirez, Board Member
Joe Colonna, Board Member

TRS Staff

Brian Guthrie, Executive Director
Ken Welch, Deputy Director
Amy Barrett, Chief Audit Executive
Karen Morris, Director, Pension Audit Services
Hugh Ohn, Director, Investment Audit Services
Jan Engler, Audit Manager, Internal Audit
Dinah Arce, Senior Auditor, Internal Audit
Dorvin Handrick, Information Technology Audit Manager, Internal Audit
Toma Miller, Senior Auditor, Internal Audit
Nick Ballard, Senior Investment Auditor, Internal Audit
Art Mata, Senior Internal Audit Consultant, Internal Audit
Cari Casey, Internal Audit Consultant, Internal Audit
Jerry Albright, Deputy Chief Investment Officer
Barbie Pearson, Chief Benefit Officer
Don Green, Chief Financial Officer
Jamie Pierce, Director, General Accounting
Cindy Haley, Team Leader, Financial Reporting, General Accounting
Chris Cutler, Chief Information Officer
Chet Henry, Deputy Information Officer
Christi Holman, Director of Information Systems Support
Carolina de Onís, General Counsel
Dan Junell, Assistant General Counsel

TRS Staff (cont'd)

Rebecca Smith, Assistant General Counsel
Clarke Howard, Assistant General Counsel
Heather Traeger, Chief Compliance & Ethics Officer, Legal
Lynn Lau, Assistant Secretary to the Board and Program Specialist
Jay LeBlanc, Director, Risk Management & Strategic Planning
Dan Herron, Communications Specialist, Communications

Other Attendees

Steven Huff, Reinhart Boerner Van Deuren s.c.
Hillary Eckford, State Auditor's Office
Philip Mullins, Texas State Employees Union
Ann Fickel, Texas Classroom Teachers Association
Ted Melina Raab, Texas American Federation of Teachers
Reece Freeman, Texas Pension Review Board
Tim Lee, Texas Retired Teachers Association
Carol Riley, Blue Cross Blue Shield of Texas
Leslie Adkins, Blue Cross Blue Shield of Texas
Bert Marshall, Blue Cross Blue Shield of Texas
Amy Timmons, HPE

Audit Committee Chair Christopher Moss called the meeting to order at 8:00 a.m. with a quorum of committee members present.

1. APPROVE THE PROPOSED MINUTES OF THE SEPTEMBER 25, 2015 AUDIT COMMITTEE MEETING

On a motion by Ms. Nanette Sissney and seconded by Ms. Karen Charleston, the proposed minutes of the September 25, 2015 Audit Committee meeting were approved as presented.

2. RECEIVE STATE AUDITOR'S OFFICE REPORT ON AUDIT OF BENEFITS PROPORTIONALITY AT THE OFFICE OF THE COMPTROLLER OF PUBLIC ACCOUNTS, THE TEACHER RETIREMENT SYSTEM, AND THE EMPLOYEES RETIREMENT SYSTEM

Ms. Hillary Eckford, State Auditor's Office, presented the results of the Audit of Benefits Proportionality at the Office of the Comptroller of Public Accounts, the Teacher Retirement System, and the Employees Retirement System. She stated that the audit resulted in several recommendations being made to the Legislature regarding inconsistencies in proportionality requirements for state agencies and higher education institutions. She added that no recommendations were made concerning the Teacher Retirement System during the audit.

3. RECEIVE INTERNAL AUDIT REPORTS

A. Audit of Actuarial Data Controls

Ms. Karen Morris stated that the objective of the Actuarial Data Controls Audit was to assess whether internal controls are in place and working effectively to determine the accuracy and

completeness of the Fiscal Year 2014 actuarial data files for the pension trust fund. She reported that management controls were found to be working effectively and no significant issues or errors were identified. The project team identified some areas where controls could be strengthened.

Mr. Dorvin Handrick described the testing process used during the audit and the issues identified.

Ms. Morris reported that management had agreed with recommendations regarding areas where it was identified that controls could be strengthened.

Ms. Amy Barrett informed the Committee that Ms. Morris was retiring. She then took a moment to recognize Ms. Morris for more than 30 years of service to the state of Texas and to the Teacher Retirement System. Several members of the Committee and the Board of Trustees thanked Ms. Morris for her service as well.

B. Audit of Northside Independent School District

Ms. Dinah Arce gave a brief overview of Northside Independent School District (ISD) and then Mr. Art Mata presented the results of the Northside Independent School District Audit. Mr. Mata stated that Northside ISD correctly submitted information on five of eight reports that were audited. Three reports where errors were found dealt with employment after retirement, the pension surcharge report, and the TRS-Care surcharge report.

Ms. Barbie Pearson informed the Committee of steps being taken by the Benefit Services Division at TRS to improve training for reporting entities and of proposed rule changes that attempt to make the employment after retirement process less challenging to school districts.

Mr. Brian Guthrie commented that TRS previously proposed changes to the employment after retirement process that were passed by the Legislature a couple of sessions ago and helped to make the rules simpler and easier to understand.

Mr. Ken Welch commented that TRS is looking at adjusting the employment after retirement rules further; however, caution is being taken to ensure that any changes would not have an actuarial impact on the fund. He indicated that the proposed changes may be brought before the Policy Committee in February. Mr. Welch also noted that TRS has increased staffing in the reporting entity area in order to allow for more outreach to and training for reporting entities.

C. Quarterly Investment Testing (Agreed-Upon Procedures)

Ms. Barrett informed the Committee that no errors were identified during the quarterly investment testing.

4. RECEIVE REPORTS ON THE FISCAL YEAR 2015 INTERNAL AUDIT REPORT AND STATUS OF PRIOR AUDIT AND CONSULTING RECOMMENDATIONS

A. Fiscal Year 2015 Internal Audit Annual Report

Ms. Barrett gave an overview of the Internal Audit Annual Report issued each year in accordance with the Texas Internal Auditing Act, with copies given to the State Auditor's Office, Legislative Budget Board, Sunset Advisory Commission, and the Governor's Office. This annual report is also posted to the TRS website.

B. Status of Prior Audit and Consulting Recommendations

Ms. Barrett provided a brief update on the status of prior audit and consulting recommendations. She stated that a lot of progress is being made on the recommendations from the Purchasing and Contract Management Audit, including the development of a new contract management policy that will replace the old contract administration manual. Due to the complexity of developing a procurement policy that impacts the entire agency, she stated that the implementation dates on some of the related recommendations have been moved out to allow time for proper implementation.

Ms. Barrett also informed the Committee that a section was added to track the status of outstanding audit recommendations from the State Auditor's Office.

5. DISCUSS OR CONSIDER INTERNAL AUDIT ADMINISTRATIVE REPORTS AND MATTERS RELATED TO GOVERNANCE, RISK MANAGEMENT, INTERNAL CONTROL, COMPLIANCE VIOLATIONS, FRAUD, REGULATORY REVIEWS OR INVESTIGATIONS, NEW AND OUTSTANDING COMPLAINTS, FRAUD RISK AREAS, AUDITS FOR THE ANNUAL INTERNAL AUDIT PLAN, OR AUDITORS' ABILITY TO PERFORM DUTIES

Ms. Barrett provided an overview of her performance goals for fiscal year 2016 and how each ties to the TRS Strategic Plan. She asked the Committee to provide her with feedback they may have.

Ms. Barrett stated that Internal Audit will be undergoing a peer review during the spring. She stated that the peer review team has been selected and will include Benny Ybarra, Chief Audit and Compliance Officer from the Texas Department of Transportation, Byron Williams, Chief Audit Executive from the Oregon State Treasury, and Greg Royal, the Director of Internal Audit at the Department of Insurance.

In regards to staff accomplishments, Ms. Barrett noted that Hugh Ohn participated in a panel at the Association of Public Pension Fund Auditors conference and has been fulfilling the secretarial duties for the organization in place of Ms. Barrett who has not been able to travel over the past year.

Board Chairman, Mr. David Kelly, asked Ms. Barrett to coordinate a project that looks at technology opportunities across TRS with the goal of identifying opportunities where implementing lower priced technology improvements could gain some efficiency for the agency.

The meeting adjourned at 9:00 a.m.

Approved by the Audit Committee of the Board of Trustees of the Teacher Retirement System of Texas on the 8th day of April 2016.

Attested by:

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

TAB 2

TAB 2A

Fiscal Year 2015 Teacher Retirement System Financial Statement Audit

State Auditor's Office Audit Team:

Angelica M. Ramirez, CPA, Audit Manager

Michael O. Clayton, CPA, CISA, CFE, CIDA, Project Manager

April 7, 2016



Audit Results

We issued an unqualified opinion on the Teacher Retirement System's fiscal year 2015 financial statements.

We reissued the prior-year finding that the Teacher Retirement System should develop and implement a process to strengthen controls over active employee census data.



Fiscal Year 2014 Beginning
Net Pension Liability
Beginning of Year Column
Total Audit



We issued an unqualified opinion on the Fiscal Year 2014 Beginning Net Pension Liability Column Balance on the Fiscal Year 2014 Schedule of Pension Amounts by Employer.

We performed this work subsequent to the issuance of our opinion on the Fiscal Year 2014 Teacher Retirement System Schedule of Pension Amounts by Employer due to audit recommendations enacted by the American Institute of Certified Public Accountants (AICPA) after the date of our original opinion.



Questions



Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System (System) Fiscal Year 2015 Financial Statements

We have audited the financial statements of the Teacher Retirement System (System) for the year ended August 31, 2015, and have issued our report thereon dated November 18, 2015. 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 19, 2015, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management with your oversight are prepared, in all material respects, in accordance with generally accepted accounting principles. Our audit of the financial statements 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 19, 2015.
3	Corrected and Uncorrected Misstatements	<p>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.</p> <p>The attached schedule summarizes uncorrected misstatements of the financial statements. Management has determined that their effects are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.</p>
4	Other Information in Documents Containing Audited Financial Statements, Supplementary Information, and/or Required Supplementary Information	<p>Our financial statement audit opinion applies to the basic financial statements, which include the accompanying notes. We also applied certain limited auditing procedures to the Other Supplementary Information and concluded that such information was fairly stated in all material respects in relation to the basic financial statements taken as a whole.</p> <p>We did not opine on Management's Discussion and Analysis (MD&A) and Required Supplementary Information. However, we performed limited procedures related to this information, which consisted of inquiring of management regarding the methods of its measurement and presentation, and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements.</p>

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System (System) Fiscal Year 2015 Financial Statements

No.	Item	Comments
5	Management Representations	We have requested certain representations from management that are included in the management representation letter dated November 18, 2015. We also requested a representation letter dated November 18, 2015, from the System's general counsel regarding the existence of certain contingent liabilities that might require disclosure in the financial statements.
6	Qualitative Aspects of the Entity's Significant Accounting Practices	<p>Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the System are described in Note 1 to the financial statements.</p> <p>For the fiscal year 2015, the Statement of Changes in Fiduciary Net Position for the Pension Trust Fund includes a reclassification from Net Increase in Fair Value of Investments to Dividends.</p> <p>We noted no transactions entered into by the System during the year for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the financial statements in a period that differs from when the transaction occurred.</p>
7	Significant Difficulties Encountered During the Audit	We did not encounter any restrictions in performing our procedures or gaining access to individuals or records. Management and staff provided us with all of the information and support we requested.
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. These discussions occurred in the normal course of the audit.</p> <p>We identified the following significant deficiency in controls: The System should strengthen controls to help ensure the completeness and accuracy of the active employee census data that employers submit.</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 financial statements or the auditor's report.</p>

Required Communication with Those Charged with Governance
Based on the Audit of the Teacher Retirement System (System) Fiscal Year 2015 Financial Statements

No.	Item	Comments
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 financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, 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>
11	Significant Findings or Issues Discussed, or Subject to Correspondence, with Management	<p>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.</p>
12	Independence	<p>The State Auditor's Office is independent to conduct the audit of System's fiscal year 2015 financial statements. It is the State Auditor's Office's philosophy to conduct all projects in an environment free of any threats that impair independence.</p>
13	Fraud, Abuse, or Noncompliance with Laws and Regulations, Contracts or Grant Agreements	<p>Auditing standards require auditors to exercise professional skepticism and increased awareness to detect potential violations, fraud, and abuse.</p> <p>We did not find evidence that fraud, abuse, or noncompliance with laws and regulations, contracts or grant agreements, had, or might have, occurred.</p>

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

Attachment for Required Communication with Those Charged with Governance

Uncorrected Financial Statement Misstatements to Material Line Items*	
Alternative Investments	\$56,761,038
Net Increase(Decrease) in Fair Value of Investments	\$56,761,038

*This amount is a projected error amount based on an actual error of \$3,066,907 identified during valuation testing of TRS holdings as of 8/31/2015.

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

Independent Auditor's Report

Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman
Ms. Nanette Sissney, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

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 financial statements of the major enterprise fund and the aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the Teacher Retirement System (System) as of and for the year ended August 31, 2015, and the related notes to the financial statements, which collectively comprise the System's basic financial statements and have issued our report thereon dated November 18, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, 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 and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control described in the accompanying schedule of findings and responses that we consider to be a significant deficiency.

Summary of Findings and Responses
Finding Number
2015-1

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free of 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 financial statement 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.

The System's Response to Findings

The System's response to the finding identified in our audit is described in the accompanying schedule of findings and responses. The System's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control over financial reporting 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 over financial reporting and compliance. Accordingly, this communication is not suitable for any other purpose.



Lisa R. Collier, CPA, CIDA

First Assistant State Auditor

November 18, 2015

Schedule of Findings and Responses

Section 1

The System Should Strengthen Controls to Help Ensure the Completeness and Accuracy of the Active Employee Census Data That Employers Submit

Reference No. 2015-1

Type of finding: Significant Deficiency

The Teacher Retirement System (System) should strengthen controls over active employee census data to help ensure that data is complete and accurate (see text box for additional information). More than 1,300 school

Active Employee Census Data

Active employee census data is key demographic data that affects the actuarial estimate of the pension liability amount that the System presents in its financial statements.

Key data elements include:

- Gender.
- Date of birth.
- Salary.
- Years of service.

Source: American Institute of Certified Public Accountants February 2014 white paper entitled *Single-Employer and Cost-Sharing Multiple-Employer Plans: Issues Associated with Testing Census Data in an Audit of Financial Statements*.

districts, colleges, and universities submit active employee census data regarding the active members who participate in the System's pension plan. The completeness and accuracy of that data is important because the System uses that data to calculate member pension benefits and the pension liability amount that the System presents in its financial statements. Auditors previously reported this finding during the audit of the System's fiscal year 2014 financial statements.¹

The System's controls over active employee census data are not sufficient to properly identify data that is incomplete or inaccurate. The absence of effective management processes and controls represents a deficiency in internal control over financial reporting, as noted in the guidance that the American Institute of Certified Public Accountants (AICPA) issued in a February 2014 white paper.²

Auditors tested census data at 89 school districts, colleges, and universities. The majority of that data was accurate, and auditors identified no systematic issues. However, strengthening controls at the System would:

- Help to ensure that data is complete and accurate.
- Help to ensure that school districts, colleges, and universities are fully and accurately reporting that data.

¹ See *A Report on the Audit of the Teacher Retirement System's Fiscal Year 2014 Financial Statements* (State Auditor's Office Report No. 15-010, November 2014).

² The AICPA's white paper is entitled *Single-Employer and Cost-Sharing Multiple-Employer Plans: Issues Associated with Testing Census Data in an Audit of Financial Statements*.

- Improve the quality of the data that the System provides to its actuary to calculate the pension liability amount presented in the System's financial statements.

Examples of ways in which the System could strengthen controls over active employee census data include:

- Performing periodic site visits at employers to verify active employee census data.
- Providing employers with training or guidance on capturing active employee census data.
- Requiring school districts to periodically test the active employee census data and to certify the completeness and accuracy of that data when they submit that data to the System.

Recommendation

The System should develop and implement a process to strengthen controls over active employee census data.

Management's Response

TRS is undertaking a modernization effort of its pension administration system that will, among other things, help strengthen controls over active employee census data to ensure its accuracy and completeness through additional data elements and stronger validations. The new pension administration system is expected to go live in FY 2017. TRS Staff is currently beginning the User Acceptance Testing for Phase 1A Employer Certification. Beginning late February 2016 TRS will begin Employer Training on the new Pension Line of Business. Those sessions will be conducted throughout the state at the Region Service Centers in addition to TRS Headquarters. Once the training is complete we will begin the Employer Certification where the Reporting Entities will submit their reports using the new employer portal for the Pension Line of Business System through a test environment.

TRS Reporting Entity Coaches conducted their FY 2016 fall workshops for employer reporting officials at the twenty Education Service Centers. This training consisted of reviewing the reporting requirements and any new legislative or rule changes. The Coaches have also provided additional follow up training as requested by attendees at the sessions.

TRS staff is also heavily involved in the Data Management Project that is identifying missing employee census data. The data conditioning portion of that project is working through the missing data elements and using various methods to identify and locate the missing data by using Lexis Nexis software and our actuaries' software to identify information on members based on tax identification numbers. The TRS staff is then correcting or adding the missing information to the employee data file.

TRS Internal Audit staff will continue testing employer census data and controls in FY 2016 pertaining to the census data reporting process for active members. TRS is auditing the following elements of the data: gender; dates of birth; dates of hire or years of service; eligible compensation; and termination or retirement dates. TRS internal auditors are also testing eligibility and compensation for accuracy, completeness, and compliance with TRS Laws & Rules. Employer self-audit tools are available on the TRS website. These tools provide specific how-to instructions and guidelines for conducting a self-audit of the data and contributions of various reports submitted to TRS.

All processes described above are being implemented and are ongoing processes with the exception of the new pension line of business which will be implemented for active membership September 2016 with the full implementation of the pension line of business scheduled for May 2018.

Independent Auditor's Report

Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman
Ms. Nanette Sissney, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

Report on the Financial Statements

We have audited the accompanying financial statements of the major enterprise fund and the aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the Teacher Retirement System (System), a component unit of the State of Texas, as of and for the year ended August 31, 2015, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements 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 financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements 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 financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, 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

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financial statements 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 financial statements.

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

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the statements of the major enterprise fund and the aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the System, as of August 31, 2015, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

Teachers Retirement System Financial Statements

As discussed in Note 1, the financial statements of the System, are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the major enterprise fund and the aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the State of Texas that is attributable to the transactions of the System. They do not purport to, and do not, present fairly the financial position of the State of Texas as of August 31, 2015, the changes in its financial position, or where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Investments with Values that are not Readily Determined

As discussed in Note 3, the financial statements include investments valued at approximately \$48.2 billion as of August 31, 2015, whose fair values have been estimated by management in the absence of readily determinable fair values. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and Schedule of Changes in the Employers' Net Pension Liability and Related Ratios, Schedule of Employers' Net Pension Liability (Historical), Schedule of Employer and Non-Employer Contributing Entity Contributions, Schedule of Investment Returns, Schedule of Funding Progress, and Schedule of Contributions from Employers and Other Contributing Entities, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's financial statements. The information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information in Exhibit A and Schedules 1 through 4, as listed in the table of contents, is fairly stated in all material respects in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial, Benefits, and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Report on Summarized Comparative Information

We have previously audited the System's fiscal year 2014 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 17, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended August 31, 2014, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we issued a separate report on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.



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

November 18, 2015

TAB 2B

Independent Auditor's Report

Teacher Retirement System Board of Trustees:

Mr. R. David Kelly, Chairman
Ms. Nanette Sissney, Vice Chair
Mr. Todd Barth
Ms. T. Karen Charleston
Mr. Joe Colonna
Mr. David Corpus
Mr. Christopher Moss
Ms. Anita Smith Palmer
Ms. Dolores Ramirez

We have audited the column total titled Net Pension Liability Beginning of Year of the Teacher Retirement System (System) Pension Plan, as of and for the year ended August 31, 2014, included in the accompanying schedule of pension amounts by employer of the System Pension Plan as of and for the year ended August 31, 2014.

Management's Responsibility for the Schedule

Management is responsible for the preparation and fair presentation of this schedule 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 the schedule that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the specified column total 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the specified column total included in the schedule of pension amounts by employer is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amount in the specified column total 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 specified column total included in the schedule of pension amounts by employer, 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 specified column total 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 specified column total 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 column total referred to above presents fairly, in all material respects, the Net Pension Liability Beginning of the Year for the total of all participating entities for the System Pension Plan as of August 31, 2014, 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 schedule of employer allocations of the System Pension Plan, as of and for the year ended August 31, 2014, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System Pension Plan as of and for the year ended August 31, 2014, and the related notes, and our report thereon, dated May 29, 2015, expressed an unmodified opinion on those schedules.

Restriction on Use

Our report is intended solely for the information and use of the 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, CIDA
First Assistant State Auditor

December 14, 2015

TAB 3



TRS-ActiveCare enrollment and billing readiness review

Audit Committee Meeting
April 7th



Project overview

TRS has engaged Ernst and Young to perform a review of the TRS-ActiveCare enrollment and billing remediation efforts by Aetna and WellSystems.

Objectives:

- Perform inquiry and testing to assess the root causes of identified enrollment and billing issues
- Perform inquiry and testing to assess whether known issues in the enrollment and billing process have been remediated
- Perform inquiry and testing to assess current-state enrollment and billing processes
- Compare existing enrollment and billing processes against industry standards and leading practices

Project timing:

- March 9, 2016 through June 17, 2016



Readiness review project team



Neill Masterson
Engagement Executive



Debbi Fitzgerald
Payer Subject Matter Resource



Lara Perlman
Project Senior Manager



Shakeya McDow
Payer Subject Matter Resource



Ryan Thompson
Organizational Change Management Support



Garrison Phillis
Project Manager



Toma Miller
TRS Senior Internal Auditor



Ben Books
Senior Internal Auditor



Daniel Cantillo
Senior Internal Auditor

Staff





Scope of review

The scope of the TRS-ActiveCare enrollment and billing review includes:

Root cause analysis of known enrollment and billing issues:

- Interviews with the following school districts:
 - Dallas ISD
 - Fort Worth ISD
 - Eagle Mountain Saginaw ISD
 - Medina Valley ISD
 - East Central ISD
- Third Party Administrator file transfer testing
- Mesa self-service portal configuration and interface review

Current process review and remediation plan assessment:

- Third Party Administrator file transfer testing
- Mesa self-service portal configuration and interface review
- Data vulnerability review
- Ongoing enrollment maintenance and updates review
- Enrollment report and monthly control report review
- Billing accuracy review



Project timeline

		March 2016			April 2016				May 2016				June 2016		
		3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2	5/9	5/16	5/23	5/30	6/6	6/13
Planning	Initial meetings with client executives, key stakeholders and management														
	Obtain and review source documentation														
	Conduct stakeholder interviews														
Fieldwork	On site at Aetna/WellSystems														
	On site at school districts														
Findings validation and reporting	Draft findings and recommendations report														
	Management validation of findings														
	Submit final report of findings and recommendations														
	Audit Committee results presentation														

TAB 4

TAB 4A

CONFIDENTIAL PRIVATE DOCUMENT - NOT SUBJECT
TO PUBLIC DISCLOSURE - GOVERNMENT CODE §
552.139 relating to exception to disclosure for government
information relating to security issues for computers.

TAB 4B

CONFIDENTIAL PRIVATE DOCUMENT - NOT SUBJECT
TO PUBLIC DISCLOSURE - GOVERNMENT CODE §
552.139 relating to exception to disclosure for government
information relating to security issues for computers.

TAB 5

TAB 5A

SEMI-ANNUAL TEST RESULTS OF INVESTMENT CONTROLS

March 21, 2016

TRS Internal Audit Department

Business Objectives	External Public Markets: Identify and invest in top tier external managers to provide superior risk-adjusted return	Public Strategic Partnership & Research: Generate alpha through unique long-term investment relationships	Support Groups: Provide support for IMD profit centers to promote and protect Trust interest
Business Risks	<ul style="list-style-type: none"> Hiring unqualified managers No long-term value added to the Fund Investing strategy changes or style drift by managers Incorrect fee amount paid Non-compliance with Investment Management Agreement (IMA) 	<ul style="list-style-type: none"> Investment returns trailing benchmarks consistently Inadequate monitoring of strategic partners Failure to take corrective action on risk limit or compliance violations Failure to meet research targets 	<ul style="list-style-type: none"> Inaccurate information on holdings and valuation Investment risks not measured or reported Manager's non-compliance with IMA Inappropriate or costly travel to foreign countries
Management Controls	<ul style="list-style-type: none"> Due diligence and approval required prior to hiring Investment performance monitoring Risk signals monitored Monitoring by consultants TRS staff's and consultant's review of fees charged Compliance monitoring 	<ul style="list-style-type: none"> Weekly Strategic Partner Network (SPN) Position Report Monthly portfolio review Follow-up action and documentation required for risk signals generated Annual Report Card Research results reported to Management Committee 	<ul style="list-style-type: none"> Monthly investment holdings reconciliation Risk certification prior to hiring a new manager Periodic risk measurement and reporting Daily compliance monitoring Approval of foreign travel and related expenses
Controls Tested	<ul style="list-style-type: none"> Manager certification Investment performance monitoring Risk signals monitored TRS staff's and consultant's review of fees charged 	<ul style="list-style-type: none"> Monthly portfolio review Follow-up action and documentation on risk signals generated Annual Report Card Research results reported 	<ul style="list-style-type: none"> Monthly holdings reconciliation Risk certification for a new manager Approval of foreign travel and related expenses
Results	Management controls are operating effectively to achieve business objective.	Management controls are operating effectively to achieve business objective.	Management controls are operating effectively. However, foreign travel documentation can be improved.
Recommended Actions	None	None	Improve the travel process by requiring justifications for excess lodging expenses related to foreign travel
Management Responses	N/A	N/A	Management agrees

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

MEMORANDUM

TO: Audit Committee Members, TRS Board of Trustees
Brian Guthrie, Executive Director

FROM: Amy Barrett, Chief Audit Executive
Hugh Ohn, Director of Investment Audit Services

SUBJECT: **First Half Test Results of Investment Controls**

DATE: March 21, 2016

The purpose of this memo is to report the interim results of Internal Audit's tests of Investment Management Division (IMD) controls for the first half of fiscal year 2016. The results of these tests are considered interim since they will be used to express the overall opinion on IMD controls at the end of the fiscal year 2016. For the first half of fiscal year 2016, we tested controls related to the following three areas: (a) External Public Markets; (b) Public Strategic Partnership and Research; and (c) Groups that provide support for these two profit centers which include Investment Operations, Risk, Investment Accounting, and Investment Compliance.

OVERVIEW

External Public Markets (EPU)

The External Public Markets (EPU) program at TRS started in 2008 shortly after the 80th Texas Legislature authorized the TRS Board of Trustees to delegate investment authority to contract with private professional managers for investment and management of Trust assets. The EPU's business objective is to identify and invest in top tier external managers to provide superior risk-adjusted return for the teachers of Texas. The roles of different EPU managers at TRS are:

- Long Oriented Investment Managers
 - Higher tracking error strategies: alpha focus
 - Complements internally managed equity portfolios
- Hedge Fund Managers
 - Stable value, providing absolute returns with no correlation to equity markets
 - Directional, correlated to global equities and provide superior risk-adjusted returns
- Other Absolute Return/Fixed Income Managers
 - Tactical Exposure during valuation extremes
 - Partnership with top-tier, premier investors worldwide

The EPU team within the Investment Management Division (IMD), which consists of portfolio managers and analytics members, is responsible for identifying prospective managers, recommending them to the Internal Investment Committee (IIC) for hiring, monitoring investment performance and risk of managers and portfolios, and terminating underperforming

First Half Investment Control Test Results
March 21, 2016 Memorandum

managers. The EPU team's monitoring of external managers and hedge funds is supplemented by the services provided by external consultants and other TRS support groups.

As of December 31, 2015, the market value of the portfolios managed by the EPU team was \$36.7 billion. The breakdown of these portfolios is as follows:

Portfolio	Market Value (in billion)	Percentage	Number of Funds
Long-Oriented	\$25.2	68.7%	38
Directional Hedge Funds	6.0	16.3%	24
Stable Value Hedge Fund	5.3	14.5%	26
Other Absolute Return	0.2	0.5%	1
Total External Public =	\$36.7	100.0%	89

According to State Street's PureView report, one-year and three-year returns of the Total External Public Market's portfolio as of December 31, 2015, were -3.05% and 5.46%, outperforming its benchmark by 48 basis points and 41 basis points, respectively.

Public Strategic Partnership and Research (SPR)

In 2008 TRS selected four of the world's largest and highly-resourced investment organization as its strategic partners. In addition to asset management services, strategic partners provide TRS with multiple benefits, including access to analytical tools and data sources, proprietary market insights and investment research, and trading and systems support. The public Strategic Partner Network (SPN) team within the SPR is responsible for managing, overseeing, and monitoring four unique long-term investment relationships in the public markets around the world. Its business objectives are: (a) to generate consistent and significant alpha through unique long-term investment relationships in the public markets; and (b) to deliver leading-edge ideas, market perspectives, and investment research.

As of December 31, 2015, the market value of the assets managed by the four public strategic partners was \$6.3 billion. According to State Street's PureView report, one-year and three-year returns of the public strategic partnership assets were -3.80% and 5.79%, underperforming its one-year benchmark by 101 basis points while outperforming its three-year benchmark by 82 basis points.

Support Groups for EPU and SPR

The following groups provide various types of support for IMD profit centers, including the EPU and SPR:

- Investment Operations (Ops) – The Ops group is responsible for managing the financial and information systems for the entire IMD. This team works closely with the custodian (State Street Bank) to ensure that the investment book of records is accurate. One of the Ops teams is responsible for process IMD staff's travel requests, including travels to foreign countries.

**First Half Investment Control Test Results
March 21, 2016 Memorandum**

- Risk Group – The Risk Group is responsible for monitoring and managing investment risk for the Trust, including absolute and relative risk exposures of the Trust, analysis of new investments for risk and portfolio fit, and hedging strategies. This group is led by the Chief Risk Officer of the IMD.
- Investment Accounting – Investment Accounting, which is part of the Financial Division at TRS, provides independent oversight over financial reporting on investment operations and activities performed by the IMD. Investment Accounting’s responsibilities include reconciliations of TRS’ partnership investments, wire transfers of funds to general partners, and review of fee payments to external asset managers.
- Investment Compliance – As a part of the Legal Services Department, Investment Compliance assists IMD in reviewing questions regarding whether external managers and strategic partners adhere to laws, regulations, ethics policies, and investment management agreements. Investment Compliance also, in conjunction with Investment Operations, establishes and monitors testing of, and responds to violations of, Investment Policy Statement and investment management agreement provisions for EPU and SPR managers. This team is led by the Chief Compliance Officer.

FINDINGS AND RECOMMENDED ACTIONS

Overall, we determined that management controls at EPU, SPR, and other supporting groups are operating effectively to achieve business objectives. Examples of the positive results we noted during our control testing included the following:

- EPU staff members have completed or are in process of re-negotiating many investment management agreements to lower the fees they agreed to charge to TRS under current investment management agreements. The EPU team was successful with twelve managers so far and the estimated fee savings from these re-negotiations is approximately \$10 million per year, plus one-time savings of \$2.5 million.
- EPU has recently started receiving reports from a hedge fund consultant which show comparisons of estimated fees and actual amounts of fees charged by each hedge funds (for both management fees and incentive fees). These reports enable EPU staff to assess whether hedge fund fees are reasonable. This is an important step since hedge funds are generally less transparent compared to Long-Oriented managers.
- The Strategic Partner Network Position Report (“Common Language Report”) developed by the SPR group provides a useful monitoring tool to find out and compare each strategic partner’s asset allocation positions, exposures, and risk metrics on a weekly basis. Information included in these reports is also used by other IMD teams as part of tactical asset allocation and trading processes for TRS.

**First Half Investment Control Test Results
March 21, 2016 Memorandum**

We did not identify any significant issues or control deficiencies. However, we noted an opportunity to improve documentation of foreign travel requests and expense claims.

Improve the Travel Process by Ensuring Justification for Excess Lodging Expenses for Foreign Travel

Our testing of EPU and SPR staff's travel to foreign countries during the period from January 1, 2015 to January 31, 2016 disclosed that:

- Business purposes of foreign travel are justified
- Foreign trips made were in line with staff's duties
- Forms required for multi-person travel were completed
- Foreign travel request forms with estimated costs were approved by the Executive Director

In addition to TRS Travel Guide, the IMD maintains Deputy CIO's Travel Request Tips to provide additional guidelines for what travel practices are allowable or unallowable and what types of travel-related expenses are not reimbursable. Currently, there is no State of Texas guidelines for lodging expenses for foreign travel. Our testing disclosed an instance of travel where the daily average of the combined expense of lodging and meals exceeded the U.S. State Department per diem rate by 14.5%. The travel claims file did not include any documentation of why this person stayed at a hotel with a higher rate than the federal per diem. However, information obtained after the fact supported staying at that hotel in order to visit the maximum number of managers without staying for an extra day.

RECOMMENDATION

We recommend that TRS improve the travel process by ensuring there is appropriate justifications for excess lodging expenses to be incurred for foreign travel.

MANAGEMENT RESPONSE

Management agrees with the recommendation. Management will seek to improve the travel process by providing justification for excess lodging expenses over a prescribed amount. The target implementation date for this recommendation is August 31, 2016.

TAB 5B

QUARTERLY INVESTMENT COMPLIANCE TESTING
INVESTMENT POLICY STATEMENT (IPS), SECURITIES LENDING POLICY (SLP), PERFORMANCE INCENTIVE PAY (PIP) PLAN, WIRE
TRANSFER PROCEDURES, BUDGET TRANSFER PROCEDURES, AND ETHICS POLICIES FOR EMPLOYEES AND CONTRACTORS
 CALENDAR QUARTER ENDED DECEMBER 31, 2015, 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, wire transfers, other reporting)</u> Risk limits are followed for other investment programs and activities	4. <u>Ethics Policies</u> Ethics filing and reporting 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 filed or reported
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	Ethics policies and requirements are being followed
Agreed-Upon Procedures	<ul style="list-style-type: none"> Compare Board reports to IPS requirements 	<ul style="list-style-type: none"> Vouch Internal Investment Committee (IIC) approved investments to supporting documentation Verify approval limits of new investments Obtain evidence that Placement Agent Questionnaires (PAQs) were received prior to investing 	<ul style="list-style-type: none"> Validate IMD's reporting of a summary of managers/funds added or removed Validate SLP compliance Validate completeness of wires Test accuracy of Internal Public Markets PIP calculations for the quarter ended 9/30/2015. Trace budget transfers and expenditures to supporting documentation 	<ul style="list-style-type: none"> Obtain evidence that employee disclosure statements were filed before the deadline Obtain evidence that contractors filed commencement of business, annual compliance statements, and expenditure reports
Test Results	<ul style="list-style-type: none"> All reporting requirements were met Documentation provided support for the reports tested 	<ul style="list-style-type: none"> All investments tested were in compliance with approval limits PAQs were obtained for all investments tested 	<ul style="list-style-type: none"> All requirements of the IPS, SLP, PIP, wire transfer procedures, and budget transfer procedures tested were met 	<ul style="list-style-type: none"> All ethics filing and reporting requirements tested were met
Management Responses	N/A	N/A	N/A	N/A

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



March 14, 2016

Carolina de Onis, TRS General Counsel

We have completed the **Quarterly Investment Compliance Testing** for the quarter ended December 31, 2015, as included in the *Fiscal Year 2016 Audit Plan*. This scope of this engagement included the requirements of the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Employee Ethics Policy, Code of Ethics for Contractors, Wire Transfer Procedures, Performance Incentive Pay (PIP) Plan, and Budget Transfer and Amendment Procedures.

We performed the procedures that were agreed to by the TRS Legal Services 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 below 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.

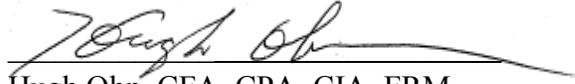
This report is intended solely for information and use by TRS management, the Board of Trustees, and oversight agencies, and is not intended to be and should not be used by anyone other than those specified parties. However, this report is a matter of public record and its distribution is not limited.

* * * * *

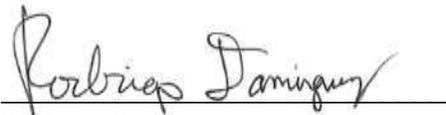
We express our appreciation to management and key personnel of the Investment Management Division, Investment Accounting, and General Accounting for their cooperation and professionalism shown to us during this quarterly testing.



Amy Barrett, CIA, CPA, CISA
Chief Audit Executive



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



Rodrigo Dominguez
Internal Audit Intern



Christopher Toffoli
Senior Consultant, Protiviti LLC

APPENDIX A
AGREED-UPON PROCEDURES AND RESULTS

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
1	1	IPS Article 1.7a - 1.7o – 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 1.8f – 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"> • Ensure that responsible staff have updated Sudan/Iran restricted lists • Determine whether 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"> • Investment Compliance staff updated Sudan/Iran restricted lists. • TRS complied with the notification requirement • TRS complied with divestment requirements. • TRS complied with the annual report requirements. 	No response required
3	2	IPS Article 3.3f – 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

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
4	2	IPS Article 7 – Obtain evidence that new investments in emerging managers meet requirements	Test sample of approved investments to verify: <ul style="list-style-type: none"> • Each is independent private investment management firm with less than \$2 billion • Each has a performance track record as a firm of less than 5 years, or both • TRS commitment did not exceed 40% of fund size 	All emerging managers tested during this time period were in compliance with these provisions.	No response required
5	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, verify that IMD obtained responses to the questionnaire • Determine that IMD compiled responses to the questionnaires and reported all results 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
6	2	IPS Appendix B – Obtain evidence that investments approved are within policy limits	<ul style="list-style-type: none"> • Select sample of approved investments and obtain tear sheet for each, observe the approved amounts are within authorized limits <ol style="list-style-type: none"> a) Initial allocation – .50% b) Additional or follow-on – 1% c) Total Manager Limits – 3% d) Total limit each manager organization – 6% • Obtain documentation from IMD staff that supports the calculations of the authorized limits • Inquire if any “Special Investment Opportunities” were made for the quarter 	For the sample investments tested, no manager or partner organization exceeded the authorized limits and documentation existed for IMD staff calculations of authorized limits. There were no Special Investment Opportunities.	No response required
7	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. No compliance exceptions were identified as a result of the quarterly compliance certification.	No response required
8	3	Wire Transfers – Obtain evidence that TRS Investment Accounting’s record of processed	Obtain evidence that TRS Investment Accounting investment funding log reconciles to State Street outgoing wires log to determine if the funding log is complete.	The Investment Accounting funding log reconciled to the State Street Outgoing wires log for the period tested.	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
		investment funding was complete.			
9	3	Securities Lending Policy – Obtain evidence that IMD reviews the securities lending program and performance of lender	<p>Obtain evidence from the monthly securities lending program performance reviews conducted by the TRS Asset Allocation team and the Securities Lending Agent that investments in the securities lending program comply with the following policy requirements:</p> <p>a) Collateral pool investments are only in US Government Securities; Money Market Instruments; Repurchase Agreements; and Fixed and Floating Rate Debt Obligations.</p> <p>b) The maturity for fixed rate cash collateral investments does not exceed 36 months, and the maturity for floating rate investments does not exceed seven years.</p> <p>c) The dollar-weighted average maturity of the collective cash collateral investment portfolio does not exceed 120 days.</p>	The securities lending program monthly reports and performance reviews showed that TRS collateral pool investments complied with the securities lending provisions selected for testing.	No response required
10	3	Performance Incentive Pay Plan (PIP) – Verify that investment performance results used in quarterly Internal Public Markets (IPM) portfolio matches data from TRS financial 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 calculation spreadsheet to TRS financial performance application data and TRS custodian bank data.</p> <p>Test whether employee assignments were approved by Senior Director in TRS IPM prior to quarter start by obtaining approval email from Senior Director in TRS IPM 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 calculation spreadsheet.</p> <p>Test whether formulas in the quarterly IPM individual component calculation spreadsheet are</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 September 30, 2015.	No response required

STEP #	OBJ. #	TEST PURPOSE	TEST DESCRIPTION	TEST RESULT	MANAGEMENT RESPONSE
			correct by recalculating investment return totals by portfolio manager and sector manager, and comparing total investment returns to returns provided by the TRS Custodian Bank.		
11	3	Budget Transfers and Expenditures – Obtain evidence that budget transfers and expenditures are supported by required documentation	Select a sample of budget transfers and expenditures for the quarter and trace them to supporting documentation.	Budget transfers and expenditures were supported by required documentation.	No response required
12	4	Employee Ethics Policy – Obtain evidence that Key Employees filed completed Disciplinary Action Disclosure Statements	Select a sample of TRS Key Employees, and determine whether completed Disciplinary Action Disclosure Statements were filed within 60 days of the date of employment and when any action occurs that would cause any answers on the Statement to change.	All employees tested submitted completed Disciplinary Action Disclosure Statements within the timeline, as required in the Employee Ethics Policy.	No response required
13	4	Code of Ethics for Contractors – Obtain evidence that each contractor signed and returned the TRS Code of Ethics for Contractors upon commencement of business with TRS. Obtain evidence that TRS contractors annually signed the Annual Ethics Compliance Statement and filed annual expenditure reports.	Select a sample of current TRS contractors, and determine whether the selected contractors signed and returned a copy of the TRS Code of Ethics for Contractors to TRS upon commencement of business with TRS and whether the contractors signed the TRS Contractor Annual Ethics Compliance Statement annually and filed annual expenditure reports.	All tested TRS contractors signed and returned a copy of the TRS Code of Conduct for Contractors upon commencement of business with TRS. All sampled TRS contractors signed the TRS Contractor Annual Ethics Compliance Statement and filed expenditure reports annually.	No response required

Note: Testing procedures for the Investment Policy Statement (IPS), Securities Lending Policy (SLP), Employee Ethics Policy, Code of Ethics for Contractors, wire transfers, and budget transfers and expenditures are for the activity for the quarter ending December 31, 2015. Testing procedures for the Performance Incentive Pay Plan are for the quarter ended September 30, 2015.

TAB 6

TRS Internal Audit Summary of Audit Recommendations Status – March 2016

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
14-401 Purchasing and Contract Administration					
	TRS' Contract Administration Manual should have a coaching component for all contract sponsors, their designees, and anyone involved in procurement at TRS. Coaching should be provided to the Board and include information regarding fiduciary responsibility and TRS fiduciary obligation.	Implemented	Other Reportable	12/2015	3/2016
	TRS' Contract Administration Manual should have a monitoring component to ensure compliance with the revised Contract Administration Manual and a method for follow-up and/or escalation of non-compliance.	In Progress	Other Reportable	9/2015	6/2016
	The Purchasing Department should update written procedures to match current and new processes.	In Progress	Other Reportable	10/2015	4/2016
	Improve central contract files to include all necessary documentation and train purchasing staff and contract sponsors on these requirements. Implement an escalation process to ensure required documentation is provided to the owner of the contract file.	Implemented	Other Reportable	12/2014	3/2016
	Update TRS record retention schedules to clearly define who the official record holders are for all contracts and related documentation.	Implemented	Other Reportable	2/2015	3/2016

Significant to Business Objectives

	<ul style="list-style-type: none"> Past <i>original</i> estimated completion date 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 <i>original</i> <u>or</u> 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 <i>original</i> <u>or</u> 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 – March 2016**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
15-301 FY 2015 Overall IMD Internal Control Opinion					
	Continue efforts to increase General Partners' transparency on fees and expenses	Implemented	Other Reportable	6/2015	3/2016
	Provide clear guidelines for acceptable accounting and valuation standards for Private Equity investments	In Progress	Other Reportable	9/2015	5/2016
	TRS request that service providers produce SOC 2 report	Implemented	Other Reportable	1/2016	1/2016
15-402 Actuarial Data Controls					
	General Accounting management should discuss the fiscal year 2014 AX test results with the actuary	Implemented	Other Reportable	1/2016	1/2016
	ISS management should consider changes to the AX program so that the program does not convert birthdates with values of zeros or blanks to "200000" as a result of a date conversion subroutine	Implemented	Other Reportable	12/2015	12/2015
	Include the required active and retired actuarial data file layouts in the contractual agreement with actuary	In Progress	Other Reportable	9/2016	
	Document process and control activities performed annually to produce and submit actuarial data files	Implemented	Other Reportable	3/2016	3/2016
	Implement change management procedures that involve quality assurance review and validation of changes to the AX and RX actuarial data programs	Implemented	Other Reportable	11/2015	11/2015
15-501 Records Management Audit					
	Require Certification for Terminating Employee and Contract Workers	Implemented	Significant	12/2015	3/2016
	Develop a plan to perform routine enterprise-wide departmental records retention assessments	Implemented	Significant	10/2015	9/2015
	Develop a plan to provide well-defined guidelines for users of electronic records systems and increase records management awareness	Implemented	Significant	10/2015	9/2015
	Records Management Officer should develop a plan to enhance coordination among related TRS departments and key functions	Implemented	Other Reportable	10/2015	11/2015

**TRS Internal Audit
Summary of Audit Recommendations Status – March 2016**

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
15-501 Records Management Audit (continued)					
	Formally assess the records management program's current and future resource needs, including succession planning	Implemented	Other Reportable	10/2015	10/2015
	Formally document the decision that TRS' Records Management Officer position report to the Chief Administrative Officer	Implemented	Other Reportable	11/2015	11/2015
	TRS' records management should develop a plan to update policy contents to reflect current operating procedures	Implemented	Other Reportable	10/2015	11/2015
	Develop a plan to formally assess the records management program's future role and responsibilities within the agency	Implemented	Other Reportable	11/2015	11/2015

**TRS Internal Audit
Summary of Audit Recommendations Status – March 2016**

Status of Reporting Entity Audit Recommendations

	Audit Project #	Audit Report Date	Reporting Entity (RE)	Status
1	15-401 A	4/29/2015	Santa Maria ISD	In Progress
2	15-401 B	5/21/2015	College Station ISD	Closed
3	15-401 C	5/21/2015	Presidio ISD	Closed
4	15-401 D	5/21/2015	El Paso ISD	Closed
5	15-401 E	10/29/2015	Northside ISD	Closed

Statuses:

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

**TRS Internal Audit
Summary of Audit Recommendations Status – March 2016**

State Auditor’s Office (SAO) Audit Recommendations

Project	Recommendation	Status	Issue Type	Estimated Date	Revised / Actual Date
15-035 SAO Audit of Employer Pension Liability Allocation Schedules					
	Establish verification process of reporting entities and verify payment of contributions - Step 3 – implement new Pension Line of Business	In Progress	Significant	9/2016	
15-305 SAO Audit of Fiscal Year 2014 Comprehensive Annual Financial Report					
	Strengthen controls over census data	In Progress	Significant	8/2016	9/2016

TAB 7

MEMORANDUM

TO: Audit Committee Members, TRS Board of Trustees
Brian Guthrie, Executive Director

FROM: Amy Barrett, Chief Audit Executive

SUBJECT: Proposed Revisions to the Audit Plan for Fiscal Year 2016

DATE: April 7, 2016

Per the approved *Fiscal Year 2016 Audit Plan*, amendments to the approved Audit Plan deemed to be significant will be submitted to the Audit Committee for recommendation to the Board of Trustees for approval. The State Auditor's Office also requires notification of material changes to the Audit Plan. Below is a list of proposed changes for your consideration:

Proposed Changes to Fiscal Year 2016 Audit Plan¹

Project	Proposed Change	Reason
Semi-Annual Benefits Testing (Agreed-Upon Procedures)	Change to <u>Annual</u> Benefits Testing	<ul style="list-style-type: none">• To reduce reporting requirement to once per year instead of twice per year. The project will cover the same time-period as the semi-annual testing, but results will only be reported once.• Project completion scheduled for August 2016
Testing of Executive Performance Incentive Pay Calculations (Agreed-Upon Procedures)	Added	<ul style="list-style-type: none">• Management request as a result of overall discussion with the Board of Trustees• Project completion scheduled for July 2016

¹ Changes proposed will not impact TRS Internal Audit's ability to meet its performance measure: Execute 80% of [original] audit and agreed-upon procedures projects.

TAB 8

Teacher Retirement System of Texas
April 2016 Audit Committee Agenda Items Mapped to TRS Stoplight Report

403(b)	Accounting & Reporting <i>Agenda Items 2A & 2B</i>	Budget <i>Agenda Items 5B</i>	Business Continuity	Communications & External Relations
Credit	Customer Service	Employer Reporting	Ethics & Fraud Prevention	Facilities Management & Planning
Governmental / Association Relations & Legislation	Health Care Plans Administration <i>Agenda Item 3</i>	Information Security & Confidentiality <i>Agenda Items 3, 4A & 4B</i>	Investment Accounting <i>Agenda Items 5A & 5B</i>	Investment Operations <i>Agenda Items 5A & 5B</i>
Legacy Information Systems	Liquidity / Leverage	Market	Open Government <i>Agenda Items 6, 7, & 8</i>	Pension Benefit Administration
Pension Funding	Purchasing & Contracts	Records Management	Regulatory, Compliance & Litigation <i>Agenda Item 5B</i>	Talent Continuity
TEAM Program	TRS-ActiveCare Affordability	TRS-Care Funding		

Fiscal Year 2016 Audit Plan Status As of March 2016

Title and Project #	Type	Status
Executive and Finance		
Actuarial Data Controls (15-402)	Audit	Complete
State Auditor's Office (SAO) Financial (CAFR) Audit Coordination	Advisory	Complete
Internal Ethics and Fraud Hotline Administration	Advisory	Ongoing
Meetings Participation	Advisory	Ongoing
Special Requests and Emerging Issues	Audit/Consulting/Advisory	
<ul style="list-style-type: none"> • Innovation Best Ideas (16-605) - Board Chair Request 	Consulting	Complete
Testing of Executive Performance Incentive Pay Calculations	Agreed-Upon Procedures	
TEAM Program		
TEAM Program Internal Controls Assessment	Advisory	In Progress
TEAM Security and Access Controls Assessment	Advisory	In Progress
TEAM Independent Program Assessment (IPA) Vendor Support	Advisory	Ongoing
TEAM Committees and TEAM Projects Participation	Advisory	Ongoing
Pension Benefits		
Benefits Testing for State Auditor's Office (SAO) Audit of Comprehensive Annual Financial Report (CAFR) (16-100)	Audit	Complete
Annual Benefits Testing (16-101)	Agreed-Upon Procedures	
Reporting Entity Audits (6-8) and Investigations (16-401)	Audit	In Progress (Completed 3 REs with one reported in November)
TRS Reporting Entity Website Audit Information	Advisory	Complete
Benefits Data Analysis Pilot Project	Advisory	
Health Care		
Health Care Audit Risk Assessment Follow Up	Consulting	In Progress
Open Enrollment and Billing Readiness Review	Consulting	In Progress
Health Care Vendor Selection Observation	Advisory	Complete

Fiscal Year 2016 Audit Plan Status As of March 2016

Title and Project #	Type	Status
Health Care Vendor Update Meetings	Advisory	Ongoing
Information Technology		
SharePoint Governance and Security Audit (16-501)	Audit	Complete
Wireless Network Security Assessment (16-502)	Agreed-Upon Procedures	Complete
Data Protection Project	Advisory	In Progress
Disaster Recovery, Network Penetration Tests; Security Risk Assessment Review	Advisory	Ongoing
Investment Management		
Overall Internal Control Opinion on Investment Activities (16-301)	Audit	In Progress
Quarterly Investment Compliance, Incentive Pay, Ethics Policies and Budget Testing (16-302)	Agreed-Upon Procedures	Complete 2 nd QTR
Annual Incentive Compensation Plan Testing (16-303)	Agreed-Upon Procedures	In Progress
Coordination of SAO Audit of Incentive Pay	Advisory	In Progress
Investments Data Analysis Pilot Project	Advisory	In Progress
Investment Committees Attendance	Advisory	Ongoing
Internal Audit Department		
Annual Internal Audit Report (16-603)	Audit	Complete
Data Analytic Development Project	Advisory	In Progress
Quarterly Audit Recommendations Follow-up	Audit	Ongoing
External Quality Assurance Review	Audit	In Progress
Internal Quality Assurance Review (16-602)	Advisory	In Progress
Fiscal Year 2017 Audit Plan	Advisory	
Internal Audit Vendor Request for Qualifications (RFQ)	Advisory	Complete
Audit Committee Meetings Preparation	Advisory	Ongoing

Internal Audit Advisory Services¹
Fiscal Year 2016 - 2nd Quarter

BENEFIT SERVICES
<p>Participated in the TEAM Program</p> <ul style="list-style-type: none"> • Executive Steering Committee • Organizational Change Management Advisory Group • Business Procedures and Training • Decommissioning Legacy Systems • Core Management Team (CMT) Prioritization Review Meetings • Monthly meetings with TEAM Program Manager and vendor personnel • Independent Program Assessment (IPA) Vendor Coordination and Support • Reporting Entity Outreach (REO) Core Team
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 • Participated (non-voting) in the HIB Claims Audit Vendor selection process • Coordinated Health Care Risk Assessment Follow-Up project • Coordinated selection and engagement of a vendor to conduct the Open Enrollment and Billing Readiness Review
INVESTMENT MANAGEMENT DIVISION (IMD)
<ul style="list-style-type: none"> • Attended Internal Investment Committee (IIC) meetings • Participated in the Proxy Voting Committee meeting • Participated in Performance Incentive Pay Procedures Working Group meetings
FINANCIAL SERVICES
<ul style="list-style-type: none"> • Working with General Accounting to hire an external audit firm for financial statement audit of London Office
EXECUTIVE
<ul style="list-style-type: none"> • Facilitated SAO's Quarterly Update Meetings • Administered and facilitated Hot Line Calls • Participated in the Risk Oversight Committee • Participated in Safety Committee Quarterly Committee Meetings
INFORMATION TECHNOLOGY (IT)
<ul style="list-style-type: none"> • Participated in TEAM Enterprise Security Team meetings • Participated in TRUST Report Repository Meetings • Participated in TRUST General Ledger Testing Meetings • Participated in the Enterprise Risk Management (ERM) Data Protection Project • SharePoint Governance and Security Advisory Services

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 2016
2nd Quarter Ending February 2016

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 81% for the 2 nd quarter of fiscal year 2016.	On Task
2. Complete an independent external assessment and report the results of the Quality Assurance and Improvement Program.	The team for the external assessment has been determined and the review will be conducted in April 2016.	On Task
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.	Audit planning and risk assessment is scheduled for the 4 th quarter.	On Task
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 assurance and agreed-upon procedures projects are on schedule and assigned to staff.	On Task
5. Update a formal reporting entity risk assessment to identify reporting entities for audit.	The update of the reporting entity risk assessment is in progress.	On Task
Goal 3: Enhance Internal Audit Staff Skills and Knowledge in Emerging Risks and Controls with Emphasis on Information Technology, Investment, and Health Care		
6. Enhance staff knowledge of services provided to the Investment Management Division by visiting one TRS asset manager or service provider.	Two visits are planned for late April 2016	On Task
7. Engage a service provider for developing data analytics capabilities.	Engaged a firm to develop data analytics capabilities and proposed a roadmap for Internal Audit	Achieved
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.	On Task

**Internal Audit Goals and Performance Measures - Fiscal Year 2016
2nd Quarter Ending February 2016**

Target Performance	Activity	Status
9. Facilitate timely completion and success of State Auditor's Office (SAO) audits in fiscal year 2016 by effectively providing audit support, coordinating meetings, reserving facilities and gathering schedule and documentation requests.	Internal Audit staff has provided support and coordination for the following SAO audits: <ul style="list-style-type: none"> • Audit of FY 2015 Comprehensive Annual Financial Report (CAFR) • Audit of Benefits Proportionality at the Office of the Comptroller of Public Accounts, the Teacher Retirement System, and the Employees Retirement System • Audit of Incentive Compensation at Selected Agencies 	On Task
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 participate in leadership roles in at least one professional organization.	The CAE is secretary for APPFA and IT Audit Manager is the web administrator for APPFA. One audit manager is on the Board of Governors for the Austin Chapter of the IIA. Participation in professional organizations is ongoing.	On Task
11. Support staff in obtaining additional certifications such as the CFA, CPA, and CIA certifications and have all staff obtain a minimum of 40 continuing professional education hours.	Staff attended professional development training this quarter.	On Task

Legend: Target Status

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

Amy Barrett's Goals for FY16

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
1	Objective G2.01: Implement modern pension and benefit information systems that allow TRS staff to serve our members and deliver accurate benefits effectively and timely by August 2017.	TEAM: Participate actively in TEAM program and oversight vendor coordination; facilitate identification, communication, and resolution of risks early prior to going live; gather information for the automation best ideas board presentation	<p>Ongoing participation in bi-weekly Executive Steering Committee (ESC) meetings</p> <p>Regular meetings with oversight, project management, implementation vendor, and change management (OCM) staff to assess program status</p> <p>Increased dialog and meetings between oversight vendor and project management staff to discuss risks identified and solutions proposed</p> <p>Initiation of advisory activities for TEAM relating to security and internal controls</p> <p>Increased requests for TEAM participation and audit staff input into TEAM activities</p> <p>Presentation of automation best ideas to Trustees at February retreat</p>	<p>Chief Audit Executive (CAE) attends and participates in ESC meetings</p> <p>CAE meets monthly with Bridgepoint, Provaliant, and HPE separate from management. CAE meets periodically with OCM staff</p> <p>Provaliant established a process for Bridgepoint to communicate risks to Core Management Team (CMT) and to ESC; therefore, additional meetings with Provaliant and Bridgepoint were not deemed necessary</p> <p>Internal Audit (IA) staff are mapping business controls from the old system to the new and identifying tests of key controls. IA staff is participating in the security team meetings where controls are mapped to industry standards</p> <p>IA staff requested to participate in TRUST to general ledger mapping initiative</p> <p>Automation best ideas gathered and presented to Trustees at February retreat</p>

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
2	<p>Strategy G1.O2.S1: Establish and implement an effective investment governance structure.</p> <p>Tactic G1.O2.S1.T4: Perform regular audit and compliance activities.</p>	<p>Investment, Benefits, Health Care, and IT Assurance: Identify and audit key risks related to investments and other areas to provide assurance to the board and executive management</p>	<p>Completion of annual audit plan, especially completion of overall investment opinion, investment compliance, and incentive pay projects</p> <p>Enterprise Risk Management (ERM) Stoplight Report risks considered in development of the annual audit plan</p> <p>Subject matter expert used to supplement investment audit projects</p> <p>Active participation in the Executive Council (EC) and Risk Oversight Committee meetings with input on governance, risk, and control matters</p> <p>Staff auditor observation of internal investment meetings including Internal Investment Committee (IIC), Securities Lending, Proxy Voting, and London Office Operations</p> <p>Staff auditor participation in quarterly health care vendor updates</p> <p>Staff auditor observation of hot site/co-location testing</p>	<p>Annual audit plan is on track to be completed. Investment incentive pay project is complete.</p> <p>Annual audit plan is mapped to the ERM stoplight report and shared with the Risk Oversight Committee (ROC)</p> <p>Protiviti provided staff augmentation resources for the investment area.</p> <p>CAE participates in monthly EC and quarterly ROC meetings</p> <p>IA staff attended IIC meetings, proxy voting meetings, and meetings on the setup of the London Office. IA is coordinating the financial audit of the London Office.</p> <p>IA staff attend all quarterly meetings with health care vendors. IA is coordinating the Open Enrollment Readiness Review</p> <p>IA observed the hot site/colocation testing</p>

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
3	<p>Strategy G2.O2.S2: Provide and maintain accurate, timely and consistent information to participants, reporting entities and other stakeholders in line with customer service benchmarks.</p> <p>Tactic G2.O2.S2.T4: Conduct and publish independent review and audits in accordance with best practices.</p>	<p>Employer Audits: Increase efficiency and volume of employer audits and coordinate with Benefits, Health Care, and Legal staff to identify systemic issues requiring additional employer training and timely resolution</p>	<p>6 – 8 employer audits completed (double of prior year)</p> <p>Testing at employers of TRS-ActiveCare eligibility and premiums paid (new for FY16)</p> <p>TRS staff outside of audit participated in employer audits as requested and provided results prior to issuing reports</p> <p>Audit webpage relating to employer audits updated</p> <p>Overview to trustees on employer audit steps provided at February meeting</p>	<p>IA has completed 4 employer audits and plans to complete 3 more prior to year-end.</p> <p>IA is in process of piloting a TRS-ActiveCare audit at one school district</p> <p>Staff from Benefit Reporting attend all Reporting Entity audit exit conferences and receive test worksheets prior to audit completion</p> <p>The webpage with employer audit information was updated and a new webpage was created to assist financial auditors of Reporting Entities requesting information from TRS</p> <p>A joint presentation with Benefit Reporting on conducting employer audits was made at the February board meeting</p>

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
4	G1.O2.S1.T4; G2.O2.S2.T4	CAFR and SAO Audits: Facilitate State Auditor's Office (SAO) audits to minimize disruption to TRS staff and ensure sufficient communication of requests and findings	Concerns about audit process raised to internal audit are addressed Sharepoint used to gather schedule requests (new process) Recommendations from TRS for improving SAO CAFR process from prior year implemented in current year Debriefing meeting held after audit to gather lists of improvements for next year Audit recommendations made by SAO are tracked quarterly with status reported to the Risk Oversight Committee and Audit Committee (AC)	All concerns raised to Internal Audit have been provided to the SAO IA staff used Sharepoint for uploading documents required by the SAO All recommendations from the prior year were implemented in the current year Debrief meeting held after the audit and a list of improvements identified Audit recommendations are tracked and reported to the ROC and AC
5	G1.O2.S1.T4; G2.O2.S2.T4	Expertise: Engage third party expertise to address critical risks in complex areas by issuing a request for qualifications (RFQ) and utilizing expertise in selected projects	Audit Services RFQ issued in September Subject matter expertise outside of internal audit used in vendor evaluation and selection process Vendors selected by December 31, 2015 Vendors used in conducting projects requiring specific expertise or tools such as the WiFi assessment and Health Care Risk Assessment (HCRA) Follow Up project	RFQ issued Expertise identified and hired Vendors selected and contracts are in place for three vendors Vendors completed the WiFi assessment and HCRA Follow Up

	TRS Strategic Plan	CAE Goals	Key Performance Indicators	Status
6	G1.O2.S1.T4; G2.O2.S2.T4	Data Analysis Capabilities: Improve data analysis capabilities identified by EY in year one of the data analytics roadmap for Internal Audit to improve the quality of audit results	Data analysis vision statement created and mapped to audit strategic plan and TRS Core Values EY provides other data analytics training Staff attends data analysis training Two data analysis projects identified and completed (internal advisory)	Data analysis vision statement was created and mapped EY provided excel training for data analysis IA staff are preparing training for other staff on data analysis techniques In process
7	Objective G4.O2: Develop an effective recruitment/retention strategy and a competitive total rewards package.	Workforce Planning: Plan for the future by hiring staff, transitioning benefits testing from senior to junior staff, and reorganizing benefits team	One staff hired from Benefit Services Organizational changes made to better align audit teams to TRS departments Responsibilities of retiring auditor smoothly transitioned to other auditors	Cari Casey was hired from Benefit Services effective October 1 Jan Engler was promoted to Director of Pension Services and four staff were moved to report to her. An additional staff will be hired to supplement the IT audits and data analytics initiatives. Karen Morris transferred her responsibilities to two staff
8	G1.O2.S1.T4; G2.O2.S2.T4	Governance: Orient new audit committee members to enhance understanding of audit's role in the governance structure	New audit committee member orientation provided to new trustees External quality assessment review (QAR) of audit compliance with standards completed and communicated to trustees with no significant compliance deficiencies	Orientation materials have been prepared The external QAR is scheduled for the week of the April board meetings. The report will be available in June

Internal Audit Staff Accomplishments

December 2015 - March 2016

- Amy Barrett and Hugh Ohn attended the Emerging Manager Conference in January 2016
- Art Mata and Cari Casey attended the training course “*Fundamentals of Internal Auditing*” by MIS Training Institute (MISTI) in March 2016
- Art Mata was awarded *The Whitney M. Young Jr. Service Award* by the *Boy Scouts of America-Capital Council* for his involvement in the development and implementation of scouting opportunities for youth from rural or low-income urban backgrounds in March 2016