

December 2023

ASSURANCE

Audit, Compliance & Ethics Committee Meeting



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

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

(Mr. Walls, Jr., Chairman; Ms. Allred, Mr. Ball, Ms. Sissney, and Mr. Williams Committee Members)

*All or part of the December 7, 2023, meeting of the TRS Audit, Compliance and Ethics Committee and Board of Trustees may be held by telephone or video conference call as authorized under Sections 551.130 and 551.127 of the Texas Government Code. The Board intends to have a quorum and the presiding officer physically present at the following location, which will be open to the public during the open portions of the meeting: **1000 Red River, Austin, Texas 78701 in the TRS East Building, 5th Floor, Boardroom.***

The open portions of the December 7, 2023, meeting are being broadcast over the Internet. Access to the Internet broadcast and agenda materials of the meeting is provided at www.trs.texas.gov. A recording of the meeting will be available at www.trs.texas.gov.

**AGENDA
December 7, 2023 – 1:00 p.m.
TRS East Building, 5th Floor, Boardroom**

1. Call roll of Committee members.
2. Approve minutes of September 2023 Audit, Compliance and Ethics Committee meeting
– Mr. Robert H. Walls, Jr., Chair
3. Receive report of the financial audit of TRS Annual Comprehensive Financial Report (ACFR) for fiscal year ended August 31, 2023 – Bill Hunter and Hillary Eckford, SAO.
4. Receive Crowe LLP's report of the financial audit of TRS Investment Company (TRICOT) for fiscal year ended August 31, 2023 – Kevin W. Smith, Crowe LLP .
5. Receive TRS Compliance reports including those related to ethics and fraud, conflicts of interest, and investment policies – Heather Traeger and Chris Bowlin.
6. Receive Internal Audit reports:
 - A. Review of Investment Trading Operations – Syed Israr and Jaime Llano
 - B. Review of Insulin Cost-Sharing Benefits – Jonathan O'Reilly and Yimei Zhao
 - C. Internal Audit Quality Assurance Improvement Program (QAIP) Self – Assessment – Tammie Wells and Amanda Jenami.
 - D. Internal Audit Annual Report for Fiscal Year 2023 – Katie Linczer.
 - E. Status of prior audit and consulting recommendations – Amanda Jenami.
7. Discuss or consider Internal Audit and TRS Compliance administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, fraud risk areas, audits for the annual internal audit plan,

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

or auditors' ability to perform duties – Robert H. Walls, Jr., Amanda Jenami and Heather Traeger

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

Minutes of the Audit, Compliance and Ethics Committee September 15, 2023

The Audit, Compliance and Ethics Committee of the Board of Trustees of the Teacher Retirement System of Texas met on September 15, 2023, in the boardroom located on the Fifth Floor in the East Building of TRS' offices located at 1000 Red River Street, Austin, Texas, 78701.

Committee Members Present:

Mr. Robert H. Walls, Jr., Chair
Ms. Brittney Allred
Mr. Michael Ball
Ms. Nanette Sissney
Mr. Elvis Williams

Other TRS Board Members Present:

Mr. David Corpus
Mr. Jarvis V. Hollingsworth
Mr. James D. Nance

Others who participated:

Brian Guthrie, TRS
Andrew Roth, TRS
Jase Auby, TRS
Heather Traeger, TRS
Amanda Jenami, TRS
Katrina Daniel, TRS
Chris Cutler, TRS
Katherine Farrell, TRS
LaTresa Stroud, TRS
Shannon Gosewehr, TRS
Jonathan O'Reilly, TRS
Tammie Wells, TRS
Kristi Glasgall, TRS
Stephen Randall, TRS
Adam Fambrough, TRS
Suzanne Dugan, Cohen Milstein
Bill Hunter, State Auditor's Office
Hillary Eckford, State Auditor's Office
Michelle Buss, Crowe LLP

Audit, Compliance and Ethics Committee Chair, Mr. Walls, called the meeting to order at 8:00 a.m.

1. Call roll of Committee members.

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

2. Approve minutes of July 2023 Audit, Compliance and Ethics Committee meeting – Committee Chair Mr. Robert H. Walls, Jr.

On a motion by Mr. Ball, seconded by Mr. Williams, the proposed minutes for the July 2023 Audit, Compliance and Ethics Committee meeting were approved as presented.

3. Receive State Auditor’s Office (SAO) presentations on planned audit of TRS’ Annual Comprehensive Financial Report (ACFR) for Fiscal Year 2023 – Hillary Eckford and Bill Hunter, SAO.

Mr. Bill Hunter reviewed the purpose and scope of the audit of TRS’ Annual Comprehensive Financial Report for fiscal year 2023. He concluded by reviewing the proposed timelines. He noted that his team will also cover the schedules audit to be performed in the Spring. He said the report will be issued around November 20th.

4. Receive Crowe LLP’s presentation on the planned financial audit of TRS Investment company (TRICOT) – Michelle Buss, Crowe LLP.

Ms. Michelle Buss provided the audit plan for the TRICOT audit. She reviewed the team working on the audit, discussed the audit plan and timeline. She noted that Crowe planned to provide the final report at the December board meeting.

5. Receive an overview of TRS Compliance and reports including those related to ethics, fraud, conflicts of interest and investment policies – Heather Traeger and Chris Bowlin.

Mr. Chris Bowlin reported the quarterly testing focused on whether or not the IMD provided an investment integrity questionnaire for each of the new investments, or each of the new commitments; whether or not they performed the hedge fund assessment for all applicable investments; and whether or not all investments were within the policy limits. He said the requirements were met and there were no policy violations detected for this quarter.

Ms. Heather Traeger reported on two 541C conflicts reports, one was a vendor with which TRS does business and the other involved an employee’s personal trading issue. She said they were being reviewed. As to the hotline report, she said there were two items, both under investigation.

Ms. Traeger was then joined by Compliance staff members who provided an overview of the Compliance function, as it relates to the TRS Trustee perspective and as the perspective of new TRS employees.

6. Receive an update on Internal Audit’s Data Analytics Program – Jonathan O’Reilly.

Mr. Jonathan O’Reilly delivered an update on Internal Audit’s data analytics program. He said the type of data analytics they perform is very tailored and customized to the business processes here at TRS. For FY ’23 he reported the team developed 41 algorithms, nine more than the previous year. He said the algorithms tested for provider fraud, waste, and abuse risk in the TRS-

ActiveCare and Care plans. He said in the year ahead, the focus will be more on vendor contract compliance.

7. Consider recommending to the Board of Trustees adoption of the proposed Audit Plan for Fiscal Year 2024 – Amanda Jenami.

Ms. Amanda Jenami reviewed the comprehensive risk assessment process on how the audit plan for fiscal year 2024 was developed. She pointed out a few of the key audits: IMD contract oversight, vulnerability remediation and patch management as well as cybersecurity incident response program, risk parity operations and insulin cost-sharing. Ms. Jenami noted an amendment to remove the talent continuity audit from the proposed plan.

On a motion by Mr. Ball, seconded by Ms. Sissney, the Committee voted to recommend to the Board adoption of the audit plan for FY 2024, as presented by staff including the removal of the talent continuity audit.

8. Receive Internal Audit reports.

A. Follow-up Reviews of:

i. Historically Underutilized Business (HUB) program – Tammie Wells and Shannon Gosewehr.

Ms. Tammie Wells provided the follow-up review for the audit of the HUB program which was issued in March of 2021. She said six out of the ten recommendations were fully implemented. She said this was significant when considering that for 80 percent of the audit period the HUB Coordinator position was vacant. She noted four recommendations still require additional corrective actions to be fully implemented. She said they were related to increasing HUB resources, quality control around accuracy of reporting to the Comptroller, developing and strengthening processes related to determining the effectiveness of HUB outreach activities and ensuring the monthly progress assessment reports were received.

Ms. Shannon Gosewehr provided the management response. She said they agreed with the results of the audit and are close to implementing a couple of the outstanding items.

ii. IT Contract Oversight – Tammie Wells and Chris Cutler.

Ms. Wells provided the follow-up review for the audit of IT Contract Oversight which was issued in April of 2022. She said three of the five (60%) of the prior recommendations were fully implemented. She said the other two recommendations were considered partially implemented. She said they were related to strengthening the processes around ensuring vendor compliance, as well as invoice reviews for accuracy and compliance with contract requirements.

Mr. Chris Cutler provided the management response. He said they have about 212 contracts, about 20 IT contract managers which represent about \$104 million of total contract costs. He said the recommendations were great and they plan to have them in place and worked through by March 2024.

B. Update on Prior Audit Recommendations – Amanda Jenami.

Ms. Jenami reviewed the dashboard noting the key changes are quite a few recommendations have been confirmed as satisfactorily implemented.

Mr. Walls announced the committee would take up the next two items in executive session.

C. Review of Cyber Controls – Chris Cutler, Kristi Glasgall; and Troy Dearing, Kudleski Security.

D. Audit of MyTRS – Stephen Randall and Adam Fambrough.

At 9:02 a.m., Mr. Walls announced the committee will go into executive session under the following Agenda Item and sections of the Government Code: Item 8(c) under Section 825.115(d), 551.076, and 551.089 to discuss the review of cyber controls, and under Section 551.071, to consult with legal counsel as needed; Item 8(d), under Section 825.115(d), 551.076, and 551.089 to discuss the audit of MyTRS and under Section 551.071 to consult with legal counsel as needed.

At 9:27 a.m., Mr. Walls reconvened the committee in open meeting.

9. Discuss or consider Internal Audit and TRS Compliance administrative reports and matters related to governance, risk management, internal control, compliance violations, fraud, regulatory reviews or investigations, fraud risk areas, audits for the annual internal audit plan, or auditors' ability to perform duties – Robert H. Walls, Jr., Amanda Jenami and Heather Traeger

Ms. Jenami reported on Internal Audit's Fiscal Year 2023 key performance measures. She noted that Internal Audit met 14 out of 15 key performance targets for the year. She said the one performance measure was regarding employee retention.

There being no more business before the Audit, Compliance and Ethics Committee, the committee adjourned at 9:33 a.m.

APPROVED BY THE AUDIT, COMPLIANCE AND ETHICS COMMITTEE OF THE BOARD OF TRUSTEES OF THE TEACHER RETIREMENT SYSTEM OF TEXAS ON THE _____ DAY OF DECEMBER 2023.

Robert H. Walls, Jr.
Chair, Audit Compliance and Ethics Committee
Board of Trustees
Teacher Retirement Systems of Texas

Date



Internal Audit

Audit, Compliance & Ethics Committee Meeting



December 7, 2023





Texas State Auditor's Office Presentation to the Teacher Retirement System Board of Trustees

December 7, 2023

The State Auditor's Office has audited the financial statements of the Teacher Retirement System for the fiscal year ended August 31, 2023, and issued our opinion dated November 20, 2023.

Overall Conclusion

Opinion on the basic financial statements is unmodified.

- Standards – GAAS and *Government Auditing Standards*
- Matters of Emphasis
 - Nature of the entity represented in the financials
 - Investments with a total value of \$103.4 billion are estimated by management
- Management representations

Report on Internal Control and Report to the Legislative Audit Committee.

Bill Hunter, Managing Senior Auditor

Hillary Eckford, Audit Manager



Smart decisions. Lasting value.™

TRS Investment Company (TRICOT)

Fiscal Year Ended August 31, 2023

Audit Committee Presentation

December 7, 2023

Kevin W. Smith, Partner

Agenda



1 Introductions

2 Results of Services

3 Fraud Considerations

4 Independence
Communications

With You Today



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Results of Services

Unmodified (“Clean”) Opinion

- In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teacher Retirement Investment Company of Texas, Ltd., as of August 31, 2023, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.



Results of Services

Emphasis of Matter

As discussed in Note 1, the financial statements present only TRICOT and do not purport to, and do not, present fairly the financial position of Teacher Retirement System of Texas or the State of Texas as of August 31, 2023, 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.



Results of Services

Internal Control - No material weaknesses or significant deficiencies in internal control reported or communicated to management.

Audit Differences – none.

Required Communications

Topic	Comments
Changes in accounting principles	None noted
Other information included in annual reports	None noted
Circumstances that affect the form and content of audit report	None noted
Disagreements with management on financial accounting and reporting	None noted
Corrected or uncorrected misstatements	Corrected misstatements – None identified Uncorrected misstatements – None identified.
Major issues discussed with management prior to engagement	None noted
Consultations with other accountants	None noted
Difficulties in performing the audit	None noted
Material errors, irregularities or illegal acts	None identified
Material weaknesses in internal control	None identified
Representation letter	Provided to Crowe prior to release of AFS
Independence communications	No impairments identified
Significant Estimates	Allocation of expenses



Fraud Considerations

General:

- Inquiry of management and employees about risks of fraud - none noted
- Consideration of unusual or unexpected relationships that have been identified in performing analytical procedures in planning the audit - none noted
- Consideration of whether fraud risk factors exist - none noted
- Consideration of other information gathered throughout the audit - none noted

Fraudulent Financial Reporting Procedures:

- Examination of journal entries and other adjustments for evidence of possible material misstatement due to fraud
- Review of accounting estimates for biases that could result in material misstatement due to fraud, including a retrospective review of significant prior year estimates
- Evaluation of the business rationale of significant unusual transactions
- Review of revenue for proper cut-off



Independence Communications

- We wish to report that we are not aware of any relationship between Crowe LLP and TRICOT that, in our professional judgment, may reasonably be thought to impair our independence.
- Accordingly, and relating to our examination of the financial statements of TRICOT as of August 31, 2023, and for the year then ended, we are independent certified public accountants with respect to the Trust Funds within the meaning of the applicable pronouncements of the American Institute of Certified Public Accountants' Code of Professional Conduct, its interpretations and rulings.

Questions?



Thank You

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Internal Audit

Quarterly Compliance Testing



Heather Traeger & Chris Bowlin

December 7, 2023



Quarterly Investment Compliance Testing
Investment Policy Statement (IPS), Securities Lending Policy (SLP), and Proxy Voting Policy
Quarter ending September 30, 2023

Procedures Performed	Test Results
<u>Business Objective 1: Board Reports</u> All required information is reported to the TRS Board of Trustees	
<ul style="list-style-type: none"> Obtain evidence that all requirements reported to Board of Trustees Trace sample information included in Board reports to supporting documentation 	<ul style="list-style-type: none"> All reporting requirements were met Documentation provided supported information tested
<u>Business Objective 2: Investment Selection and Approval</u> Investments made are within delegated limits and established selection criteria	
<ul style="list-style-type: none"> Obtain evidence that Investment Integrity Questionnaires (IIQs) were received prior to investing Obtain evidence from the investment teams that the CIO conditional upon approval was received after the IIC Obtain evidence of existence of IMD's prudent underwriting objectives for advisor's due diligence Obtain evidence that all counterparty requirements were met Obtain evidence that new investments in emerging managers met requirements Obtain evidence that approved investments were within policy limits 	<ul style="list-style-type: none"> Each investment tested had a completed questionnaire prior to IIC date No CIO conditional approval was required for this period Prudence letters were provided (where required) for this period All counterparty tests met policy requirements for the tested period. All investments met policy requirements for the tested period. All investments made during the quarter were tested and found to be in compliance with approval limits.
<u>Business Objective 3: Other (IPS, SLP, other reporting)</u> Risk limits are followed for other investment and proxy voting policies and procedures were followed	
<ul style="list-style-type: none"> Obtain senior management disclosure about known compliance violations Obtain evidence that TRS securities lending program complied with the following guidelines Obtain evidence that the proxy voting committee complied with the proxy voting policy, including maintaining a voting record, documenting exceptions and reviewing TRS' service provider guidance. 	<ul style="list-style-type: none"> Obtained quarterly compliance certification from IMD IIC and Legal (IPS violation reported) No security lending violations were identified All proxy voting policy requirements were met, and documentation provided supported the policies tested.

Legend:



Significant to TRS



Significant to Business Objectives



Other Reportable Exception



Positive Test Result/ No Exception

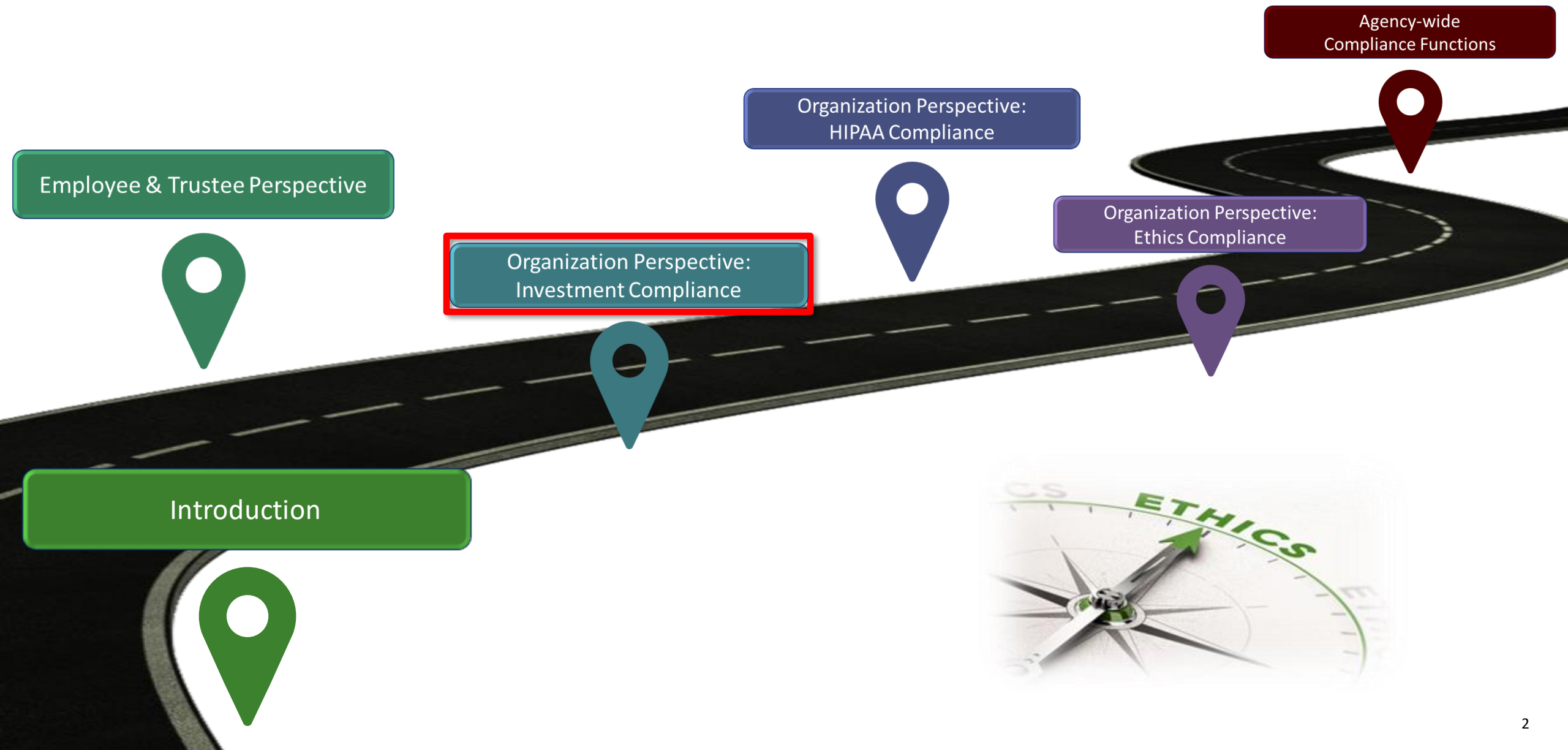


TRS Compliance & Ethics Overview: Investment Perspective (Part 1)



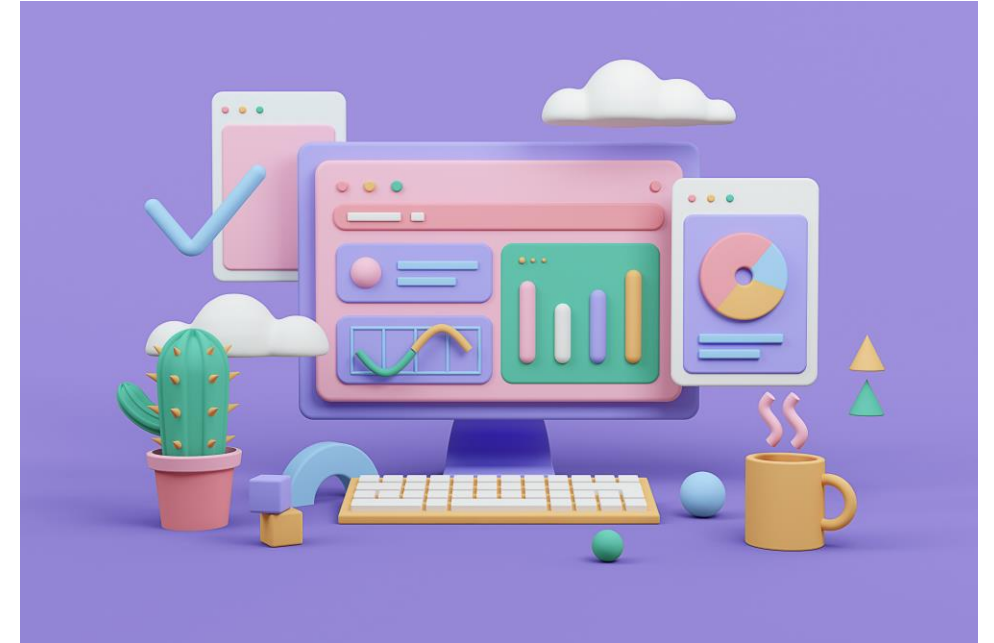
TRS Compliance
December 2023

TRS Compliance & Ethics – Information Session Roadmap



Compliance from the Organizational Perspective – Investments (Part 1)

The Investment Compliance team provides independent (“second line”) monitoring and reporting for investment-related activities to assist TRS in fulfilling its mission and fiduciary responsibilities by complying with laws, regulations, and TRS policies.



Investment Compliance Overview

- Daily Responsibilities / Business as Usual
- Monthly
 - Internal Investment Committee (IIC)
 - Regulatory Filings
- Quarterly
 - Board Reporting
 - IPS and other Investment Testing
 - Compliance Certification for IIC and Legal Investments (e.g., IPS violations)
 - Regulatory Filings
 - Peer Conference Calls

- Annually
 - Policy / Procedure / Training Modules Updates
 - Contract Management, New and Renewal
 - Policy and Statutory Reporting



Daily Responsibilities / Business as Usual



- Policy Guidance / Rules of the Road
 - Investment Policy Statement (IPS) / GAR
 - Personal Trading Policy / Information Barriers
 - Employee Ethics Policy / Revolving Door Policy
 - Use of Expert Networks
- Compliance Systems
- Data Management Matters
- New regulatory, statutory or policy requirements

Daily Responsibilities / Business as Usual (continued)

- Investment Policy Rules and Breach Alerts
 - Internal Portfolio (Pre-trade) Monitoring
 - Investment Holdings (Post-trade) Monitoring
 - Holdings Reports and Regulatory Filings
- External Manager & Counterparty Inquiries
- Operational Due Diligence (ODD)
- Investment Integrity Policy & Questionnaire
- Investment Compliance Testing



Internal Portfolio (Pre-trade) Monitoring

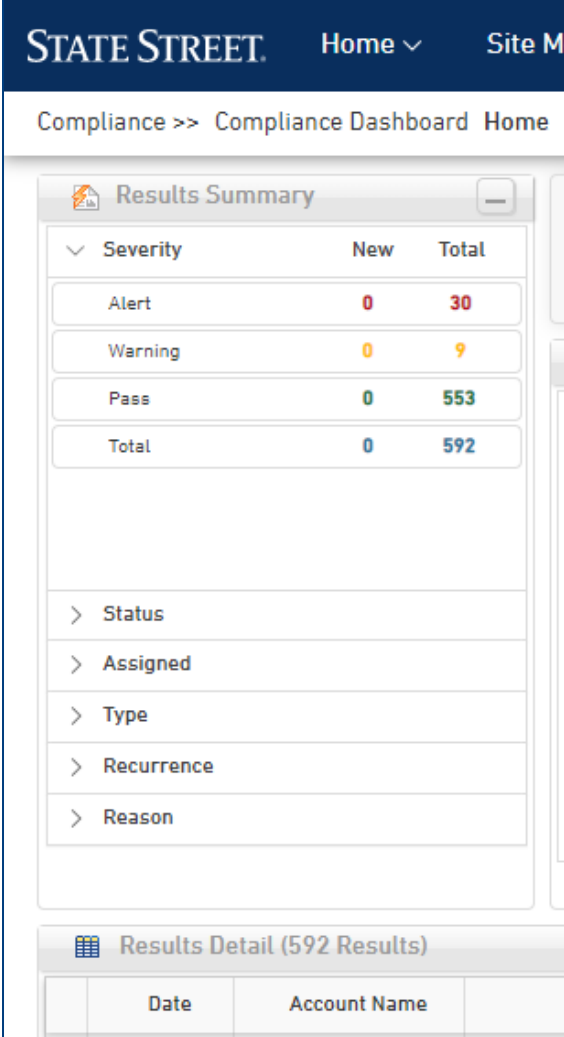
- Bloomberg (VMGR / CMGR)
- Portfolio Guidelines
- Restricted Lists
 - Comptroller Divestment
 - Boycott of Israel, Fossil Fuels
 - Doing business with Iran, Sudan, FTOs
 - U.S. Sanctions
 - OFAC
 - Executive Orders
 - Contract restriction & MNPI barriers
- Ad hoc rules or thresholds

The screenshot displays the CMGR Compliance Manager application. At the top, there's a title bar 'CMGR Compliance Manager' with a close button. Below it is a menu bar with buttons: CANCEL, HELP, SEARCH, NEWS, QUOT, QUOT, MSG, MENU, PRINT, PG BA, PG FW. A navigation bar shows 'LIFE TIME GROUP Equity' and 'CMGR' with a dropdown arrow. The main header area displays 'Running AIM Production: TEACHERS RETIREMENT (PX# 200)' and 'E093 t'. Below this is a tabbed interface with tabs: 1) Create Rule, 2) Actions, 3) Reports, 4) Export, 5) Settings. Under the 'Reports' tab, there are sub-tabs: 10) Rules, 11) Watchlist, 12) Issuers, 13) Brokers, 14) Refresh, 15) Limits, 16) LTC. The 'Rules' sub-tab is active, showing a search bar with 'Search Type' set to 'Advanced' and a text input field. Below the search bar is a section for 'Popular Rule Fields' with input fields for ID/Name, Note, Description, Attributes, Template, Account/Group, Broker/Group, and Date Modified. To the right, a table lists 29 of 99 rules. The table has columns for ID, Name, Status, and a date. The rules listed include RX_MOATU, RX_MOATE, RX_MOATD, RX_DOD1, RX_OFAC6, RX_OFAC5, RX_SEC16, RX_LST3, RX_EOCN2, and RX_EOCN1.

ID	Name	Status	
rx			
RX_MOATU	RX: MOAT USA restricti...	Active	02/
RX_MOATE	RX: MOAT Emg Mkts re...	Active	02/
RX_MOATD	RX: MOAT Dev Mkts res...	Active	02/
RX_DOD1	Restx - DOD Rstx Secs	Active	06/
RX_OFAC6	Restx - OFAC Sanct Sec...	Active	06/
RX_OFAC5	Restx - OFAC Sanct Sec...	Active	06/
RX_SEC16	REG - No shx stx on Se...	Active	12/
RX_LST3	RESTX: No Short Sells i...	Active	11/
RX_EOCN2	RESTX: Exec Order for...	Inactive	03/
RX_EOCN1	RESTX: Exec Order on ...	Inactive	03/

Investment Holdings (Post-trade) Monitoring

- State Street / Charles River Investment Management Solution (CRIMS)
 - Portfolio Guidelines Monitoring
 - Trust-wide Threshold Reporting
 - Risk & Performance metrics
- Internal Portfolios
 - Position Limits, Risk Limits (e.g., sector, country, issuer)
 - Permitted Investment Type
- External Managers
 - Direct (i.e., separately managed accounts, fund of one)
 - Indirect (i.e., commingled funds, co-invests)
- Remediation of Alerts / Breach Logs



STATE STREET Home Site M

Compliance >> Compliance Dashboard Home

Results Summary

Severity	New	Total
Alert	0	30
Warning	0	9
Pass	0	553
Total	0	592

> Status

> Assigned

> Type

> Recurrence

> Reason

Results Detail (592 Results)

Date	Account Name
------	--------------

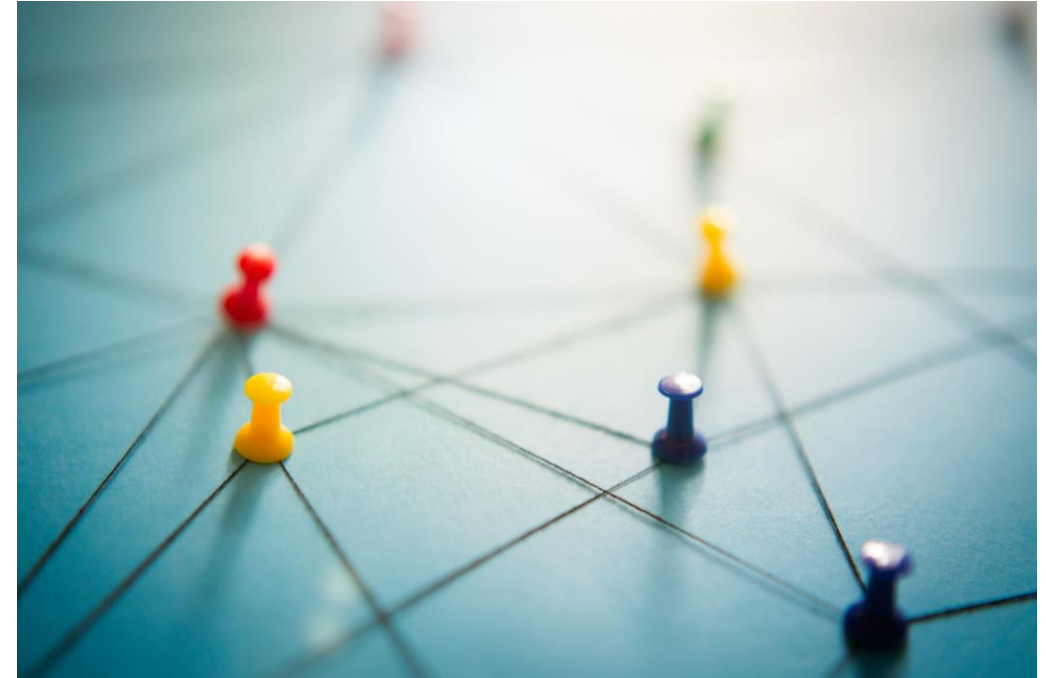
Holdings Reports and Regulatory Filings

- FundsApps – aggregate short reporting by country
- State Street (CRIMS)
 - Aggregate holdings alerts
 - IPS requirements and limits
- Regulatory Filing Platforms
 - U.S. – EDGAR
 - EU (11 active), APAC (3 active), other
- Resources for Regulatory Updates
 - AOSphere
 - Service providers
 - Law firm notices / alerts

The image shows two overlapping screenshots. The top screenshot is the FundsApps dashboard, which includes a navigation bar with logos for FUNDAAPPS, SD, PL, RAPPORTR, and GCD. The main header area displays a personalized message: 'Hi Chris, No disclosures due today'. To the right, there are statistics for 'Position Data from 20 Apr 2023', showing 1 New Breach, 21 Disclosures, and 35 Warnings. Below this, there are sections for 'Important Tasks' (0 tasks) and 'Rule Comments' (1 comment from Samuel B on 14 Apr 2023). The bottom screenshot is the AOSphere website, an affiliate of ALLEN & OVERY. It features a 'Shareholding Disclosure' section with a world map visualization of data points. On the right side of the AOSphere page, there are 'Related Tools' (Initial Foreign Investment Thresholds, Initial Thresholds) and 'Related Links' (Quick Start Guide, Guidance Notes and FAQs, Key Terms).

External Manager & Counterparty Inquiries

- External Manager Inquiries
 - Restricted Securities Lists
 - Authorized Signers / General Authority Resolution (GAR)
 - FATCA/CRS Entity Self-Certification
- Counterparty & Broker Requests
 - “Know Your Client” / AML
 - Institutional Investor forms (e.g., FINRA, CFTC)
- Code of Ethics for Contractors



Operational Due Diligence (ODD)

- Manager and Fund Assessments
 - Operational risk assessment prior to investment approval
 - Includes consideration of mitigative measures to reduce risks
 - Collaborate to provide a recommendation to the IIC
- Ongoing Manager Diligence / Questionnaires
 - ADV Monitoring
 - Investment Integrity Questionnaire (IIQ)



Investment Integrity Policy & Questionnaire

- Investment Integrity Policy (IIP)
 - Ensures the integrity of all TRS investment transactions
 - Ensures that all investment decisions and recommendations are free of impropriety or improper influence (“pay-to-play”)
- Investment Integrity Questionnaire (IIQ)
 - Applies to all external fund or manager parties, and placement agents
 - Must be obtained prior to IIC consideration or other investment authorization
 - Coverage: TRS relationships, contributions, placement agents/fees



Investment Compliance Testing

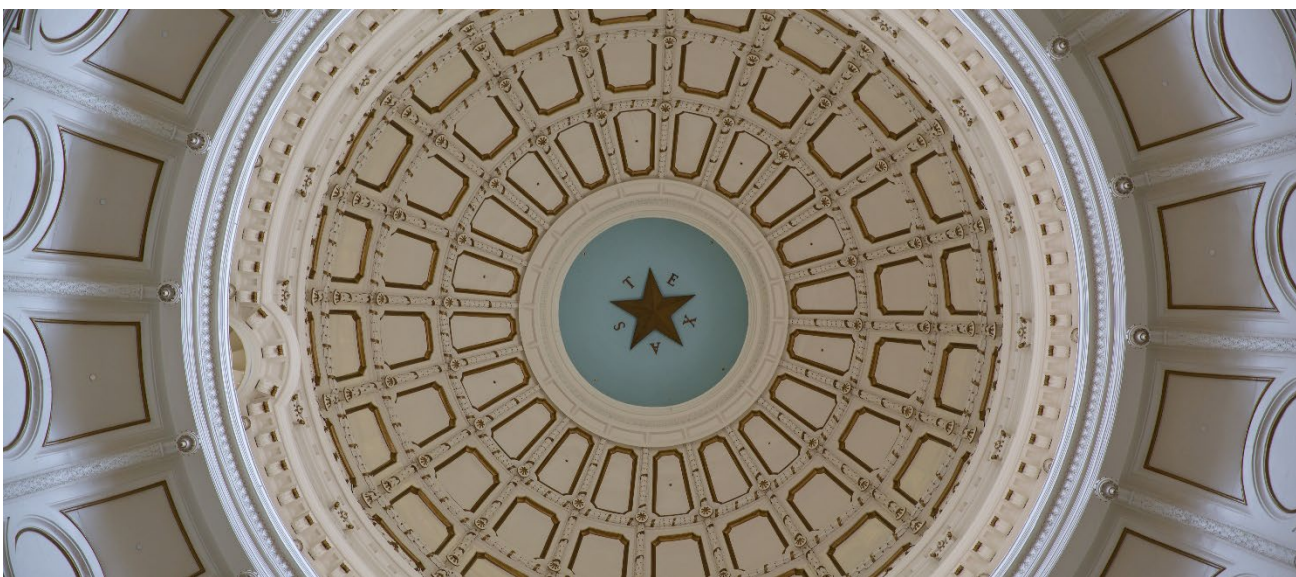
- Investment Compliance Testing Scope
 - Onboarding Custodian Rules, External Manager & Internal Portfolio Guidelines
 - Hedge Funds
 - Portfolio Concentrations
 - Rules, Parameters and Definitions
 - “Second Line of Defense”

Semi-Quarterly IPS Sections Tested	
IPS Article 1.3(c) Underwriting Objectives	IPS Article 10.9 Use of Leverage
IPS Article 1.7 Reporting Requirements	IPS Article 12.4 Investment Integrity Questionnaire
IPS Article 1.8(d) Restricted Securities	IPS Appendix B Approval Authority and Limits
IPS Article 2.5 Hedge Fund classification	IPS Appendix F Committee and Board Representation
IPS Article 7 Emerging Manager Limits	CIO condition upon approval after the IIC meeting
IPS Article 10.3 Counterparty Requirements	

Additional Policies Tested	
Quarterly Compliance Certification	Proxy Voting Policy Section
Securities Lending Policy	Contractual Allowances & Commission Credits Tracking



Internal Audit Review of Investment Trading Operations



Syed Israr and Jaime Llano
December 7, 2023



Review of Investment Trading Operations

Overview

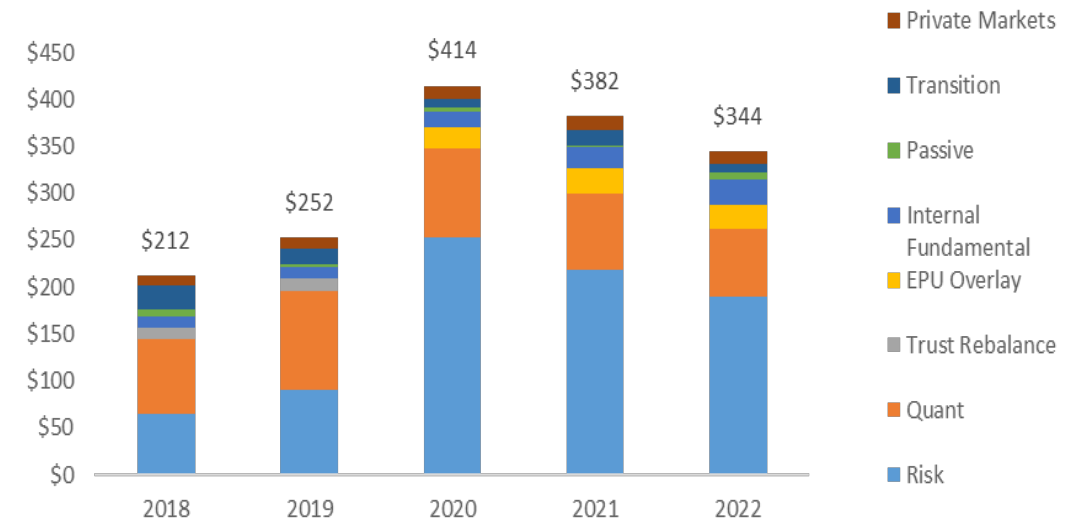


- ✓ TRS trading activities play a strategic and critical role in the efficient execution of Trust investment transactions
- ✓ Two specialized transaction groups:
 - ✓ Trading Group
 - ✓ Fixed Income, Currency & Commodities Trading Group (FICC)

Audit Scope

- ✓ September 2021 – August 2022

Total Notional Traded by Strategy (\$BB)
12-month periods ended September 30



Source: Investment Management Committee Annual Trading Reports, 2018-2022



AUDIT CONCLUSION

The Teacher Retirement System's (TRS) Trading operations include sufficient controls to ensure that trading operations are managed and conducted effectively, efficiently and in compliance with relevant procedures and guidelines.

Key controls include:

- General Authority Resolution (GAR)
- Transaction cost analysis
- Trade approval and execution procedures
- Trading system access controls
- Performance oversight

Positive results:

- Performance tracking
- Board-approved trading authority

Improvement opportunities:

- Formal procedure to document and report errors
- Retrievability of FICC records retention
- Review and affirm trade approval practices

1. Implement and execute trades in an efficient and economical manner

Positive Results	Recommendations	Management Action Plan & Target Date
<ul style="list-style-type: none">• Third-party data for analysis of trading cost efficiency	<ul style="list-style-type: none">• Periodically review peer-relative benchmark selection• Provide regular Business Continuity Plan (BCP) training & review of employee alternative site access• Document key decision points within the broker process	<ul style="list-style-type: none">• Management will periodically review the trading peer-relative benchmark (9/2024)• Management will ensure Trading and FICC training and access to the alternative site (6/2024)• Management will solidify documentation practices around approval of key decision points (3/2024)

2. Execute trades in compliance with relevant policies, guidelines and procedures

Positive Results	Recommendations	Management Action Plan & Target Date
<ul style="list-style-type: none">• Trading system configuration aligns with General Authority Resolution (GAR)• Timely termination of trading system access	<ul style="list-style-type: none">• Establish formal procedure to document and report errors• Enhance FICC trade approval records retention controls• Review and affirm trade approval practices	<ul style="list-style-type: none">• Management will establish a formal process for error reporting (6/2024)• Management will review capabilities to enhance FICC trade approval records retention (6/2024)• Management will review the trade approval controls (9/2024)

Investment Audit Team



Syed Israr
Senior Investment Auditor



Katie Linczer, CPA, CIA, CRMA
Senior Investment Auditor



Nathan Ward
Senior Investment Auditor



Julie Toler, CFA, CFP®, CIA, CRMA
Investment Audit Services Director



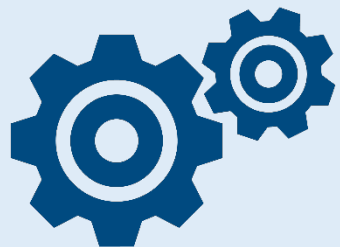
APPENDIX

Appendix 1: Objective, Methodology and Scope



Audit Objective

Determine whether investment trading systems and operations include sufficient controls to ensure trading activities are managed and conducted effectively, efficiently and in compliance with relevant policies, guidelines and procedures.



Methodology

- Review IPS, applicable laws, industry standards, and established IMD procedures
- Review TRS Board, Management Committee presentations and meeting records
- Review investment documents and internal controls
- Conducted peer practices survey



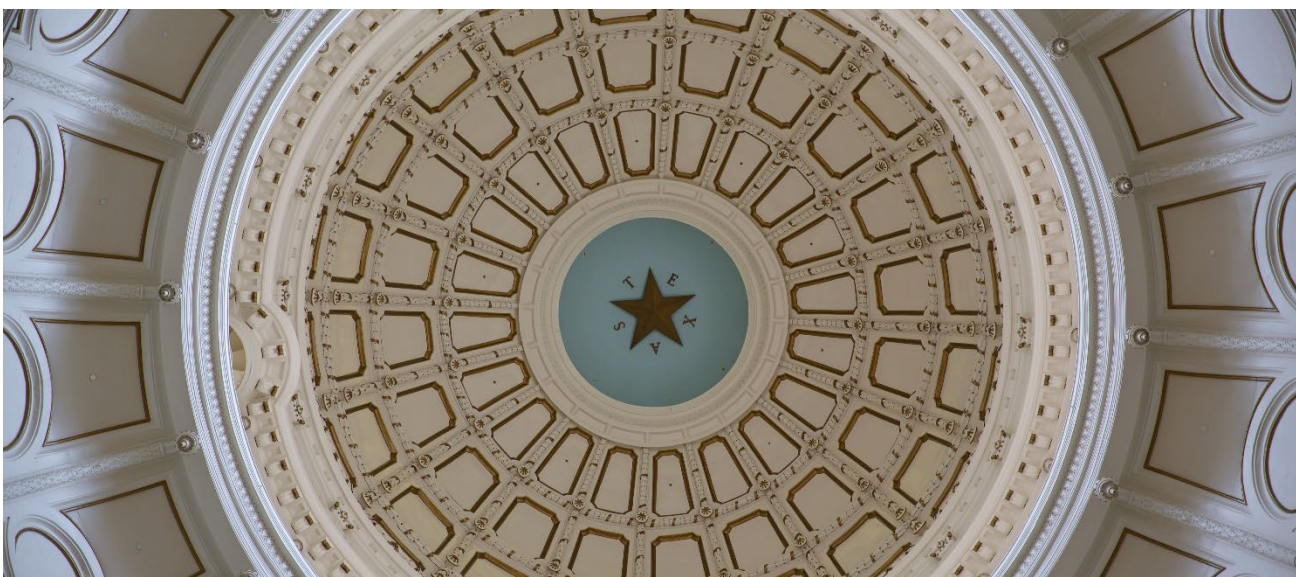
Audit Scope

- Trading activities from September 2021 – August 2023



Internal Audit

Review of Insulin Cost-Sharing Benefits



Jonathan O'Reilly and Yimei Zhao

December 7, 2023



Background: SB 827 Additions to Insurance Code

The 87th Legislature passed Senate Bill 827 effective September 1, 2021, which amended Texas Insurance Code (Title 8, Subtitle E, Chapter 1358).



Formulary Requirement (Section 1358.104)

- Formulary must include at least one insulin from each therapeutic class.



Limit on Cost-Sharing Requirement (Section 1358.103)

- May not impose a cost-sharing provision for insulin above \$25 per prescription for a 30-day supply.

Review of Insulin Cost-Sharing Benefits



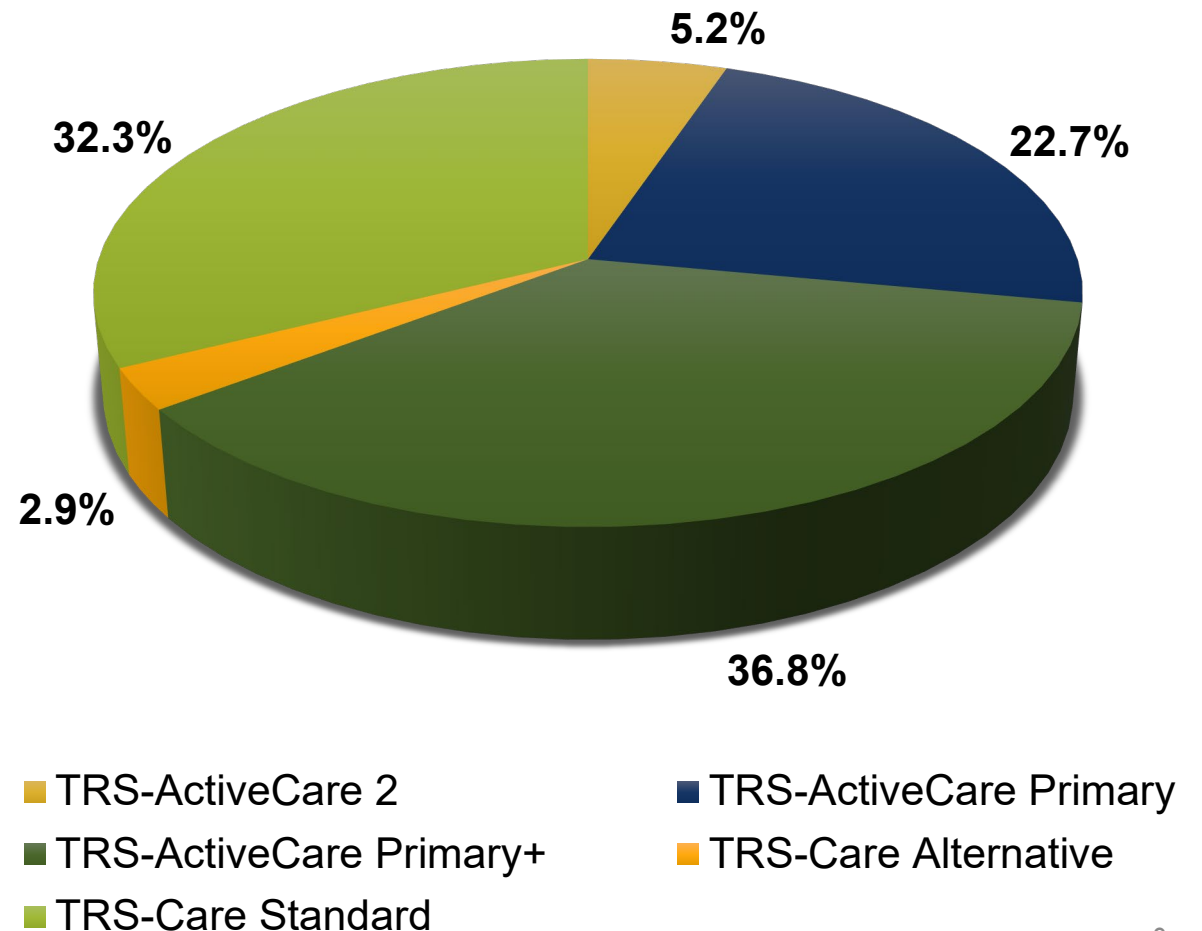
Client Requirements Document (CRD) copay rules

- ✓ 1–31-day supply \$25
- ✓ 32–59-day supply \$50
- ✓ 60–90-day supply \$75

Audit Scope

- ✓ TRS-ActiveCare
 - ✓ All plans except High-Deductible
 - ✓ 9/1/2022-8/31/2023
- ✓ TRS-Care
 - ✓ Standard and Alternative plans
 - ✓ 1/1/2022-9/30/2023

Proportion of TRS members with Insulin by Plan








AUDIT CONCLUSION

Teacher Retirement System (TRS) has opportunities to improve compliance with Texas Insurance Code insulin benefit requirements.

Key observations:

- TRS-Care and TRS-ActiveCare health benefit plan's formularies are inclusive of each insulin therapeutic class and are in compliance.
- 95% of claims met cost-sharing requirements. Pharmacy carrier's implementation error caused 3,154 claims to exceed cost-sharing limits. 14% of TRS members receiving insulin were identified as having risk of overpayment.

Results: Observations, Recommendations and Management Action Plan

 Observations	 Recommendations	 Management Action Plan & Target Date
1. TRS-ActiveCare and TRS-Care health benefit plans include insulin drugs from each therapeutic class in their formularies.	<ul style="list-style-type: none">• No recommendations	
2. Claims with cost-sharing payments above the SB 827 limits were paid across 1,240 TRS members.	<ul style="list-style-type: none">• Ensure the carrier reimburses members for their overpayments and implement a process to verify that members received the reimbursements.• Confirm that the vendor addresses the coding errors to ensure future claims are processed in compliance with the law.• Ensure that the new pharmacy carrier has properly implemented SB 827 insulin cost-sharing requirements.	<ul style="list-style-type: none">• HD has instructed PBM to provide an impact report and start processing refunds. (2/2024)• TRS-ActiveCare, which incurred 99% of the suspected findings, has transitioned to a new PBM so there are no prospective coding errors to correct. However, HD will monitor the TRS-Care program and take steps if additional claims are incorrectly processed. (2/2024)• HD is monitoring insulin claims as part of our post-implementation review. (2/2024)

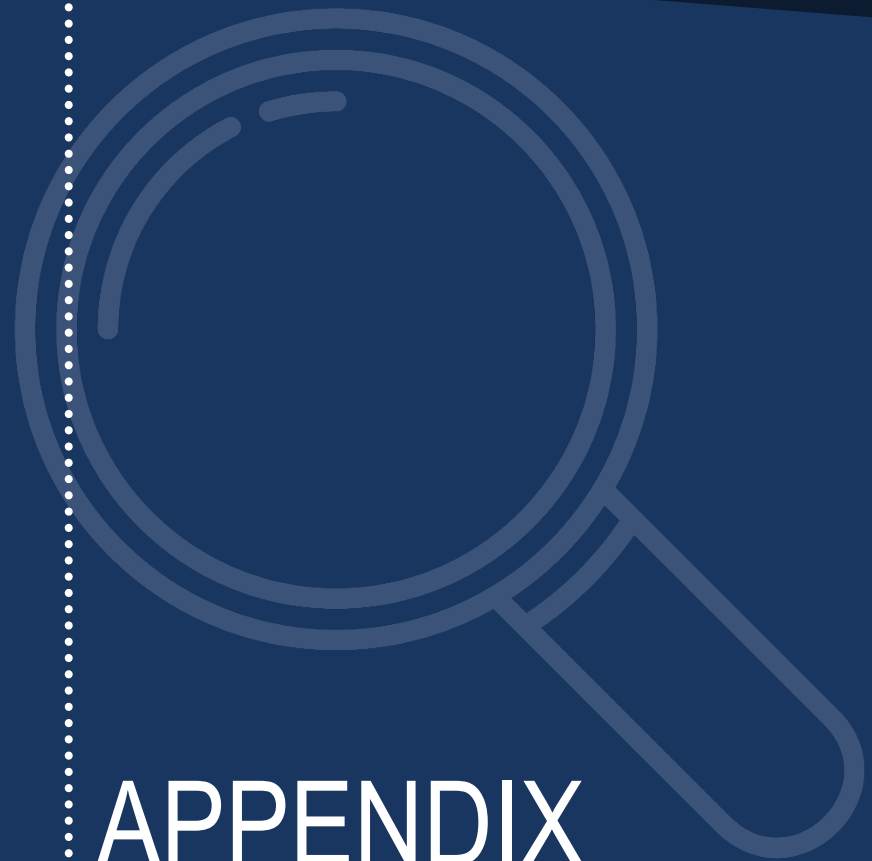
Business Intelligence Audit Team



Jonathan O'Reilly, M.A.
Business Intelligence Director



Olga Jerman, Ph.D.
Senior Business Intelligence Analyst

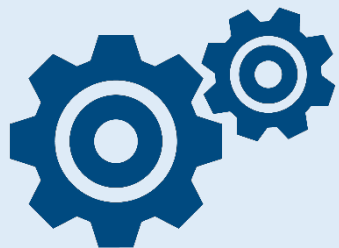


APPENDIX



AUDIT OBJECTIVES

- ✓ Ensure that TRS health benefit plans include at least one insulin from each therapeutic class in the plans' formulary.
- ✓ Ensure that TRS members do not pay over \$25 per prescription for a 30-day supply of insulin.



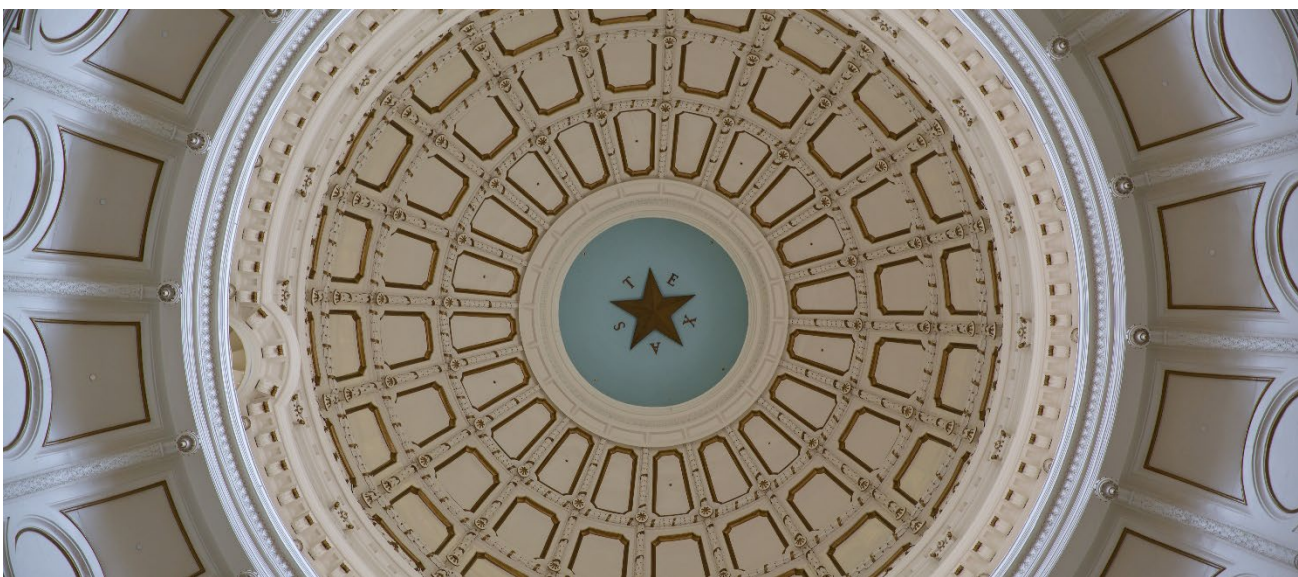
METHODOLOGY

- ✓ Review relevant materials.
- ✓ Review health benefit plans' formularies.
- ✓ Perform data analysis.
- ✓ Validate the findings with the carrier.



AUDIT SCOPE

- ✓ January 2022 – September 2023
- ✓ Final paid pharmacy claims related to insulin drugs.
- ✓ Therapeutic class codes starting with “2710” and “279910” (insulins).



Internal Audit

Quality Assurance and Improvement Program (QAIP)

Tammie Wells, Amanda Jenami

December 7, 2023

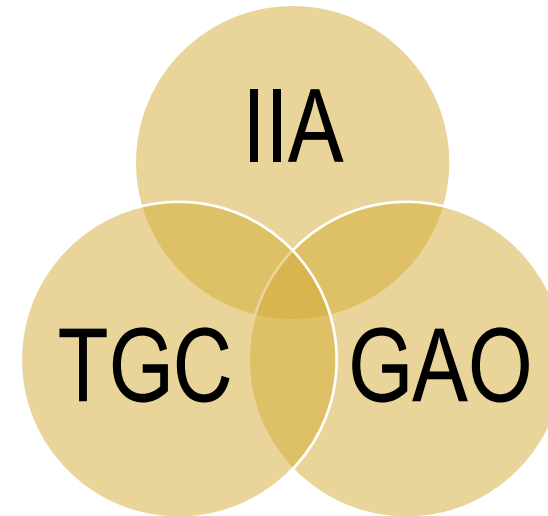




Background

Criteria: The Standards

- Texas Internal Auditing Act (Texas Government Code, Chapter 2102)
- The Institute of Internal Auditors (IIA) International Professional Practices Framework – The “Red” Book
- United States Government Accountability Office (GAO) Government Auditing Standards – The “Yellow” Book



Criteria: The Standards

Requirements:

The Chief Audit Executive (CAE) **must** develop and maintain a quality assurance and improvement program that covers all aspects of the internal audit activity.

AS 1310: The QAIP **must** include both internal and external assessments.

AS 1311: Internal assessments **must** include ongoing performance reviews, *periodic reviews* by persons with knowledge of auditing practices and the Standards.

Person(s) conducting the assessment **can be part of internal audit activity** or from another area in the company.

GAGAS 5.43: The audit organization should perform monitoring procedures that enable it to assess compliance with professional standards.

GAGAS 5.44: The audit organization should analyze and summarize the results of its monitoring process at least annually.

- Reviewed Internal Audit's policies and procedures, annual risk assessment, annual audit plan, and other relevant documents
 - Reviewed post-audit surveys completed by auditees
 - Discussions with the CAE, Internal Audit Staff
 - Reviewed and evaluated audit working papers
-
- Utilized the State Agency Internal Audit Forum (SAIAF) Peer Review Program
 - Scope of engagement: Fiscal Year 2023

Areas of Focus

Red Book Standards	Yellow Book Standards	Area of Focus
Standard 1000	-	Purpose, Authority and Responsibility
Standard 1100	3.11, 3.17-3.108	Independence and Objectivity
Standard 1200	3.109-3.117, 4.01-4.53	Proficiency and Due Professional Care
Standard 1300	5.42-5.59	Quality Assurance and Improvement Program
Standard 2000	-	Managing the Internal Audit Activity
Standard 2100	-	Nature of Work
Standard 2200	8.03-8.35	Engagement Planning
Standard 2300	8.36-8.141	Performing the Engagement
Standard 2400	9.01-9.67	Communicating Results
Standard 2500	-	Monitoring Progress
Standard 2600	-	Communicating the Acceptance of Risks



Results

Overall QAIP Conclusion

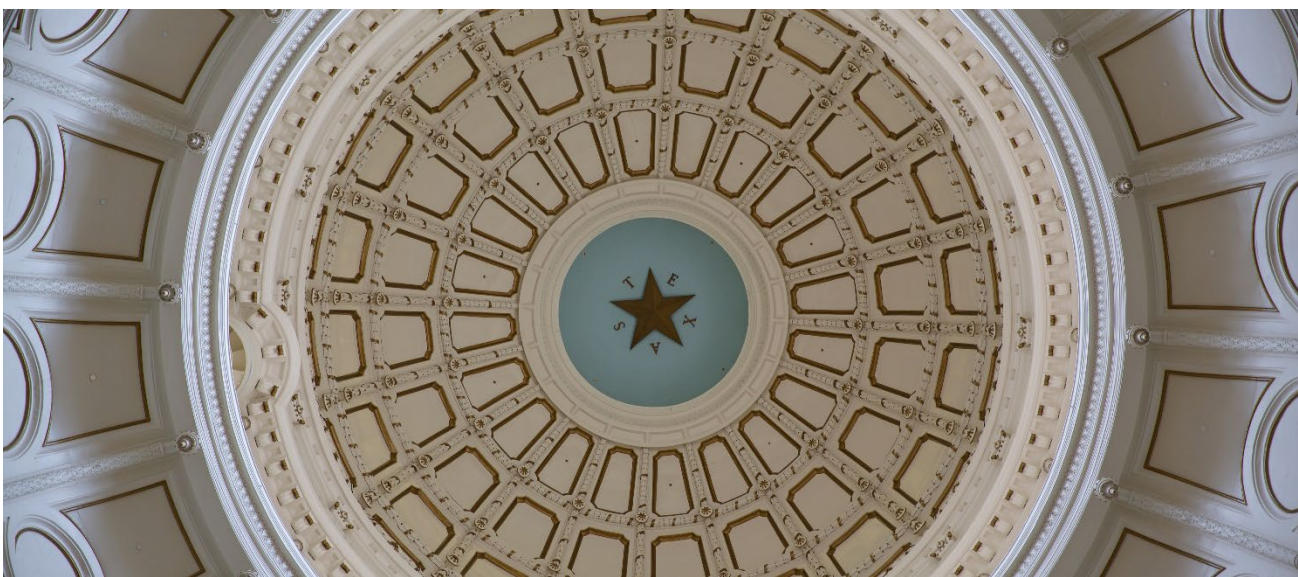
- TRS Internal Audit *generally conforms* with the requirements of professional audit standards and related codes of ethics, state law and Internal Audit's QAIP.
- We identified three opportunities to further enhance our practices and workpaper documentation.

Recommendations and Management Responses

Recommendation	Management Responses	Target Implementation Date
Internal Audit should:	Management agreed with the recommendation and will:	
Continue training and developing audit staff to ensure there is shared awareness of the procedures necessary to comply with applicable standards.	Continue to train audit staff on the procedures necessary to comply with applicable standards.	Ongoing
Consider updating the report template to include a “placeholder” for sampling methodology to be used when sampling is used in an audit.	Work with the Audit Report Improvement Workgroup to update the current report template to include a sampling methodology section.	March 2024
Continue its efforts to strengthen audit documentation and timely completion and review of audit documentation.	Work with Internal Audit’s Management Committee to provide guidelines on what constitutes timely completion of both documentation and review of work papers.	March 2024
Consider updating the quality control procedures to document the process for internal quality reviews for the years in which an external peer review is completed.	Update quality control procedures, as recommended.	March 2024
Consider updating the TeamMate procedure steps to clarify the expectations related to the consideration of fraud risks, including documentation expectations.	Clarify management expectations on documentation of audit teams’ consideration and documentation of fraud risks.	March 2024



FY2023 Internal Audit Annual Report



Katie Linczer, CIA, CPA, CRMA

December 7, 2023



FY2023 Internal Audit Annual Report

The Internal Audit Annual Report provides information on the audit plan, assurance, consulting, and advisory projects completed, and other Internal Audit activities in fiscal year 2023. It meets the annual reporting requirement of the Texas Internal Auditing Act (Texas Government Code, Chapter 2102.009 and Texas Government Code, Sections 2102.015 and 2102.0091).

This report follows the State Auditor's Office reporting guidelines and includes the following:

- I. Compliance With Texas Government Code, Section 2102.015: Posting the Internal Audit Plan, Internal Audit Annual Report, and Other Audit Information on Internet Website
- II. Internal Audit Plan for Fiscal Year 2023
- III. Consulting and Nonaudit Services Completed
- IV. External Quality Assurance Review (Peer Review)
- V. Internal Audit Plan for Fiscal Year 2024
- VI. External Audit Services Procured in Fiscal Year 2023
- VII. Reporting Suspected Fraud and Abuse



Questions

2023 YEAR IN REVIEW



INDEPENDENT • OBJECTIVE • ASSURANCE • CONSULTING

WHO WE ARE:

14 Auditors

3 Business Intelligence Analysts

1 Administrative Professional

WHAT WE BRING:

HIGHLY CREDENTIALLED PROFESSIONALS:

4
Certified Public
Accountants3
Certified
Information
Systems Auditors5
Certified
Internal
Auditors2
Certified
Fraud
Examiners1
Certified
Information
Systems Security
Professional1
Chartered
Financial
Analyst8
MBAs2
PhDs123
123 years total
audit experience81
81 years total data
analysis experience41
41 years total
IT experience46
46 years total
investment experience

DIVERSE BACKGROUNDS:

AUDIT EXPERIENCE



WITH
**BIG FOUR
AUDIT FIRMS**
&
**TEXAS STATE
GOVERNMENT**

DIVERSE PROBLEM
SOLVING SKILLS

INCLUDING:
• AUDIT
• ACCOUNTING
• TREASURY
• INVESTMENT
MANAGEMENT
• TRADING
• DATA ANALYSIS
• CYBER SECURITY
• INFORMATION
TECHNOLOGY

WORK EXPERIENCE



AUSTRALIA
THE UK
CHINA
INDIA
PAKISTAN
RUSSIA
USA

WHAT WE DID IN 2023:

ROBOTICS PROCESS AUTOMATION INITIATIVE



CREATED 3
ROBOTS FOR RE
DATA ANALYSIS



CREATED 38 ALGORITHMS
FOR HEALTH CARE CLAIMS
DATA ANALYSIS



11 TRS AUDITS



8 ADVISORY PROJECTS



580

HOURS of CONTINUING PROFESSIONAL
EDUCATION (CPE) COMPLETED

Q1

- Amanda Jenami, Syed Israr, Katie Linczer, Nathan Ward & Julie Toler attended ITCI's Emerging Issues in Investments and Derivatives conference in October.
- Teklehaimanot Derseh, Syed Israr, Amanda Jenami, Olga Jerman, Julie Toler & Nathan Ward attended & spoke at APPFA's fall conference in November.
- Stephen Randall, Falguni Sampat, & Lisa Wei attended APPFA's fall conference in November.
- Falguni Sampat continued to serve on the Outreach, Culture & Engagement (OCE) Council.

Q2

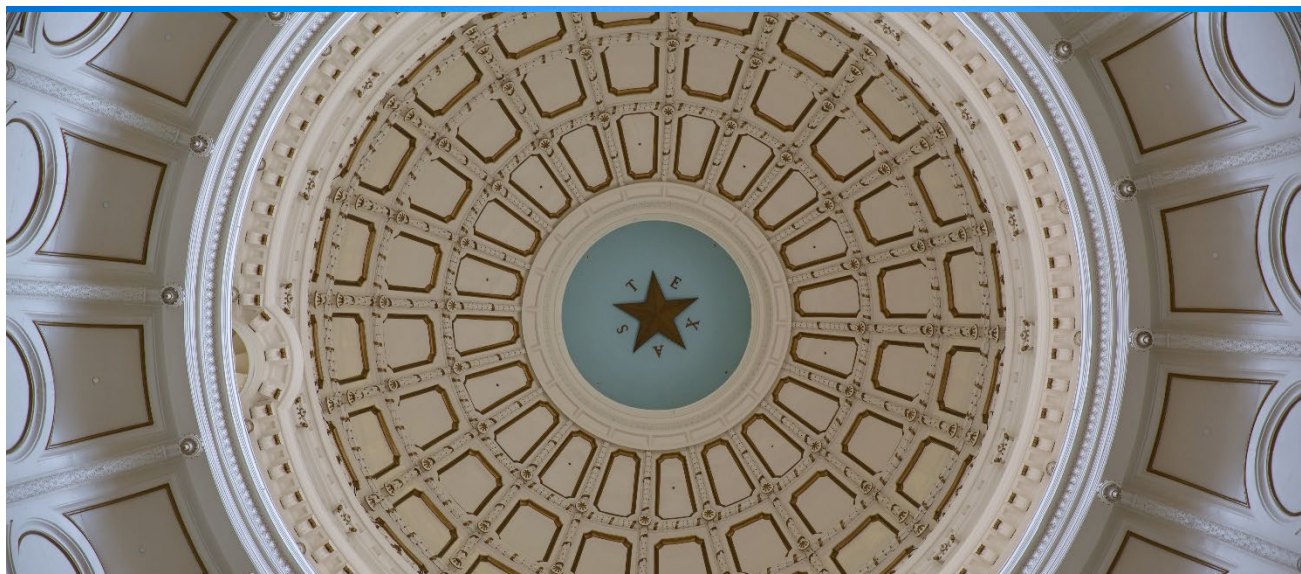
- Lisa Wei was awarded the CISA designation in December.
- Katie Linczer was awarded a Certificate of Achievement from the IIA for "Dedicated Contributions to Item Writing" in December.
- Syed Israr was awarded the Bushel of Fun award in January.
- Syed Israr, Katie Linczer & Julie Toler attended the 2023 TRS IMD Townhall in January.
- Nathan Ward spoke on a panel & attended the 2023 TRS IMD Townhall in January.
- Olga Jerman completed Machine Learning Leadership and Practice Course in February.

Q3

- Department hosted Internal Audit Awareness Week Open House.
- Olga Jerman and Teklehaimanot Derseh attended the NHCAA Schemes for Health Care Fraud Investigators & Analysts conference in May.
- Welcomed Jonathan O'Reilly as Business Intelligence Director in March.
- Jonathan O'Reilly joined the APPFA Best Practices Committee and leads the Data Analytics Subcommittee.
- Stephen Randall and Lisa Wei attended the DIR's Information Security Forum in April.

Q4

- Falguni Sampat was awarded the Bushel of Fun award in June.
- Welcomed Tammie Wells as Operations Audit Director, Cui Rye as Senior Internal Auditor & Rebecca Warnick as Audit Project Manager.
- Amanda Jenami, Katie Linczer, Stephen Randall & Julie Toler attended & spoke at APPFA's spring conference in June.
- Teklehaimanot Derseh completed the Post Graduate Program in Artificial Intelligence and Machine Learning – Business Applications in July.
- Katie Linczer was awarded the Golden Apple award for 2023 contributions.



Internal Audit

Summary of Audit Recommendations As of November 21, 2023

Amanda Jenami, CPA, CIA,
CISA, CIDA, CFSA

December 7, 2023



Highlights

66

Recommendations
(Total)

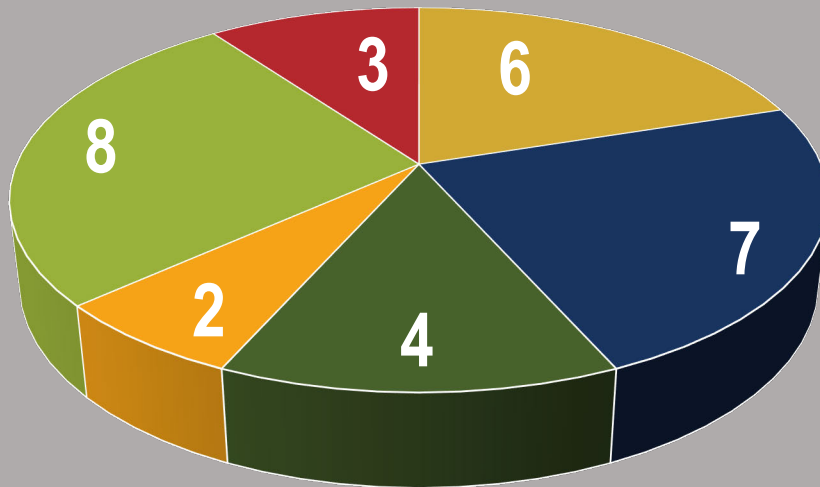
20

Audit Reports

44

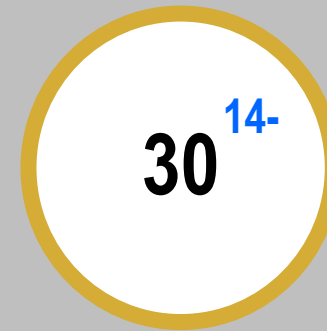
Recommendations
rated significant

Ownership of Pending Recommendations

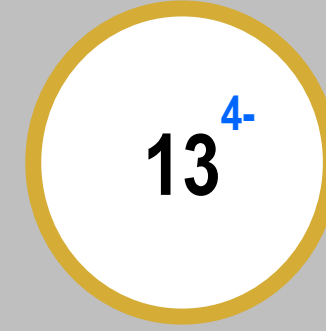


Benefit Services Business Admin HD IMD IT ISO

Implementation Status



Pending



Satisfactorily
Implemented



Implemented,
pending IA
validation

Age of Recommendations

17
1-12
months

10
13-24
months

3
25-36
months

0
37-48
months

**TRS Internal Audit
Summary of Audit Recommendations Status
As of November 21, 2023**

Recommendation	Status	Issue Type	Issue Date	Estimated Date	Revised / Actual Date
19-601 Talent Management and Culture Audit					
2. Strengthen shared services alignment - (c) Performance metrics	Implemented	Significant	4/2019	12/2020	5/2022
20-104 Review of Collections					
1.1 Strengthen death claim-related collection process	Implemented	Significant	7/2020	8/2020	11/2020
1.2 Develop procedures for death claim-related payments and update death notification procedures	Implemented	Significant	7/2020	3/2020	8/2020
1.3 Document and implement procedures for writing off post-death overpayments	Implemented	Significant	7/2020	3/2020	12/2020

Significant to Business Objectives

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

Other Reportable

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

TRS Internal Audit
Summary of Audit Recommendations Status
As of November 21, 2023

Recommendation	Status	Issue Type	Issue Date	Estimated Date	Revised / Actual Date
20-105 Review of 1099-R Processes					
1.1 Identify and Implement Improvements to Address System Defects	Implemented	Significant	10/2020	9/2021	12/2021
2.2 Strengthen Controls for Oversight of Vendor Performance	Implemented	Significant	10/2020	12/2020	12/2020
20-401 Review of Accounting Operations					
3.1.i Accrual and Reporting Accuracy: ACFR - Receivables	Implemented	Significant	7/2020	9/2020	3/2021
3.1.ii Accrual and Reporting Accuracy: ACFR - Payables	Implemented	Significant	7/2020	9/2020	3/2021
21-202 Review of Contract Oversight (HIB)					
1.1 Strengthen contract monitoring efforts	Implemented	Significant	9/2021	2/2023	2/2023
1.2 Assist contract managers in setting up PAVES deliverables	Implemented	Significant	9/2021	10/2021	10/2021
1.3 Strengthen invoice review processes	Implemented	Significant	9/2021	2/2023	2/2023
1.5 Establish and implement criteria for using SOWs	Implemented	Significant	9/2021	2/2023	2/2023
2.1 Strengthen change control processes	Implemented	Significant	9/2021	2/2023	2/2023
2.2 Ensure sufficient involvement of P&C	Implemented	Significant	9/2021	2/2023	2/2023
3.1 Complete risk assessments for executed contracts	Implemented	Significant	9/2021	2/2023	2/2023
3.2 Document the risk assessment process	Implemented	Significant	9/2021	2/2023	2/2023

TRS Internal Audit
Summary of Audit Recommendations Status
As of November 21, 2023

Recommendation	Status	Issue Type	Issue Date	Estimated Date	Revised / Actual Date
21-402 Review of the HUB Program					
1.4 Implement documentation, tracking, and effective reviews of outreach activities	In Progress	Significant	5/2021	9/2021	1/2024
2.1 Monitor HUB Subcontracting Plans and Monthly Progress Assessment Reports	In Progress	Other Reportable	5/2021	7/2021	1/2024
2.2 Implement quality control process to improve the accuracy of reporting	In Progress	Other Reportable	5/2021	5/2021	1/2024
22-302 Review of Strategic Asset Allocation Procedures and Governance					
1.4.1 Alignment with SAA target allocations	In Progress	Other Reportable	6/2022	12/2024	
22-303 Review of Investment Performance Measurement					
2.2.2 Reliance on Excel Workbooks / Scalability	In Progress	Other Reportable	8/2022	8/2023	1/2024
22-304 Review of Internal Fundamental Public Equity Portfolio Operations					
2.1.1 Consultation between Legal & Compliance and IFM	Implemented	Other Reportable	1/2023	9/2023	9/2023
22-401 Review of Records Management					
1.1 Assist business units in weighing benefits against risks of longer retention timeframes	In Progress	Other Reportable	6/2022	2/2023	2/2024
1.2 Require written justification and executive management approval for longer retention timeframes	In Progress	Other Reportable	6/2022	2/2023	2/2024
3.1 Continue efforts to implement record management automated features	In Progress	Other Reportable	6/2022	3/2023	1/2024
3.2 Include shared and personal drives to Microsoft project	In Progress	Other Reportable	6/2022	5/2025	

TRS Internal Audit
Summary of Audit Recommendations Status
As of November 21, 2023

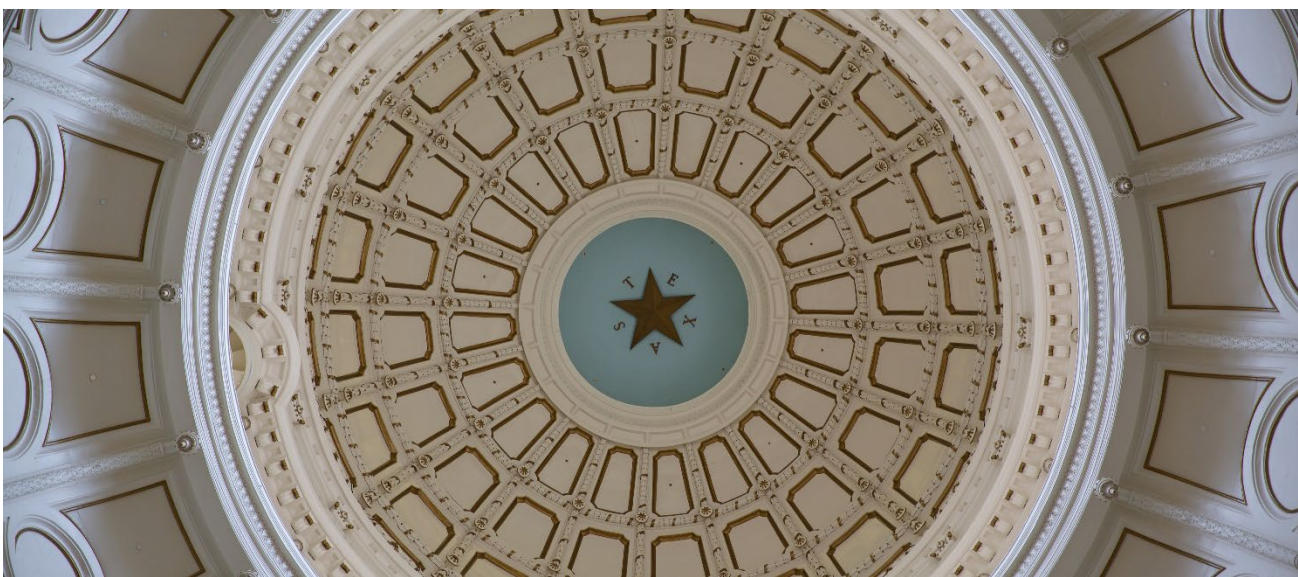
Recommendation	Status	Issue Type	Issue Date	Estimated Date	Revised / Actual Date
22-402 Follow-Up of Procurement Audit					
1.2.1 Implement enhancement feature to tie IMD payments to their relevant contracts	Implemented	Other Reportable	11/2022	9/2023	10/2023
1.2.2 P&C management should separate invoice creation from the review and approval steps within PAVES	Implemented	Other Reportable	11/2022	9/2023	8/2023
1.2.3 P&C management should implement enhancements to limit the number of instances users have to manually enter data in key fields	Implemented	Other Reportable	11/2022	9/2024	11/2023
1.2.4 P&C management should improve quality assurance reviews to ensure accuracy and completeness of data.	Implemented	Other Reportable	11/2022	9/2023	8/2023
2.1 TRS management should assist P&C in bringing a cultural shift to comply with P&C's lead times	Implemented	Other Reportable	11/2022	9/2023	11/2023
22-502 IT Contract Oversight					
1.2 Align contract monitoring efforts with key contract requirements	In Progress	Significant	1/2023	2/2023	3/2024
1.3 Strengthen invoice review processes	In Progress	Significant	1/2023	2/2023	3/2024
23-102 Review of Reporting Employer Processes					
1.1 Practical enhancements to the TRUST system	In Progress	Significant	7/2023	12/2023	
1.2. Report submission after due dates	In Progress	Significant	7/2023	12/2023	
1.3.a. Develop and implement KPIs	In Progress	Other Reportable	7/2023	6/2024	
1.3.b. Notify REs about any changes to the performance targets	Implemented	Other Reportable	7/2023	8/2023	8/2023
1.4 The TRUST system open tickets	In Progress	Significant	7/2023	1/2024	

TRS Internal Audit
Summary of Audit Recommendations Status
As of November 21, 2023

Recommendation	Status	Issue Type	Issue Date	Estimated Date	Revised / Actual Date
2.1.a. Develop Targeted Training Sessions	In Progress	Other Reportable	7/2023	8/2023	3/2024
2.1.c. Organization of training material	In Progress	Other Reportable	7/2023	1/2024	
2.1.d. Implement Quality Assurance Process	Implemented	Other Reportable	7/2023	7/2023	8/2023
2.2 Supplement the annual RE survey with several transaction surveys	Implemented	Other Reportable	7/2023	7/2023	8/2023




Internal Audit Administrative Reports 1st Quarter 2024



Amanda Jenami, CPA, CIA, CISA, CFE,
CGAP, CRMA, CHIAP

December 7, 2023





Internal Audit Performance Measures 1st Quarter 2024

FY2024 Strategic Plan

Goal 1: Provide assurance to the Board of Trustees and Senior Management (3 KPIs)

Goal 2: Serve as trusted advisor to the Board of Trustees and Management (4 KPIs)

Goal 3: Attract, develop and retain diverse and outstanding talent (6 KPIs)

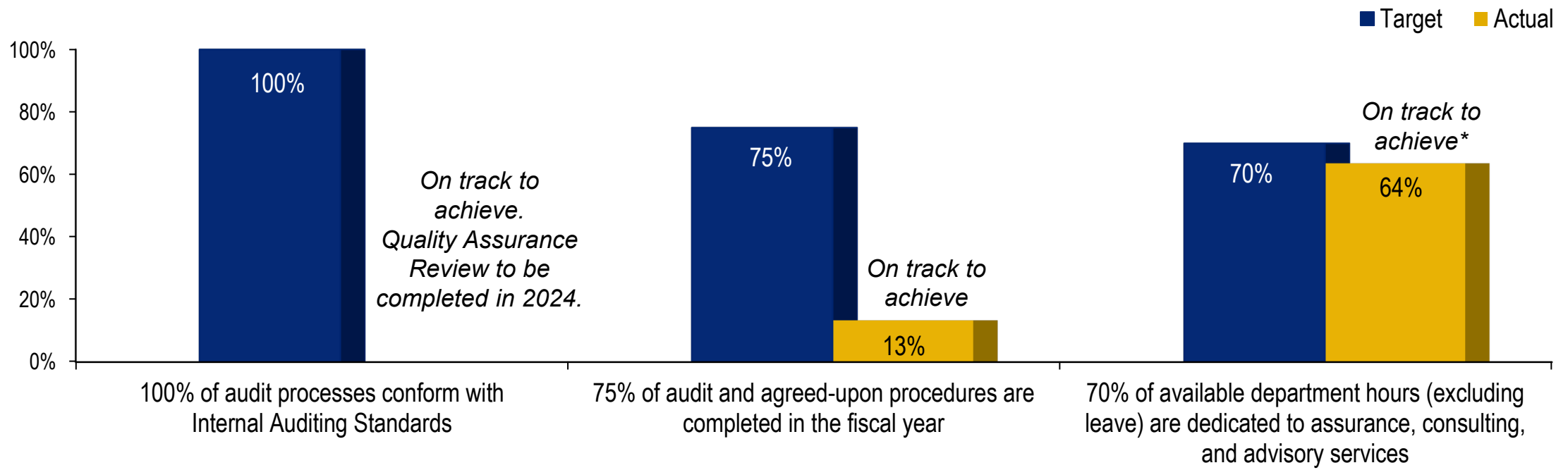
Goal 4: Leverage technology (1 KPI)

FY2024 Key Performance Indicators (KPIs)

Internal Audit either exceeded or was on track to achieve 100% (14 out of 14) of its annual performance targets in the first quarter.



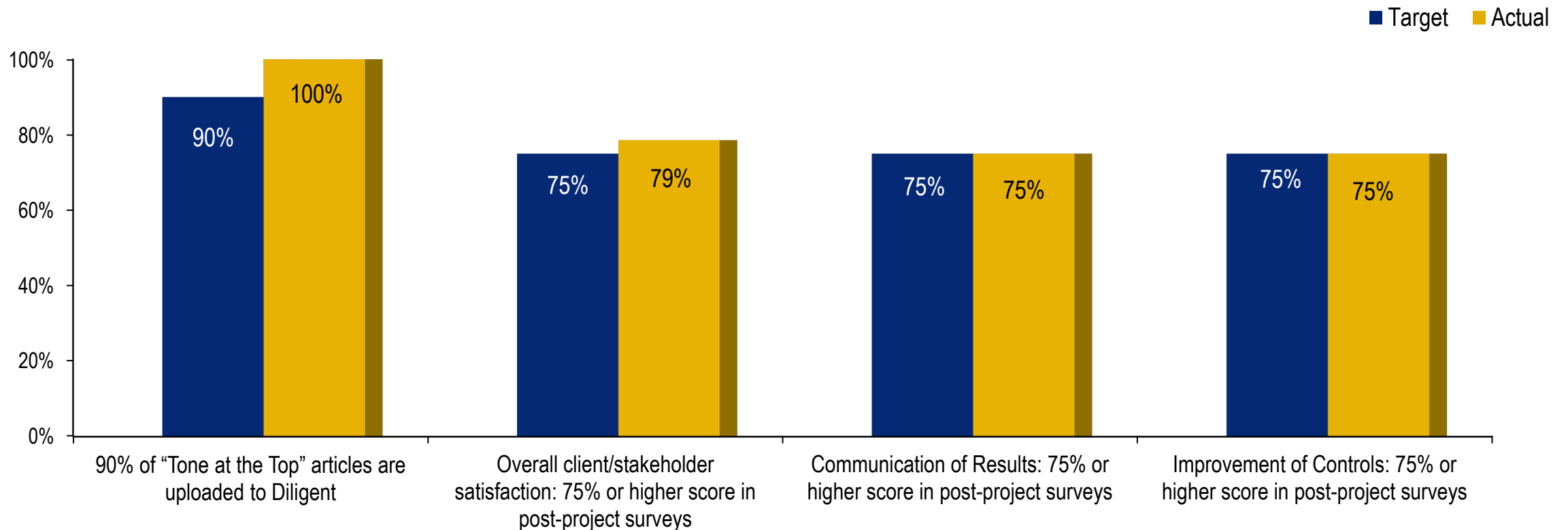
Goal 1: Provide Assurance to the Board of Trustees & Senior Management



* Higher than typical time dedicated to administrative and onboarding/training during Q1.

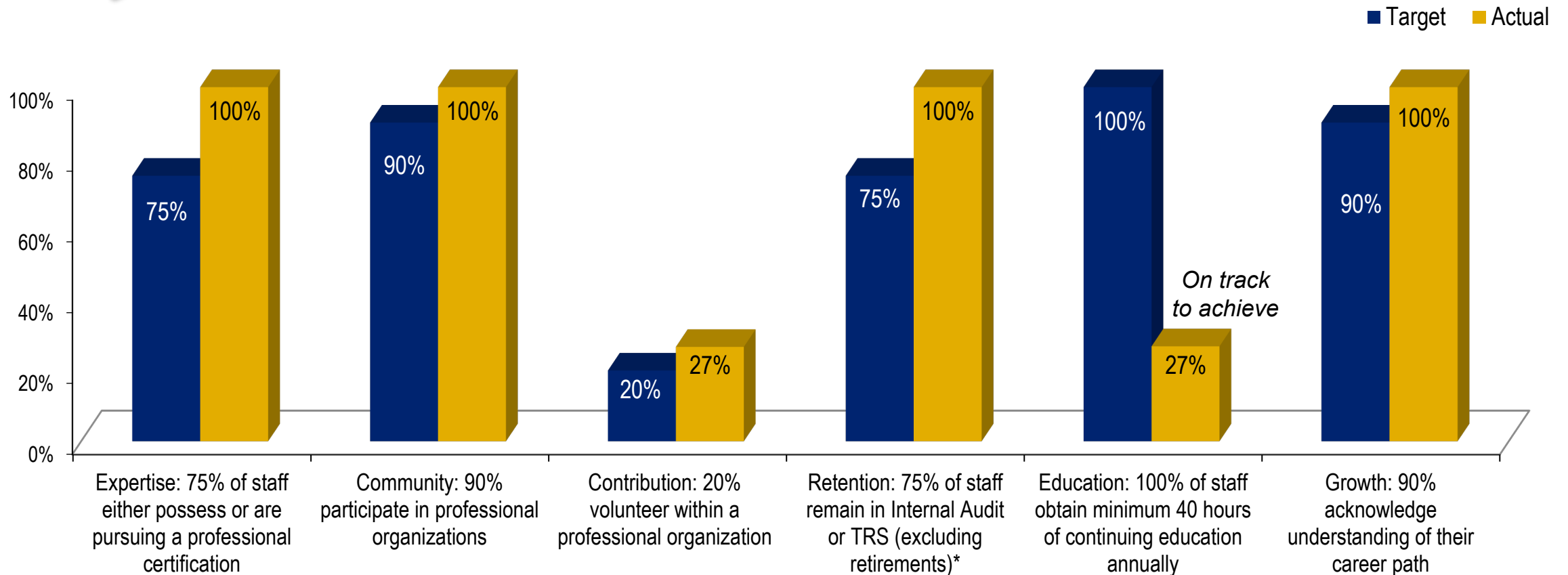


Goal 2: Serve as trusted advisor to the Board of Trustees & Management



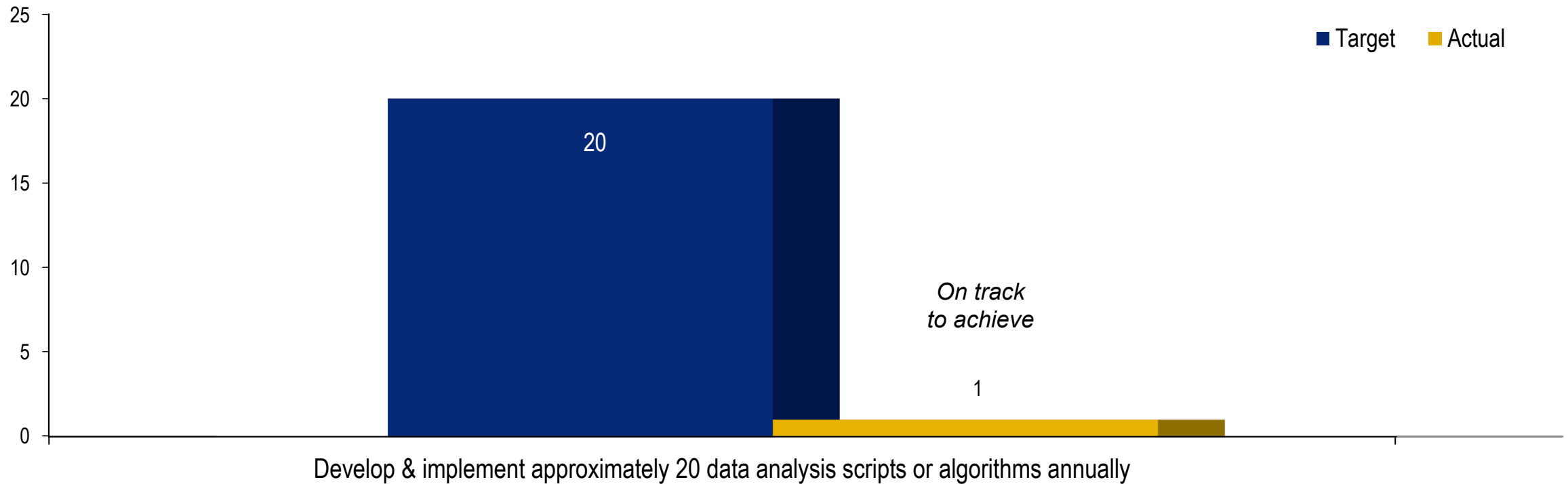


Goal 3: Attract, develop & retain diverse & outstanding talent





Goal 4: Leverage Technology





Advisory Services

1st Quarter 2024

Internal Audit Advisory Services

EXECUTIVE

- Facilitated external audits of the Annual Comprehensive Financial Report, TRICOT Annual Financial Report, and FY23 Other Post-Employee Benefits (OPEB)
- Served on the Risk Oversight Committee
- Served on the ERM Maturity Project Team
- Served on the Enterprise Data Governance Council
- Participated in Enterprise Projects Oversight Committee (EPOC)

INVESTMENT MANAGEMENT DIVISION (IMD)

- Attended Internal Investment Committee (IIC) meetings
- Attended monthly Securities Lending monitoring calls
- Held quarterly collaboration meetings with Investment Compliance and Investment Risk
- Held quarterly collaboration meetings with IMD management

INFORMATION TECHNOLOGY

- Attended Information Security Advisory Team (ISAT) meetings
- Attended Change Management Team (CMT) meetings
- Coordinated IPA (TEAM) activities
- Held collaboration meetings with Chief Information Officer (CIO) and Chief Information Security Officer

BENEFIT SERVICES

- Attended quarterly Employer Advisory Group meetings
- Performed RE data integrity tests via data analytics

FINANCIAL SERVICES

- Performed independent testing and reconciliation of wire activity

HEALTH INSURANCE BENEFITS (HIB)

- Performed independent TEAM testing and reconciliation



Staff Accomplishments & Highlights

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TWO new **Certified Internal Auditor (CIA)** certifications:



Cui Rye, CPA, CIA
Senior Auditor,
Operations Audit Services



Stephen Randall, MBA, CISA, CIA
IT Audit Services Director

Leadership among industry peers:



November 6-8
Phoenix, AZ

37 public pensions represented

TRS Internal Audit presenters:

Katie Linczer
Jonathan O'Reilly
Amanda Jenami

New Team Members



**Rebecca Warnick,
CIA, CPA**

Operations
Audit Project
Lead

- Education:
 - BBA Accounting, UT Austin
- 20 years internal audit experience
 - Whole Foods Market
 - Texas Association of Counties
 - KPMG



Sharon Riley

Senior
Business
Intelligence
Analyst

- Education:
 - MA Health Education/ Health Promotion, UT-Austin
 - BS Biology, University of Houston
- 15 years data analytics experience
 - Rhode Island Dept. of Health
 - Department of State Health Services
 - Dell Children's



**Netza Gonzalez,
CISA, CFE**

Senior IT
Auditor

- Education:
 - MBA, Concordia University
 - MS Accounting, Texas A&M – Commerce
 - MS Management, Texas A&M – Commerce
 - BA Business, Concordia University
- 10 years IT audit experience
 - Wells Fargo
 - Hanger, Inc.
 - Office of the Inspector General
 - Department of Insurance
- US Army: 8 years of service



Questions?