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Committee Meeting: 11/17/2021

Board Meeting: 11/18/2021 Austin, Texas

Nolan Perez, Chairman Christina Melton Crain Jodie Lee Jiles Janiece Longoria Kelcy L. Warren Rad Weaver

		Committee Meeting	Board Meeting	Page
Convene		2:45 p.m. Chairman Perez		
1.	U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration	Discussion	Action	21
2.	U. T. System: Authorization to settle property insurance claim for U. T. Permian Basin, and delegation of authority to Chief Compliance and Risk Officer	Action Mr. Dendy	Action	22
3.	U. T. System: Discussion and presentation of Systemwide Compliance Risk Assessment	Report/Discussion Mr. Dendy Mr. King	Not on Agenda	23
4.	U. T. System: Review of Investments made by the Board in Information Security	Report/Discussion Ms. Mohrmann Mr. Cam Beasley U. T. Austin	Not on Agenda	30
5.	U. T. System: Discussion of U. T. Systemwide Internal Audit Guiding Principles Charter	Discussion Mr. Peppers	Not on Agenda	40
6.	U. T. System: Report and discussion on the Systemwide internal audit activities, including FY 2021 Annual Report	Report/Discussion Mr. Peppers	Not on Agenda	44
Adjourn		3:30 p.m		

1. <u>U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration</u>

RECOMMENDATION

No Consent Agenda items are assigned for review by this Committee.

2. <u>U. T. System: Authorization to settle property insurance claim for U. T. Permian</u> <u>Basin, and delegation of authority to Chief Compliance and Risk Officer</u>

RECOMMENDATION

The Chancellor concurs in the recommendation of the Chief Compliance and Risk Officer and the Interim Executive Vice Chancellor for Business Affairs that the U. T. System Board of Regents:

- a. approve, in accordance with Regents' Rule 80601, final settlement of the U. T. Permian Basin (UTPB) property insurance claim covered under the U. T. System Comprehensive Property Protection Plan (CPPP) in the amount of \$8,574,733.89; and
- b. delegate authority to the Chief Compliance and Risk Officer to execute all related Proofs of Loss and other settlement documents

BACKGROUND INFORMATION

The U. T. System Comprehensive Property Protection Plan (CPPP) finances catastrophic losses for The University of Texas System and its institutions. Under the CPPP, the Fire and All Other Perils Program insures against risks of direct physical loss or damage to a U. T. System property.

On June 14, 2017, the city of Odessa and the UTPB campus suffered a severe hail storm affecting every building on the Odessa campus. In addition to roof damage, many windows were damaged as well. Due to the citywide damage caused by the storm and strain on contractors and material later that year due to several major hurricanes, including hurricane Harvey, repairs took a considerable amount of time and were not completed until June 2021.

The contractor completed repairs totaling \$8,574,733.89. The applicable CPPP deductible for this hail storm claim is \$5 million, resulting in a CPPP commercial insurance settlement payment of \$3,574,733.89. The CPPP Fund will provide interim financing of \$4,750,000 to UTPB to fund capital costs incurred within the policy deductible.

3. <u>U. T. System: Discussion and presentation of Systemwide Compliance</u> Risk Assessment

Chief Compliance and Risk Officer Dendy and Executive Director of Systemwide Compliance and Ethics Officer King will report on the results of the recently concluded Systemwide Risk Assessment. A PowerPoint presentation is set forth on the following pages.

BACKGROUND INFORMATION

As a part of a comprehensive approach to a Systemwide compliance program and as required by The University of Texas System Systemwide Compliance Charter, the Office of Systemwide Compliance conducted a Systemwide Compliance Risk Assessment in Summer 2021.

The Chief Compliance and Risk Officer and the Executive Director of Systemwide Compliance and Ethics Officer will briefly discuss:

- The methodology of the risk assessment
- Scope and limitations of the assessment
- Primary Systemwide compliance risks

Systemwide Compliance Risk Assessment

Mr. Jason King, Executive Director of Systemwide Compliance and Ethics Officer

U. T. System Board of Regents Meeting
Audit, Compliance, and Risk Management Committee
November 2021



Overview

- Methodology
- Scope and limitations
- Primary systemwide compliance risks



Methodology

- Built upon institutional risk assessments
 - Utilize existing resources
 - Generate a minimum of additional work at the institutional level
 - Ensure accuracy



Scope and Limitations

- Compliance risks
- Quantification challenges
- Varying institutional methodologies



Primary Risk Areas

- Medical billing/operations
- Research
- Privacy
- Title IX/student & minor safety
- Ethics

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Information security



Continued Engagement

- Aligning Systemwide Compliance efforts to risks
- Leveraging institutional expertise
- Systemwide procurement
- Comprehensive institutional reporting



4. <u>U. T. System: Review of Investments made by the Board in Information Security</u>

Ms. Helen Mohrmann, Chief Information Security Officer, U. T. System, and Mr. Cam Beasley, Chief Information Security Officer, U. T. Austin, will report on the capabilities and benefits of the services funded by the Board and delivered to U. T. institutions.

BACKGROUND INFORMATION

Over the past two years, System Administration and U. T. Austin have worked together with the institutions to expand and strengthen two key strategic security services: the Intrusion Detection Service (IDS) and the Vulnerability Scanning Service, both of which are provided by U. T. Austin under contract to System Administration. The IDS coverage was expanded and now inspects local institution and data center traffic in addition to data that transverses the wide area network. It sends automated alerts twenty four hours a day, seven days a week, three hundred sixty five days a year to security and IT staff at each institution about malware and other indicators of serious compromise. The Board has funded strategic services since 2009. These latest allocations of \$16.4 million were made in 2018 and \$10.7 million has been expended. The remaining funds cover service costs through Fiscal Year 2023.

Information Security: Improving our Defenses

Helen Mohrmann, Chief Information Security Officer, U. T. System Cam Beasley, Chief Information Security Officer, U. T. Austin

U. T. System Board of Regents Meeting Audit, Compliance, and Risk Management Committee November 2021



U. T. Institutions are Strengthening their Programs

- Deploying state of the art malware detection and other next generation capabilities
- Incorporating departmental IT resources into important security practices
- Conducting tabletop incident response exercises and evaluating business continuity strategies
- Educating users through security awareness training and phishing simulations



Additional U. T. System Support

- Organized an incident response and tabletop exercise with an incident response consultant
- Contracted U. T. Austin to conduct a simulated attack at each institution
- Conducted Systemwide phishing exercise
- Contracted with incident response forensics firm, breach counsel, and other vendors
- Implemented a risk assessment platform for use by the institutions



Strategic Services through U. T. Austin

- The Board has funded these services since 2009.
- In 2018, \$16.4M was allocated to refresh and expand these services:
 - Local institution and data center traffic is inspected in addition to inbound/outbound internet traffic
 - Scanning was added to detect vulnerabilities. Over 900,600 devices are scanned.
- Through FY21, \$10.7M has been expended. Current funding lasts through FY23.





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Strategic Security Services Assist in Every Phase of an Attack

PROACTIVE DEFENSE

Vulnerability Scanning

Identify Vulnerabilities

Intrusion Detection

Identify Compromised Systems • Find Malware • Detect Lateral Movement • Detect Data Exfiltration



STEPS IN AN ATTACK

Reconnaissance

An organization is targeted. Outward facing systems are scanned for vulnerabilities.



Malware Installation

Vulnerabilities in systems are exploited malware is deployed



Command & Control

Attackers gain access and take control of system or network.



Lateral Movement

Attackers move laterally within the network, spreading malware as they go.



Attempt Objective

Exfiltrate data, launch ransomware, or disrupt business operations.



ANALYSIS OF AN ATTACK

Digital Forensic Analysis

Information: what is the source, how far has it spread, which accounts have been used?







Vulnerability Scanning Identifies Weaknesses







An organization is targeted. Outward facing systems are scanned for vulnerabilities.

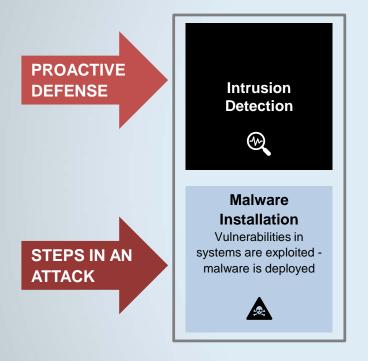


- Alerts call out vulnerabilities and remediation steps
- Trend data is continually updated
- Attackers exploit vulnerabilities that are not addressed





Attackers Attempt to Establish their Beachhead

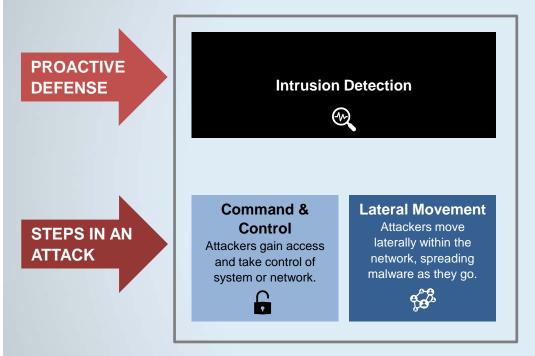


- Alerts identify compromised machines and information about the malware
- Trend data tracks the age of compromises
- In FY21, 30 major types of malware were identified





The Attacker Attempts to Establish Control

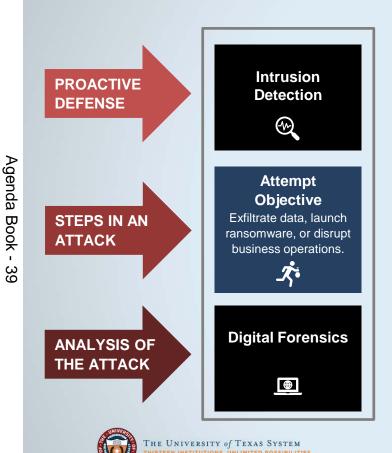


- Alerts call attention to suspicious activity
- Malware contacts the Attacker for instructions
- Lateral movement indicates expansion of an Attacker's control





Launching the Final Attack Stage Happens Quickly



- Alerts signal exfiltration attempts
- Encryption of machines can be triggered collectively
- Network information can validate data exfiltration
- Data collected is valuable at every step in an incident



5. <u>U. T. System: Discussion of U. T. Systemwide Internal Audit Guiding Principles</u> Charter

Chief Audit Executive Peppers will discuss with Audit, Compliance, and Risk Management Committee (ACRMC) members the revisions made to UTS 129 "Internal Audit Activities", which outlines governing principles and practices for Systemwide internal audit activities, using a PowerPoint presentation set forth on the following pages. The changes were made based on input received during the last triennial external quality assessments and consideration of current, leading board/committee governance practices. The U. T. System "two-tier" audit committee structure (both the ACRMC and the institutional audit committees) is somewhat unique. It is intended to position our Chief Audit Executives to fulfill their mission of providing assurance and consulting services with the maximum independence. The policy was modified from a detailed guide on audit practices to a more principles-based document that succinctly outlines the roles and oversight responsibilities of the various parties.

U. T. Systemwide Internal Audit Guiding Principles Charter

Mr. J. Michael Peppers, U. T. System Chief Audit Executive

U. T. System Board of Regents Meeting Audit, Compliance, and Risk Management Committee November 2021



Internal Audit Guiding Principles

- UTS129 Internal Audit Activities policy modified from detailed audit practices guide to more principles-based (outlining roles and oversight responsibilities)
- Specific practices, procedures, and requirements are maintained in a web portal the internal auditors utilize



Internal Audit Oversight

 Internal Audit effectiveness and independence is ensured and supported through a unique three-element oversight/reporting structure:

Functional Oversight	Institutional Oversight	Professional Oversight
ACRMC and Institutional Audit	 Presidents manage operational and	UT System CAE provides oversight
Committees provide strategic	administrative matters, including	and support related to conformance
oversight and direction	performance evaluation of CAEs*	with professional standards

^{*}Chief Audit Executive (CAE) employment and termination by a president must have concurrence from ACRMC Chairman (with advice from UT System CAE)



6. <u>U. T. System: Report and discussion on the Systemwide internal audit activities, including FY 2021 Annual Report</u>

Chief Audit Executive Peppers will present the FY 2021 Systemwide Annual Report of internal audit activities, using a PowerPoint presentation set forth on the following pages. He will also discuss the status of the external financial audit. Additional details on the Systemwide findings by subject area and significance, the annual audit plan's budget to actual hours status, as well as the planned scope and timing of the external financial audit were provided to the Audit, Compliance, and Risk Management Committee members prior to the meeting.

BACKGROUND INFORMATION

Internal audit across the U. T. System uses a consistent classification process to evaluate audit results to identify Priority, High, Medium, or Low level reportable findings. A Priority Finding is defined as "an issue identified by an internal audit that, if not addressed timely, could directly impact achievement of a strategic or important operational objective of a U. T. institution or the U. T. System as a whole." All reportable findings are rated based on an assessment of applicable risk factors and the probability of a negative outcome occurring if the risk is not adequately mitigated. The standard risk factors considered are: Qualitative (evaluates the probability and consequences across seven areas), Operational Control (evaluates operational vulnerability to risks by considering the existence of management oversight and effective alignment of operations), and Quantitative (evaluates the level of financial exposure or lost revenue).

FY 2021 Systemwide Internal Audit Annual Report

Mr. J. Michael Peppers, U. T. System Chief Audit Executive

U. T. System Board of Regents Meeting Audit, Compliance, and Risk Management Committee November 2021



Systemwide Internal Audit Hours

- Approximately 171k hours were incurred to complete the Fiscal Year (FY) 2021 Systemwide Annual Audit Plan.
 - Assurance Engagements
 - Consulting & Advisory Engagements
 - Required Engagements
 - Investigations

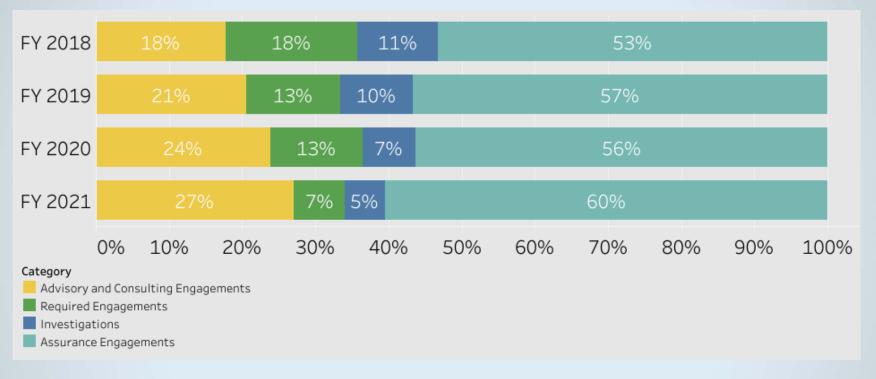
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- Follow-Up
- Development Operations
- Development Initiatives & Education

 70% of the hours were spent on Assurance, Consulting, and Required Engagements; Investigations; and Follow-Up.



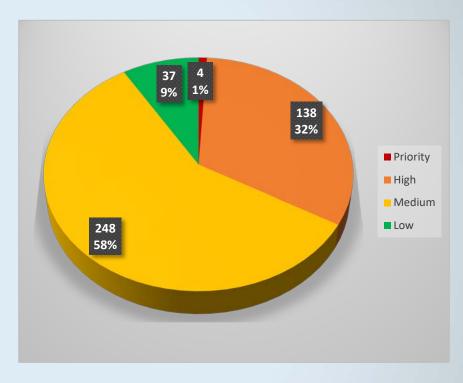
Systemwide Shift in Engagement Categories





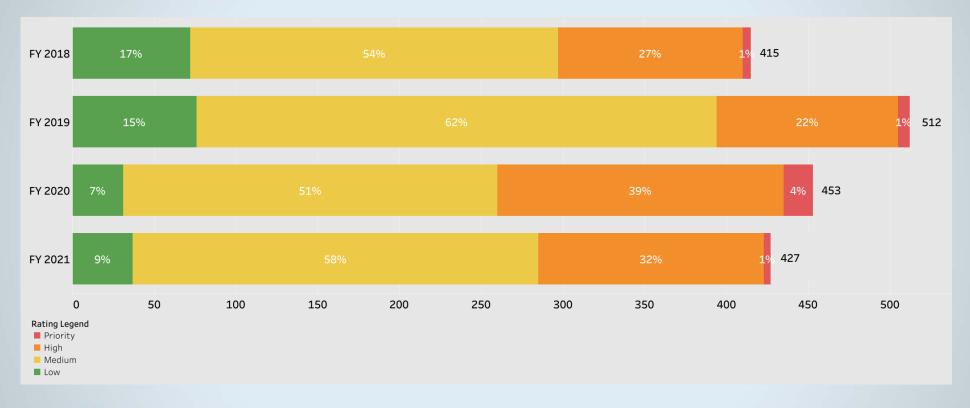
Systemwide Internal Audit Reports and Observations

- In FY 2021, 240 engagement reports and memos were issued.
- 118 of the 240 reports resulted in 427 observations ranked as follows:
 - 4 Priority level observations
 - 138 High level observations
 - 248 Medium level observations
 - 37 Low level observations



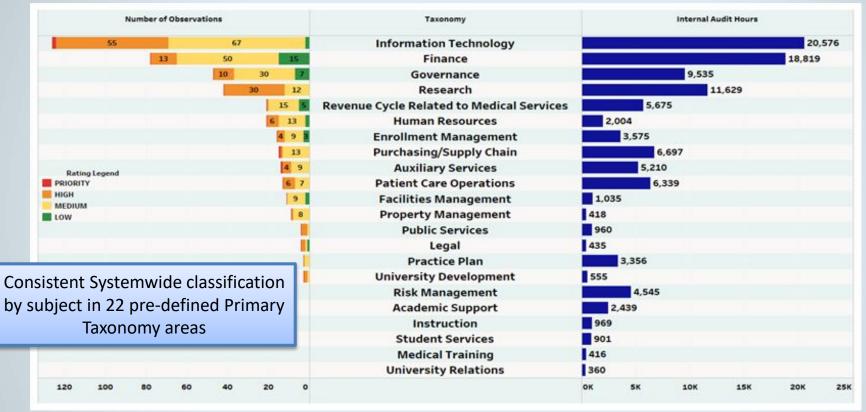


Trends in Systemwide Observations - Number & Level



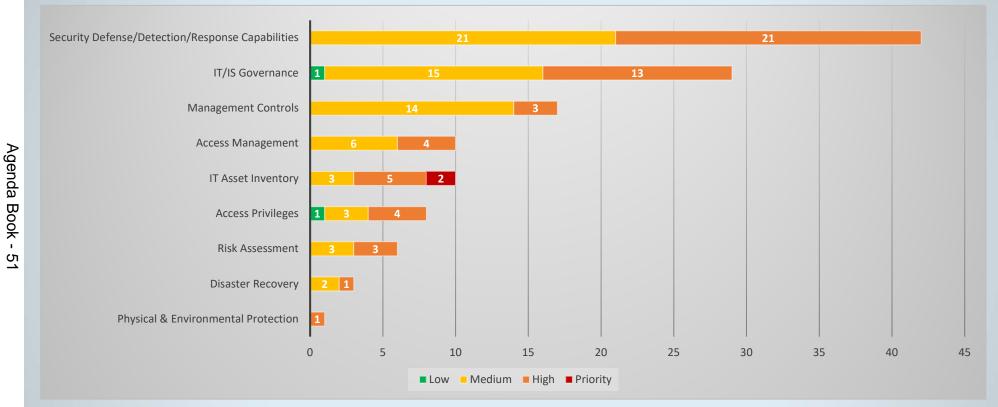


Systemwide Observations by Subject Area (Taxonomy)



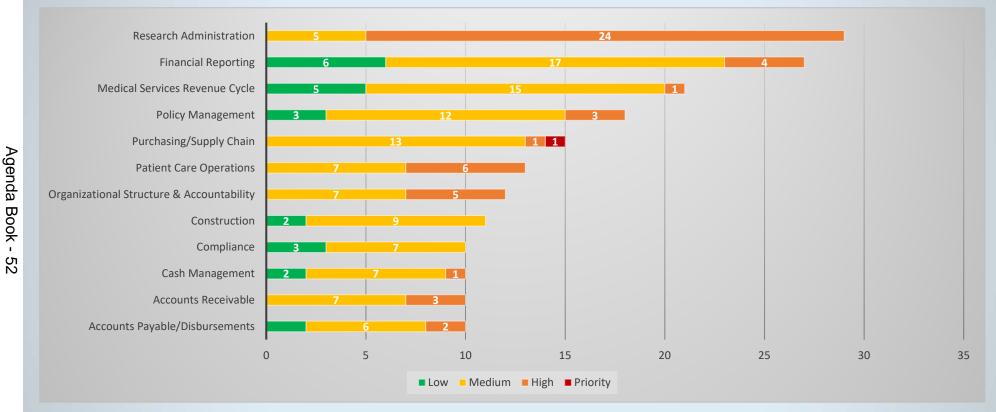


Systemwide Information Technology (IT) Observations



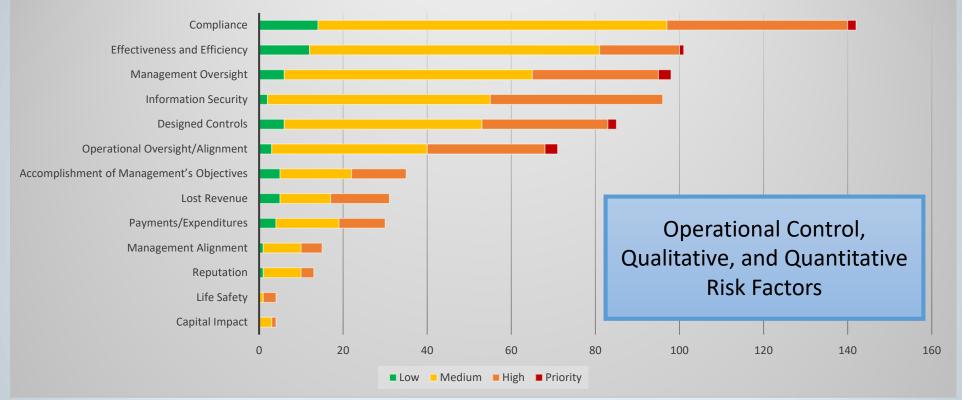


Systemwide Top Non-IT Observations



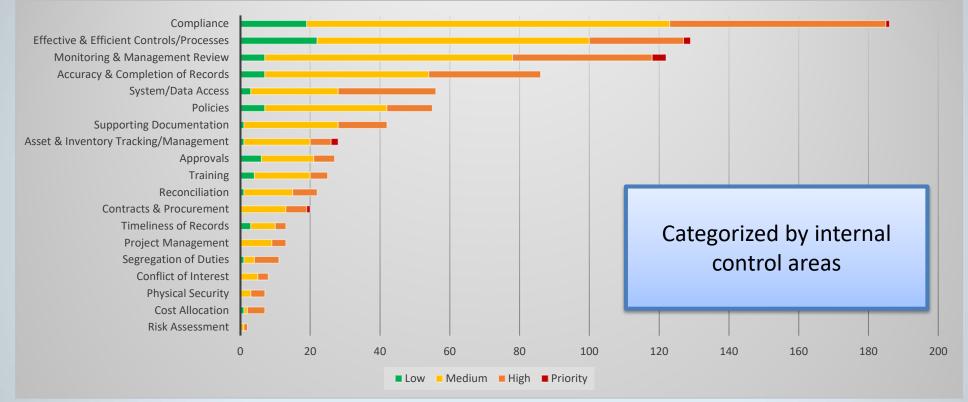


Systemwide Observations by Risk Factors





Systemwide Observations By Categories





November 17-18, 2021 Meeting of the U. T. System Board of Regents - Audit, Compliance, and Risk Management Committee

Client Satisfaction

- In the spirit of continuous improvement, client feedback is sought to ensure internal audit:
 - Provides valuable and constructive information and insights
 - Conducts work in professional and competent manner
 - Produces clear and accurate communication and reporting
- The average client survey score stays steady at 4.6 (5 strongly satisfied to 1 - strongly dissatisfied) for FY21 engagements, with an average response rate of 50%.



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Systemwide Internal Audit Competencies & Contributions

- Proficiency (average employee statistics):
 - 80% hold professional certifications
 - 43% earned advanced degrees
 - 18 years of relevant and 9 years of U. T. experience
 - 58 hours of continuing professional education annually
- Contributions
 - Professional organizations at the local, national, and global levels through board service, leadership positions, and conference presentations
- Support the academic enterprise
 - Student interns, guest/part-time lecturers, professional publications

