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FOR
AUDIT, COMPLIANCE, AND MANAGEMENT REVIEW
COMMITTEE

Committee Meeting: 11/5/2014
Board Meeting: 11/6/2014
El Paso, Texas

Brenda Pejovich, Chairman
Wallace L. Hall, Jr.
R. Steven Hicks
Jeffery D. Hildebrand
Robert L. Stillwell

Committee Meeting: 10:30 a.m
Chairman Pejovich

B. RECESS TO EXECUTIVE SESSION PURSUANT TO TEXAS
GOVERNMENT CODE, CHAPTER 551

1. Personnel matters relating to appointment, employment,
evaluation, assignment, duties, discipline, or dismissal
of officers or employees - Texas Government Code
Section 551.074

U. T. System: Discussion with the Chief Audit Executive or
Assistant Systemwide Compliance Officer concerning
personnel matters relating to appointment, employment,
evaluation, assignment, duties, discipline, or dismissal of
individual System Administration and institutional officers or
employees involved in internal audit and compliance
functions

2. Consultation with Attorney Regarding Legal Matters or Pending
and/or Contemplated Litigation or Settlement Offers –
Section 551.071

U. T. System: Discussion with Counsel regarding legal issues
related to Special Review of the U. T. Austin Procurement of
Consulting Services from Accenture, LLP
C. RECONVENE IN OPEN SESSION TO CONSIDER AGENDA ITEMS
Tomás Rivera Conference Center, Union Building East, Third Floor, U. T. El Paso

<table>
<thead>
<tr>
<th>Committee Meeting</th>
<th>Board Meeting</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:50 a.m.</td>
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</table>

1. **U. T. System Board of Regents:** Discussion and appropriate action regarding Consent Agenda items, if any, referred for Committee consideration

   10:50 a.m.

   **Action**

   **Mr. Peppers**

2. **U. T. System:** Report on special review of U. T. Austin's procurement of consulting services from Accenture, LLP

   10:51 a.m.

   **Report/Discussion**

   **Mr. Peppers**

3. **U. T. System:** Report on the results of the Systemwide External Quality Assessment of internal audit activities

   11:01 a.m.

   **Report/Discussion**

   **Mr. Frank Saputo and Mr. Andy Dahle, PricewaterhouseCoopers**

4. **U. T. System:** Report on Systemwide audit activities, including an update on the Cancer Prevention Research Institute of Texas Grant Audits, Proportionality of Higher Education Benefits Audits, Physician Quality Reporting System Consulting Engagements, and Presidential and Executive Travel and Entertainment Audits

   11:16 a.m.

   **Report/Discussion**

   **Mr. Peppers**


   11:20 a.m.

   **Report/Discussion**

   **Mr. Watkins**

D. ADJOURN

11:30 a.m.
1. **U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, referred for Committee consideration**

   **RECOMMENDATION**

   The proposed Consent Agenda is located at the back of the book.

**REPORT**

Chief Audit Executive Peppers will present a report on the special review of U. T. Austin's procurement of consulting services from Accenture, LLP.

**REPORT**

Mr. Frank Saputo and Mr. Andy Dahle, PricewaterhouseCoopers (PwC), will report on the external quality assessments (EQA) conducted of the internal audit functions across the U. T. System.

The EQAs performed by PwC included an assessment of the level of conformance with The Institute of Internal Auditors’ *International Standards for the Professional Practice of Internal Auditing (IIA Standards)*, the Generally Accepted Government Auditing Standards (GAGAS), and the relevant requirements of the *Texas Government Code*, Chapter 2102, Texas Internal Auditing Act (TIAA).

The EQA reports were distributed to the appropriate institutional chief audit executive, president, internal audit committee (IAC) members, the U. T. System Chief Audit Executive, and the Chairman of the Audit, Compliance, and Management Review Committee. PwC made formal presentations of the individual EQA results at the respective institutional IAC meetings.

A summary of the EQA results may be found on the following pages.

**BACKGROUND INFORMATION**

The internal audit profession is guided by the *IIA Standards*, within which there is a requirement for all internal audit functions to have external assessments conducted at least once every five years by a qualified, independent assessor or assessment team from outside the organization.

For state agencies within the State of Texas, the TIAA establishes guidelines for state agencies’ internal audit functions. The TIAA requires all state agencies to adhere to the U.S. Government Accountability Office Government Auditing Standards, which require a review at least once every three years by reviewers independent of the audit organization.

On May 9, 2013, the U. T. System Board of Regents authorized using an external provider to conduct EQAs of the U. T. System internal audit functions through the request for proposals process. PwC was selected.
The University of Texas System

Report on Systemwide Internal Audit Functions
External Quality Assessments

U. T. System Board of Regents’ Meeting
Audit, Compliance, and Management Review Committee
November 2014
Project objectives, scope and approach

Objectives:
• Professional Auditing Standards and State Auditing Requirements Assessment
• Leading practices assessment and recommendations
• Identification of Systemwide strengths and enhancement opportunities

Scope:
• Separate External Quality Assessments (EQA) of 15 institutional Internal Audit functions and the System Audit Office (includes both audit execution and Systemwide oversight roles)

Approach
• Interviewing stakeholders and Internal Audit (IA) resources
• Surveying other management
• Analyzing a sample of IA reports & documents
• Comparison of U. T. System Internal Audit processes against leading practices

By the Numbers
16 EQA Reports
480 Survey Responses Received
195 Interviews Conducted
3 National Leaders
Higher Ed
Healthcare
IIA Standards
16 In-Person Audit Committee Presentations
2 IT Specialists
1 Government Standards Partner
5 Engagement Partners
15 Core Team Members
>50 IA Reports and Workpapers Analyzed
12 Thought Leadership & Audit Tools Provided

By the Numbers

Information contained herein is for the sole benefit and use of U. T. System
Using PwC’s proprietary Profiler™ software tool, compared to U. T. System IA practices against leading practices and data from other high performing internal audit functions. The following illustration depicts the framework utilized.

**EQA Methodology Framework**

Using PwC’s proprietary Profiler™ software tool, compared to U. T. System IA practices against leading practices and data from other high performing internal audit functions. The following illustration depicts the framework utilized.

- **Strategy**
  - Mission, Vision, and Charter
  - Strategic Analysis
  - Initiative Definition and Implementation
  - Performance Measurement & Reporting
  - Risk Assessment and Annual Plan
  - Stakeholder Management and Communication

- **Technology**
  - Audit Workbench
  - Data Analytics and Tools
  - Knowledge Management
  - Automated Control Analysis Tools

- **Structure**
  - Operating Structure
  - Leadership
  - Practice Management
  - Policies & Procedures

- **People**
  - Career Path and Development
  - Training
  - Performance Management
  - Staffing Model and Mix
  - Recruiting and Placement

- **Process**
  - Methodology
  - Engagement Planning
  - Execution
  - Reporting
  - Issue Tracking and Follow-Up
  - Quality

Information contained herein is for the sole benefit and use of U. T. System
### Positive Attributes and/or Leading Practices

Examples identified across the U. T. System IA functions are noted below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Attributes/Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy</strong></td>
<td>• System Audit Office strategic plan and oversight initiatives are developed to enhance the value of Internal Audit</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>• Stakeholders view Internal Audit as independent and objective&lt;br&gt;• Planned/hired System Audit resources will better support the institutions and enhance audit quality</td>
</tr>
<tr>
<td><strong>People</strong></td>
<td>• Internal auditors are considered collaborative in their interactions with stakeholders&lt;br&gt;• Professional and experienced teams have various certifications</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>• Audit follow-up and issue tracking processes are robust</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>• Data analytic tools are successfully used at some of the institutions&lt;br&gt;• Use of Teammate for electronic work papers promotes effective use of information gathered during the audit</td>
</tr>
</tbody>
</table>
### Summary of Results

<table>
<thead>
<tr>
<th>Auditing Standard / State Requirement</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIA Standards</td>
<td>No conformance issues identified</td>
</tr>
<tr>
<td>Generally Accepted Government Auditing Standards (GAGAS)</td>
<td>One conformance issue noted – 5 institutions deferred their triennial external peer review as directed by the U. T. System Audit Office in order to coordinate the process Systemwide</td>
</tr>
<tr>
<td>TIAA</td>
<td>No conformance issues were noted other than one observation related to an <em>interim</em> Chief Audit Executive's credentials, which has been addressed subsequent to the EQA review</td>
</tr>
</tbody>
</table>

**Systemwide Opportunities for Enhancement**

The categorizations of recommendations across all IA functions is summarized in the illustration below:

- **Total 202**
  - Academic (111)
  - Healthcare (78)
  - System Audit Office (13)

General conformance with Standards and State Auditing Requirements & Value-added performance improvement opportunities across the System
Key Enhancement Opportunities

**STRATEGY**
1. Strategic Plan ★
2. Risk Assessment Process ★
3. Organizational Reporting
4. Performance Measurement
5. Relationship Management
6. Executive Sessions
7. Stakeholder Communication

**TECHNOLOGY**
8. Data Analytics and Continuous Auditing ★
9. Knowledge Management and Sharing

**STRUCTURE**
10. Role Definition

**PEOPLE**
11. Talent Management and Use of Specialists ★

**PROCESS**
12. Risk/Finding Prioritization and Root Cause ★
13. Quality Improvement Program
14. AC and Reporting Presentations
15. GAGAS Required Audits

Legend:
- Limited opportunities for enhancement
- Moderate opportunities for enhancement
- Significant opportunities for enhancement

★ = Details on next slide

Strategy, People, Process and Technology contain the greatest opportunities
### Top 5 Enhancement Opportunities

<table>
<thead>
<tr>
<th>Enhancement Opportunities</th>
<th>Value to U. T. System</th>
<th># IA Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Plan</strong></td>
<td>• Enhanced focus on building high-performing IA functions - adding value across the institutions</td>
<td>13</td>
</tr>
<tr>
<td>• Formalize IA strategic plans to align with key objectives,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goals and risk profile of the institutions and Systemwide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk Assessment Process</strong></td>
<td>• Timely identification of risks that may impact attaining goals/objectives of the institutions and System</td>
<td>10</td>
</tr>
<tr>
<td>• More frequently update enterprise-wide view of changing /</td>
<td></td>
<td></td>
</tr>
<tr>
<td>emerging risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data Analytics &amp; Continuous Auditing</strong></td>
<td>• 100% population coverage - identification of revenue enhancement, cost reduction and potential fraud</td>
<td>16</td>
</tr>
<tr>
<td>• Identify trends, anomalies or higher risk transactions on a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>real-time or frequent basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Talent Management and Use of Specialists</strong></td>
<td>• Increased efficiency and ability to provide cost-effective audits of high risk and technical areas</td>
<td>15</td>
</tr>
<tr>
<td>• Leverage specialized expertise across the System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Co-source subject matter expertise to supplement skillsets</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk/Finding Prioritization &amp; Root Cause</strong></td>
<td>• Increases relevance of reported issues and focuses management &amp; audit committee on higher risk areas</td>
<td>13</td>
</tr>
<tr>
<td>• Enhance reporting of risk exposure, root cause of issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and prioritization of findings in reports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
High performing Audit functions are expanding from **value protection** to **value enhancement**.

System Audit Office strategic plan and initiatives are moving the Internal Audit functions in the right direction.
Disclaimer

Our services were performed and this report was developed in accordance with our contract dated February 18, 2014 and are subject to the terms and conditions included therein. Our Services were performed in accordance with the Standards for Consulting Services established by the American Institute of Certified Public Accountants ("AICPA"). Accordingly, we are providing no opinion, attestation or other form of assurance with respect to our work and we did not verify or audit any information provided to us.

Our work was limited to the specific procedures and analysis described herein and was based only on the information made available through June 17, 2014, when field work was substantially completed. Accordingly, changes in circumstances after this date could affect the findings outlined in this report.

This information has been prepared solely for the use and benefit of, and pursuant to a client relationship exclusively with The University of Texas System Administration. PwC disclaims any contractual or other responsibility to others based on its use and, accordingly, this information may not be relied upon by anyone other than The University of Texas System Administration.
4. **U. T. System: Report on Systemwide audit activities, including an update on the Cancer Prevention Research Institute of Texas Grant Audits, Proportionality of Higher Education Benefits Audits, Physician Quality Reporting System Consulting Engagements, and Presidential and Executive Travel and Entertainment Audits**

**REPORT**

Chief Audit Executive Peppers will report on the status of the following Systemwide engagements. Summaries of these engagements were provided to the Regents prior to the meeting.

- Cancer Prevention Research Institute of Texas (CPRIT) Grant Audits
- Proportionality of Higher Education Benefits Audits
- Physician Quality Reporting System Consulting Engagements (health institutions only)
- Presidential Travel and Entertainment Expenses Audits
- Executive Travel and Entertainment Expenses Audits

Chief Audit Executive Peppers will report on the FY 2014 annual internal audit plan status as of August 31, 2014, which is set forth on the next page.
The University of Texas System Internal Audit
FY 2014 Systemwide Audit Plan Status

<table>
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<tr>
<th></th>
<th>Financial</th>
<th>Operatio... Projects</th>
<th>Reserve</th>
<th>Total Actual Hours (Note 1)</th>
<th>Total Budget Hours (Note 2)</th>
<th>Variance (Hours)</th>
<th>Percentage Completion</th>
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<td>U. T. MDA Cancer Center</td>
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<td>U. T. HSC - Tyler</td>
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<td><strong>Subtotal</strong></td>
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<td><strong>Total</strong></td>
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<td>19,741</td>
<td>21,712</td>
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<tr>
<td><strong>Percentage of Total</strong></td>
<td>16%</td>
<td>26%</td>
<td>13%</td>
<td>17%</td>
<td>5%</td>
<td>17%</td>
<td>4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**NOTE 1**
Total Actual Hours are for the time period from 9/1/2013 through 8/31/2014, which represents 100% of the annual audit plan year.

**NOTE 2**
The FY 2014 Total Budget Hours originally approved by the ACMRC were amended during the fiscal year since institutions may alter the number of budgeted hours and/or the allocation of budgeted hours among the various categories due to changes in priorities and staffing resources. These changes are communicated to/approved by the institution's respective president and/or internal audit committee.

**NOTE 3**
Reserve hours were originally budgeted for TBD engagements (e.g., unknown special requests, investigations, consulting, etc.). As the fiscal year progresses and engagements become known, these hours are sometimes re-allocated to the applicable categories (e.g., financial, operational, compliance, etc.).

* - These hours represent only the Engagements section of U. T. System Administration's Annual Audit Plan. Additional hours for Operations and Initiatives that are part of the annual audit plan are not shown above.

A - U. T. Permian Basin's lower percent completion was due to time spent on the administrative set-up of the internal audit function with the transition on new audit leadership and additional training required for new audit staff.

B - U. T. San Antonio's lower percent completion was due to higher than expected vacancies throughout the year, but were filled in August 2014.

C - U. T. Southwestern's lower percent completion was due to higher than expected staff vacancies, assistance on several investigations, and significant resources greater than expected required for the FY15 risk assessment & audit planning.

**REPORT**

Chief Information Security Officer Watkins will report on Information Security Compliance Enhancements across the U. T. System, and how those investments are helping address current cyber threats. A PowerPoint presentation is set forth on the following pages.

**BACKGROUND INFORMATION**

Following a November 10, 2011, report to the Board by Deloitte on its comprehensive information security compliance effectiveness review of the U. T. System, the Board approved the allocation of $34,872,000 of Available University Funds to invest in information security compliance enhancements across the U. T. System and to secure the U. T. Research Cyberinfrastructure. The Office of Systemwide Compliance administers the investment of these funds through a centrally managed program and is to submit annual reports on progress to the Chancellor and to the Board. This is the third annual report.
Annual Report on Information Security

Mr. Lewis Watkins, U. T. System Chief Information Security Officer

U. T. System Board of Regents’ Meeting
Audit, Compliance, and Management Review Committee
November 2014
Information Security Assurance Initiative (ISAI) Progress Summary

Current Project Status

Total Identified Projects: 441

- Active Projects: 123 (28%)
- Completed Projects: 182 (41%)
- Pending Projects: 136 (31%)
Funding Status

ISAI Budget: $29.3 M

- Funds Expended to Date for Completed and Active Projects
- Funds Currently Encumbered for Completed and Active Projects
- Funds Available for Pending Projects

$15,450,221 (53%)
$12,130,401 (41%)
$1,674,378 (6%)
Available Funds
$1.7 M   5.7%
U. T. Austin  
$3.2 M 
11.0%
Multi-Institution Projects  
$13.8 M 
47.3% 
Includes:
- Patient Privacy Monitoring
- Mobile Device Security and Management
- IT Resources Logging and Monitoring
- Risk Management
- Training
U. T. Arlington 
$1.8 M  6.3%
U. T. San Antonio 
$2.1 M  7.1%
Common Infrastructures 
$2.1  
7.1%
UTHSC-San Antonio 
$1.3  4.4%
Funds Balance…………………… $1,674,378        5.7%
U. T. Arlington  $1,842,885         6.3%
U. T. Austin $3,218,032      11.0%
U. T. Brownsville $54,000        0.2%
U. T. Dallas $11,535          0.0%
U. T. El Paso $277,763        0.9%
U. T. Pan American $549,204       1.9%
U. T. Permian Basin $80,373        0.3%
U. T. San Antonio $2,069,307       7.1%
U. T. Tyler $208,110         0.7%
U. T. Southwestern Medical $818,831       2.8%
U. T. Medical Branch $156,992       0.6%
U. T. HSC-Houston $186,091       0.6%
U. T. HSC-San Antonio $1,298,766       4.4%
U. T. MDACC $360,000        1.2%
U. T. HSC-Tyler $521,450        1.8%
U. T. System Administration $3,996       0.0%
Multi-Institution Project $13,828,471     47.3%
UTIMCO $0       0.0%
Common Infrastructures $2,066,214       7.1%
Funds Balance $1,674,378        5.7%
Funding by Risk Area

- Network Security: $5,265,416
- Risk Management: $3,453,996
- Monitoring and Logging: $3,480,607
- Disaster Recovery: $3,426,497
- Decentralized IT Migration: $2,681,555
- Patient Privacy Monitoring: $2,447,542
- Data Loss Prevention: $1,465,029
- Mobile Device Security: $1,017,857
- Encryption: $1,016,830
- Infrastructure Upgrade: $868,183
- Physical Security: $832,842
- Identity Management: $810,168
- Backup: $345,950
- Training: $250,000

Projects Addressing High Risks Affecting Many Institutions
- Application Security: $75,990
- Vulnerability Scanning: $33,541
- Governance: $10,090

Projects Focused on One or a Few Institutions
- Business Process Improvement: $98,530
Significant Trends Impacting Information Security

• Complexity of IT Environments
  – From one organization, one data center, one computer, to multiple of all of these. Add to this a myriad of device types, ownerships, and regulations and multiple layers of software.

• Outsourcing
  – Mission-critical applications are increasingly being hosted by third-party service providers.

• Access to data at anytime from anywhere on any device

• Criminalization of the Internet
  – Fraud schemes are launched from all over the world.
A Risk Management Framework to Deal with Complexity of IT Environments

- Definition of Risk:
  Impact \( \times \) Likelihood of Occurrence

- Method of Assigning Risk

- Integrated Controls Catalog:
  Foundation is National Institute of Standards and Technology (NIST) publication:
  *Security and Privacy Controls for Federal Information Systems and Organizations (NIST SP 800-53, Revision 4)*
A common framework alone does not ensure consistency.

You need a tool that helps guide consistent application of the framework.
Outsourcing: Do Third-Party Partners Measure Up?

Third-Party Security Risk Assessment

- Provides a method of assessing and defining the risk to the institution of outsourcing a service or function prior to engaging a third-party service provider
- Ensures that adequate security controls are in place prior to finalizing any contract agreement
Addressing Data Mobility

• Most security incidents involve lost or stolen portable devices (e.g., laptops, USB drives, smartphones)

• Work is no longer performed solely at the office during business hours with institutional devices
  – Also performed at home or on-the-road at all times using personal devices

Challenge: How to protect university data regardless of location and device?

Answer: Encryption and mobile device management
Encryption and Mobile Device Management

• Completed laptop encryption Systemwide

• Deployed encrypted thumb drives to U. T. System faculty and staff using/maintaining confidential information

• Require minimum security controls for portable device

• Contracted for mobile device management software for Systemwide use to enforce iPad, iPhone, and Android encryption and configuration management
Addressing Cybercrime

- Criminals use phishing and other techniques to steal User credentials (Logon ID and password)

- Criminals then:
  - Redirect bank deposits to fraudulent accounts
  - Submit bogus tax returns to steal refunds
  - Submit bogus financial aid applications
  - Submit bogus unemployment claims
Keep In Mind

- Most online fraud is performed using stolen logon credentials
- Most online fraud is initiated from remote locations – mostly from overseas

Challenge: How to prevent use of stolen credentials?

Answer: Two-factor authentication