November 1, 2012

Dr. Daniel:

We have completed an audit of the Texas Schools Project (TSP), managed by the UT Dallas Education Research Center (ERC), as part of our fiscal year 2012 Audit Plan, and the detailed report is attached for your review. The objective of this audit was to ensure that the Center is in compliance with TAC 202 and to ensure that the ERC is adhering to the terms of the contract. The terms of the contract require such audits every year.

Based on the results of the audit work performed, it appears that the ERC is substantially compliant with the terms of their contract. While no recommendations were considered significant to university operations, we did have two recommendations to further enhance operations, compliance with TAC 202, policies, and procedures, and compliance with the ERC contract.

Management has reviewed the recommendations and has provided responses and anticipated implementation dates. Please let me know if you have any questions or comments resulting from this audit.

Toni Messer Stephens
Executive Director of Audit and Compliance

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    Sunset Advisory Commission

Staff Assigned:
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Executive Summary

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| **Texas Schools Project** | • Dr. Rodney Andrews, Director of the Texas Schools Project | • Ali Subhani, CIA, CISA, GSNA, IT Audit Manager  
• James Shiveley, CIA, IT Staff Auditor |

**Audit Objective:** The objective of this audit was to ensure that the ERC is in compliance with TAC 202 and to ensure that the Center is adhering with the terms of the contract.

**Audit Results:** The audit resulted in no recommendations considered significant to University operations. However, the following recommendations should be considered to enhance compliance with applicable policies, laws, procedures, and contract terms:

1. **Continue to Maintain Activity Logs** – Due to the network re-architecture project, the aggregation of log history to the Splunk utility was not occurring during a portion of the year. While this has been resolved, we recommend that the monitoring of logs as they are aggregated on the Splunk server continue to occur.

2. **Update Disaster Recovery and Business Continuity Plans** – Management should refine the Business Continuity Plan and the Disaster Recovery Plan, specifically with respect to the business impact analysis, risk assessment, and ongoing maintenance program for the plan, to ensure full compliance with TAC 202.74 requirements.

**Conclusion:** Based on the results of the audit work performed, it appears that the ERC is substantially compliant with the terms of their contract. However, additional improvements are needed. Implementation of the above recommendations will help enhance operations, compliance with TAC 202, policies and procedures, and compliance with the ERC contract.

**Management’s Response:** Recommendations will be implemented.

**Estimated Date of Implementation of All Recommendations:** (1) has been implemented; (2) will be implemented by 2/28/2013
Background

In 2006, the 79th Texas Legislature authorized the Commissioner of Education and the Texas Higher Education Coordinating Board (THECB) to establish three statewide centers for education research. The Educational Research Center (ERC) at UT Dallas is one such center and is charged with conducting research that will benefit Pre-K-16 education in the State of Texas, disseminating results and findings, and providing access to student level education data for other researchers.

An ERC is operated under written authorization by the Commissioner of Education and the THECB. Status as an ERC cannot be assigned, delegated, or transferred to any other entity. The Joint Advisory Board (JAB) was created through the Commissioner’s rule (Texas Administrative Code §95.1001 ) to oversee the operation of the ERCs. Up to ten individuals can be jointly appointed as members of the JAB by the Commissioner of Education and the Commissioner of Higher Education.

The contract between UT Dallas, The Texas Higher Education Coordinating Board, and the Texas Education Agency requires that “At a minimum, the internal auditor of UTD shall annually certify that the Research Center is in full compliance with all terms of the contract and all applicable state and federal laws.” The current contract expires August 31, 2012.

Audit Objective

The objective of this audit was to ensure that the ERC is in compliance with TAC 202 and to ensure that the Center is adhering with the terms of the contract. Additionally, we also determined if the audit recommendations made by the Internal Audit Office from last year had been met.

Scope and Methodology

The scope of this audit was fiscal year 2012 (September 1, 2011, through August 31, 2012). Our audit fieldwork concluded on August 23, 2012. To satisfy our objectives, we performed the following:

- Gained an understanding of the ERC program by reviewing contract terms and conditions.
- Reviewed relevant statutes, rules, policies and procedure manuals, and documentation related to operations.
- Interviewed ERC personnel about relevant operational and compliance subject areas.
Inspected and analyzed facilities and data to confirm control objectives are being met.

Tested for compliance with contract requirements.

Where applicable, we conducted our examination in accordance with guidelines set forth in The Institute of Internal Auditors’ *International Standards for the Professional Practice of Internal Auditing*. The *Standards* set criteria for internal audit departments in the areas of independence, professional proficiency, scope and performance of audit work, and management of the internal auditing department.

**Audit Results and Management’s Responses**

According to The UT System, a significant recommendation is one that may be material to operations, financial reporting, or legal compliance. This would include an internal control weakness that does not reduce the risk of irregularities, illegal acts, errors, inefficiencies, waste, ineffectiveness, or conflicts of interest to a reasonably low level. There were *no* recommendations considered significant to University operations.

Our evaluation of the ERC program indicated that the following controls currently exist:

- Confidentiality agreements for researchers are being filled out prior to them receiving data access.
- Visitor access records are being maintained.
- Procedures are in place to protect student level data
- Written procedures for reviewing research output for FERPA compliance are in place.
- Firewall rules that severely restrict network traffic to the ERC are in place.
- Users do not have administration privileges on workstations.
- Group policy is used to restrict access to sensitive information through portable media, and
- MAC address filtering is used to disallow use of personal computers

Although the following controls are in place, compliance with the contract will be enhanced by implementing the following recommendations:
(1) **Continue to Maintain Activity Logs**

According to TAC 202.75 (5) (C)\(^1\) “[...] a sufficiently complete history of transactions shall be maintained to permit an audit of the information resources system by logging and tracing the activities of individuals through the system.” To ensure compliance with this requirement, the ERC has audit logging capability enabled on critical information technology infrastructure. In addition, logs are aggregated to a central location using Splunk\(^2\). During the current year, the network was redesigned to enhance security in the ERC. The network redesign negatively impacted the log aggregation in Splunk, and therefore log files were unavailable for analysis for this audit. During this period in which log aggregation was not occurring, the ERC represents that it was keeping and reviewing logs for a rolling one week window on the servers.

The issue has now been remediated and logs are now being aggregated in Splunk. The ERC has implemented an automated process to send out alerts to the Administrator in case log aggregation fails in the future.

**Recommendation:** The ERC should continue monitoring logs aggregated to the Splunk server regularly to ensure sufficiency of logs and continued compliance with TAC 202.75.

**Management’s Response and Action Plan:**
Per the audit recommendation, the logging server was restored to operation and monitored, and e-mail alerts implemented to notify systems administrators of any interruption to log collection from applicable systems lasting for greater than one hour.

**Estimated Date of Implementation:** As of this date (November 1\(^{st}\)), all recommended modifications are operational.

**Responsible Party:**
Greg Branch, Research Scientist, Texas Schools Project

(2) **Update Disaster Recovery and Business Continuity Plans**

TAC 202.74\(^3\) describes the requirements for an effective business continuity plan and a disaster recovery plan. The ERC has made good efforts to ensure compliance with these requirements by incorporating the business continuity plan and disaster recovery plan into the policy and procedure manual for the department.

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\(^1\)http://info.sos.state.tx.us/pls/pubreadtacext/TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=1&pt=10&ch=202&rl=75
\(^2\)http://www.splunk.com/view/SP-CAAAGWY
From the review of the manual, it is evident that both the business continuity and the disaster recovery plans can be further refined to ensure full compliance with the requirements of TAC 202.74. TAC 202.74 requires a business impact analysis which includes specified elements, a risk assessment that weighs costs and benefits of preventative measures, and an ongoing maintenance program for the plan. The ERC’s current disaster recovery plan would likely allow the ERC to recover from most incidents, but a more comprehensive approach, in compliance with TAC 202.74 requirements, would cover additional contingencies.

**Recommendation:** Management should further refine the Disaster Recovery and Business Continuity Plans to ensure full compliance with TAC 202.74 requirements.

**Management’s Response and Action Plan:**
*We will undertake to complete these requirements as specified. Given that we are currently in the midst of a transitional period pending the outcome of an RFP process, on which the specifics of our operations will depend to a large degree, we will not be in a position to meaningfully revise our recovery plan until the outcome and its ramifications become known. At this time, we have been told that the result of our proposal will be announced on November 30th, and, if favorable, a new contract and operating requirements would presumably emerge during the period following that date. Once this outcome, and its implications for our structure and operations, becomes known, we will revise our disaster recovery plan to incorporate these additional requirements.*

**Estimated Date of Implementation:**
*Based on the assumption that the outcome of the ERC proposal process will be announced on November 30th as planned, we expect to have our disaster recovery plan revised by the end of the second quarter of the fiscal year (2/28/2013).*

**Responsible Party:**
*Greg Branch, Research Scientist, Texas Schools Project*

**Conclusion**

Based on the results of the audit work performed, it appears that the ERC is substantially compliant with the terms of their contract. Implementation of the above recommendations will help enhance security, compliance with TAC 202, policies, and procedures, and compliance with the ERC contract.

We appreciate the courtesy and cooperation received from ERC staff over the course of this audit.