

## AUDIT PROPOSAL

### State Agency Information Systems: Reviewing Significant Security Controls in Selected State Agencies (CY 2017-2019)

#### SOURCE

This audit proposal was suggested by LPA staff to satisfy requirements in K.S.A. 46-1135.

#### BACKGROUND

It is important that state agencies' security measures are periodically evaluated to help ensure the safety of the sensitive data they maintain. Many state agencies collect and process millions of sensitive records in their computer systems, including individuals' social security numbers, medical and financial records and tax information. Additionally, several agencies process payments including paychecks, unemployment, or child care assistance benefits. This makes those state agencies an enticing target for hackers. Agencies often use multiple security layers to protect data and computers from cyber or physical attacks including locked doors, employee badges, network firewalls, and user passwords. While these measures are good, they should be evaluated periodically to ensure the agency's sensitive data is sufficiently protected from accidental or intentional data breaches.

Currently, there is limited oversight of agencies' security controls to ensure that agencies are adequately protecting confidential data. The Kansas Information Technology Executive Council (ITEC) has developed standards across several security areas including security awareness training, access controls, and physical and environmental safeguards. These standards were created to ensure state agencies develop adequate security controls. However, agencies have a significant amount of autonomy in how they develop, apply, and monitor these security controls.

The 2015 Legislature passed K.S.A. 46-1135, which directs our office to conduct information technology audits as directed by the Legislative Post Audit Committee. Those audits are to include an assessment of the security practices at state agencies or any other entities subject to audit under the Legislative Post Audit Act. These audits are conducted on a three-year cycle. The current cycle (2017 – 2019) began with a statewide assessment of what types of sensitive datasets the state maintains and which agencies are responsible for those data.

#### AUDIT OBJECTIVES AND TENTATIVE METHODOLOGY

*The audit objectives listed below represent the questions that we would answer through our audit work. The proposed steps below each objective are intended to convey the type of work we would do, but are subject to change as we learn more about the audit issues and are able to refine our methodology.*

**Objective 1: Do state agencies adequately comply with significant information technology security standards and best practices?** Our tentative methodology would include the following:

- Select agencies to be audited based on our statewide risk assessment and other factors including previous audit coverage and findings.
- Identify and create a list of significant IT requirements from the Kansas Information Technology Executive Council (ITEC) and best practices from other relevant standard-setting bodies to evaluate.
- Assess agency compliance through reviewing employee training and other records, testing computer vulnerability remediation processes, reviewing access control and boundary information, observing physical security compliance, interviewing IT and other staff, and other work as applicable.
- Select a high-risk computer system the agency manages and evaluate its compliance with a limited number of specific security requirements or best practices.
- Interview agency officials and staff as needed to understand any compensating controls that they have implemented to adequately cover areas in which the agency does not follow ITEC or other relevant security standards.

#### **ESTIMATED RESOURCES**

These audits will be conducted by our **three (3)** person information technology audit team.