

Report of the Joint Committee on Information Technology to the 2019 Kansas Legislature

CHAIRPERSON: Senator Mike Petersen

VICE-CHAIRPERSON: Representative Blake Carpenter

RANKING MINORITY MEMBER: Senator Tom Holland

OTHER MEMBERS: Senators Marci Francisco, Dinah Sykes, and Caryn Tyson; and Representatives Pam Curtis, Keith Esau, Kyle Hoffman, and Brandon Whipple

CHARGE

The Committee is directed to:

- Study computers, telecommunications, and other information technologies used by state agencies and institutions, defined by KSA 2018 Supp. 75-7201 to include executive, judicial, and legislative agencies and Board of Regents institutions;
- Review proposed new acquisitions, including implementation plans, project budget estimates, and three-year strategic information technology plans of state agencies and institutions. All state governmental entities are required to comply with provisions of KSA 75-7209 *et seq.* by submitting such information for review by the Committee;
- Monitor newly implemented technologies of state agencies and institutions;
- Make recommendations to the Senate Committee on Ways and Means and House Committee on Appropriations on implementation plans, budget estimates, and three-year plans of state agencies and institutions;
- Report annually to the Legislative Coordinating Council and make special reports to other legislative committees as deemed appropriate; and
- Discuss the three recommendations for legislative consideration included in the Legislative Division of Post Audit's recent information technology audit report titled "Enterprise Project Management Office: Evaluating the Statutory Definition and Monetary Threshold for Major IT Projects."

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Joint Committee on Information Technology

ANNUAL REPORT

Conclusions and Recommendations

The Committee makes the following recommendations to the 2019 Legislature:

- Introduce legislation to require all state employees to participate in cybersecurity training at least once a year;
- The House Committee on Appropriations and the Senate Committee on Ways and Means should increase cybersecurity funding for state agencies;
- The Kansas Information Security Office should develop a prioritization plan for addressing security vulnerabilities among state agencies;
- Schedule a Joint Committee on Information Technology (Committee) meeting early in the 2019 Session for the purpose of approving language to be included in legislation to amend the Kansas Cybersecurity Act (created in 2018) to require agency heads to submit cybersecurity assessment reports to the Chief Information Security Officer on an annual basis and include an appropriate enforcement mechanism;
- The Executive, Judicial, and Legislative Chief Information Technology Officers (CITOs) should develop and use a risk score approach in the information technology (IT) project approval process;
- The Revisor of Statutes staff should review statutes related to the current \$250,000 IT project threshold and report back to the Committee early in the 2019 Session for the purpose of drafting legislation that would clarify such statutes for university IT projects;
- The Enterprise Project Management Office should improve transparency of IT projects that have been recast so the Legislature is aware of the true cost of a project over the entire life of the project;
- For IT procurements exceeding \$5.0 million, the Committee should review any request for quotation (RFQ) or request for proposal (RFP) before a contract is awarded, and such RFQ or RFP should include an impact assessment explaining how the contract will affect Kansas workers;
- The Director of Procurements should not authorize any sole-source contract that extends for a period exceeding ten years;
- The Chief Information Technology Architect position should be filled as soon as possible;
- The Executive CITO should continue developing partnerships with IT talent recruiters and increasing capacity for IT talent in the state;

- The Legislative Coordinating Council should consider expanding the scope of the Committee to include exploring ways to provide more science, technology, engineering, and math (STEM) opportunities in the state; and
- The House and Senate Committees on Education should look for opportunities to increase STEM education (including coding classes) across the state.

Proposed Legislation: None

BACKGROUND

The Joint Committee on Information Technology (Committee) has statutory duties assigned by its authorizing legislation in KSA 46-2101 *et seq.* The Committee may set its own agenda, meet on call of its Chairperson at any time and any place within the state, and introduce legislation. The Committee consists of ten members: five senators and five representatives. The duties assigned to the Committee by KSA 46-2101 and KSA 2018 Supp. 75-7201 *et seq.* are as follows:

- Study computers, telecommunications, and other information technologies used by state agencies and institutions. The state governmental entities defined by KSA 2018 Supp. 75-7201 include executive, judicial, and legislative agencies and Board of Regents institutions;
- Review proposed new acquisitions, including implementation plans, project budget estimates, and three-year strategic information technology (IT) plans of state agencies and institutions. All state governmental entities are required to comply with provisions of KSA 2018 Supp. 75-7209 *et seq.* by submitting such information for review by the Committee;
- Monitor newly implemented technologies of state agencies and institutions;
- Make recommendations to the Senate Committee on Ways and Means and the House Committee on Appropriations on implementation plans, budget estimates,

and three-year plans of state agencies and institutions; and

- Report annually to the Legislative Coordinating Council (LCC) and make special reports to other legislative committees as deemed appropriate.

In addition to the Committee's statutory duties, the Legislature or its committees, including the LCC, may direct the Committee to undertake special studies and to perform other specific duties.

KSA 2018 Supp. 75-7210 requires the Executive, Judicial, and Legislative Chief Information Technology Officers (CITOs) to submit annually to the Committee all IT project budget estimates and revisions, all three-year plans, and all deviations from the state IT architecture. The Legislative CITO is directed to review the estimates and revisions, the three-year plans, and the deviations, and then make recommendations to the Committee regarding the merits of and appropriations for the projects. In addition, the Executive and Judicial CITOs are required to report to the Legislative CITO the progress regarding implementation of projects and proposed expenditures, including revisions to such proposed expenditures.

COMMITTEE ACTIVITIES

The Committee met during the 2018 Interim as authorized by the LCC, on December 17 and 18, 2018. In addition to these days, the Committee met during the 2018 Session on March 8, April 26, and May 2, 2018.

March 8

Election of Chairperson and Vice-chairperson

The Committee elected a new chairperson and vice-chairperson for the 2018 calendar year. The new Chairperson announced the intention to elect a ranking minority member, selected from the same chamber as the chairperson, at the next meeting.

Executive Branch Quarterly IT Project Report

The Interim Executive CITO reviewed the executive branch agency reports for the October-December 2017 quarter. The Executive CITO reported five new “active” projects:

- Electronic tracking for the Women, Infants and Children program by the Kansas Department of Health and Environment (KDHE);
- Implementation of a new KDHE air-quality project combining six obsolete air compliance systems;
- Office of Information Technology Services (OITS) consolidation of 23 service desks into a centralized service desk;
- Kansas Department of Labor (KDOL) data management/data analytics; and
- KDOL’s new tax-audit software.

The Interim Executive CITO reported five projects in “alert” status:

- A Fort Hays State University (FHSU) enterprise resource planning system that added functionality requiring the project to be recast;
- An OITS load balancer upgrade, which requires new hardware;

- A Kansas Criminal Justice Information System eCitation II project that requires refreshing business projects. A representative of the Kansas Sheriffs’ Association explained major business practices were being changed in the project. The representative predicted the project to be completed sometime between October 2018 and the first quarter of 2019;
- KDOL’s Incarceration Database/Victim Notification Service, which needed to include more county jails; and
- KDOL’s tax-audit software, which was slightly behind schedule.

The Interim Executive CITO described three projects that had to be recast:

- Pittsburg State University’s cloud implementation, which was behind schedule and over budget;
- Kansas Department of Revenue’s (KDOR’s) KanLicense II project, which was behind schedule and was undergoing more regression testing at the request of the Secretary of Revenue; and
- The Kansas Bureau of Investigation’s (KBI’s) Identity Access Management project, which was operating under a new schedule.

The Interim Executive CITO noted one project in “caution” status for being behind schedule: the KDHE Medicaid Management Information System Modernization (MMIS) Project, a joint venture among five states. Responding to questions, the Interim Executive CITO stated the \$91.0 million project is funded 90.0 percent through federal moneys and 10.0 percent through the State General Fund (SGF), but maintenance funding returns to approximately 60.0 percent from federal funding and 40.0 percent SGF funding.

Finally, the Interim Executive CITO noted five completed projects:

- Kansas State Department of Education's replacement of the Kansas Nutrition–Claims and Information Management system;
- FHSU's hyper-converged data center and backup;
- OITS' mainframe transition project. Responding to a member's question about the propriety of using this as a template for the FHSU project, the Interim Executive CITO said OITS does not have authority to make decisions about IT projects of Board of Regents institutions;
- KBI's livestream equipment; and
- KDOR's forecast and modeling system for the consensus revenue estimating process.

April 26

KanLicense Update

The Committee heard from the Director of Vehicles, KDOR, regarding the final tests and preparations for the launch of KanLicense, a statewide, web-based system for issuing and tracking driver's licenses. The Director stated the roll out was tentatively scheduled for Monday, May 7, 2018, with the conversion from the agency's legacy system occurring over the weekend, potentially closing motor vehicle offices on Friday, May 4, 2018, in order for the system to go live on Tuesday, May 8, 2018. The Director acknowledged delays had occurred in the project, but he noted these delays did not involve any additional costs to the agency or the State. Responding to a member's concern that future IT projects undertaken by KDOR would be outsourced to third-party vendors, leading to a loss of state jobs, the Director stated large projects would continue to be outsourced by the Division of Vehicles, but the Division planned to utilize KDOR IT staff for smaller projects.

May 2

Election of Ranking Minority Member

The Committee elected a new ranking minority member, as had been discussed in the March 8 meeting.

Enterprise Project Management Office Audit

A representative of the Legislative Division of Post Audit (LPA) reviewed an audit of the Enterprise Project Management Office (EPMO). He gave a brief background of the EPMO and the history of LPA's authority to perform audits of agency IT projects. The representative stated the focus of the audit was to determine whether the statutory definition and monetary threshold for a major IT project appear to be appropriate, and what effects changing the definition or threshold would have on project oversight. He stated auditors interviewed stakeholders, who reported the definitions are appropriate; however, they recommended certain projects be excluded from approval or oversight, such as license renewals, hardware purchases, and infrastructure projects. Stakeholders also suggested the monetary threshold might be too low or too simplistic, reaching consensus that small projects do not benefit from oversight and other projects need other requirements integrated with the monetary threshold. Several ancillary issues were raised as the audit was conducted: quarterly reports on IT projects are not always complete or accurate, two statutory requirements are not being followed, and the fees for service do not always reflect actual costs. Stakeholders also questioned whether EPMO's project management services add sufficient value to the State. The representative concluded the current definitions and oversight requirements were found to be adequate, but noted a list of LPA recommendations for both executive action and legislative action. He also noted EPMO's response to the audit: the agency generally agreed with the findings, but stated the agency lacks authority to effect changes when it finds IT deficiencies in executive branch agencies. In response to concerns over rates, EPMO stated it had completed a thorough review of rates to bring the agency into compliance with federal regulations. Responding to a Committee question, the LPA representative stated the current IT project threshold of \$250,000 would be equivalent to \$360,000 if adjusted for inflation.

Responding to Committee questions, a project manager from EPMD explained the process of project management and stated the Kansas Eligibility and Enforcement System project under KDHE was originally estimated at \$90.0 million and, with enhancements, ended up costing \$150.0 million.

Department of Administration IT Security Audit

A representative of LPA presented its most recent IT security audit of the Department of Administration in an executive session pursuant to KSA 2018 Supp. 75-4319(b)(12)(C).

December 17 and 18

Quarterly Report and Consolidation Efforts

The Executive CITO reviewed the IT quarterly project reports for the Kansas Information Technology Office, outlining projects in good standing (8), in “caution” status (2), in “alert” status (4), and those that had been recast (2). He also stated one program is in “hold” status. He suggested rather than using a \$250,000 threshold for determining project reports, a risk-based oversight approach might be more effective. Responding to members’ questions regarding various executive branch IT projects, the Executive CITO responded:

- The FSHU Enterprise Resource Planning project is in “alert” status due to being 39.0 percent over schedule;
- KDHE’s MMIS is funded mostly by federal dollars (90.0/10.0 percent match) until the project is completed, then the federal/state match drops to 60.0/40.0 percent for maintenance, typically;
- KDOR’s KanLicense implementation has gone well, and the system went online in October 2018; and
- The vendor for KDHE’s e-reporting to the Environmental Protection Agency provided custom software development.

The Executive CITO also updated the Committee on the work of OITS to streamline certain agency functions through collaboration and consolidation of technical services; the hybrid approach maintains ownership of the applications and data at the agency level, but centralizes core IT services under OITS. All executive branch agency Chief Information Officer positions were consolidated under a Chief Technology Officer (CTO) on October 7, 2018. The CTO will report to the Executive CITO and will carry out the duties of the vacant Chief Information Technology Architect (CITA). He stated the new team structure will be fully implemented by February 2019. A new position, Chief Operations Officer, is being created for a person who will be responsible for the operational aspects of OITS. Consolidated services will be outsourced to a vendor and costs will be based on consumption so agencies pay only for what is needed for hardware and services. A new data center is included in the contract.

State Cybersecurity

A representative of Microsoft State and Local Government discussed recent issues of state cybersecurity. He outlined the process by which a hacker can gain control of an agency’s data and, by extension, an entire state’s data system. He explained hackers use a state’s transparency against it; using automated asymmetrical attacks, hackers are often successful in breaching state data systems because only 5.0 percent of preliminary security alerts are investigated. He emphasized the importance of security updates of software and recommended cloud-based security systems. If an agency chooses to provide its own security, he encouraged communication integration among data systems and a coordinated response to attacks. He concluded by offering ten actions that would minimize risk, such as deploying phishing-proof identities for all users and automating information protection and classification.

KanLicense Update

The Director of Property Valuation and Director of Vehicles, KDOR, updated the Committee on the KanLicense project. He reported the data conversion was completed and the new licensing system went live on October 23, 2018, with no interruption in service. He noted

special features that enable a citizen to renew a driver's license online or with a mobile device.

Sole Source Contracts in IT Procurement

Kansas Legislative Research Department (KLRD) staff reviewed the exemptions to the State's procurement process as it relates to contracts for IT goods and services. Staff stated competitive bids are the standard practice for negotiating state contracts. However, under certain circumstances, the State employs noncompetitive procurement or "sole-source" contracts. The Department of Administration's Office of Procurement and Contracts (OPC) employs a prior-authorization review process to determine whether a purchase should be exempt from competitive bids; such exemptions include compatibility with existing equipment, software maintenance from a developer, or when a company is the only known provider. Staff listed examples of prior authorization for IT purchases showing the agency, the vendor, the amount of purchase, and the officer who made the determination. Responding to a question, KLRD staff replied a request for quotation (RFQ) is used for one-time purchases and a request for proposal (RFP) for recurring purchases.

The Director of the OPC responded to members' questions:

- There are no negotiations for an RFQ;
- A request for information is not used since it provides information for competitors;
- The information for an RFP is obtained from the agency;
- A vendor may discuss parameters with an agency, but when the information is given to the Department of Administration for an RFP, discussion with a vendor is prohibited;
- Three principals evaluate an RFP: a representative from the agency, a representative from OPC, and a Department of Administration official;

- IT proposals are separated into the technical details and the proposed costs; and
- If an agency wants a sole-source contract, a request must be submitted to the Department of Administration.

Members expressed concern regarding sole-source contracts since significant funds were expended through such contracts.

Presentation on Oversight of IT in Other States

KLRD staff reviewed the history of the State's statutory oversight of IT projects and provided information regarding other states' approaches to IT management. She stated Kansas' IT oversight began in 1992 with HB 2578, which created the Joint Committee on Computers and Telecommunications. In 1994, Senate Sub. for HB 2573 established the Kansas Information Resources Council (KIRC), created the position of Chief Information Architect, and introduced new procedures for supervising IT resources. In 1998, SB 5 reorganized IT, abolishing the KIRC and creating the Information Technology Executive Council (ITEC) with 17 statutory participants. The bill also established the Office of CITA and three CITO, one for each branch of Kansas government. The legislation established a threshold for IT projects and required agencies to submit a description, schedule, costs, and a cost-benefit statement for any project exceeding \$250,000. The bill provided a new name and duties for the legislative oversight committee (Joint Committee on Information Technology, or JCIT) and modified purchasing practices for state agencies. Minor changes to the State's IT structure were made in 2013 (HB 2200 abolished the Division of Information Services and Computers and established OITS in its place) and in 2018 (House Sub. for SB 56 modified ITEC membership).

Staff reviewed some notable JCIT recommendations over the past 24 years, including:

- A 5-year planning document and a multi-year budget estimate must be submitted to JCIT;
- Budget information about all projects should be given to the House Committee on Appropriations and the Senate Committee on Ways and Means;
- JCIT must be notified following a 10.0 percent or \$1.0 million cost overrun before a new project plan is submitted;
- Project costs must include both internal and external costs; and
- The Chief Information Security Officer (CISO) should review security plans and certify approval for proposed new projects.

Staff listed the states that provide direct legislative oversight of IT (10) and those that offer other types of IT oversight (6), including 16 states that have cabinet-level technology agencies. Responding to a question, she replied no state exercises authority beyond observation and oversight.

A member commented on the limitations of legislative oversight to mitigate IT projects' cost overruns, recast projects, and delays. He asked how the Committee can be more proactive in minimizing these problems. Another member noted the three-year-plan requirement has been ignored by agencies.

LPA Project Monitoring Audits

A representative of LPA briefly discussed the closing out of two project monitoring audits conducted by LPA in recent years: the KDOR KanLicense project and the KDOL Online System for Claims Administration Research/Regulation project. He reviewed a recent audit of EPMO, which was also discussed at the May 2 meeting.

The representative commented the audit was triggered by recent project failures under the authority of the newly created EPMO. The audit reported stakeholders generally found the statutory definition of IT projects appropriate; however, stakeholders recommended eliminating certain projects from approval and oversight to save agency staff time and resources. They also suggested adding a statutory definition of "infrastructure projects" to help codify how certain projects are handled. Further, most stakeholders recommended raising the threshold that the EPMO tracks from \$250,000 to \$500,000, since smaller projects do not benefit from project oversight. Stakeholders also suggested including non-monetary factors and implementing a tiered system of monitoring levels for various projects.

The LPA representative cited other issues that should be considered for further action:

- Estimated project costs may not accurately reflect staff time;
- Recast projects' costs may be understated;
- Statutory compliance may need to be addressed. Currently, the Executive CITO carries out duties ascribed to the Legislative CITO, and three-year strategic IT plans have not been collected;
- EPMO fees are not always aligned with costs for services; excess revenues may be considered profits and a violation of federal regulations;
- Most agency officials questioned the value received from EPMO services; they cited limited oversight, which fails to keep projects on schedule or within budget. OITS noted its lack of statutory authority to fulfill its oversight functions;
- The vacant CITA position needs to be filled or its duties distributed to other staff; and
- The Committee should review and amend relevant statutes.

Recent Security Audits

A representative of LPA presented the most recent IT security audits of the KBI, KDHE, Pittsburg State University, the Department for Children and Families, the Kansas Highway Patrol, and KDOL. Each audit was presented in executive (closed) session.

Update on Legislative IT Projects

The Acting Legislative CITO told the Committee recent legislation allowing legislators to be included as members of ITEC has provided valuable input for IT decisions. The Acting Legislative CITO introduced the Director of Application Services, Kansas Legislative Office of Information Services (KLOIS). The Director listed the application services that provide for legislative reports, bill drafts, chamber automation, statute books, committee information, and other services. He noted the tracking of conference committees has been improved, but tracking bills that are merged with other bills still awaits a solution. A member encouraged improvement in responding immediately to bill amendments.

The Director of Technical Services, KLOIS, outlined changes in technical services, such as the streaming audio for committee meetings. She reported April's security assessment rated the Legislature's security risk as average, and KLOIS has addressed the highest vulnerabilities. She noted the data center in the Statehouse has a backup system in Kansas City. A recent RFP for data protection resulted in choosing World-Wide Technologies' (WWT) Rubrik backup system. Another RFP for data storage resulted in selection of WWT's Cisco Hyperflex, a system that should eliminate data bottlenecks. She also cited an upgrade to the House voting management system.

Update on Judicial IT Projects

The Judicial CITO reviewed progress on the Centralized Case Management System, one of the services of the eCourt comprehensive system being developed for the Judicial Branch. He expressed gratitude to the Legislature for providing docket fees that enable the project to go forward. He listed the benefits of the new system, which he stated will automate county systems statewide, improve communication and data sharing, and balance staff work loads among the

counties. He stated the project is on time and on budget, with the first services to go live June 2019; completion of the entire project is scheduled for August 2021. He added vendor Tyler Technologies adapted an off-the-shelf program to minimize costs.

KDOR CGI Technologies Contract

The Chief Financial Officer (CFO) of KDOR reviewed issues related to KDOR's contract with CGI Technologies (CGI) for software used for the processing of tax returns. He explained the original 1995 contract was with vendor American Tax Systems, which CGI purchased in 2004; the 30-year software contract did not include upgrades for the original software. CGI agreed to provide upgrades in lieu of lapsed software maintenance fees of \$600,000 with the stipulation KDOR's licensing fees would reimburse CGI at 80.0 percent until the debt is satisfied, after which KDOR would receive 100.0 percent of the fees. He noted the CGI upgrades have more than covered the costs of the debt.

The CFO responded to members' questions:

- There are two contracts with CGI: software upgrades for a cost of \$42.0 million, and all other tax-support software systems for a cost of \$40.0 million;
- Of the employees who were displaced by the CGI contract, 22 were hired by CGI, 30 found other state jobs, and others retired. A member requested a time line from 1995 regarding employees' job status and whether CGI jobs left the state;
- At the end of the contract in 2025, finding a comparable vendor might be too costly; and
- The original contract was a fixed-price contract.

CONCLUSIONS AND RECOMMENDATIONS

The Committee made the following recommendations to the 2019 Legislature:

- Introduce legislation to require all state employees to participate in cybersecurity training at least once a year;
- The House Committee on Appropriations and the Senate Committee on Ways and Means should increase cybersecurity funding for state agencies;
- The Kansas Information Security Office should develop a prioritization plan for addressing security vulnerabilities among state agencies;
- Schedule a Committee meeting early in the 2019 Session for the purpose of approving language to be included in legislation that would amend the Kansas Cybersecurity Act (created in 2018) to require agency heads to submit cybersecurity assessment reports to the CISO on an annual basis and include an appropriate enforcement mechanism;
- The Executive, Judicial, and Legislative CITO should develop and use a risk score approach in the IT project approval process;
- The Revisor of Statutes staff should review statutes related to the current \$250,000 IT project threshold and report back to the Committee early in the 2019 Session for the purpose of drafting legislation that would clarify such statutes for university IT projects;
- The EPMO should improve transparency of IT projects that have been recast so the Legislature is aware of the true cost of a project over the entire life of the project;
- For IT procurements exceeding \$5.0 million, the JCIT should review any RFQ or RFP before a contract is awarded, and such RFQ or RFP should include an impact assessment explaining how the contract will affect Kansas workers;
- The Director of Procurements should not authorize any sole-source contract that extends for a period over ten years;
- The CITA position should be filled as soon as possible;
- The Executive CITO should continue developing partnerships with IT talent recruiters and increasing capacity for IT talent in the state;
- The LCC should consider expanding the scope of the Committee to include exploring ways to provide more science, technology, engineering, and math (STEM) opportunities in the state; and
- The House and Senate Committees on Education should look for opportunities to increase STEM education (including coding classes) across the state.