



# **IT PROJECT MONITORING REPORT**

**Kansas Department of Revenue  
KanDrive IT Project  
Quarter Ending June 30, 2016**

**CURRENT STATUS: CAUTION**

**A Report to the Legislative Post Audit Committee  
By the Legislative Division of Post Audit  
State of Kansas  
September 2016**

# Legislative Division of Post Audit

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**Scott Frank, Legislative Post Auditor**

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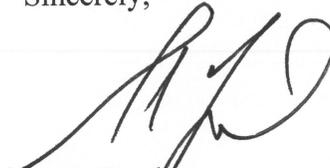
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This report contains the findings from our first monitoring report of the *Kansas Department of Revenue KanDrive IT Project (Quarter ending 6/30/16)*.

Sincerely,



Scott Frank  
Legislative Post Auditor

This work was conducted by Alex Gard, PMP, CISA; Clyde-Emmanuel Meador, SSCP, PMM; and Katrin Osterhaus, PMP, CIA, CGAP. If you need any additional information about the findings, please contact Katrin Osterhaus at the Division's offices.

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## Overview of the KanDrive Project

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### *The Purpose of the KanDrive Project Is to Replace KDOR's Old Mainframe Kansas Driver's License System*

The Kansas driver's license and identification system is responsible for issuing and tracking driver's licenses and identification cards for the entire state. It also tracks driving records for roughly two million individuals, including any restrictions, suspensions or revocations for those individuals. The system is one of KDOR's most critical systems and must be available to law enforcement at all times.

The KanDrive project includes the conversion of the current Kansas driver's license system from a legacy mainframe to a modern, web-based software framework. The new driver's license system will continue to issue and manage driver's licenses and identification cards. According to the project plan, new technology will allow better access to ongoing and ad-hoc reporting needs.

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### *The Current KanDrive Project Started as Another Project in 2007—Almost 10 Years Ago*

In 2007, the Kansas Department of Revenue (KDOR) initiated a project to replace its mainframe systems. That project, referred to as the Division of Motor Vehicles (DMV) Modernization Project, had a total estimated budget of \$40 million. In 2009, KDOR awarded a contract to the 3M Company to develop and implement the system. The goal of the project was to consolidate the Division of Motor Vehicle's three older information systems into one. The new system would process motor vehicle titles and registrations and track and issue driver licenses. The DMV project was to be rolled out in two phases:

- Phase one – New Motor vehicle titling and registration system
- Phase two – New Drivers' license and identification system

**Phase one of the DMV project, which included the new motor vehicle titling and registration system, was deployed in May 2012.** Originally scheduled to be deployed in July 2011, this system was implemented in May 2012. Because of a number of problems at that time (including long delays at some county treasurer's offices, complaints about corrupted files, and clerks being routinely disconnected from the system), LPA completed a performance audit in October 2014 (R-14-010). However, KDOR officials report those issues have been resolved in recent years.

**In November 2015, the department ended the DMV project before completing phase two—the driver's license system.** Originally scheduled to be deployed by January 2012, this portion was significantly behind schedule, leading to KDOR terminating its contract with 3M in May 2014. At that time, KDOR planned to complete the driver's license system of the DMV project in-house by November 2015, for about \$2.1 million. Summary progress

reports published through the Kansas Information Technology Office (KITO) described the project on hold and eventually as “stopped” by August 2015. By then, the department had “de-scoped” phase two from the DMV project, thus officially ending the DMV project.

**The KanDrive project was created to complete the driver’s license portion of the former DMV project at an estimated \$6 million with a scheduled completion date of December 2017.**

The KanDrive project received approval from the executive Chief Information Technology Officer (CITO) in November 2015, with a project cost of \$6.1 million and a planned completion date of December 27, 2017. According to the original KDOR project budget, the project cost is fully state-funded, including about \$1.9 million in internal and \$4.2 million in external costs. Those external expenditures represent contracting costs for Allied Global Services, Inc. to supplement KDOR’s in-house IT staff for the completion of this project.

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***We Selected the KanDrive Project for Continuous Monitoring Due to Its Prior Problems, Criticality, and Cost***

K.S.A. 46-1135, directs our office to conduct continuous audits of ongoing information technology projects by state agencies, including systems development and implementation. Our primary objective is to identify, as early as possible, when a project is at risk of failure due to scope, schedule, cost, or quality problems, and to communicate that risk to the appropriate level of project leadership, legislative bodies, or other stakeholders to get those projects back on track. Our secondary objective is to evaluate whether monitored IT projects have adequately planned for the implementation of required security controls.

In February of this year, we selected the KanDrive project from a total of 21 active projects across state agencies as our first monitoring project. We chose the project for several reasons, including prior problems on the DMV project, the estimated cost of KanDrive, and its criticality for KDOR and other agencies.

Our evaluation is based on relevant state statutes, Information Technology Executive Council (ITEC) policies and guidelines, Kansas Information Technology Office (KITO) templates and instructions for IT projects, and international project management standards and guidelines. As part of our monitoring efforts, we reviewed documentation on the previous DMV project, and read relevant KITO reports. Additionally, we reviewed KanDrive project documents including information submitted to KITO. Lastly, we attended most of the key communication meetings (steering committee, monthly status, and bimonthly progress meetings) from March 1 through June 30, 2016, and interviewed several members of the project team.

This first monitoring report includes an assessment of the project's planning and initiation phase which started last year, as well execution activities through the end of June 2016. We plan to continuously monitor the project, with the next report covering the third calendar quarter (July through September). Each quarter, we will evaluate the project's system development and implementation status and provide a rating of either satisfactory, caution, or unsatisfactory status.

Due to their continuous nature, these audits are not conducted in accordance with generally accepted government auditing standards.

We provided the draft report to KDOR on August 18, 2016. The department's formal response is included as *Appendix A* on page 11.

*Appendix B* on page 14 contains a glossary of frequently used abbreviations in this report.

## LPA Assessment of the KanDrive Project (as of June 30, 2016)

**Overall Project Status:**  
**CAUTION**

We determined the overall project health for KanDrive to be in caution status. We evaluated the project across four major areas — project scope, schedule, cost, and quality. These areas, with the exception of quality, correspond to the areas also tracked by the Kansas Information Technology Office (KITO). The scale below describes the categories we established for our assessment:

- **Satisfactory status:** The project generally meets applicable state laws, policies, and guidelines, generally complies with project management best practices, and has no material issues in scope, schedule, cost or quality.
- **Caution status:** The project does not meet several state laws, policies or guidelines, has deviations or unrealistic milestones in scope, schedule, or cost, or quality, or has weak or insufficient mitigation plans for known issues which could result in project failure.
- **Unsatisfactory status:** The project is not in compliance with many state laws, policies or requirements, or has scope, schedule, cost, or quality deviations that are sufficiently material and no mitigation plans, thus causing the project to be at significant risk of failure.

The table below provides a summary of our findings for this reporting period.

Kansas Department of Revenue's KanDrive IT Project Summary of LPA Monitoring Findings as of June 30, 2016					
Area	Summary of Assessment	Satisfactory	Caution	Unsatisfactory	Informational
Scope	The scope is clearly defined.	x			
	Major improvement ideas are set aside for a separate project.	x			
Schedule	The project did not follow statutory requirements related to project approval.				x
	Certain work segments are behind schedule while other work has been delayed.		x		
	The KanDrive project has a designated project manager to oversee successful integration with the existing driver's license information and issuance system.	x			
Cost	Internal project management has approved a cumulative cost increase of \$1 million, but revised cost baselines are not properly disclosed outside the agency.		x		
	The project does not budget for costs associated with staff spending less than 50% of time on the project (a problem affecting all KITO-approved projects).				x
Quality	The project does not include sufficient consideration for IT security.			x	
	The periodic independent verification and validation assessments, which were part of the project's quality plan, were eliminated.		x		
Source: LPA review of project documents, interviews, and attendance of periodic project meetings					

As the table on the previous page shows, several findings are informational in nature. These items related to problems we

identified that cannot be fixed going forward, or issues with state policies affecting this as well as other IT projects. Therefore, these items do not affect our assessment of the current status of this project. The remainder of the report provides additional information for items listed in the table.

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***Project Scope:***  
***SATISFACTORY***

**The scope is clearly defined (satisfactory).** A clear description of what a project includes and does not include is important to ensure everyone understands the end goal. The scope for KanDrive involves a clearly defined replication of the current system's functionality in a different platform. Additionally, we found the project charter and related documents properly supported a business need and identified the business value, and included a planned schedule and an estimate of resources.

**Major improvement ideas are set aside for a separate project (satisfactory).** Success of a project is measured in terms of completing the project within the constraints of scope, time and cost. Because deviations from a project's agreed-upon scope also affect time and cost, project management standards require that scope is properly controlled throughout a project's life cycle (planning, execution, close-out). Based on our interviews and documentation we reviewed, the KanDrive project team prevents scope expansion by tracking ideas for system improvements separately and only adding enhancements that do not affect cost or time as part of a change management process. Management has planned for a separate project in which system enhancement ideas can be accomplished if funding is available. A February 2016 project roadmap indicated an anticipated start date for the separate project to start around October 2016, and to be completed parallel to the KanDrive project end date of December 2017.

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***Project Schedule:***  
***CAUTION***

**The project did not follow statutory requirements related to project approval (informational).** K.S.A. 75-7209 and Information Technology Executive Council (ITEC) policy 2400 require that the project plan must be approved by the appropriate branch Chief Information Technology Officer (CITO) before a project can be implemented. Additionally, ITEC guidelines require agencies to complete a feasibility study for planned projects exceeding a cost of \$1 million. We noted two issues:

- **The project was not approved until after implementation.** The executive CITO approved the project plan in November 2015—seven months after the project started its execution phase. KDOR staff told us they did not seek approval earlier in part because the CITO position was vacant. KITO staff confirmed the former CITO left in October 2014 and the current CITO was hired in August 2015, and explained that the Secretary of Department of Administration or his designee approved several other projects during the CITO's vacancy.
- **KDOR did not conduct a feasibility study, as required.** Officials explained the feasibility study had been done as part of the original

DMV project back in 2007 and therefore they did not consider it to be necessary.

These issues relate to the planning phase, do not affect the risk of project failure, and cannot be remedied. We do not expect to the agency to take any action.

**Certain work segments are behind schedule and other work has been delayed (caution).** The Joint Committee on Information Technology (JCIT) has outlined a number of project monitoring measures, including several critical task and task completion rate measures. For example, JCIT considers a project in caution status when the task completion rate is between 80%-90%. A list of measures the committee adopted is shown in *Appendix C* on page 15. We could not easily determine how much the project was behind schedule, but noted the following issues:

- **The biweekly status report for the period ending 6/24/2016 showed two major sections behind schedule.** The project team produces biweekly reports which evaluate the progress of the project's various work sections. This June 2016 report showed the website and user interface application development ("UX, UI, and .Net Development") had slipped further behind from the start of the quarter. The quality assurance and testing segment had improved from the start of the quarter, but was still behind the planned schedule. Other work segments were progressing on schedule. Project management staff had developed a number of charts during this quarter to visually see progress and identify issues. Also, staff developed mitigation plans to catch up with expected trend lines for the two problem areas.
- **Some work has been delayed and does not appear to go through a formal change management process.** We noted project management officials actively manage and mitigate when critical and recurring tasks fall behind. However, our review of the latest available project documents showed other tasks, such as standing up the pre-production and production environment infrastructure, disaster recovery planning and testing, and driver's license station infrastructure modernization that have been delayed by 4-7 months (131 days to 234 days) from the original timeline. Additionally, work labeled "ADA, Regression and UAT cycles" has been delayed by more than 2 months and certain training has been delayed by about 4 months. The task delays or their potential cumulative effects do not appear to be discussed or approved as part of the steering committee's change approval process.
- **Overall execution hours have increased by 14%.** We noted that development cycle hours have increased by 8-32% with overall execution hours having increased from 111,751 hours in the original plan to 127,249 hours in the current baseline plan (a 14% increase). Additional hours to finish the project within the same timeframe could result in higher costs, increased risk for mistakes due to staff burnout, or both.
- **The overall schedule performance index (SPI) is somewhat unreliable because the budgeted cost of the work scheduled**

**has gone down in the last quarter.** This project management statistic measures the ratio of completed tasks to planned tasks. A project is considered on schedule when the index is equal or greater than 1.0. As of June 30, 2016, the project's overall SPI had improved to 0.96 from previous measurements of 0.37 and 0.56. However, that improvement is due in part to several tasks having been rescheduled. We also noted work on specific tasks (e.g. infrastructure) had an SPI of only 0.83 as of June 30, 2016, indicating less work was completed than planned for during this period. **Appendix D** on page 16 summarizes key statistics for current quarter as well as previous quarters for comparison.

Although KDOR officials are confident the project will meet the completion date of December 2017, we think there is a significant risk the project will not be completed on time without further budget or scope changes.

**The KanDrive project has a designated project manager to oversee successful integration with the existing driver's license information and issuance system (satisfactory).** Since 2009, KDOR has used a contractor (MorphoTrust) to provide the state with its driver's licenses and identity cards. Although KDOR officials considered going out for bid for those services while implementing the KanDrive project, they ultimately decided to use the current vendor. As a result, the latest contract amendment was signed May 2016. The new contract requires MorphoTrust to update the Kansas driver's license information and issuance system that is integrated with KanDrive.

Because such integration and working with a contractor adds project risk, the steering committee approved a change request to add a separate project manager resource to oversee that work as part of the KanDrive project.

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**Project Cost:**  
**CAUTION**

Project management standards require staff to make reasonable cost estimates to complete project activities, including labor, material, travel and other costs. The KITO project management plan template supports this best practice by requiring agencies to estimate project cost at completion. This section summarizes our concerns related to the original and revised cost estimates for the project.

**Internal project management has approved a cumulative cost increase of \$1 million thus far, but revised cost baselines are not properly disclosed outside the agency (caution).** Project management standards require projects to follow formal change control processes when a project cannot meet its planned scope constraints, schedule or cost estimates. Change requests may be necessary when productivity or resources were estimated incorrectly, or unforeseen issues emerge. When approved changes affect scope, schedule or cost, project plans may need to be "re-baselined" to create revised schedule or cost estimates. State law

(K.S.A. 75-7211) requires agencies to consult with JCIT for any changes that increase the planned projects cost by 10% or \$1 million of the currently authorized costs.

KDOR has followed the proper process for making changes to the KanDrive project budget internally. KDOR received initial approval for the project in November 2015 with a project cost estimate of \$6.1 million. Since then, the KanDrive project budget has been re-baselined three times, with a budget of \$7.1 million as of June 30, 2016. This latest cost baseline reflects more than 20 change requests during the past seven months which were properly discussed and approved by the project’s internal steering committee.

However, revised cost information has not been properly reported to the KITO which is the office responsible for monitoring and reporting the status of agencies’ IT projects to the Joint Committee on Information Technology. Our review of documents, which are required to be submitted to KITO periodically, showed that KDOR had not sufficiently disclosed project cost increases, resulting in KITO reporting the project’s original costs in several quarterly reports.

The table below summarizes the original and quarterly cost changes, as well as the incremental and overall increases in cost.

<b>Summary of Original and Quarterly Cost Changes for KanDrive Through June 30, 2016</b>				
<b>Reporting Date</b>	<b>11/4/2015</b>	<b>12/31/2015</b>	<b>3/31/2016</b>	<b>6/30/2016</b>
<b>Est. Project Cost (a)</b>	\$ 6,134,114	\$ 6,355,372	\$ 6,629,524	\$ 7,156,869
<b>Cost as reported in the KITO Quarterly Summary Report</b>	\$ 6,134,114	\$ 6,134,114	\$ 6,134,114	\$ 6,134,114
<b>Incremental Cost Change</b>	n/a	\$ 221,258	\$ 274,152	\$ 527,345
		4%	4%	8%
<b>Change from Original Cost</b>	n/a	\$ 221,258	\$ 495,410	\$ 1,022,755
		4%	8%	17%

(a) These costs reflect the original cost approved by the CITO in November, and the revised cost estimates based on changes approved by the KDOR project steering committee. Changes typically increased the cost but several changes (e.g. the cancellation of the IV&V contract) also decreased the costs. This information shows net estimate from all approved changes at the end of each quarter.

As the table shows, these cumulative cost increases of over \$1 million received proper internal review but have not been reported outside the agency to allow KITO and JCIT to evaluate and monitor the project.

**The project does not budget for costs associated with staff spending less than 50% of time on the project - a problem likely affecting all KITO-approved projects (informational).**

Our review of the project’s detailed tasks and assigned resources revealed no dedicated funding for certain tasks. For example, planning for and testing disaster recovery is budgeted at 252 hours across 7 staff (each at 30%) and has no cost associated. At an estimated cost of \$40 an hour, these two tasks alone would add an additional \$10,000 to the project.

We learned that the state’s planning guidelines (a supplement to ITEC policy 2400) only require agencies to include staff costs when they are associated with a main task at least 50% of the time. Not budgeting for staff who do not reach that threshold has the advantage of limiting the work involved with tracking staff time and assigning costs at the agency. However, it also creates two risks: a risk that project approval is not based on accurate and complete project cost estimates; and a risk that overall project costs are understated.

Because this policy affects all IT projects that are subject to ITEC reporting, this risk is informational only. We do not expect to the agency to take any action, but encourage oversight bodies such as JCIT or ITEC to study and possibly revise this policy.

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***Project Quality:***  
***CAUTION***

**The project does not include sufficient consideration for IT security (unsatisfactory).** ITEC policies 7230 and 7230A list the minimum security requirements expected to be implemented for state information systems. Examples include:

- Conducting a risk assessment
- Ensuring access control (e.g. identification and authentication, proper password construction, and account controls)
- Setting up systems configuration standards (e.g. change control, malicious code protection mechanisms),
- Setting up systems operations standards (e.g. fault tolerant settings, and restoration processes),
- Providing for physical security standards (e.g. secure storage or transportation of media).

While the project charter for KanDrive includes an assumption that “security will be at or above current level,” other project documents do not provide much additional detail. The project’s detailed task document calls for a security matrix (budgeted at ~260 hours and about \$2,200). That deliverable, largely complete, only determines the level of access for various duties (e.g. who is authorized to delete a customer, update or edit fees, or take driver’s license pictures). The detailed task document also includes tasks to plan for and test disaster recovery. However, these components only cover a small portion of the state’s security requirements.

We expressed concerns in this area to project management and steering committee staff in April. Project staff consulted the agency’s Information Security Officer (ISO) in early May about

certain user access requirements. We also learned the ISO had tried to alert project management staff on the existence of state and internal security requirements, and had expressed concerns about the lack of security architecture for this project. In mid-May, the systems architect created a draft security plan which he finished June 30 and forwarded to the Information Security Officer after this reporting period completed.

Our review of the draft security plan found it to be incomplete (it did not include all ITEC requirements) and inadequate (it lacked detail on how the KanDrive project will comply with specific requirements). Because the project is well into its execution stage, we think there is a substantial risk that the system will not be compliant with necessary standards.

**The periodic independent verification and validation assessments, which were part of the project's quality plan, were eliminated (caution).** Project management standards require projects to include a quality assurance process. The project management plan for KanDrive included quality management activities consisting of internal peer reviews and formal quarterly assessments from an independent contractor. KDOR staff explained they added the external reviews to avoid repeating mistakes made during the original DMV project. However, with the executive CITO's support based on his research of the value these reviews provide, the steering committee reversed that decision in May 2016. Their reasons included cost, our monitoring involvement, and the lack of a state requirement to conduct these assessments for projects below \$10 million.

The cancellation of this ongoing monitoring contract saved about \$255,000, but also means the loss of an independent quality review that user requirements are met, the product is structurally sound, and is built to the required specifications. Our monitoring efforts are not an equitable substitute because we do not evaluate such technical aspects and instead focus our attention on project management processes.

## APPENDIX A

### Agency Response

On August 18, we provided copies of the draft audit report to the Department of Revenue. We have incorporated a number of suggestions or changes based on officials' informal response. In other instances we considered the agency's informal feedback but did not change our assessment materially. On September 6, we received the agency's official response which is included as this Appendix. Following the agency's response is a table listing the department's specific implementation plan for each finding.

We carefully reviewed the information provided by KDOR, and offer the following points of clarification:

**Finding 2 – Cost: The agency states that not reporting cost updates to KITO is due to a mismatch in reporting intervals from the project to KITO and LPA's audit cycle.** We noted that the reports to KITO for quarters ending December 31 (2015), March 31 (2016), and June 30 (2016) did not reflect periodic project cost increases made during those time periods. Based on our interviews with project staff, we learned that baselines get updated every quarter and that those quarters match the reporting cycle to KITO. As a result, we aligned our assessment period with those quarterly updates to ensure we report on the same information that KITO receives. The table on page 8 accurately reflects the project's budget through each period based on approved cost changes, which we cross-checked to the applicable baseline for each quarter based on the projects' Work Breakdown Structure (WBS). We do not think that a mismatch in reporting intervals contributes to this finding.

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September 6, 2016

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Dear Mr. Frank:

We want to thank Ms. Katrin Osterhaus and her team for their professionalism and cooperative approach in preparing the initial IT Monitoring Report on the KanDrive Project. With the first phase of our modernization effort, the vehicle registration system, in successful production operation, all assistance is welcome in ensuring that customer service is further enhanced with implementation of the driver's license system. We appreciate the opportunity to work with your staff as they use the KanDrive Project as a first step to develop and refine methodologies for monitoring State IT projects.

KDOR's response to the audit findings is summarized in the attached Itemized Response to LPA Recommendations form. As expected with a critical system such as this, the audit, and KDOR management attention, is focused on scope, schedule, cost and quality. With a well-defined scope and rigorous internal oversight and change control practices, timely implementation of a high quality software solution within available resources is the expected outcome of this project. Although cited as an area where additional documentation was needed, there has never been a question that security of our systems and data is a top priority for KDOR. All measures required by state and federal security policies will be incorporated into the KanDrive software, supported by thorough testing to ensure compliance with those standards. Efficient service to our customers and stakeholders includes an absolute commitment to safeguard the information provided in compliance with the vehicle and driving laws.

Again, we thank you and the audit team and look forward to our continued shared efforts to bring about a successful implementation of the KanDrive Project.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Jordan", written over a white background.

Nick Jordan  
Secretary of Revenue

## Itemized Response to LPA Recommendations

**Audit Title:** IT Project Monitoring Report - Kansas Department of Revenue KanDrive IT Project  
**Quarter Ending June 30, 2016**  
**Agency:** KDOR

LPA FINDING	Agency Action Plan
<p>1 <b>SCHEDULE - Certain work segments are behind schedule and other work has been delayed (Caution).</b></p> <ul style="list-style-type: none"> <li>- The biweekly status report for the period ending 6/24/2016 showed two major sections behind schedule.</li> <li>- Some work has been delayed and does not appear to go through a formal change management process.</li> <li>- Overall execution hours have increased by 14%.</li> <li>- The overall schedule performance index (SPI) is somewhat unreliable because the budgeted cost of the work schedule has gone down in the past quarter.</li> </ul>	<p>A) The project manager has been reporting to the Steering Committee weekly on significant progress made with the documented recovery plans since late 2015.</p> <p>B) A formal, documented Change Request process was initiated at project start, and all changes to the project critical path schedule are first approved by the Steering Committee.</p>
<p>2 <b>COST - Internal project management has approved a cumulative cost increase of \$1 million, but revised cost baselines are not properly disclosed outside the agency (Caution).</b></p>	<p>KDOR acknowledges this finding and has incorporated all required information in the quarterly reporting to KITO. This was initially due to a mis-match in reporting intervals from the project to KITO and LPA's audit cycle, but has since been resolved by alignment of both schedules. Also, a change request to debit/"refund" from the project budget for approximately 800K is being prepared for Steering Committee review.</p>
<p>3 <b>QUALITY - The project does not include sufficient consideration for IT security (Unsatisfactory)</b></p>	<p>KDOR acknowledges this finding and is taking the following actions to better incorporate security into the project:</p> <ul style="list-style-type: none"> <li>- The project manager has established a bi-weekly security integration meeting to ensure that security is fully integrated into the project plan and the SDLC. Invitees include KanDrive Project Management and KDOR Information Security. Optional future invitees will include staff from the Kansas Information Security Office</li> <li>- The project manager is updating the project plan to incorporate additional security requirements</li> <li>- Deliverables include: <ul style="list-style-type: none"> <li>* System Security Plan</li> <li>* Risk Assessment</li> <li>* Vulnerability Assessment</li> <li>* Peer Code Review</li> <li>* Disaster Recovery Plan</li> <li>* Disaster Recovery Test</li> <li>* Security Assessment</li> <li>* Documented Baseline Configuration</li> <li>* Completed business impact analysis</li> </ul> </li> </ul>
<p>4 <b>QUALITY - The periodic independent verification and validation assessments, which were part of the project's quality plan, were eliminated (Caution).</b></p>	<p>This was a business decision based on historic IV&amp;V project performance, and as noted in the LPA findings was approved by the Executive Branch CITO</p>

## APPENDIX B

### Glossary of Frequently Used Terms and Abbreviations

The following list contains various abbreviations and a definition of those terms.

- **CITO - Chief Information Technology Officer.** K.S.A 75-7205 through K.S.A. 75-7207, established a CITO for each of the executive, judicial, and legislative branches of government. The respective CITO reviews and consults with each their branch agencies regarding information technology plans, monitors compliance with all information technology policies, and coordinates implementation of new information technology, among other duties.
- **DMV - Division of Motor Vehicles.** The Motor Vehicles Program administers Kansas law relating to vehicle titling and registration, motor vehicle dealer licensing, and driver's licenses. The Division of Vehicles has three subprograms which include Administration, Vehicle Services, and Driver Services. The Administration subprogram oversees policy and procedure to ensure a safe, fair and equitable customer service atmosphere for Kansas citizens.
- **ITEC - Information Technology Executive Council.** The 17-member Information Technology Executive Council is responsible for approval and maintenance of all information technology policies, IT project management procedures, the statewide technical architecture, and the state's strategic information management plan.
- **KDOR - Kansas Department of Revenue.** The Department is a Kansas Cabinet-level agency and is responsible for collecting taxes and fees, administering Kansas tax laws, issuing a variety of licenses, and providing assistance to Kansas citizens and local governments.
- **KITO - Kansas Information Technology Office.** KITO supports the statutory responsibilities of the Executive, Judicial, and Legislative Branch CITO's and the state's Chief Information Technology Architect by providing enterprise services across state government.
- **SPI - Schedule Performance Index.** A measure of schedule efficiency expressed as the ratio of earned value (how much work has been completed by a certain date) to planned value (how much work was supposed to have been completed by that date).

## APPENDIX C

### JCIT Project Measurement Guidelines

JCIT Policy 2, approved by the committee in 1998, establishes a number of specific measures to evaluate state projects in active status. The table below enumerates those measures.

<b>JCIT Project Measurement Guidelines</b>		
<b>Area</b>	<b>JCIT threshold</b>	<b>Condition</b>
Critical Path	10%-20% behind schedule	The project will be considered in a caution status
Critical Path	20% or more behind schedule	The project will be considered in a red or alert status.
Task Completion Rate	Completion rate of 80%-90%	The project will be considered in a caution status
Task Completion Rate	Completion rate of 80% or less	The project will be considered in a red or alert status.
Deliverable Completion Rate	Completion rate of 80%-90%	The project will be considered in a caution status
Deliverable Completion Rate	Completion rate of 80% or less	The project will be considered in a red or alert status.
Cost	10%-20% deviation from plan	The project will be considered in a caution status
Cost	20%-30% deviation from plan	The project will be considered in a red or alert status.
Cost	30% or more deviation from plan	If costs are 30% higher than planned, serious consideration should be given to stopping the project. JCIT should find specific approval of the agency head and approval of a rationale that strongly supports continuation of the project. JCIT should consider recommending that an independent 3rd party be obtained to conduct a project review and make recommendations to the agency head and JCIT regarding causes for the project deviation from plan, corrective actions needed, expected outcomes, and whether the project the project should be continued.
Actual vs. Planned Resources	Deficiency gap of 15%-20%	The project manager should be acting with the project sponsor to correct this condition. For some projects, the impact of this level of deficiency may be greater than indicated and be reflected in the other measures as well.
Actual vs. Planned Resources	Deficiency gap of 20%-25%	There should be a plan to show a compensatory change n resources or a plan to reduce the scope, costs and objectives for the project with approval of the agency head. For some projects, the impact of this level of deficiency may be greater than indicated and will be reflected in the other measures as well.
Actual vs. Planned Resources	Deficiency gap of 25% or more	A deficiency of this magnitude places project in jeopardy and 3rd party review should be considered if the impact is reflected in other measures. The project should not be permitted to drift awaiting a compensatory resources plan or a new reduced project scope plan. If a new project plan is developed, the new financial plan, return on investment and objectives to be achieved must recalculated and presented for review as well.

## APPENDIX D

### Summary Schedule and Cost Statistics For KanDrive

This table includes original and quarterly statistics for the KanDrive Project based on our review of internal project management reports for the quarterly time periods through June 30, 2016.

<b>Summary Schedule and Cost Statistics</b>			
<b>Calendar Year Quarter ending</b>	<b>12/31/2015</b>	<b>3/31/2016</b>	<b>6/30/2016</b>
<b>Cost Baseline</b> - the approved version of the project budget.	\$ 6,355,372	\$ 6,629,524	\$ 7,156,869
<b>Planned Value (PV)</b> - the authorized budget assigned to scheduled work (also known as Budgeted Cost of Work Scheduled)	\$ 4,139,459	\$ 4,386,321	\$ 3,221,845
<b>Earned Value (EV)</b> - the measure of work performed expressed in terms of the budget authorized for that work (also known as Budgeted Cost of Work Performed)	\$ 1,536,518	\$ 2,438,435	\$ 3,094,942
<b>Actual cost (AC)</b> - the realized cost incurred for the work performed on activity during a specific time period.	\$ 1,467,415	\$ 2,302,664	\$ 2,842,990
<b>Schedule variance (SV)</b> - a measure of schedule performance expressed as the difference between the earned value and the planned value.	\$ (2,602,941)	\$ (1,947,886)	\$ (126,903)
<b>Schedule Performance Index (SPI)</b> - a measure of schedule efficiency expressed as the ratio of earned value to planned value (a ratio of 1.0 or better is good).	0.37	0.56	0.96
<b>Cost Variance (CV)</b> - the amount of budget deficit or surplus at any given point in time, expressed as the difference between earned value and actual cost.	\$ 69,103	\$ 135,772	\$ 251,951
<b>Cost Performance Index (CPI)</b> - a measure of the cost efficiency of budgeted resources expressed as the ratio of earned value to actual cost (a ratio of 1.0 or better is good).	1.05	1.06	1.09