IT PROJECT MONITORING REPORT

Kansas Department of Revenue
KanDrive IT Project
Quarter Ending March 31, 2017

CURRENT STATUS: CAUTION

R-16-012.4

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LEGISLATIVE DIVISION OF POST AUDIT

800 SW Jackson
Suite 1200
Topeka, Kansas 66612-2212
Telephone: (785) 296-3792
Fax: (785) 296-4482
Website: **http://www.kslpa.org**

Scott Frank, Legislative Post Auditor

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July 31, 2017

To: Members, Legislative Post Audit Committee

This report contains the findings from our fourth monitoring report of the *Kansas Department of Revenue KanDrive IT Project (Quarter ending March 31, 2017)*. The audit team included Clyde-Emmanuel Meador (Senior IT Auditor) and Katrin Osterhaus (IT audit Manager).

We would be happy to discuss the findings and conclusions presented in this report with any legislative committees, individual legislators, or other state officials.

Sincerely,

Scott Frank
Legislative Post Auditor

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.

The Current KanDrive Project Was Originally Part of KDOR's DMV Modernization Project Which Began in 2007

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.

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 2016, 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.

Methodology and Results of Prior Monitoring Periods

Our Quarterly Reports Evaluate the System Development and Implementation Status of the Project

Authorized under K.S.A. 46-1135, our audits of ongoing information technology projects evaluate the health of the project regarding system development and implementation, and the project's adherence to 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 for the most recent calendar quarter ending March 31, 2017, we reviewed project documentation, read relevant KITO reports, and attended many of the key communication meetings (steering committee, monthly status, bimonthly progress, and contractor status meetings). Lastly, we interviewed project team and steering committee members as necessary.

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 May 5, 2017. The department's response is included as ***Appendix A***.

The KanDrive Project Was in Caution Status in Our Previous Monitoring Report

Our previous monitoring report included an assessment of the project's execution activities through December 31, 2016. That report was published in April 2017.

We considered scope and cost to be satisfactory, but called out several issues within the schedule and quality categories. We evaluate the project across four major areas – project scope, schedule, cost and quality. The following summarizes our findings in those areas from our previous monitoring report:

- **Scope (satisfactory):** We found the scope for the project to be clearly defined, with major improvement ideas set aside for a separate project, which had not yet been approved.

- **Schedule (caution):** We found that some work segments were behind schedule while other work had been delayed, and that the contractor had delayed the deadline for a key milestone by three weeks, but KDOR had taken steps to mitigate the risk.

- **Cost (satisfactory):** We found project management appropriately used change control processes to periodically reduce or increase project cost baselines as necessary.

- **Quality (caution):** We found the project continued to lack adequate security planning, despite being well into its execution phase, and the security plan document was still mostly incomplete.

KDOR planned to make significant changes to the project based on an internal review. Officials provided explanations and provided additional context to the findings in our quarterly report ending December 31, 2016. More importantly, during the response period, we learned that officials planned to make significant changes to the project based on a separate technical review KDOR had commissioned. The remainder of this report provides more details on what those planned changes are.

Overall Project Status:
CAUTION

We determined the overall project health for KanDrive to be <u>in caution status</u>. The status is unchanged from our previous monitoring report.

We evaluate projects across four major areas —project scope, schedule, cost, and quality. Except for quality, these areas also are tracked by the Kansas Information Technology Office, or KITO. *Appendix B* contains a glossary of frequently used abbreviations in this report. 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, 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.

KDOR has made significant changes to the KanDrive project scope and overall management during this quarter. At the start of this evaluation period, the new Secretary of KDOR engaged Allied Global Services to evaluate the health of the KanDrive project. The technical review, completed in late February, identified a number of serious technical and management issues which could jeopardize the project's health. These issues included the addition of zero-cost scope items throughout the project, communication issues, development team claims of completed tasks despite business users seeing little functionality, and struggles to complete critical components for several work streams. Overall, the technical review concluded it was not possible to complete the entire scope for KanDrive and its complementary enhancement project by December 2017. The technical review also warned the project budget may run out before the planned completion date (December 31, 2017).

To address these problems, KDOR management met with the entire project staff (including contractors) and rolled out several changes. Those changes included a rearranged project team, revisions to the scope of the project, steps to eliminate

communication barriers, and increased involvement from the department's IT staff.

The table below provides a summary of our findings for this reporting period. As the table shows, several items are informational in nature. These items provide context to problem findings or relate to problems which are not specific to the KanDrive project. The remainder of the report provides additional information about our assessments in the four main project management areas.

	Kansas Department of Revenue's KanDrive IT Project Summary of LPA Monitoring Findings as of March 31, 2017				
Area	**Summary of Assessment**	**Satisfactory**	**Caution**	**Unsatisfactory**	**Informational**
Scope	KDOR planned a separate project to enhance KanDrive.				x
	Both the KanDrive project and the separate enhancement project are being closed and recast.		x		
	The project scope for KanDrive has changed and is not yet formalized.		x		
Schedule	The contractor (MorphoTrust) has missed a second major deadline by delivering all-in-one equipment to KDOR that is not working properly.		x		
	KDOR established new major milestones, but we cannot evaluate whether those milestones are realistic.		x		
	The new milestones have the project "go live" by the end of December with a change in how the project will be deployed across the state.		x		
Cost	We could not determine whether changes in the project's cost estimates are justified.		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 has suffered from several quality issues many of which KDOR is working to remediate.		x		
	Project staff have made progress completing a security plan and mitigated additional security-related issues during this quarter.	x			
Source: LPA review of project documents, interviews, and attendence of periodic project meetings					

Project Scope: CAUTION

We determined the project scope for KanDrive to be in caution status. This represents a downgrade from the "satisfactory" rating in our previous monitoring report.

KDOR planned a separate project to enhance KanDrive (informational). The KanDrive project (referred to within KDOR as "Part One") converts the current driver's license system from a legacy mainframe to a modern web-based software framework. In June 2016, KDOR began work on a separate project ("Part Two") which was supposed to add several enhancements to KanDrive,

including a sanctions engine, a cashiering function, and a fraud prevention module. These enhancements were intended to automate and speed up the current licensing process, increase its accuracy, and allow for better ad-hoc reporting.

KDOR staff began to execute this $3.4 million enhancement project before they received approval from the CITO. In January 2017, staff submitted its first quarterly update to KITO. Staff are working on both projects concurrently, and both parts were supposed to be finished together, by the end of December 2017.

Both the KanDrive project and the separate enhancement project are being closed and recast (caution). We previously rated the project scope as "satisfactory" because KDOR followed good project management processes by keeping the two projects separate and thereby not increasing the scope of the original KanDrive project. However, the technical report issued in February stated that it would be impossible to meet the December 2017 "go live" date for all work components in both project parts. Specifically, the report noted numerous small, undocumented scope changes with no associated cost had occurred over time which adversely affected the project schedule

KDOR management also expressed concerns about the parallel nature of the two projects, causing duplicate or redundant work, as well as confusion and frustration among staff. To solve these issues, officials decided to combine both projects, but to delete certain non-critical enhancements to meet the December project completion deadline. At the end of this monitoring period, KDOR had submitted a request to KITO to close the KanDrive project and intends to submit a recast project plan for approval during the next quarter. KDOR anticipates the CITO will approve the recast project at the end of June, with only six months of the project's timeline left.

The project scope for KanDrive has changed and is not yet formalized (caution). During a February steering committee meeting, the scope for the combined project was planned to include the original KanDrive project scope, as well as the cashiering component and sanctions engine from the enhancement project. Later we learned the scope of the combined project was reduced further to only include the cashiering component from the Part Two project. As discussed further in the project schedule section, staff also plan to change how the project will be deployed across the state to meet the December deadline. KDOR staff are still working on revising the project plan to codify these scope changes, which creates project communication and expectation risks. Lastly, the Department would need to create a new project (with new costs and timelines) to implement the additional

functionalities that were envisioned, but are not included in the combined project.

Project Schedule: CAUTION

We determined the project schedule for KanDrive to be in <u>caution status.</u> This status is unchanged from our previous monitoring report. We think there is a risk the project will not meet its December 2017 completion date. Our reasons for this outlook are outlined below.

The contractor (MorphoTrust) has missed a second major deadline by delivering all-in-one equipment to KDOR that is not working properly (caution). KDOR signed a contract amendment with MorphoTrust to integrate the Kansas driver's license information and issuance system with the KanDrive project. During the previous quarter, we reported MorphoTrust missed a deadline by three weeks to provide a web service interface to existing back-office architecture. During <u>this</u> monitoring period, the contractor was scheduled to provide all-in-one equipment in early March for KDOR to start user acceptance testing. Although MorphoTrust delivered the equipment timely, its software had problems which prevented KDOR from starting its testing phase. These problems had not been resolved as of the end of this monitoring period.

KDOR's technical review has identified the dependence on the contractor as the biggest external project risk, and this recent problem adds to those concerns. Officials told us KDOR and MorphoTrust were working to get the equipment working, but we noted KDOR staff expressed continued frustration with the non-working equipment during the weekly status calls we attended. Insufficient penalty clauses to compel the contractor to meet its milestones increase the risk the project schedule will be delayed due to contractor issues.

KDOR established new major milestones, but we cannot evaluate whether those milestones are realistic (caution). As mentioned before, KDOR plans to submit detailed project plan documentation for the recast KanDrive project to KITO during the next quarter. In the meantime, KDOR established a number of new major milestones for the project. However, without a revised, detailed work schedule that reflects the new scope, remaining work and available resources, we cannot conclude whether the current milestones are realistic.

The new milestones have the project "go live" by the end of December with a change in how the project will be deployed across the state (caution). The original project schedule included a month-long deployment phase from November to the go-live

date in mid-December 2017. Our previous monitoring report pointed out the deployment phase had been delayed through the end of January, about six weeks behind schedule. The new milestones indicate the project as "complete" when the technology is deployed *to a production environment* by end of December. Steering committee members confirmed this last milestone indicates project completion, with the application in use by drivers' license offices across the state.

Officials explained meeting this deadline will be possible because the agency changed its approach from a phased roll-out to a "flip-the-switch" approach, with training and testing occurring prior to that event. KDOR staff are still working on revising the project plan which will codify the new approach and provide more details on the necessary components and timelines before KanDrive goes live. Additionally, KDOR is working on a new Memorandum of Understanding with Allied Global Services for continued IT support to finish the project. With the project being reorganized so close to its end date, we cannot determine whether the new schedule is realistic.

Project Cost: CAUTION

We determined the project cost to be in caution status which is unchanged from our previous monitoring report.

Changes that combined the two projects and reduced the projects' scope made it impossible for us to evaluate whether changes in the project's cost estimates are appropriate (caution). Here is what we know:

- **The combined improvements for the drivers' license system were estimated to cost almost $10 million as of December 31, 2016.** Part One of the project was budgeted to cost $6.4 million, with an additional $3.4 million budgeted for the separate enhancement project (Part Two).

- **The technical report released during this monitoring period warned that the project budget may run out before the final completion date (December 31, 2017).** Additionally, the technical report warned "additional funding may be needed to support the post go live support for the first 2-3 months of rollouts."

- **KDOR staff are working to create a new project plan, including a revised budget, for the combined KanDrive project which they estimate will total about $8 million.** According to KDOR's Chief Financial Officer, Part One and Part Two have cost a total of approximately $5.5 million through the end of this reporting period. The agency's rough estimates indicate it will take an additional $2.0 to $2.5 million for the remaining work, in addition to actual expenditures to date. The new cost estimate of $8 million (actual and budgeted expenditures) does not include deployment and rollout, or several enhancements that were removed from Part Two.

- **Combining two different project budgets, along with the scope reductions, make it impossible for us to evaluate changes to project costs.** Project management standards require staff to make reasonable cost estimates to complete project activities, including labor, material, and other costs. Since large scope reductions have taken place at the same time as the two projects are being combined, we cannot assess what contributes to the cost changes and whether they are reasonable.

As is the case for all KITO-approved IT projects, the project does not budget for costs associated with staff who spend less than 50% of their time on the project (informational). Because the state's planning guidelines only require agencies to include staff costs when they are associated with a main task at least 50% of the time, it is likely that the project's costs are understated.

Because this affects <u>all</u> IT projects that are subject to ITEC reporting, this is informational only. We do not expect to the agency to take any action.

Project Quality: CAUTION	We determined the project quality to be in <u>caution status</u> which is unchanged from our previous monitoring report.

The project has suffered from several quality issues many of which KDOR is working to remediate (caution). The technical review completed in February highlighted a number of quality concerns about the team's inability to resolve conflicts, communication issues, and a lack of direction from project leadership. Other quality concerns included gaps in completed code, and little functionality despite a large number of completed use cases. Lastly, the report pointed out that existing features required workarounds to function. While KDOR's initiative to address the technical and management problems is encouraging, the entire KanDrive project (Part One and Part Two) is being recast with only nine months until the original end date.

Lastly, the project includes staff from KDOR, Allied Global Services (a contractor providing supplemental staff resources), MorphoTrust, and Celtic (the contractor providing the cashiering component). Each group needs to get their tasks done timely to ensure the project is completed on time and on budget. With the project being reorganized so close to its end date, we are concerned the project's quality may be affected.

Project staff have made progress completing a security plan and mitigated additional security issues during this quarter (satisfactory). Our previous review of the project's security plan showed it was significantly incomplete. Many of the IT-control |

sections were entirely blank. Lastly, several IT-control areas were marked as complete, but lacked the required details on how the system meets the controls.

During this monitoring period, the agency's Chief Information Security Officer has filled in several sections of the plan, and has indicated planned controls or controls which are provided outside the system in other sections. Additionally, project management staff told us KanDrive staff will begin work on other sections of the plan in May, with a due date assigned by the Chief Information Security Officer of September 30. Finally, the agency appears to have fixed security concerns raised in the technical document. Those concerns included project staff not delivering necessary documents to the security team for evaluation, and a lack of access by the KDOR's security team to run security tools against the latest code.

We will continue to monitor this aspect of the project during the next monitoring period to ensure IT security efforts continue to make progress.

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APPENDIX A

Agency Response

On Friday May 5, we provided copies of the draft audit report to the Department of Revenue. We have incorporated several suggestions or changes based on its informal and formal response. In other instances, we considered the agency's feedback but did not change our assessment materially. The Department's response is included as this Appendix.

Kansas
Department of Revenue

phone: 785-296-3041
fax: 785-368-8392
www.ksrevenue.org

Samuel M. Williams, Secretary

Sam Brownback, Governor

May 15, 2017

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LEGISLATIVE DIVISION
OF POST AUDIT

Scott Frank
Legislative Post Audit
800 SW Jackson St. Ste. 1200
Topeka, KS. 66612

Dear Mr. Frank:

We want to thank Ms. Katrin Osterhaus and her team for their continued professionalism and cooperative approach in preparing the most recent IT monitoring report on the KanDrive Project.

KDOR's response to the audit findings is summarized in the attached *Itemized Response to LPA Recommendations* document. The audit and our response follow the quarterly timeframe ending March 31, 2017; however, there have been some significant developments in the past two months.

I have requested the executive steering committee team to carry out a KanDrive technical assessment. Its findings would be presented, with the intent to determine the viability of this project. It was concluded based on the assessment, the project could continue, a restructure of the team, scope and plan would have to occur. We have restructured the team and have moved to a fixed-bid milestone delivery method. Although, the scope was changed, the KanDrive project will still have major benefits provided to the Division of Vehicles (DoV). We have begun the process of recasting the new plan and will deliver the necessary KITO project filings. Since the restructure, I have hired a Chief Information Officer (CIO), Jon Payne, he and his team will play a significant role in understanding application and preparing a Go-Live deployment strategy. I have and the executive steering committee team has continued its commitment to delivering a production –ready successfully tested system by January 3, 2018.

I look forward to our continued shared efforts to bring about a successful implementation of the KanDrive Project.

Sincerely,

Sam Williams
Secretary of Revenue

Itemized Response to LPA Recommendations

Audit Title: IT Project Monitoring Report - Kansas Department of Revenue KanDrive IT Project Quarter Ending March 31, 2017
Agency: KDOR

	LPA FINDING	Agency Action Plan
1	SCOPE - Both the KanDrive project and the separate enhancement project are being closed and recast (caution).	The KanDrive project management team is developing a new, but modified Cost Benefits Analysis (CBA) to include hard-savings around the use of a integrated state-wide cash drawer solution. The KITO recast Information Technology CBA statement called DA519 will submitted by June 2017. In conjunction, KanDrive will develop a KITO Information Technology Project Request Explanation called DA518 to include the costs to complete the KanDrive Project by 12/31/2017. We will need to have a cover letter from the agency head requesting approval of the recast plan.
2	SCOPE - the project scope for KanDrive has changed and is not yet formalized (caution).	The KanDrive project management team is developing a plan to continue our execution from 3/13/2017 till 12/31/2017. The plan will be focused on the remaininng work necessary to replace the legacy KDLS functionality with a secure web-based application and introduce a cash drawer solution. In Scope: Ability to issue driver license and the process that meets the approved trued-up UI screens with no work arounds Ability to manage all driver license solutions process that meets the approved trued-up UI screens with no work arounds Integration with AAMVA and support AAMVA testing to ensure Kandrive system passes the need. Support integration with @Work by providing technical resources, answers, access, permissions for @Work developer to successfully create/test the integration. Support integration with all the current interfaces in production for KDLS system by providing technical resources, answers, access, permissions for KDOR Developers to successfully create/test the interfaces. Succesfully integrated with Celtic Cashbox system. Gaps in Cashbox capability will not be a performance issue for Kandrive technical team. Peform load testing and performance testing to ensure the system meets the desired load in production. Support Training team with questions, access, permissions to be able to successfully deliver training. Technical team will not participate in delivering training to the end users Prepare and manage project plan that meets KDOR needs for internally reporting and managing the project.
3	SCHEDULE - The contractor (Morpho Trust) has missed a second major deadline by delivering all-in-one equipment to KDOR that is not working properly (caution).	A meeting took place in Topeka, 5/9/2017 with Alan Moore from MorphoTrust and various KDOR staff. KDOR has given MorphoTrust a date of 9/29/2017, to complete rollout with a drop dead date of 10/23/2017 to allow as a buffer. Known issues are being monitored Technical resources are on-site until resolved Account for UAT time in consideration with the Print CardFactory Changes required in Project Manager responsibilities.

LPA FINDING	Agency Action Plan
4 SCHEDULE - KDOR established new major milestones, but we cannot evaluate whether those milestones are realistic (caution).	**The KanDrive Executive Steering Committee is meeting weekly and includes the Secretary of Revenue.** **Managing milestones expectations:** Performed User Interface True-up and Gap Analysis (i.e., Identify missed functions and gaps) Managing undefined and and possibly undefinable dependencies (e.g., The behavior between two critical components) Controlling requirements instability (i.e., prevent unnecessary scope creep) Constant support of stakeholders involvement (i.e., business owners are making the necessary decisions) Continuous Improvement of the milestone/accomplishment criteria (i.e., we know what the "done" looks like) Validating program performance at the right level (i.e., each work stream contains actionable backlog items) Emphasize Integration Testing (i.e., Hold Third-Party vendor accountable to their commitments) Transparency of Integrated Planning (i.e., a plan is a strategy for success. The strategy is a hypothesis, it needs constant testing)
5 SCHEDULE - The new milestones have the project "go live" by the end of December with a change in how the project will be deployed across the state (caution).	**Our recast plan will contain a set of deployment tasks. These tasks will include several step-by-step practice production cut-over deployments. After our Go-Live date of 1/3/2018 has been successful, the project team conduct a set of close-out tasks.** **Objectives of Mock Cutover** (Our plan will be to conduct 3 Practice Deployments) To exercise/practice the full Go-Live Cutover plan in the production environment To involve everyone in the cut-over to PRACTICE and confirm the time required to execute the cut-over. To discover and resolve issues (technical, operational or logistical) and incorporate into the overall Go-Live Cutover Plan To practice the Data Conversion Plan and understand the timings of all data loads To validate the overall Production environment **How is Cutover executed?** Cutover will be executed as per the 'Cutover Plan' - a set of detailed, sequenced tasks to build the new Production system, convert and migrate data, configure the new system and decommission legacy systems. Mock Cutovers are utilized to practice and validate the Cutover Plan prior to Go-Live and make revisions prior to the actual. It is a way of fine-tuning the process and minimize risks prior to full production cutover.

LPA FINDING	Agency Action Plan
6 COST - Changes that combined the two project and reduced the projects' scope made it impossible for us to evaluate whether changes in the project's cost estimate are appropriate (caution).	The KanDrive II recast project plan will incorporate the change request for the Celtic cash drawer solution.

	Part 1	Part 2 Was not published	Track 2 Budget	DAS18 Recast	KanDrive II	Cashiering Budget
DAS18 Original	$ 6,134,114	$ 3,399,087	$ 9,533,201			
Actual	$ 5,206,915	$ 430,917	$ 5,637,832			
Cashiering			$ 1,051,162	$ 1,775,000	$ 977,575	$ 2,752,575
Actual			$ 73,587			

LPA FINDING	Agency Action Plan
7 QUALITY - The project has suffered from several quality issues many of which KDOR is working to remediate (caution).	The recent KanDrive application code drops starting in March 2017 have produced favorable results in the Quality Assurance area. We have seen a significant amount work completed on bugs and updated functions within the application. An effort / Approach has been successful to unite the QA into the development cycle. This will help the team avoid many of the communication errors resulting in delays, defects, and unproductive effort.

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 CITOs 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.

JCIT Project Measurement Guidelines		
Area	**JCIT threshold**	**Condition**
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 quarterly statistics for the KanDrive project based on our review of internal project management reports for the quarterly time periods from March 31, 2016 through March 31, 2017. The initial project cost for the project was $6.1 million and the project was planned for completion by December 27, 2017.

Summary Schedule and Cost Statistics					
Calendar Year Quarter ending	**3/31/2016**	**6/30/2016**	**9/30/2016**	**12/31/2016**	**3/31/2017**
Cost Baseline - the approved version of the project budget.	$6,629,524	$7,156,869	$6,505,518	$6,438,167	(a)
Planned Value (PV) - the authorized budget assigned to scheduled work (also known as Budgeted Cost of Work Scheduled)	$4,386,321	$3,221,845	$4,537,634	$4,652,495	(a)
Earned Value (EV) - the measure of work performed expressed in terms of the budget authorized for that work (also known as Budgeted Cost of Work Performed)	$2,438,435	$3,094,942	$4,108,142	$4,424,359	(a)
Actual cost (AC) - the realized cost incurred for the work performed on activity during a specific time period.	$2,302,664	$2,842,990	$3,785,416	$4,068,233	(a)
Schedule variance (SV) - a measure of schedule performance expressed as the difference between the earned value and the planned value.	($1,947,886)	($126,903)	($429,492)	($228,136)	(a)
Schedule Performance Index (SPI) - a measure of schedule efficiency expressed as the ratio of earned value to planned value (a ratio of 1.0 or better is good).	0.56	0.96	0.91	0.95	(a)
Cost Variance (CV) - the amount of budget deficit or surplus at any given point in time, expressed as the difference between earned value and actual cost.	$135,772	$251,951	$322,725	$356,126	(a)
Cost Performance Index (CPI) - 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).	1.06	1.09	1.09	1.09	(a)
(a) The project is undergoing major changes, and we were not able to evaluate schedule or cost statistics this quarter.					