A Report on

Analysis of Quality Assurance Team Projects

November 2019
Report No. 20-010
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Overall Conclusion

The State Auditor’s Office assisted the Quality Assurance Team (QAT) by performing an analysis of five major information system projects at five state agencies. The State Auditor’s Office selected those five projects based on input from the QAT.

It is important to note that this project was a non-audit service; therefore, the information in this report was not subject to all of the tests and confirmations that would be performed in an audit. However, the information in this report was subjected to certain quality control procedures to ensure accuracy. The agencies self-reported the information in this report, and the State Auditor’s Office did not independently verify that information.

At the time of the State Auditor’s Office analysis, four of the five projects were complete, and the remaining project was nearing completion. The five projects were:

- The Department of State Health Services’ (DSHS) Tuberculosis, HIV, and STD Integrated System (THISIS) Improvement Implementation project. The project was 98 percent complete as of August 31, 2019, according to DSHS.
- The Texas Department of Motor Vehicles’ (TxDMV) WebDealer-eTitles (WebDealer) project.
- The Texas Department of Insurance’s (TDI) Document Management Project.
- The Texas Workforce Commission’s (TWC) Enterprise Contracting & Procurement System (ECPS), Phase II project.

Background Information

In 1993, the 73rd Legislature established the State’s Quality Assurance Team (QAT). The QAT comprises representatives from the Legislative Budget Board, the Department of Information Resources, the Office of the Comptroller of Public Accounts, and the State Auditor’s Office. The QAT reviews and approves major information resources projects. The State Auditor’s Office serves on the QAT as an advisor.

As Table 1 and Table 2 below show:

- One project (WIC WIN) was completed over the original budget, while three projects (WebDealer, Document Management Project, and ECP5) were completed under budget. THISIS, which had not been completed as of August 31, 2019, was over its original budget.

- The agencies submitted changes in estimated project costs to the QAT through their project Monitoring Reports as required for four projects (THISIS, WIC WIN, WebDealer, and Document Management Project). TWC asserted that it reduced the ECP5 project budget in February 2018 from $1,715,282 to $1,330,306; however, the agency did not submit the budget reduction to the QAT, as required by the Department of Information Resources’ Project Delivery Framework.

- All five projects were completed later than originally planned.

Table 1 presents a summary of the budgeted and actual expenditures.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Project</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Total Expended</th>
<th>Total Expended Compared to Original Budget</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of State Health Services</td>
<td>Tuberculosis, HIV, and STD Integrated System (THISIS) Improvement Implementation project</td>
<td>$5,049,063</td>
<td>$8,609,928</td>
<td>$7,396,711</td>
<td>$2,347,648</td>
<td>98%</td>
</tr>
<tr>
<td>Health and Human Services Commission</td>
<td>Women, Infants, and Children Information Network (WIC WIN) project</td>
<td>$24,899,000</td>
<td>$77,356,181</td>
<td>$78,764,986</td>
<td>$53,865,986</td>
<td>100%</td>
</tr>
<tr>
<td>Texas Department of Motor Vehicles</td>
<td>WebDealer-eTitles (WebDealer) project</td>
<td>$14,034,484</td>
<td>$8,932,311</td>
<td>$7,964,980</td>
<td>($6,069,504)</td>
<td>100%</td>
</tr>
<tr>
<td>Texas Department of Insurance</td>
<td>Document Management Project</td>
<td>$4,000,237</td>
<td>$2,356,698</td>
<td>$1,437,714</td>
<td>($2,562,523)</td>
<td>100%</td>
</tr>
<tr>
<td>Texas Workforce Commission</td>
<td>Enterprise Contracting &amp; Procurement System (ECP5), Phase II project</td>
<td>$1,715,282</td>
<td>$1,330,306</td>
<td>$997,878</td>
<td>($717,404)</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Table 1**: Summary of Project Budgeted and Actual Expenditures

**Table Notes**

a This column lists the original project budgets that the agencies submitted to the QAT in their Business Case Workbooks, with the exception of WIC WIN. The original budget for WIC WIN is the amount DSHS, which was the agency initially responsible for that project, submitted in its first Monitoring Report for that project.

b This column lists the estimated project cost amounts that the agencies submitted to the QAT in their final or most recent Monitoring Report for the project, with the exception of ECP5. The revised budget for ECP5 is the amount that TWC provided.

c This column lists the total reported expenditures (paid) for the projects. See project-specific chapters for additional expenditure information.

d This column lists the project’s percentage completion as of August 31, 2019, that the agencies reported.

Sources: The QAT and information that the agencies provided.
Table 2 lists the original and actual completion dates.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Project</th>
<th>Original Scheduled Start Date (a)</th>
<th>Original Scheduled Completion Date (b)</th>
<th>Actual/Estimated Completion Date (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of State Health Services</td>
<td>Tuberculosis, HIV, and STD Integrated System (THISIS) Improvement Implementation project</td>
<td>February 6, 2014</td>
<td>June 30, 2016</td>
<td>November 29, 2019</td>
</tr>
<tr>
<td>Health and Human Services Commission</td>
<td>Women, Infants, and Children Information Network (WIC WIN) project</td>
<td>July 13, 2006</td>
<td>June 30, 2010</td>
<td>August 31, 2018</td>
</tr>
<tr>
<td>Texas Department of Motor Vehicles</td>
<td>WebDealer-eTitles (WebDealer) project</td>
<td>September 1, 2012</td>
<td>June 30, 2015</td>
<td>August 19, 2019</td>
</tr>
<tr>
<td>Texas Department of Insurance</td>
<td>Document Management Project</td>
<td>December 2, 2015</td>
<td>August 31, 2018</td>
<td>November 12, 2018</td>
</tr>
<tr>
<td>Texas Workforce Commission</td>
<td>Enterprise Contracting &amp; Procurement System (ECPS), Phase II project</td>
<td>September 5, 2017</td>
<td>September 30, 2018</td>
<td>November 30, 2018</td>
</tr>
</tbody>
</table>

\(a\) This column lists the initial project start dates reported in the agencies’ initial Monitoring Reports to the QAT.

\(b\) This column lists the estimated project completion dates reported in the agencies’ initial Monitoring Reports to the QAT.

\(c\) This column lists the actual completion date that the agencies reported for all but the THISIS project. DSHS reported that the THISIS project was 98 percent complete as of August 31, 2019, and the agency’s estimated completion date is listed.

Sources: The QAT and information that the agencies provided.

In analyzing the five projects, the following details were noted:

- Three agencies (TDI, TWC, and TxDMV) reduced the budgets for their projects (Document Management Project, ECPS, and WebDealer, respectively), and they all subsequently spent less than the reduced budgets. Specifically:
  - TDI management stated that it reduced the Document Management Project’s budget because it chose to implement a system solution that enabled it to avoid purchasing certain hardware.
  - TxDMV and TWC management stated that one of the reasons they reduced their projects’ budgets from the initial Business Case Workbook estimates included additional planning that better estimated actual costs.
  - DSHS and HHSC management asserted that project (THISIS and WIC WIN, respectively) budgets were exceeded for reasons including increased project scope, lengthened timelines, and vendor issues.
Although HHSC reported that it had completed WIC WIN in August 2018, it also reported in August 2019 that one of its vendors was still addressing outstanding issues related to reporting.

Agencies are required to submit a *Post-implementation Review of Business Outcomes* report within six months of a project’s completion date. HHSC and TWC submitted their *Post-implementation Review of Business Outcomes* report after their due dates. TDI had not submitted its report as required for the Document Management Project as of August 31, 2019.

**Project Objective and Scope**

The objective of this project was to provide an analysis of information resources projects monitored by the QAT.

The scope of this project covered five major information resources projects that the QAT monitored as of August 31, 2019.
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Detailed Results

Chapter 1

The Department of State Health Services’ TB, HIV, and STD Integrated System (THISIS) Improvement Implementation Project

Department of State Health Services (DSHS) management reported that the TB, HIV, and STD Integrated System\(^1\) (THISIS) Improvement Implementation project met its anticipated objectives and achieved many of the benefits that it had detailed in the Business Case and Project Plan it submitted to the Quality Assurance Team (QAT). Additionally, DSHS management reported that the project was 98 percent complete and has an anticipated completion date of November 29, 2019. DSHS has exceeded its original budget by more than $2.3 million and its original timeline by more than 3 years. Management attributed the increases in the budget and timeline to factors including vendor performance issues and key resource availability.

Project History / Overview

The purpose of the THISIS project was to replace eight disparate and nonintegrated disease monitoring and case management systems that were used to separately track instances of and treatments for TB, HIV, and STD. The new system was to be integrated to allow for earlier determination and treatment of multiple medical conditions, which was a labor-intensive process with the legacy systems. DSHS reported that most of those legacy systems were outdated and could not be maintained easily. DSHS also reported that it has decommissioned four of those legacy systems since implementing THISIS and is working to decommission the remaining four systems.

According to DSHS, THISIS will improve the coordination of health care; provide real-time communication in a single system; and enable all local and regional health jurisdictions and DSHS to perform case management, monitoring, and reporting in an integrated system. THISIS is designed to support case follow-up, which helps ensure the completion of adequate treatment and monitoring of public health.

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\(^1\) Tuberculosis (TB), human immunodeficiency virus (HIV), and sexually transmitted diseases (STD).
Project Status

Table 3 lists the original start and completion dates and the current estimated completion date for the THISIS project.

Table 3

<table>
<thead>
<tr>
<th>Project Completion Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
</tr>
<tr>
<td>TB, HIV, and STD Integrated System (THISIS) Improvement Implementation Project</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and DSHS.

The Quality Assurance Team (QAT) approved the THISIS project on February 6, 2014. DSHS has increased the project timeline eight times, expanding it to 5.8 years as compared to the originally expected timeline of 2.4 years. DSHS attributed the project’s extended timeline to vendor performance issues related to the quality of software builds, increased project scope, complexity, and the availability of vendor and agency personnel throughout the project. DSHS reported that one issue with staff availability was that during fiscal years 2015 and 2016, some project personnel were redirected to assist with disease response efforts.

Project Costs

Table 4 summarizes both the budgeted and actual expenditures for the THISIS project. DSHS used the Department of Information Resources’ Business Case Workbook to estimate costs for the project’s original budget.

Table 4

<table>
<thead>
<tr>
<th>Budgeted and Actual Expenditures for the THISIS Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of August 31, 2019</td>
</tr>
<tr>
<td>Budget Category</td>
</tr>
<tr>
<td>Agency Personnel Expenditures</td>
</tr>
<tr>
<td>Contract/Consultant Expenditures</td>
</tr>
<tr>
<td>Hardware/Software/Other Expenditures</td>
</tr>
<tr>
<td>Project Contingency</td>
</tr>
<tr>
<td>Total Project Costs</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT, the Health and Human Services Commission, and DSHS.
The actual expenditures for the project were more than the originally approved budget. DSHS estimated that the project would cost $5,049,063 in the original *Business Case Workbook* that it submitted to the QAT on January 23, 2014. DSHS reported that the actual amount expended for the project was $7,396,711 as of August 31, 2019.

During the project, DSHS increased the budget six times and decreased it once. According to the project *Monitoring Reports* that DSHS submitted to the QAT, the project budget increases were due to the extensions in the project timeline and added project scope for system reporting and workflows.

**Project Benefits**

According to DSHS, the THISIS project had the following anticipated benefits:

- Provides a real-time, integrated system allowing for improved communication among local and regional health jurisdictions and DSHS.

- Allows for better tracking and coordinated treatment of TB, HIV, and STD cases.

- Decreases manual, paper-based processes.

- Reduces duplicate information requests to patients and families.

**Project Demonstration**

Auditors attended a demonstration of THISIS in a test environment. According to DSHS, many of the THISIS system’s features, functions, and applications were operating as intended and providing the expected benefits listed in the project’s *Business Case Workbook*. Some of the key application functions that DSHS demonstrated included:

- Case management, disease surveillance, and disease profile management.

- A disease surveillance suite that stores data related to the disease event, lab results, concerns, and the event history.

- System hyperlinks, which DSHS stated could be used to access preprogrammed question packages based on information entered in the system. Those hyperlinks allow staff to generate reports based on various criteria to determine possible links between events, individuals, and locations.
Additional Information

DSHS reported that it experienced vendor performance issues during the project that contributed to the budget increases and project end date extensions. DSHS reported that it took the following steps to resolve those issues in fiscal year 2019:

- DSHS reported that it has a new vendor contract effective March 1, 2019. DSHS stated that unlike the prior contract, the new contract has provisions for key performance measures and liquidated damages in instances of noncompliance.

- DSHS reported that its Executive Steering Committee was working closely with that vendor to communicate critical issues.

Because the THISIS project was over its budget and timeline by more than 50 percent, DSHS prepared a cost-benefit analysis, which the QAT approved on April 20, 2019, thereby reapproving the project. Agencies must obtain QAT approval of a cost-benefit analysis that compares canceling or continuing any contract related to a major information resource project that is subject to QAT monitoring and is more than 50 percent over budget or schedule.

A review of the periodic Monitoring Reports that DSHS submitted to the QAT showed that it submitted all 22 quarterly Monitoring Reports timely.

The QAT requires the Post-implementation Review of Business Outcomes report to be submitted six months after a project’s completion date. Therefore, if DSHS completes the THISIS project on November 29, 2019, as planned, it will be required to submit that final report by May 29, 2020.

The THISIS Enhancement Project is another DSHS project that the QAT approved on August 23, 2017, to add a Hepatitis C module to THISIS. DSHS reported that it transferred $1,553,970 from the THISIS Enhancement Project to the current THISIS project during fiscal years 2018 and 2019 as part of the budget increases that occurred during that time period. The QAT stated that the expected cost of the THISIS Enhancement Project is $3,748,598. The fiscal year 2018 third quarter Monitoring Report for the THISIS Enhancement Project indicates that project sponsors agreed to delay this project until the completion of the current THISIS project; however, management subsequently has stated that it does not intend to pursue this project further.
**Chapter 2**

**The Health and Human Services Commission’s Women, Infants, and Children Information Network (WIC WIN) Project**

Health and Human Services Commission (HHSC) management reported that it implemented its Web-based Texas Integrated Network (TXIN) through the Women, Infants, and Children (WIC) Information Network (WIC WIN) project. TXIN both administers WIC client benefits and manages payment claims from participating food vendors. WIC is a federal nutrition program for pregnant and/or breastfeeding women and families with children who are at nutritional risk.

The State Auditor’s Office reported on the project’s status and changes during fiscal year 2014 in *A Report on Analysis of Quality Assurance Team Projects* (State Auditor’s Office Report No. 14-020, February 2014). At the time of that report, the Department of State Health Services (DSHS) administered the WIC program and the WIC WIN project; however, HHSC assumed management of both on September 1, 2017, in accordance with Senate Bill 200 (84th Legislature, Regular Session).²

According to HHSC, DSHS made the final change in WIC WIN’s project approach during fiscal year 2014, which was the eighth year of the project’s 12-year duration. DSHS stated that it changed the project approach due to guidance from the U.S. Department of Agriculture’s Food and Nutrition Service, the project’s federal funding agency. HHSC stated that WIC WIN was 100 percent federally funded.

**Project History / Overview**

The purpose of the WIC WIN project was to replace the Texas WIC Information Network (Texas WIN) with the TXIN system and to make modifications to include needed functionality. DSHS implemented Texas WIN in 1995. According to DSHS, that legacy system was written in an obsolete programming language that was no longer supported. Therefore, DSHS had difficulty obtaining staff, hardware, and software needed to upgrade that system to serve an increasing number of WIC clients.

At the time of the State Auditor’s Office’s 2014 report, DSHS reported that it had changed its project approach for the second time by returning to its original plan to modify and implement a commercial, off-the-shelf state agency model. Additionally, DSHS was revising its Project Delivery Framework documents for the QAT. Those fiscal year 2014 revised

² Senate Bill 200 (84th Legislature, Regular Session) required the transfer of certain programs, including WIC, from DSHS to HHSC.
documents showed a project budget of $60,452,865. Also in 2014, DSHS partnered with two other states\(^3\) and two tribal organizations\(^4\) to create an integrated WIC network. Each of those other jurisdictions individually contracted with the same information technology (IT) vendors that DSHS was using for the WIC WIN project.

HHSC reported that it completed the rollout of the TXIN system to participating health care entities in August 2018.

**Project Status**

Table 5 lists the original and actual completion dates for the WIC WIN project.

<table>
<thead>
<tr>
<th>Project</th>
<th>Original Scheduled Start Date</th>
<th>Original Scheduled Completion Date</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women, Infants, and Children Information Network (WIC WIN) Project</td>
<td>July 13, 2006</td>
<td>June 30, 2010</td>
<td>August 31, 2018</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and HHSC.

DSHS began the WIC WIN project on July 13, 2006, and originally planned to complete the project in June 2010. The fiscal year 2014 revised Project Delivery Framework documents showed an estimated project completion date of March 1, 2017. HHSC and DSHS subsequently deferred the project completion date 1.5 years to the actual August 31, 2018, completion date with four project extensions.

HHSC reported that the reasons for the project delays since 2014 included extending the project timeline after delaying the project due to contract negotiations,\(^5\) not meeting certain milestones due to system development delays, and a two-month extension due to damage from Hurricane Harvey in 2017, which subsequently affected rollout to Houston-area health care entities.

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\(^3\) New Mexico and Louisiana.

\(^4\) The Cherokee Nation and the Pueblo of Isleta.

\(^5\) DSHS signed contracts with the project vendors after submitting revised QAT Project Delivery Framework documents.
Project Costs

Table 6 summarizes both the budgeted and actual expenditures for the WIC WIN project.

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Total Expended</th>
<th>Total Expended Compared to Original Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Personnel Expenditures</td>
<td>$0</td>
<td>$10,926,249</td>
<td>$13,162,141</td>
<td>$13,162,141</td>
</tr>
<tr>
<td>Contract/Consultant Services Expenditures</td>
<td>$24,899,000</td>
<td>$53,868,992</td>
<td>$52,509,075</td>
<td>$27,610,075</td>
</tr>
<tr>
<td>Hardware/Software/Other Expenditures</td>
<td>$0</td>
<td>$12,560,940</td>
<td>$13,093,770</td>
<td>$13,093,770</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>$24,899,000</strong></td>
<td><strong>$77,356,181</strong></td>
<td><strong>$78,764,986</strong></td>
<td><strong>$53,865,986</strong></td>
</tr>
</tbody>
</table>

Source: Information provided by the QAT, DSHS, and HHSC.

At the conclusion of the WIC WIN project, the actual expenditures were $53,865,986 more than the budget originally approved in 2006.

DSHS estimated that the project would cost $60,452,865 in its revised fiscal year 2014 *Business Case Workbook*, which was one of the revised Project Delivery Framework documents. DSHS and HHSC subsequently increased the budget six times, reporting the final budget increase to $77,356,181 in a May 14, 2018, revised *Business Case Workbook*. HHSC reported that all of the budget increases totaling $16,903,316 were a direct result of changes to scope, schedule, and vendor development for the project. HHSC reported that the actual amount expended for the project was $78,764,986 as reported on August 21, 2019, in its *Post-implementation Review of Business Outcomes*.

Project Benefits

According to DSHS, the WIC WIN project had several goals and anticipated outcomes, including the following:

- System tools to support client income eligibility calculations.
- Automated infant and child growth chart plotting and pregnancy weight growth grids.
- Payment processes for food vendors.
- A paperless office environment to the extent possible.

**Project Demonstration**

Auditors attended a demonstration of the TXIN system in a test environment. According to HHSC, most system features and functions were operating as intended and providing the expected benefits listed in the project’s *Business Case*. TXIN has two major components:

- The Management Information System, which contains the client-facing functionalities, including a new client scheduling system to allow for greater convenience and increased client flow.

- Electronic Benefit Transfer (EBT) Solutran Online Account Reporting, which HHSC stated receives and processes WIC payments to food vendors in real time.

Some of the key TXIN functions that HHSC demonstrated included:

- A growth chart function, which eliminated the need for a separate system that HHSC stated it previously used.

- A function that determines income eligibility for WIC based on federal income guidelines.

- An EBT card replacement function that HHSC stated allowed it to reduce the previous six business day wait to replace lost WIC EBT cards to three calendar days.

**Additional Information**

A review of the periodic *Monitoring Reports* that DSHS and HHSC submitted to the QAT showed that they submitted all but 1 of the 18 quarterly *Monitoring Reports* timely since submitting the fiscal year 2014 revised framework documents.

The QAT requires the *Post-Implementation Review of Business Outcomes* report to be submitted six months after a project’s completion date. Therefore, that final report for the WIC WIN project was required to be submitted by February 28, 2019. HHSC submitted that report on August 21, 2019, approximately six months late. That report lists the lessons HHSC learned from the project, including:

- To schedule collaboration activities among vendors to ensure that they have planned and agreed on how to integrate applications.
- To implement methods to monitor vendor reporting of risk and issues, as well as to verify IT vendors’ representations of system development progress.

- To create project schedules with an adequate timeline, especially in the area of testing.

Although TXIN is operational, HHSC reported in August 2019 that the vendor was still addressing outstanding issues related to reporting.

Additionally, the 86th Legislature appropriated $40 million to HHSC for the 2020–2021 biennium for the WIC Mosaic project. HHSC stated that the WIC Mosaic project will add TXIN service delivery functionality such as a Web-based function that will allow WIC clients to complete forms and upload information prior to visiting WIC clinics. HHSC submitted its required Project Delivery Framework documents to the QAT on September 4, 2019. HHSC estimated in its Business Case Workbook that this project will cost $43,506,100.
Chapter 3
The Texas Department of Motor Vehicles’ WebDealer-eTitles Project

According to Texas Department of Motor Vehicles (TxDMV) management, the WebDealer-eTitles project (WebDealer project) met the anticipated objectives and benefits detailed in its Business Case submitted to the Quality Assurance Team (QAT). The project was 43.2 percent under the original budget in its Business Case Workbook. However, the project exceeded its original scheduled end date by 4.2 years, which TxDMV attributed to project scope revisions, such as adding system functions.

Project History / Overview

The purpose of the WebDealer project was to develop an online solution for motor vehicle dealers that allows a vehicle title to be stored and transferred electronically in TxDMV’s Registration and Titling System, which provides real-time access to title and registration data.

According to the project’s Business Case and Project Plan, the previous vehicle title and registration process used by most Texas vehicle dealer locations provided title and registration data to Texas counties manually through printed documents and forms. In addition, while TxDMV’s semi-automated Remote Sticker Printing System/Dealer Title Application could be used to submit a vehicle’s title and registration application, not all vehicle dealers used that system. Those outdated methods for gathering and processing registration and titling data of vehicle sales limited TxDMV’s auditing capabilities, and the disconnected nature of the data processes increased the risks of data loss, discrepancies, and misuse during record transfers to the counties.

TxDMV stated that as a result of this project, it will no longer need to provide dealers with hardware because they will be able to import vehicle data electronically from their own systems. Additionally, the electronic format will reduce the need to physically transport registration and titling data to county tax offices, thereby reducing costs for the state and counties.

Project Status

Table 7 on the next page lists the original and actual completion dates for the WebDealer project.
Table 7

<table>
<thead>
<tr>
<th>Project</th>
<th>Original Scheduled Start Date</th>
<th>Original Scheduled Completion Date</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebDealer-eTitles Project</td>
<td>September 1, 2012</td>
<td>June 30, 2015</td>
<td>August 19, 2019</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and TxDMV.

TxDMV began detailed project planning, including preparing the *Project Plan*, on September 1, 2012. The QAT approved the WebDealer project on November 15, 2012. During the project, TxDMV made six completion date revisions. The actual project completion date was August 19, 2019. The actual project timeline was 7.0 years as compared with the original timeline of 2.8 years. TxDMV stated that the changes in the timeline were due to several factors including:

- Updating the project scope to address the statewide implementation of a single sticker for vehicle registration and inspection.
- Adding system functionality to allow for the importing of electronic data used to create temporary vehicle tags from TxDMV’s eTags application.
- Updating outdated program code because of the extended project duration.
- Making parts of the WebDealer application more functional to increase the amount of users.

**Project Costs**

Table 8 on the next page summarizes both the budgeted and actual expenditures for the WebDealer project. TxDMV used the Department of Information Resources’ *Business Case Workbook* to estimate costs for this project.
Table 8

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Total Expended</th>
<th>Total Expended Compared to Original Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Personnel Expenditures</td>
<td>$4,206,484</td>
<td>$1,657,380</td>
<td>$1,178,083</td>
<td>($3,028,401)</td>
</tr>
<tr>
<td>Contract/Consultant Services Expenditures</td>
<td>$9,828,000</td>
<td>$7,112,916</td>
<td>$6,624,882</td>
<td>($3,203,118)</td>
</tr>
<tr>
<td>Hardware/Software/Other Expenditures</td>
<td>$0</td>
<td>$162,015</td>
<td>$162,015</td>
<td>$162,015</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>$14,034,484</strong></td>
<td><strong>8,932,311</strong></td>
<td><strong>$7,964,980</strong></td>
<td><strong>($6,069,504)</strong></td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and TxDMV.

TxDMV stated that at the conclusion of the WebDealer project, the actual expenditures were $7,964,980, which is 43.2 percent less than the original $14,034,484 budget in the Business Case Workbook.

According to the Project Plan and project Monitoring Reports, TxDMV reduced the project’s budget twice. TxDMV first reduced the budget to $9,693,482 in the Project Plan dated June 20, 2013. TxDMV based this reduction on the more detailed resource assessment it performed in preparing the Project Plan. According to a project Monitoring Report prepared on January 5, 2016, TxDMV reduced the budget again by $761,171 to $8,932,311 after deciding to remove one of the planned project phases (see Additional Information section on the next page for details).

**Project Benefits**

According to TxDMV, the WebDealer-eTitles system improves the accuracy and security of transaction data, reduces the costs associated with paper titles, and improves operational performance. The WebDealer project was expected to streamline the vehicle titling and registration process by providing various benefits, which include:

- Providing the Web-based functionality for motor vehicle dealers to electronically capture all required data needed to title and register vehicles.
- Allowing for real-time verification of title and registration records and electronic transfer of titles.
- Eliminating the need for TxDMV-dedicated hardware and providing functionality for dealers to easily enter vehicle data electronically.

- Enabling some electronic payment from dealers to county tax offices.

**Project Demonstration**

Auditors attended a demonstration of the WebDealer-eTitles system in a test environment. According to TxDMV, the system’s features and functions were operating as intended and providing the expected benefits listed in the project’s Business Case. Some of the key application functions that TxDMV demonstrated included:

- Electronic collection and submission of new and used vehicle title and registration data to county tax offices.

- Facilitation of some registration and titling fee payments by dealerships to county tax offices.

**Additional Information**

During the project, TxDMV revised the scope in its original Business Case to remove a project phase that would have allowed registration and titling for private party vehicle sales. TxDMV reported that the revision was due to multiple factors, including TxDMV’s need for more time to study and develop public readiness. According to TxDMV, the agency may revisit adding the functionality for private party vehicle sales to the system as a future project.

TxDMV had the following observations about the WebDealer project:

- According to TxDMV, the agency collaborated with a major dealership for an initial user pilot of the system. That collaboration allowed TxDMV to obtain feedback on areas such as system functionality and user interface, which the agency used to make system improvements.

- TxDMV asserted that separating the project into smaller projects instead of adding phases would have been more efficient.

A review of the periodic Monitoring Reports that TxDMV submitted to the QAT showed that all 37 Monitoring Reports were submitted timely.

The QAT requires the Post-implementation Review of Business Outcomes report to be submitted six months after a project’s completion date. Therefore, the final report for the WebDealer project is due February 19, 2020.
Chapter 4

The Texas Department of Insurance’s Document Management Project

According to Texas Department of Insurance (TDI) management, the Document Management Project (Project) met its anticipated objectives and benefits detailed in the Business Case that it submitted to the Quality Assurance Team (QAT). TDI reported that implementing a cloud storage solution instead of the originally planned hybrid solution helped reduce costs, allowing TDI to complete the Project for less than 64 percent of the original budget.

Project History / Overview

The purpose of the Project was to replace TDI’s VisiFlow Document Management System (VisiFlow) with a solution that would allow the agency to create automated records and manage documents. TDI management wanted the new system to be a commercially available document management system that can be adapted to satisfy agency needs with integrated modules, such as workflow, collaboration, and automatic document retention.

TDI stated that VisiFlow was installed on outdated and unsupported hardware. According to the Project’s Business Case, no further system enhancements were available. VisiFlow housed more than 2.5 million documents and required a large amount of data. The potential for system failure presented a significant risk for statutory and agency regulation noncompliance, loss of access to documentation, and confidential information security.

Project Status

Table 9 on the next page lists the original and actual completion dates for the Project.

<table>
<thead>
<tr>
<th>Table 9: Project Completion Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original</strong></td>
</tr>
<tr>
<td>End Date: August 31, 2018</td>
</tr>
<tr>
<td>Budget: $4,000,237</td>
</tr>
<tr>
<td><strong>Actual</strong></td>
</tr>
<tr>
<td>End Date: November 12, 2018</td>
</tr>
<tr>
<td>Expenditures: $1,437,714</td>
</tr>
<tr>
<td>Status: 100 percent complete.</td>
</tr>
<tr>
<td>Sources: Information provided by the QAT and TDI.</td>
</tr>
</tbody>
</table>

6 A typical cloud storage arrangement is a model of data storage in which digital data is stored online through a host provider that manages and operates the data storage as a service rather than an entity using its own local servers and hard drives to maintain data.

7 A hybrid solution is a cloud-based solution in conjunction with agency-managed hardware/servers.
### Project Completion Dates

<table>
<thead>
<tr>
<th>Project</th>
<th>Original Scheduled Start Date</th>
<th>Original Scheduled Completion Date</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Management Project</td>
<td>December 2, 2015</td>
<td>August 31, 2018</td>
<td>November 12, 2018</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and TDI.

The QAT approved the Project on December 2, 2015. TDI increased the Project timeline once to 2.9 years as compared with the original timeline of 2.7 years. TDI attributed the Project’s extended timeline to system performance issues, including slowness that was discovered during user acceptance testing.

### Project Costs

Table 10 summarizes both the budgeted and actual expenditures for the Project. TDI used the Department of Information Resources’ *Business Case Workbook* to estimate costs for this Project.

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Total Expended</th>
<th>Total Expended Compared to Original Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Personnel Expenditures</td>
<td>$1,440,253</td>
<td>$779,623</td>
<td>$474,884</td>
<td>($965,369)</td>
</tr>
<tr>
<td>Contract/Consultant Services Expenditures</td>
<td>$890,000</td>
<td>$1,073,830</td>
<td>$673,830</td>
<td>($216,170)</td>
</tr>
<tr>
<td>Hardware/Software/Other Expenditures</td>
<td>$1,306,326</td>
<td>$289,000</td>
<td>$289,000</td>
<td>($1,017,326)</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$363,658</td>
<td>$214,245</td>
<td>$0</td>
<td>($363,658)</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>$4,000,237</strong></td>
<td><strong>$2,356,698</strong></td>
<td><strong>$1,437,714</strong></td>
<td><strong>($2,562,523)</strong></td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and TDI.

At the conclusion of the Project, the actual expenditures were 64.1 percent less than the original budget. In the original *Business Case Workbook* that TDI submitted to the QAT, the Project budget was $4,000,237. TDI reported that the actual amount it expended was $1,437,714 as of November 30, 2018. In March 2017, TDI reported that it reduced the budget by $1,643,538 because it used a cloud-based solution rather than the original hybrid solution, which would have required procuring hardware in addition to cloud storage.
**Project Benefits**

According to TDI, it expected the Project to provide various benefits, which included:

- Automated records management that enhances the integrity of the information that TDI is required to maintain. That system capability decreases the amount of time involved in locating documents, reduces the risk of misfiling documents, and allows for the disposal of documents based on record retention needs.

- Governance in managing agency documents, which includes naming convention requirements, indexing standards, and other associated processes.

- Increased security of confidential information.

- Improved access to documentation.

**Project Demonstration**

Auditors attended a demonstration of the Project. According to TDI, the system’s features and functions were operating as intended and providing the expected benefits listed in the Project’s Business Case. Some of the key application functions that TDI demonstrated included:

- The document indexing process, which allows documents to be assigned a unique identifier.

- The application interfacing with other external sources (applications) such as Microsoft Word, Outlook, and Excel.

- The document search feature, which locates stored documents.

- Record retention settings that met its business requirements.

According to the Project’s vendor, it has implemented a disaster recovery plan that would enable it to recover data in the event of a disaster. The vendor’s systems continually replicate information to its disaster recovery site.

**Additional Information**

TDI submitted all 13 Monitoring Reports to the QAT timely.

The QAT requires the Post-implementation Review of Business Outcomes report to be submitted six months after a project’s completion date, which
would have been May 12, 2019. As of August 31, 2019, TDI had not submitted that report to the QAT.
Texas Workforce Commission (TWC) management reported that it completed the second and final phase of its Enterprise Contracting & Procurement System (ECPS) project. In that second phase, TWC stated that it successfully expanded its Workforce Reporting, Accounting and Procurement System\(^8\) contracting module (WRAPS Contracts) to include functionalities from its legacy contracting system, Contract Administration & Tracking System (CATS). While the project ended 41.8 percent under the original budget, TWC increased the project’s original timeline by two months due to personnel availability.

**Project History / Overview**

The purpose of both ECPS project phases was to consolidate TWC’s two legacy contracting systems into its existing WRAPS Contracts. TWC reported that it successfully modified WRAPS Contracts during its ECPS Phase I project, which enabled TWC to discontinue using the Health and Human Services Commission’s Contract Administration and Tracking System (HCATS).\(^9\) The purpose of this second ECPS Phase was for TWC to migrate contract data in CATS to WRAPS Contracts.

Additionally, TWC management wanted to phase out CATS due to its concerns that this legacy system was hard to maintain, improve, and expand. TWC also identified vulnerabilities with CATS due to the lack of system security patches.

**Project Status**

Table 11 on the next page lists the original and actual completion dates for the ECPS Phase II project.

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\(^8\) WRAPS is TWC’s modified version of the Office of the Comptroller of Public Accounts’ Centralized Accounting and Payroll/Personnel System (CAPPS).

\(^9\) TWC used HCATS to manage contracts that it acquired when several programs from the Department of Assistive and Rehabilitative Services (DARS) were transferred to TWC in September 2016 as a result of Senate Bill 208 (84th Legislature, Regular Session).
The Quality Assurance Team (QAT) approved the ECPS Phase II project on August 30, 2017. Due to the final project completion date being revised to November 30, 2018, the project timeline was 1.2 years as compared with the original timeline of 1.1 years. TWC attributed the project’s extended timeline to higher priority tasks requiring the availability of TWC personnel.

**Project Costs**

Table 12 summarizes both the budgeted and actual expenditures for the ECPS Phase II project. TWC used the Department of Information Resources’ *Business Case Workbook* to estimate costs for this project.

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Original Budget</th>
<th>Revised Budget</th>
<th>Total Expended</th>
<th>Total Expended Compared to Original Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Personnel Expenditures</td>
<td>$1,018,200</td>
<td>$443,451</td>
<td>$321,915</td>
<td>($696,285)</td>
</tr>
<tr>
<td>Contract/Consultant Services Expenditures</td>
<td>$541,147</td>
<td>$730,920</td>
<td>$675,963</td>
<td>$134,816</td>
</tr>
<tr>
<td>Other Expenditures (Hardware/Software and Maintenance)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$155,935</td>
<td>$155,935</td>
<td>$0</td>
<td>($155,935)</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td>$1,715,282</td>
<td>$1,330,306</td>
<td>$997,878</td>
<td>($717,404)</td>
</tr>
</tbody>
</table>

Sources: Information provided by the QAT and TWC.

At the conclusion of the ECPS Phase II project, the actual expenditures were less than the approved budget. TWC initially estimated that the project would cost $1,715,282 in the *Business Case Workbook* that it submitted to the QAT. After additional planning was completed, TWC reduced the project budget to $1,330,306 to more accurately reflect staffing needs. TWC did not
communicate that budget reduction to the QAT, as required by the Project Delivery Framework. TWC reported that the actual amount expended for the project was $997,878 as of project completion on November 30, 2018.

**Project Benefits**

TWC reported that the ECPS Phase II project was expected to provide various benefits, which include the following:

- Replaces multiple outdated and redundant legacy systems, which also reduced the number of systems that users needed to access to perform their tasks.
- Utilizes one system that contains all TWC contracts and related documents, which increases efficiency and visibility.
- Provides for the capability to run detailed and customized reports to analyze and monitor contracts, vendor activities, and vendor payments.
- Generates email notifications and reminders regarding contract status.

**Project Demonstration**

Auditors attended a test environment demonstration of WRAPS, as modified by the ECPS Phase II project. According to TWC, the system’s features and functions were operating successfully and providing the expected benefits listed in the project *Business Case*. Some of the key application functions that were demonstrated included:

- Creation, modification, secure storage and electronic workflow/approval routing of contracts.
- Storage of contract-related documents, such as certificates of issuance and scopes of work, and the ability to link them to existing contracts in the system.
- Updating and uploading contract templates in a variety of common file formats.
- Role-based security, such as restricting system access to authorized users to view, edit, and approve documents.

**Additional Information**

A review of the quarterly periodic Monitoring Reports for the ECPS Phase II Project that TWC submitted to the QAT showed that all six reports were submitted timely.
The QAT requires the *Post-implementation Review of Business Outcomes* report to be submitted six months after a project’s completion date. Therefore, the final report for the Enterprise & Procurement Contracting System Phase II project was due by May 31, 2019. TWC submitted that report on August 31, 2019.
Appendix

Objective, Scope, and Methodology

Objective

The objective of this project was to provide an analysis of information resources projects monitored by the Quality Assurance Team (QAT).

Scope

The scope of this project covered five major information resources projects at five state agencies that the QAT monitored as of August 31, 2019. At that time, a project had to have an estimated development cost exceeding $1 million to be considered a major information resources project under Texas Government Code, Section 2054.003(10). The State Auditor’s Office analyzed those five projects based on input from the QAT. Those five projects were:

- The Department of State Health Services’ (DSHS) Tuberculosis (TB), Human Immunodeficiency Virus (HIV), and Sexually Transmitted Diseases (STD) Integrated Systems Improvement Implementation project (THISIS).
- The Health and Human Services Commission’s Women, Infants, and Children Information Network project (WIC WIN).
- The Texas Department of Motor Vehicles’ WebDealer-eTitles project (WebDealer).
- The Texas Department of Insurance’s Document Management project.
- The Texas Workforce Commission’s Enterprise Contracting & Procurement System Phase II project (ECPS).

Methodology

Auditors used professional judgement, in consultation with the QAT, to select five major information resources projects for further review that were complete or nearing completion.

The agencies self-reported the project information presented in this report to auditors and the QAT. The State Auditor’s Office did not independently verify the accuracy of the information that the agencies reported or perform any data reliability work.
Information collected and reviewed included the following:

- Documentation that the agencies submitted to the QAT for the selected projects, including:
  - Acquisition Plans.
  - Business Cases.
  - Business Case Workbooks.
  - Project Plans.
  - Monitoring Reports.

- New systems’ user manuals.

- Project reviews, including:
  - DSHS’ Lessons Learned presentation on THISIS.
  - Post-implementation Reviews of Business Outcomes for WIC WIN and ECPS.


Procedures and tests conducted included the following:

- Conducted interviews with key personnel involved in the projects.

- Reviewed project-related, self-reported documentation that the agencies submitted to the QAT.

- Observed demonstrations of the completed major information resources systems.

Criteria used included the following:

- Texas Government Code, Chapter 2054.

- Title 1, Texas Administrative Code, Chapter 216.

- The Department of Information Resources’ Texas Project Delivery Framework.

- General Appropriations Act (85th Legislature).

Project Information

Fieldwork was conducted from July 2019 through September 2019. This project was not an audit, and the information in this report was not subjected to all the tests and confirmations that would be performed in an audit. However, the information in this report was subjected to certain quality control procedures to ensure accuracy.

The following members of the State Auditor’s staff performed the project:

- Gregory Scott Adams, MPA, CPA, CFGM (Project Manager)
- Taylor L. Huff, CFE (Assistant Project Manager)
- James Collins
- Ashlie Garcia, MS
- Andy Lee
- Erin Hubener Peloquin, CPA
- Venus Santos
- Daniel Spencer, MSA, CFE
- George D. Eure, CPA (Quality Control Reviewer)
- Becky Beachy, CIA, CGAP (Audit Manager)
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Dr. John Hellerstedt, Commissioner

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Dr. Courtney Phillips, Executive Commissioner

**Texas Department of Insurance**
Mr. Kent Sullivan, Commissioner of Insurance

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