### **QUALITY ASSURANCE TEAM**

### Legislative Budget Board ◆ State Auditor's Office ◆ Department of Information Resources

TO: Lt. Governor Dan Patrick Speaker Joe Straus

Legislative Budget Board Members

Governor Greg Abbott

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**DATE:** December 1, 2016

**SUBJECT:** 2016 Quality Assurance Team Annual Report

The attached report is the Quality Assurance Team Annual Report on monitored major information resources projects at Texas state agencies. Projects are assessed to determine if they are operating on time and within budget and scope. The analysis is provided by the Quality Assurance Team (QAT) pursuant to the Texas Government Code, Section 2054.1183, and the Eighty-fourth Legislature, General Appropriations Act (House Bill 1), 2016–17 Biennium, Article IX, Section 9.02.

The QAT, which includes representatives of the Legislative Budget Board, the State Auditor's Office (advisory member), and the Department of Information Resources, is charged with overseeing major information resource development projects.

An electronic version of the report is available at qat.state.tx.us. If you have any questions, please contact Richard Corbell of the Legislative Budget Board at (512) 463-1200, Michael Clayton of the State Auditor's Office at (512) 936-9500, or Tom Niland of the Department of Information Resources at (512) 475-4700.

Attachments

# Annual Report

OVERVIEW OF MAJOR INFORMATION RESOURCES PROJECTS REPORTED TO THE QUALITY ASSURANCE TEAM

December 2015 to November 2016



Legislative Budget Board

State Auditor's Office

Department of Information Resources

December 1, 2016

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# OVERVIEW OF MAJOR INFORMATION RESOURCES PROJECTS REPORTED TO THE QUALITY ASSURANCE TEAM

The Quality Assurance Team (QAT), which includes representatives from the Legislative Budget Board (LBB), the State Auditor's Office (SAO) (advisory member), and the Department of Information Resources (DIR), identified 34 major information resources projects that are expected to exceed their original planned duration by more than 10 percent. Furthermore, 16 projects have exceeded or are expected to exceed their initial budgets by more than 10 percent. See Appendix A for additional information<sup>1</sup>.

QAT maintains the state's technology project portfolio, which provides a single view of all agency major information resources projects. The term major information resources project is statutorily defined in the Texas Government Code, Title 10, Chapter 2054. From December 2015 to November 2016, the QAT provided process improvement strategies to state entities that manage the projects in the portfolio.

#### **FACTS AND FINDINGS**

- From December 2015 to November 2016, the state's technology project portfolio included 76 major information resources projects totaling \$1.4 billion in estimated costs. Thirty-seven of these projects were approved and were scheduled to begin on or after September 1, 2015.
- ♦ The state's technology project portfolio's total estimated project costs have remained constant since last year's annual report. However, the current portfolio includes 15 fewer projects than those in last year's report.
- Eight projects were canceled since last year's annual report.
- Agencies do not always budget sufficient time for identifying project requirements, completing procurement activities, and conducting user-acceptance testing when establishing project milestones.
- Projects with a shorter development schedule (less than 28 months) are meeting their initial cost and duration estimates at a higher rate relative to projects with longer durations.
- ♦ Some agencies are engaging with independent verification and validation and quality control vendors to verify and assess project results. These additional oversight mechanisms sometimes are required as a condition of federal funding; but sometimes agencies have opted to use these mechanisms to help mitigate project risk.
- ♦ Thirteen projects were reported to be complete or near completion as of November 2016.

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<sup>&</sup>lt;sup>1</sup> Appendix A includes all projects and identifies the initial and current estimated costs and the initial and current estimated durations for these projects.

#### DISCUSSION

Staff from the LBB, SAO, and DIR serve in a joint capacity on the QAT. QAT reviews and monitors state agency major information resources projects; identifies potential major information resources projects from the Biennial Operating Plans of agencies; monitors the status of major information resources projects monthly or quarterly; and provides feedback on agencies' framework deliverables. If the project includes a contract, and the value of that contract changes by more than 10 percent, QAT must approve the contract amendment for it to be valid.

#### **BACKGROUND**

QAT functions pursuant to the Texas Government Code, Chapter 2054, and the Eighty-fourth Legislature, General Appropriations Act, 2016–17 Biennium (House Bill 1), Article IX, Section 9.02. The QAT approves, monitors, and reviews major information resources projects. Since its inception, the QAT has published annual reports that provide the status of these projects.

LBB staff specify procedures for the submission, review, approval, and disapproval of Biennial Operating Plans and amendments, including procedures for review or reconsideration of the LBB's disapproval of a Biennial Operating Plan or its amendments.

SAO staff retain independence while assisting QAT in project reviews. Beginning in fiscal year 2005, SAO delegated voting authority for any QAT-related decisions to approve or disapprove

#### Major Information Resources Projects

Pursuant to the Texas Government Code, Chapter 2054, a major information resources project is:

- any information resources technology project identified in a state agency's Biennial Operating Plan whose development costs exceed \$1.0 million and that:
  - requires one year or longer to reach operations status,
  - involves more than one state agency, or
  - substantially alters the work methods of state agency personnel or the delivery of services to clients; and
- any information resources technology project designated by the Legislature in the General Appropriations Act as a major information resources project.

Chapter 2054 does not apply to institutions of higher education that do not submit a Biennial Operating Plan.

the expenditure of funds to the LBB. That delegation was made to ensure that SAO retains its independence as required by certain auditing standards. The SAO again delegated that authority for fiscal years 2016 and 2017. Therefore, SAO is considered a nonvoting, advisory member of QAT.

DIR's Texas Project Delivery Framework (framework) is required for use during delivery of major information resources projects as defined in the Texas Government Code, Chapter 2054, Information Resources, and for certain major contracts. DIR's framework includes the following phases:

- initiate;
- plan;
- execute;
- monitoring and control; and
- closing.

#### **PROJECT PERFORMANCE OBSERVATIONS**

From December 2015 to November 2016, the state's technology project portfolio included 76 major information resources projects totaling \$1.4 billion. Thirty-seven of these projects were approved and were scheduled to begin after September 1, 2015. The state's technology project portfolio's total estimated costs remained constant since the last annual QAT report. However, the portfolio has 15 fewer technology projects than in November 2015.

Since the 2015 QAT annual report, SAO performed six project reviews involving five agencies on behalf of the QAT. QAT selected the projects for review based on risks. Results of these reviews were published in SAO's report, *A Report on Analysis of Quality Assurance Team Projects* (SAO Report No. 16-026, May 2016).

#### **OBSERVATIONS AND TRENDS**

QAT observations and trends are based on self-reported information as of November 2016. Information reported for projects that are in progress may change as implementation progresses.

Although QAT provides oversight for major information resources projects, agencies are ultimately accountable for the successful delivery of their projects.

The following trends and statistics apply only to the 47 projects that were reported as 30 percent or more complete as of November 2016. Typically, projects that exceeded budget and duration have a likelihood of remaining in that state, but projects within budget tend to remain closer to the initial budget. (See Figure 2.)

#### Observation 1: Duration and Budget of Projects

Projects with a shorter development schedule were more likely to meet both their cost and duration estimates, as indicated by the following:

- 24 of 47 projects (51 percent) have a duration of 27 months or less; only one of these 24 projects (4 percent) exceeded initial cost and duration estimates by more than 10 percent; and
- 23 of 47 projects (49 percent) have a duration of 28 months or more; 11 of these 23 projects exceeded their initial cost and duration estimates by more than 10 percent.

Longer projects with initial estimated costs of more than \$10.0 million were less likely to be implemented within budget and duration, as indicated by the following:

10 of 47 projects had an estimated duration of more than 27 months and expected cost of more than \$10.0 million; seven of these 10 projects (70 percent) exceeded initial cost estimates by an average of 81 percent with a range from 20 percent to 154 percent; duration of these seven projects increased by an average of 56 percent.

#### Observation 2: Timeframe of Procurement Activities

The use of an acquisition plan can help successfully reach procurement-related milestones by establishing a method to plan and manage procurements. Delays in the project timeline can occur because of delays in vendor evaluation and selection. All specifications, software, hardware, training, installation, and maintenance need to be addressed in contract negotiations to minimize delays in finalization of the contract. Some agencies have reported that the average time for completing procurement activities has exceeded initial estimates by four months to five months.

Agencies should consider several key factors when preparing acquisition plans. First, agencies should ensure that an acquisition plan contains sufficient detail regarding the overall structure of a project. Details should include milestone categories, the types of contractual relationship, and procedures for managing the contract from start to finish. Second, standards should be clearly specified for projects from the earliest stages of the planning phase. This specification includes identifying various system components and their operating environments. Next, agencies should pick what kind of contracting vehicle would suit the project best using the following factors:

- whether the solution can be provided by vendors or partners;
- the extent to which the work is well-defined;
- how the project risk will be shared;
- the importance of the task to the schedule; and
- the need for certainty with regards to the project cost.

Finally, the agency should carefully select a vendor that will work best within the established parameters. Agency procurement staff should be consulted to help determine a reasonable timeline for the procurement process, keeping in mind the agency's evaluation process and executive sign-off procedures for major purchases. When evaluating

vendors that bid on contracts, it is important to evaluate their past performance and current financial status. The final vendor selection should be made using the original approved selection criteria, including user feedback.

#### **Observation 3: Canceled Projects**

There were eight projects canceled in the state's technology project portfolio. Five projects were canceled due to a shift in agency priorities, two projects were canceled by contract termination for convenience, and the remaining project was canceled due to the scope being underestimated. These projects may be re-initiated, leveraging the infrastructure already procured or using parts of the system already developed.

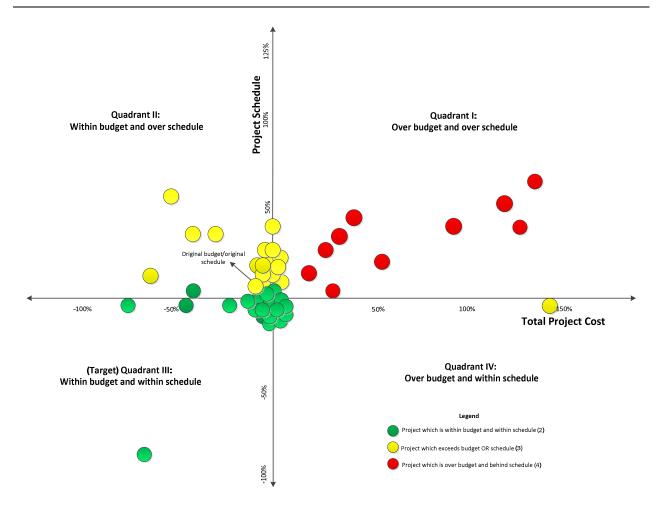
- The Texas Workforce Commission (TWC) canceled six projects. Five of the six projects were canceled by TWC's Business Enterprise Strategic Technology (BEST) team, prior to project initiation, due to the realignment of agency priorities. The Tax Modernization project was canceled due to a number of problems associated with the project, including the poor quality of project deliverables. TWC's canceled projects include the following:
  - o User Interface (UI) Information Technology (IT) Improvement Strategy Tax User Interface;
  - o UI IT Improvement Strategy Update Tax Filing Options;
  - o UI IT Improvement Strategy Streamline Fraud or Nonfraud Determination;
  - o UI IT Improvement Strategy Tax Modernization;
  - o Workforce System Improvements: Improve Job Matching; and
  - o Workforce System Improvements: Common Components Phase 2;
- The Texas State Library Archives Commission (TSLAC) canceled a contract with a vendor in April 2016 through a Contract Termination for Convenience letter effective March 23, 2016. Before the contract cancellation, TSLAC spent approximately \$400,000 on capital costs, and \$300,000 in staff and informational costs. The project was estimated to be 41 percent complete at the time of cancellation and
- The Texas Department of Transportation (TxDOT) canceled its Modernize Portfolio Project Management (MPPM) project shortly after the implementation vendor was hired. The agency determined that the project scope would not meet its needs. TxDOT stopped work and closed the original project. The agency has established a new project (MPPM II) and plans to reprocure a new solution. QAT is reviewing this project.

#### **QAT-MONITORED PROJECTS' STATUS**

Figures 1 and 2 show the status of QAT-monitored projects that were 30 percent complete or more as of November 2015 and November 2016, respectively. Fewer projects are 30 percent complete or more in 2016. Additionally, more projects are exceeding their original estimated costs and durations (18 percent in 2015 compared to 26 percent in 2016). Projects that are less than 30 percent complete are not included in this analysis because these projects may still be in the planning phase. Each circle on the two graphs represents a major information resources project.

**Figure 1** shows the 56 major information resources projects that were reported as 30 percent or more complete as of November 2015. Observations made during project oversight are included.

FIGURE 1
STATUS OF QUALITY ASSURANCE TEAM-MONITORED PROJECTS, AS OF NOVEMBER 2015

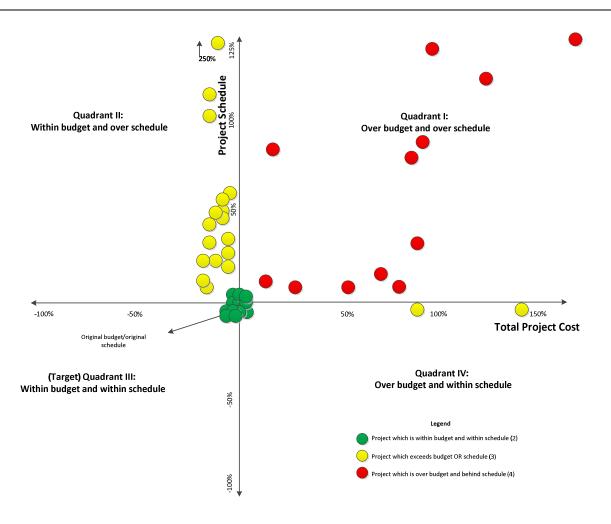


#### NOTES:

- (1) Each circle on the graph represents a project that was at least 30 percent complete.
- (2) 27 of the 56 projects, or 48%, are currently on or under their original estimated cost AND original estimated duration (green circles).
- 3) 19 of the 56 projects, or 34%, are currently exceeding their original estimated cost OR original estimated duration (yellow circles).
- (4) 10 of the 56 projects, or 18%, are currently exceeding their original estimated cost AND original estimated duration (red circles). SOURCE: Agency self-reported monitoring reports.

Figure 2 shows the 47 major information resources projects that were reported as 30 percent or more complete as of November 2016. Observations made during project oversight are included.

FIGURE 2 STATUS OF QUALITY ASSURANCE TEAM-MONITORED PROJECTS AS OF NOVEMBER 2016



#### NOTES:

- Each circle on the graph represents a project that was at least 30 percent complete (47 out of 76 projects). It is assumed that a project within 10% of its budget or schedule is considered successful. See Appendix A for further information on each project.
- 16 of the 47 projects, or 34%, are currently on or under their original estimated cost AND original estimated duration (green circles).
- 19 of the 47 projects, or 40%, are currently exceeding their original estimated cost OR original estimated duration (yellow circles).
- 12 of the 47 projects, or 26%, are currently exceeding their original estimated cost AND original estimated duration (red circles).

SOURCE: Agency self-reported monitoring reports.

The Texas Government Code, Section 2054.151, states that "[t]he legislature intends that state agency information resources and information resources technology projects will be successfully completed on time and within budget and that the projects will function and provide benefits in the manner the agency projected in its plans submitted to the department and in its appropriations requests submitted to the legislature."

The position of each project in Figures 1 and 2 was determined by comparing the current cost and duration estimates of a project to its initial cost and duration estimates. The initial cost and duration estimates were included in the agency's submission of its business case for project approval by the QAT. The placement of the project in the figures represents the percentage difference from the project's current cost and duration estimates to the initial cost and duration estimates.

Figures 1 and 2 do not include other project performance criteria such as product quality, end-user experience, and the extent to which the system or project satisfies the requirements. This type of criteria is available in other documents such as the Post-Implementation Review of Business Outcomes reports.

#### Comparison of 2015 and 2016 Project Performance

For projects reporting 30 percent or more completion as of November 2015, 48 percent were within their original estimated cost and original estimated duration. For projects reporting 30 percent or more completion as of November 2016, 34 percent were within their original estimated cost and original estimated duration. Difference may be attributed to the following reasons:

- agencies' failure to identify necessary timeframes related to procurement activities;
- less time spent on developing initial costs, benefits, and scope;
- projects being managed outside the agency project management office;
- new requirements were added to an existing project;
- larger projects that have increased timelines, scope, and budget; or
- agencies are not performing a thorough assessment of identifying system requirements.

QAT is beginning to monitor more projects with shorter durations. Durations of three years are becoming common for projects, as technology is often obsolete after three years. However, a new large-scale system could have a duration of five or more years.

#### PROJECT HIGHLIGHTS DURING THE 2016-17 BIENNIUM

As previously mentioned, projects lasting less than 28 months were more likely to be successful (i.e., meet their cost and duration estimates). Some examples of successful projects monitored by QAT during fiscal year 2016 include:

- The Texas Ethics Commission (TEC) developed an online webfiling tool for the state's lobby and personal financial state filers to submit statutorily required reports to TEC. The initial estimated project cost was \$4.4 million. The initial planned project start and finish dates were September 2013 and August 2015, respectively. The project was successful overall in terms of both budget and duration. The agency kept change orders to a minimum and added only critical functionality that was not captured in the original statement of work. Substantial testing of the applications caused the project finish date to be extended; however, the project was ultimately only 2 percent over schedule; and
- The Texas Department of Criminal Justice began the Electronic Document Management System (EDMS) project in fiscal year 2013. The initial estimated project cost was \$14.7 million. The initial planned project start and finish dates were August 1, 2013, and August 31, 2015, respectively. The project was successful in terms of budget, but was slightly over schedule due to the agency extending the project to complete the conversion migration of existing images and provide final quality review of digitized paper files. The estimated cost of the project decreased to \$13.5 million due to the approval of change-control requests

A Post-implementation Review of Business Outcomes (PIRBO) describes the expected benefits and outcomes compared to the realized benefits and outcomes of implementing a major information resources project. In that report, the agency also identifies the lessons it learned that can be used to improve agency-level or state level processes.

The agency must submit a PIRBO to QAT within six months after a project has been completed.

A second PIRBO must be submitted two years after project completion.

pertaining to staffing, conversion and migration of mainframe files, software components, and final quality assurance review of imaged paper files.

Large technology projects that require longer than 27 months to complete are complex and often require multiple technologies and components designed and integrated into a tailored solution. Examples of this complexity include the following:

- The Department of Motor Vehicles (DMV) began the Licensing, Administration, Consumer Affairs, and Enforcement Replacement Project in fiscal year 2013. The initial estimated project cost was \$6.7 million. The initial planned project start and finish dates were February 2013 and February 2016, respectively. The project is 95 percent over budget and 38 percent over schedule. The estimated cost of the project increased to \$13.1 million, due to a poorly defined scope related to the costs for services and software licenses. The finish date for the project was extended to February 2017 due to the effort and time needed to develop and complete the procurement activities that involved multiple contracts. The finish date for the project was further extended to March 2017 based upon updated project work schedules developed by the vendor in collaboration with the DMV enterprise project management office; and
- The Teacher Retirement System's (TRS) pension administration system has core applications that are more than 25 years old. TRS began the TRS Enterprise Application Modernization project in fiscal year 2012. The initial estimated project cost was \$96.1 million. The initial planned project start and finish dates were September 2011, and March 2017, respectively. The project is 20 percent over budget and 43 percent over schedule. The estimated cost of the project increased to \$114.9 million, due to the agency underestimating duration and costs. The agency updated benefit calculations and the addition of a contingency when a vendor was acquired. The finish date for the project was extended to August 2018 due to: (1) the Project Improvement Phase being added to the original program scope to prevent high risks from materializing; and (2) approval of change requests relating to the Line of Business project. The finish date for the project was further extended to August 31, 2019. TRS identified additional critical functionality needed and determined that some of this functionality is a result of missed requirements, the need for additional reporting requirements, and rule changes that have arisen during the past two years.

A notable accomplishment this year was QAT's review of a major amendment to the Office of the Attorney General (OAG) TXCSES 2.0 (T2) project.

The project, which began in 2010, experienced severe delays and cost overruns due to vendor performance. These problems resulted in the federal government suspending its portion of funding for the project from November 2015 to March 2016. A requirement for resuming that funding was the adoption of a new governance model and a total revision of the project timeline. These substantive changes to the project came in the form of an amendment.

QAT, in partnership with the LBB Contracts Oversight and Technology Team (COT2), conducted a thorough review of the proposed T2 amendment and identified several major risks.

- poorly defined deliverables;
- payments linked to delivery rather than state acceptance of products;
- reliance on litigation to resolve disagreements among the parties; and
- several violations of provisions contained in the Comptroller of Public Accounts' *State of Texas Contract Management Guide*.

QAT and COT2 determined that the amendment, which rewrote the contract's fundamental terms and conditions, did not sufficiently protect the state. These concerns were conveyed to OAG in June 2016.

OAG used QAT's input to negotiate new amendment terms, and addressed many of the risks identified. The risk posed to the state by the T2 amendment would not have been mitigated without QAT's approval authority. This

authority enabled the revisiting of terms and inclusion of state protections before the amendment could be executed. On August 26, 2016, QAT approved the contract amendment. This approval provided OAG with the mechanism to rebaseline the project and developed a new deployment method.

#### ADDITIONAL QAT OVERSIGHT INITIATIVES

Despite the benefits of QAT's approach to oversight, some limitations still exist. Although QAT can request amendment documents for review, such documents are not routinely provided by agencies. This lack of required review prevents QAT from monitoring the details of amendments, including revisions to terms and conditions that may increase risk.

Furthermore, QAT does not review drafts of contracts before their execution by agencies. QAT recommends enhancing oversight by including reviews of contracts valued at more than \$10.0 million before execution and by requiring Quality Assurance Team approval before such contracts can be executed. Agencies would be required to submit contract and amendment documents to QAT as a part of the review process.

Amendment reviews would be triggered if the amendment changes the project value by 10% or more, if liquidated damages have been assessed, or if the project is being re-procured. For additional assistance, agencies would be required to submit third party reports, including reviews by quality assurance or independent validation and verification vendors, to QAT as a part of the review process.

The SAO recuses itself from making recommendations and participating in additional oversight initiatives related to contracting contained in this report. This is necessary to ensure that the SAO maintains its independence so that future audits of contracts and amendments overseen by QAT can be conducted in accordance with professional auditing standards.

As part of continuous process improvement efforts, QAT and DIR are working on several developments to help agencies improve the delivery of projects. Figure 3 shows these improvements.

#### FIGURE 3

### QUALITY ASSURANCE TEAM AND DEPARTMENT OF INFORMATION RESOURCES FRAMEWORK IMPROVEMENTS, AS OF NOVEMBER 2016

- The Quality Assurance Team (QAT) and the Department of Information Resources (DIR) will emphasize bringing best practices in modern
  information technology project management outreach and training with agencies using a variety of methods: webinars, one-on-one
  training, classroom settings, and electronic delivery of content.
- QAT will coordinate information sharing with the Legislative Budget Board Contracts Oversight and Technology Team.
- QAT may require a project demonstration after project deployment.
- DIR is leading a multiagency, collaborative framework redesign project, which will streamline the Project Delivery Framework templates and make them more user-friendly and adaptive to use for agile development.
- The Texas Administrative Code, Chapter 216, which pertains to project management practices, was revised in fiscal year 2016 to help
  agency project management practitioners perform their jobs more effectively.

SOURCE: Quality Assurance Team.

#### **BEST PRACTICES USED BY AGENCIES**

QAT identified the following best practices by reviewing information in agencies' project framework that may contribute to the success of state agency information systems:

 Data Center Services (DCS) agencies should engage the DCS team before posting a solicitation to determine appropriate solicitation language; provide for better long-term network planning; and seek exemptions if necessary;

- agencies should develop methods for quantifying benefits;
- agencies should allocate adequate time to identify project requirements, prepare for procurement activities with vendors, and perform user acceptance testing;
- agencies should engage an independent verification and validation company for projects over \$10.0 million to help oversee complex projects (agency budgets should be created to accommodate the estimated cost);
- agencies should retain original estimates on scope and defer new requirements and functionality to a new project or phase at a later time;
- agencies should include network performance and capacity planning as part of project scope especially
  when new types of data (e.g. pdf images of customer files) are being sent to field offices as a result of the
  project;
- agencies should consider the use of modular contracting to reduce project risk and to incentivize contractor
  performance while meeting an agency's need for timely access to rapidly changing technology. Modular
  contracting breaks large systems into small, independent modules of work (developed by one or more
  vendors) that can be combined to form a complete system. an agency can remediate problems with
  individual modules or vendors without jeopardizing the success of the entire project; and
- when developing a public website, it is important to involve actual users of the system throughout the
  project; agencies should share results of this information with their leadership when prioritizing features of
  a new system.

QAT identified areas that agencies should improve to ensure a consistent method for project selection, control, and evaluation based on alignment with business goals and objectives. Figure 4 shows these improvements.

### FIGURE 4 METHOD IMPROVEMENTS FOR AGENCIES IDENTIFIED BY QUALITY ASSURANCE TEAM, AS OF NOVEMBER 2016

- Include employee benefit costs as part of full-time-equivalent-(FTE) position costs when reporting project costs in monitoring reports.
- Consider requirements and standards in the Texas Administrative Code, Chapter 213, Electronic and Information Resources (EIR)
   Accessibility, during analysis, design, and testing of software.
- Submit project benefits realization documents on schedule. These documents are often submitted late or are submitted with missing or inadequate information.
- Provide adequate time for project procurement activities.
- Conduct a thorough analysis of resource availability before submitting a project to agency management for approval; failure to adhere
  to this practice can lead to unrealistic expectations.
- Submit monitoring reports for a quarter within four weeks after the end of the quarter. Monitoring reports are often submitted late or with inaccurate or inconsistent information.
- Submit a contract amendment change order when change orders or amendments increase the total contract amount by 10 percent or more.
- Consider the allowable funding in a given biennium when planning a project.

SOURCE: Quality Assurance Team.

#### **CONCLUSION**

Throughout quality assurance review, QAT makes decisions regarding the steps it will execute in response to findings. Agencies retain ultimate responsibility for project management and success. However, QAT may provide recommendations to enhance an agency's ability to satisfy commitments made to state leadership.

QAT may request additional information from agencies to perform a more comprehensive analysis of projects. For example, QAT may request an updated version of a Project Plan from an agency to better understand a project's revised scope. Additionally, QAT may require an agency to submit third-party reports, including independent verification and validation reports, when the project is reviewed. Such reports can serve as crucial sources of insight to evaluate IT project risks.

A critical success factor for projects that are more than 30 percent complete was the original estimated duration and original estimated cost. Projects that last less than 28 months are estimated to meet their cost and/or duration 96 percent of the time, whereas projects lasting more than 27 months are estimated to meet their cost and/or duration only 52 percent of the time.

QAT intends to continue its practice of requesting SAO to perform project reviews. These reviews have provided valuable input to QAT from an independent perspective.

#### APPENDIX A

#### MAJOR INFORMATION RESOURCES PROJECTS REPORTED TO THE QUALITY ASSURANCE TEAM **ORDERED ALPHABETICALLY BY AGENCY**

(Data is self-reported by the agencies. Original budgets do not include operational costs after implementation.)

- Colored circles are identified for projects that are reported as 30 percent or more complete as of November 2016.

  Indicates the project is currently exceeding the original estimated cost AND original estimated duration by more than 10 percent.
- O Indicates the project is currently exceeding the original estimated cost OR original estimated duration by more than 10 percent.
- Indicates the project is currently within 10 percent of the original estimated cost AND original estimated duration.

AGENCY	PROJECT	ORIGINAL BUDGET (IN MILLIONS)	CURRENT BUDGET (IN MILLIONS)	EXPENDITURES TO DATE (IN MILLIONS)	PERCENTAGE COMPLETE	ORIGINAL ESTIMATED DATES	CURRENT ESTIMATED DATES
Commission on State Emergency Communications	State-level Digital 9-1-1 Network (1)	\$14.7	\$50.8	\$0.4	12%	09/15 to 08/17	09/15 to 08/23
Commission on State Emergency Communications	Texas Next Generation 911 Geospatial Database	\$11.3	\$10.0	\$4.0	50%	11/13 to 08/16	11/13 to 08/17
Comptroller of Public Accounts	Centralized Accounting Payroll and Personnel System (CAPPS) Financials — Agency Deployment FY17	\$14.6	\$14.6	\$0.0	0%	09/16 to 10/17	09/16 to 10/17
Comptroller of Public Accounts 🔿	Centralized Accounting Payroll and Personnel System (CAPPS) Human Resources/Payroll — Agency Deployment FY15	\$7.2	\$7.2	\$3.8	100%	09/14 to 08/15	09/14 to 06/16
Comptroller of Public Accounts 🔿	Centralized Accounting Payroll and Personnel System (CAPPS) Human Resources/Payroll — Agency Deployment FY16	\$27.7	\$27.7	\$11.9	76%	09/15 to 08/16	09/15 to 10/16
Comptroller of Public Accounts	Centralized Accounting Payroll and Personnel System (CAPPS) Human Resources/Payroll — Agency Deployment FY17	\$16.2	\$16.2	\$0.0	0%	09/16 to 09/17	09/16 to 09/17
Comptroller of Public Accounts	Centralized Accounting Payroll and Personnel System (CAPPS) Financials — Agency Deployment FY16	\$15.6	\$15.6	\$8.9	99%	09/15 to 09/16	09/15 to 10/16
Comptroller of Public Accounts	Enterprise Content Management System OnPrem Implementation	\$4.0	\$4.0	\$1.0	35%	01/16 to 11/17	01/16 to 11/17
Comptroller of Public Accounts	Unclaimed Property System Replacement	\$5.7	\$3.1	\$0.01	15%	09/15 to 12/17	09/15 to 12/17
Department of Aging and Disability Services	Automate Comprehensive Assessment — Individuals with Intellectual and Developmental Disabilities (IDD) project	\$2.0	\$2.0	\$0.0	5%	03/16 to 08/17	04/16 to 08/17

# MAJOR INFORMATION RESOURCES PROJECTS REPORTED TO THE QUALITY ASSURANCE TEAM ORDERED ALPHABETICALLY BY AGENCY

(Data is self-reported by the agencies. Original budgets do not include operational costs after implementation.)

- Colored circles are identified for projects that are reported as 30 percent or more complete as of November 2016.
- Indicates the project is currently exceeding the original estimated cost AND original estimated duration by more than 10 percent.
   Indicates the project is currently exceeding the original estimated cost OR original estimated duration by more than 10 percent.
- Indicates the project is currently within 10 percent of the original estimated cost AND original estimated duration.

ACENCY	DDO ITCT	ORIGINAL BUDGET	CURRENT BUDGET (IN	EXPENDITURES TO DATE	PERCENTAGE	ORIGINAL ESTIMATED	CURRENT ESTIMATED
AGENCY  Department of Aging and Disability Services	Implement Information Security Improvements and Application Provisioning Enhancements 2	(IN MILLIONS) \$2.6	S2.6	(IN MILLIONS)	COMPLETE 79%	DATES 12/15 to 08/17	DATES 12/15 to 08/17
Department of Aging and Disability Services	Long-term Services and Supports (LTSS) Electronic Interfaces Project	\$1.5	\$1.5	\$0.04	10%	12/15 to 08/17	12/15 to 08/17
Department of Aging and Disability Services	Nursing Facility Specialized Services Tracking System (SSTS)	\$4.6	\$4.6	\$1.7	35%	12/15 to 03/17	12/15 to 03/17
Department of Aging and Disability Services	Protecting People in Regulated Facilities	\$4.6	\$5.5	\$3.9	90%	09/13 to 08/15	12/13 to 12/16
Department of Aging and Disability Services	State Supported Living Center (SSLC) Document Management System (DMS) Project	\$1.9	\$2.1	\$0.007	4%	09/15 to 08/17	09/15 to 08/17
Department of Aging and Disability Services 🔿	State Supported Living Center (SSLC) Electronic Health Record Electronic Life Record Project (EHR/LR)	\$19.2	\$20.0	\$14.1	76%	11/13 to 08/15	11/13 to 08/16
Department of Aging and Disability Services	State Supported Living Center (SSLC) Electronic Scheduling System (ESS) Project	\$1.9	\$1.9	\$0.016	8%	09/15 to 08/17	09/15 to 08/17
Department of Family and Protective Services	Child Care Licensing (CCL) Online Fees and Enforcement Team Conference (ETC)	\$1.1	\$1.1	\$0.0	0%	06/16 to 08/17	06/16 to 08/17
Department of Family and Protective Services	Child Care Licensing Automated Support System (CLASS) Child Care Development Project	\$6.0	\$6.0	\$0.0	0%	06/16 to 08/17	06/16 to 08/17
Department of Family and Protective Services	Child Care Licensing Automation Support System (CLASS) Renewal	\$1.7	\$1.7	\$0.0	0%	06/16 to 08/17	06/16 to 08/17
Department of Family and Protective Services	Child Protective Services Transformation (2)	\$23.1	\$23.1	\$0.0	0%	10/15 to 02/18	10/15 to 02/18
Department of Family and Protective Services	Federal Bureau of Investigation (FBI) National Rap Back (Record of Arrests and Prosecutions Background) project	\$2.3	\$2.3	\$0.0	0%	06/16 to 08/17	06/16 to 08/17

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AGENCY	PROJECT	ORIGINAL BUDGET (IN MILLIONS)	CURRENT BUDGET (IN MILLIONS)	EXPENDITURES TO DATE (IN MILLIONS)	PERCENTAGE COMPLETE	ORIGINAL ESTIMATED DATES	CURRENT ESTIMATED DATES
Department of Family and Protective Services	Information Management Protecting Adults and Children in Texas (IMPACT) System Modernization	\$44.6	\$44.6	\$20.1	45%	09/13 to 02/18	09/13 to 02/18
Department of Family and Protective Services	Preventing Sex Trafficking and Strengthening Families Act (2)	\$6.2	\$6.2	\$0.0	0%	10/15 to 02/18	10/15 to 02/18
Department of Family and Protective Services	Strategies that Help Intervention and Evaluation Leading to Decisions (SHIELD) (3)	\$1.6	\$1.6	\$1.1	100%	09/13 to 03/15	09/13 to 03/15
Department of Motor Vehicles	Application Migration and Server Infrastructure Transformation (AMSIT) Project	\$7.4	\$7.4	\$0.5	42%	01/16 to 08/17	01/16 to 08/17
Department of Motor Vehicles	Licensing, Administration, Consumer Affairs and Enforcement Replacement Project (4)	\$6.7	\$13.1	\$3.1	70%	01/13 to 02/16	02/13 to 03/17
Department of Motor Vehicles 🔾	Registration and Titling System (RTS) Refactoring Project	\$28.2	\$71.6	\$43.4	83%	05/12 to 12/18	05/12 to 12/18
Department of Motor Vehicles 🔾	WebDealer eTitles Project	\$14.0	\$9.0	\$4.9	57%	09/12 to 06/15	09/12 to 04/18
Department of Public Safety 🔿	Automated Fingerprint Identification System (AFIS)	\$4.2	\$4.5	\$4.5	100%	02/13 to 08/15	02/13 to 05/16
Department of Public Safety	Enterprise Case Management	\$3.7	\$8.0	\$4.3	90%	09/13 to 02/15	09/13 to 02/17
Department of Public Safety 🔿	Fingerprint, Portrait, Signature (FPS) Project	\$7.8	\$6.5	\$6.5	100%	10/11 to 12/14	10/11 to 04/16
Department of Public Safety 🔿	Texas Data Exchange (TDex)	\$6.1	\$6.1	\$0.03	40%	09/15 to 08/16	09/15 to 02/17
Department of Public Safety	Texas Law Enforcement Telecommunications System (TLETS)	\$5.6	\$5.6	\$0.04	12%	06/14 to 05/16	06/14 to 05/18
Department of State Health Services 🔾	Clinical Data Exchange for Behavioral Health	\$1.4	\$1.2	\$0.3	100%	09/13 to 02/15	12/13 to 05/16
Department of State Health Services	Clinical Management for Behavioral Health Services (CMBHS) Complete Roadmap project	\$1.9	\$1.9	\$0.5	17%	12/15 to 08/17	12/15 to 08/17

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Department of State Health Services	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) Modifications to CMBHS	\$2.2	\$2.2	\$0.3	16%	12/15 to 08/17	12/15 to 08/17
Department of State Health Services 🔾	Contracts Process Improvement Initiative — eGrants	\$1.9	\$1.3	\$1.1	100%	09/14 to 03/16	09/14 to 08/16
Department of State Health Services	Department of State Health Services Application Remediation for Data Center Consolidation (DCC)	\$0.7	\$0.7	\$0.2	70%	12/15 to 08/16	12/15 to 11/16
Department of State Health Services	ImmTrac (Immunization Tracking Registry) Replacement Project	\$4.3	\$7.9	\$4.9	84%	06/12 to 03/15	06/12 to 05/17
Department of State Health Services	Linking Data for Health Information Quality	\$2.1	\$2.1	\$0.5	52%	10/15 to 09/17	10/15 to 09/17
Department of State Health Services	Mental Health CMBHS Youth Empowerment Services (YES) Waiver Batch / Home and Community Based Services— Adult Mental Health (HCBS— AMH)	\$1.8	\$1.8	\$0.0	0%	07/16 to 03/18	07/16 to 03/18
Department of State Health Services	Mental Health Integration Project	\$7.0	\$7.0	\$1.2	33%	10/15 to 08/17	10/15 to 08/17
Department of State Health Services	Purchased Health Services Unit (PHSU) and the U.S. Social Security Act, Title V, Maternal Child Health (MCH) Fee-for-Service Consolidated System Implementation	\$3.7	\$8.7	\$8.2	100%	06/12 to 08/14	06/12 to 08/16
Department of State Health Services	Tuberculosis, HIV, and STD Integrated Systems Improvement Implementation	\$5.0	\$6.2	\$2.7	52%	02/14 to 06/16	02/14 to 12/17
Department of State Health Services	Texas Electronic Vital Events Registrar Implementation Project	\$16.6	\$16.6	\$2.7	25%	09/15 to 07/18	09/15 to 07/18
Department of State Health Services	Women Infants and Children (WIC), WIC Information Network (WIN)	\$24.9	\$62.1	\$44.2	64%	07/06 to 06/10	07/06 to 04/18

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	DDA 1145	ORIGINAL BUDGET	CURRENT BUDGET (IN	EXPENDITURES TO DATE	PERCENTAGE	ORIGINAL ESTIMATED	CURRENT ESTIMATED
AGENCY	PROJECT	(IN MILLIONS)	MILLIONS)	(IN MILLIONS)	COMPLETE	DATES	DATES
Health and Human Services Commission	Centralized Accounting Payroll and Personnel System (CAPPS) Migration	\$28.3	\$10.8	\$8.4	100%	03/14 to 01/16	05/14 to 05/16
Health and Human Services Commission	Cybersecurity Advancement	\$7.0	\$7.4	\$0.1	33%	11/15 to 09/17	11/15 to 09/17
Health and Human Services Commission	Enterprise Data Warehouse (EDW) and Enterprise Data Government (5)	\$100.0	\$129.9	\$40.0	10%	04/08 to 04/17	04/08 to 01/22
Health and Human Services Commission	Health and Human Services Administrative System for Financials (HHSAS) to CAPPS Financials Upgrade and Enhancement Project	\$14.2	\$12.6	\$1.6	38%	09/15 to 10/17	09/15 to 10/17
Health and Human Services Commission	International Classification of Diseases, Tenth Revision (ICD-10), Implementation (3)	\$30.4	\$37.0	\$27.5	100%	05/13 to 08/15	05/13 to 03/16
Office of Attorney General	Crime Victims' Compensation (CVC) Web Portal Project	\$3.7	\$3.7	\$0.0	0%	06/16 to 03/18	06/16 to 03/18
Office of Attorney General	Texas Child Support Enforcement System (TXCSES) Initiative (6)	\$223.6	\$419.6	\$241.4	64%	09/08 to 12/17	09/08 to 12/18
Secretary of State 🔘	Texas Election Administration Management System Replacement Project	\$6.1	\$6.1	\$6.1	100%	02/14 to 06/15	08/14 to 07/16
State Office of Administrative Hearings	Integrated Case Management, Case Filing, and Timekeeping System (7)	\$2.1	\$2.1	\$0.0	0%	01/16 to 09/18	01/16 to 09/18
Teacher Retirement System	TRS Enterprise Application Modernization	\$96.1	\$114.9	\$77.0	65%	09/11 to 03/17	09/11 to 08/19
Texas Department of Agriculture	Menu Analysis and Planning System Project	\$2.5	\$2.5	\$1.7	97%	09/14 to 09/16	09/14 to 09/16
Texas Department of Criminal Justice 🔵	Enterprise Case Management (ECM) — Electronic Document Management System (3)	\$14.7	\$13.5	\$13.5	100%	08/13 to 08/15	08/13 to 02/16
Texas Department of Insurance	Document Management System	\$4.0	\$4.0	\$0.06	2.4%	12/15 to 08/18	12/15 to 08/18
Texas Department of Transportation 🔾	Bridge Inspection System	\$2.3	\$2.0	\$0.8	75%	06/15 to 11/16	07/15 to 04/17

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Texas Department of Transportation	Enterprise Content Management (8)	\$18.2	\$13.0	\$0.0	0%	12/15 to 08/18	6/16 to 11/17
Texas Department of Transportation •	Highway Performance Monitoring System (HPMS) Conversion to Geographic Information System (GIS)	\$6.2	\$5.1	\$4.7	98%	10/10 to 08/12	08/10 to 07/16
Texas Department of Transportation	Modernize Project and Portfolio Management (MPPM) (9)	\$46.9	\$49.0	\$5.0	20%	07/15 to 08/17	07/15 to 08/17
Texas Department of Transportation	Pavement Analyst Project	\$2.7	\$5.0	\$4.2	97%	08/14 to 03/16	09/14 to 09/16
Texas Department of Transportation	Texas Environmental Compliance Oversight System (TxECOS) Enhancement II	\$3.8	\$4.1	\$0.6	29%	02/15 to 08/17	02/15 to 07/18
Texas Department of Transportation 🔷	TxTag Customer Service Center Back Office System Project	\$8.7	\$8.9	\$8.1	99%	01/09 to 06/12	01/09 to 10/16
Texas Ethics Commission	Electronic Filing Software Project (3)	\$4.4	\$4.5	\$4.5	100%	09/13 to 08/15	09/13 to 09/15
Texas Parks and Wildlife Department	New Managed Land Deer Program Application	\$1.0	\$1.0	\$0.05	0%	09/15 to 08/17	09/15 to 08/17
Texas State Library and Archives Commission	Talking Book Project (10)	\$2.5	\$2.2	\$0.7	41%	07/14 to 8/16	08/14 to 08/16
Texas Workforce Commission	Enterprise Contracting System Phase I	\$2.2	\$2.2	\$0.0	0%	09/16 to 09/17	09/16 to 09/17
Texas Workforce Commission	System Integration for Department of Assistive and Rehabilitative Services (DARS) Transition to Texas Workforce Commission (TWC)	\$5.0	\$5.0	\$2.0	95%	10/15 to 10/16	10/15 to 10/16
Texas Workforce Commission	Treasury Offset Program Benefits (TOP) Project	\$1.8	\$1.8	\$0.0	0%	03/15 to 03/17	03/15 to 03/17

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AGENCY	PROJECT	ORIGINAL BUDGET (IN MILLIONS)	CURRENT BUDGET (IN MILLIONS)	EXPENDITURES TO DATE (IN MILLIONS)	PERCENTAGE COMPLETE	ORIGINAL ESTIMATED DATES	CURRENT ESTIMATED DATES
Texas Workforce Commission 🔾	User Interface (UI) IT Improvement Strategy — Benefits Electronic Correspondence — Claimant View 1.0	\$1.2	\$1.2	\$0.9	100%	03/13 to 04/14	11/14 to 06/16
Texas Workforce Commission	UI IT Improvement Strategy  — Tax Modernization	\$9.1	\$12.8	\$8.4	73%	09/11 to 02/14	11/12 to 04/17
Texas Workforce Commission 🔿	UI IT Improvement Strategy — Tax Electronic Correspondence	\$1.5	\$1.6	\$0.8	47%	10/13 to 06/15	01/14 to 04/17

#### Total Current Project Costs

#### NOTES:

(1) In August 2016, CSEC communicated to QAT that Phase 2 was vastly under estimated regarding the scope. The agency altered Phase 2 to stay within the budget and duration and modified the scope to stay within the FY2016-17 budget. The modification to Phase 2 has re-purposed the plan for Phase 3 (ESInet Project), and will commence when phase 2 is complete.

\$1,400

- (2) The scope of this project is contained within the "Online IMPACT Modernization Phase 2" RFP No. 530-16-0006, responses to the solicitation have been received and DFPS is currently evaluating the responses.
- (3) The agency has not submitted the Post-implementation Review of Business Outcomes report.
- (4) The agency executed a Contract Amendment with their current vendor in August 2016 that met the 10% increase threshold. However, DMV did not notify QAT before the execution date. QAT is currently in discussions with the agency.
- (5) On September 5, 2014, HHSC announced the cancellation of EDW procurement 529-13-0018. The EDW portion was canceled by the agency and QAT will continue to monitor the EDG portion. The agency has not re-submitted the required Framework for the EDG project.
- (6) On August 26, 2016, QAT approved T2 contract Amendment No. 1. This approval combined both releases into one effort to complete the development of the system. The new deployment date for the system is estimated to be December 2018.
- (7) The agency placed the project on hold in June 2016 due to staff changes and workload issues. SOAH recently hired a manager to oversee the project and to help prepare a Request for Proposal. The agency plans to begin the project before the end of FY 2017.
- (8) QAT identified estimated costs at \$18.2 million and a 36-month duration. The agency is reporting only costs and duration for 24 months. QAT is working with the agency to correct their reporting methodology.
- (9) TxDOT disengaged their vendor and plan to post a new solicitation to cover the increased scope, schedule, and budget. TxDOT will leverage deliverables moving forward. The agency prepared a draft RFP for review by the Contract Advisory Team.
- (10) On April 1, 2016, TSLAC issued a Contract Termination for Convenience letter to the vendor effective March 23, 2016.
- (11) Current budget and schedule, expenditures, and percentage complete is derived from submission of latest agency monitoring report or other agency communication.

SOURCE: Quality Assurance Team, from original costs and schedule derived from agency business case submission at time of project approval.

#### **CONTACT**

An electronic version of the report is available at qat.state.tx.us. If you have any questions, please contact Richard Corbell of the Legislative Budget Board at (512) 463-1200, Michael Clayton of the State Auditor's Office at (512) 936-9500, or Tom Niland of the Department of Information Resources at (512) 475-4700.