Annual Report

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

December 2019 to November 2020



Quality Assurance Team

Comptroller of Public Accounts

Department of Information Resources

Legislative Budget Board

State Auditor's Office (Advisory)

December 1, 2020



QUALITY ASSURANCE TEAM

- ♦ Comptroller of Public Accounts ♦ Department of Information Resources ♦
 - Legislative Budget Board ◆ State Auditor's Office (Advisory) ◆

TO: Governor Greg Abbott

Lt. Governor Dan Patrick Speaker Dennis Bonnen

State Senator Kelly HancockState Representative Dustin BurrowsState Senator Joan HuffmanState Representative Giovanni CapriglioneState Senator Jane NelsonState Representative Mary GonzálezState Senator Larry TaylorState Representative Oscar Longoria

FROM: Glenn Hegar, Texas Comptroller of Public Accounts

Amanda Crawford, Executive Director, Department of Information Resources

Jerry McGinty, Director, Legislative Budget Board

DATE: December 1, 2020

SUBJECT: 2020 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.

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

An electronic version of this report is available at qat.dir.texas.gov. If you have any questions, please contact Robert Wood of the Comptroller of Public Accounts at (512) 463-3973, Tom Niland of the Department of Information Resources at (512) 463-8826, Richard Corbell of the Legislative Budget Board at (512) 463-1200, or Michael Clayton of the State Auditor's Office at (512) 936-9500.

Attachments

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

The Quality Assurance Team (QAT) includes representatives from the Comptroller of Public Accounts (CPA), the Texas Department of Information Resources (DIR), the Legislative Budget Board (LBB), and the State Auditor's Office (SAO) (advisory member). QAT oversees the state's major technology project portfolio, which is a single view of all agency major information resources projects. The team monitored 49 major information resources projects during the reporting period from December 2019 to November 2020. Of these projects, 14 are expected to exceed their original planned duration by more than 10.0 percent. Six of these fourteen also are expected to exceed their initial budgets by more than 10.0 percent. See Appendix A for additional information. ¹

A major information resources project is statutorily defined in the Texas Government Code, Title 10, Chapter 2054. These projects typically include information technology projects that meet a certain dollar threshold and require a year or longer to reach operational status.

From December 2019 to November 2020, QAT provided process improvement strategies to state entities that manage the projects in the portfolio. These strategies included agency consultations, trainings, and dissemination of best practices.

FACTS AND FINDINGS

- ♦ From December 2019 to November 2020, the state's major technology project portfolio included 49 projects with an estimated total cost of \$1.267 billion. The number of projects in the portfolio has decreased from 73, and their total estimated costs have decreased from \$1.43 billion since the 2019 annual report
- One project has been closed out since the December 2019 annual report due to cancellation of the vendor contract; the agency finalized the project with agency resources. The agency is assessing the remaining scope and may launch a new project during fiscal year 2021.
- ◆ Two projects were descoped or canceled because of changing agency priorities due to the COVID-19 pandemic and no longer are major information resources projects.
- Three additional projects were reclassified as no longer being major information resources projects; therefore, these projects are not monitored by the QAT.
- Of the 49 projects, 31 are currently within 10.0 percent of both original planned duration and planned costs.
- When establishing project milestones, some agencies are not allocating enough time to identify project requirements, complete procurement activities, submit contract reviews for QAT review and comment, and conduct user-acceptance testing.
- Projects that have a development schedule of less than 28 months are meeting their initial cost and duration estimates at a higher rate relative to projects with longer durations.
- ◆ As of November 2020, 10 projects were reported to be complete or near completion. Five of the ten projects (50.0 percent) were within 10.0 percent of original budget and duration.

¹ 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 CPA, DIR, LBB, and SAO 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 agencies' Biennial Operating Plans; monitors the status of major information resources projects; and provides feedback regarding agencies' framework deliverables. Agencies issuing contracts for major information resources projects with an expected value of greater than \$10.0 million also must obtain QAT review of the contract before execution.

BACKGROUND

QAT functions pursuant to the Texas Government Code, Chapter 2054, and the Eighty-sixth Legislature, General Appropriations Act (GAA), 2020–21 Biennium, Article IX, Sections 9.01 and 9.02. QAT reviews and monitors information resources projects. QAT also reviews and provides recommendations regarding certain contracts and contract amendments related to those projects. Since its inception, the team has published annual reports that provide the status of these projects.

Each member agency of the team provides staff with expertise in system development, budgeting, and contracting.

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 \$5.0 million and that:
 - requires one year or longer to reach operations status,
 - o 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 Biennial Operating Plans.

DIR's Texas Project Delivery 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:

- initiation;
- planning;
- execution;
- monitoring and control; and
- closing.

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.

CPA staff review contracts, contract amendments, and related solicitation documents. CPA staff also provide input on project framework deliverables.

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

Part of this work includes QAT requests for additional information from agencies to facilitate more comprehensive project analyses. 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 information technology (IT) project risks.

Finally, QAT may request SAO to perform project reviews. These reviews have provided valuable input to QAT from an independent perspective.

PROJECT PERFORMANCE OBSERVATIONS

From December 2019 to November 2020, the state's technology project portfolio included 49 projects totaling \$1.267 billion. Twenty-eight of these projects were approved and scheduled to begin on or after September 1, 2019. The remaining 21 projects are in various development stages or were completed during the past year.

There were no project reviews performed by the SAO this year.

OBSERVATIONS AND TRENDS

QAT observations and trends are based on self-reported information as of November 2020. Information reported for projects that are ongoing may change as their implementation progresses.

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

The following trends and statistics apply to 31 projects that were at least 30.0 percent complete as of November 2020. Typically, projects that exceed planned durations also are more likely to exceed their budgets, whereas projects within schedule tend to remain closer to the initial budgets. (See Figure 2.)

Observation 1: Duration and Budget of Projects

Projects that have a shorter development schedule were more likely to meet both their estimated current cost and duration projections, as indicated by the following examples:

- 18 of 31 projects (58.0 percent) had an initial duration of 27 months or less; none of these 14 projects exceeded both their initial cost and duration estimates by more than 10.0 percent; and
- 13 of 31 projects (42.0 percent) had an initial duration of 28 months or more; six of these 13 projects (46.2 percent) exceeded their initial cost and duration estimates by more than 10.0 percent.

Longer projects that have initial estimated costs of more than \$10.0 million were less likely to be implemented within budget and duration. Eleven of the 31 projects (35.5 percent) have an initial duration of 28 months or more and are expected to cost more than \$10.0 million; four of these projects exceeded initial cost estimates by an average of 43.0 percent with a range from 31.0 percent to 74.0 percent.

Observation 2: Timeframe and Procurement Method

A sound acquisition plan should outline the procurement strategy for managing the acquisition in accordance with statutory and regulatory requirements and in support of the program's needs. The procurement strategy should be guided by a realistic procurement timeframe that considers the complexity and dynamism of the procurement.

Setting a realistic timeframe can be a challenge, especially considering the unpredictability of contract negotiations; however, through relevant market research and key input from stakeholders and the vendor community, the project team may be well-informed to set reasonable timing expectations and avoid or minimize project schedule overrun. Project schedule overrun is not uncommon for large projects. QAT has observed that agencies that have large procurements often are delayed by several months during the acquisition phase.

Agencies may respond to pressure to meet rigid timeframes and minimize delays in executing contracts by attempting to scope all requirements and contingencies prior to contract award. However, strict adherence to pre-established requirements post-award may be difficult to achieve given inevitable changes in leadership, legislative and other

policy constraints, or emerging technologies.² As a result, QAT has observed more agencies exploring the use of agile methodology; 12 agency projects indicate using an agile methodology, which enables more flexibility in scoping a project. See the Best Practices to Be Considered by Agencies section for further discussion regarding agile procurement.

Agencies should prepare a request for proposal (RFP) consistent with state law and the *State of Texas Procurement* and *Contract Management Guide*. Typically, an RFP is recommended when factors other than price are to be considered or when objective criteria cannot be defined. Agency procurement staff should be consulted to help determine a reasonable timeline for the solicitation and should consider the agency's evaluation process and executive signoff procedures for major purchases. For contracts that are expected to exceed \$10.0 million in value, agencies are encouraged to notify QAT early in the process to prevent unnecessary delay in the final contract review. 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 end-user feedback.

Data Center Services (DCS) agencies should engage the DCS team for assistance before posting a solicitation. The team will aid in developing appropriate solicitation language to offer a solution option that is hosted in a State Data Center; provide for better long-term network planning; and consult on DCS exemptions from the State Data Center if necessary.

Observation 3: Closed Out Projects Not Completed

Overall, six projects closed before completing their initial intended scope due to various circumstances.

Teacher Retirement System of Texas (TRS). Effective January 2020, after significant issues with system performance during an extended period and in consultation with the Office of the Attorney General, TRS terminated the contract with the TRS Enterprise Application Modernization (TEAM) program vendor. With the termination of the contract, TRS has closed out the original project and begun assessing options to complete the remaining TEAM Program scope with agency staff using agile methodology. According to the most recent Sunset Advisory Commission report, TRS contracted for 79 additional staff to assist with the completion of the project. TRS continues to update the QAT and will provide a conclusion report as part of the project framework detailing the agency's plan to move forward.

The current estimated project cost is \$138.7 million, which is an increase of \$42.6 million across the life of the project. The project is expected to be completed by August 2024. TRS is dividing the final program into three project groups, Health, Pension Group I, and Pension Group II. The initial structure will help better track the status of the overall program. According to the agency, no further costs will exceed \$138.7 million.

Health and Human Services Commission (HHSC). Effective February 2020, the HHSC Medicaid Management Information Systems (MMIS) Modernization – Claims Processing System project changed strategic direction from developing a project to acquiring a managed service. The new effort no longer is considered a major information resources project and is not monitored by QAT.

Texas Department of Transportation. Effective January 2020, the I2MS Replacement (Material Analysis Testing System) project efforts were canceled while the agency determines a strategy to complete the remaining scope. QAT no longer monitors this project because it no longer meets the \$5.0 million threshold for major information resources projects.

Comptroller of Public Accounts. Effective August 2020, the Geographic Information System Software Solution project costs have been reduced significantly as a result of transferring development responsibilities to internal CPA

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² U.S. General Services Administration, Technology Transformation Services, 18F office, Modular Procurement online guide, 2017. Retrieved from https://github.com/18F/Modular-Contracting-And-Agile-Development/blob/master/_strategies/modular-procurement.md

staff with less reliance on the vendor. Reduction in costs place the project at less than the \$5.0 million threshold, and the project no longer is monitored by QAT.

Projects Related to COVID-19. Two projects were descoped or canceled because of changing agency priorities due to the COVID-19 pandemic and no longer are major information resources projects. HHSC's Inventory Tracking Electronic Asset Management (ITEAMS) Replacement project descoped immunization components and transferred them to another agency project, ImmTrac2, to prepare for a more rapid COVID-19 vaccine delivery. The resulting budget is less than the \$5.0 million threshold for QAT monitoring. The Texas Department of Criminal Justice's Corrections Information Technology System project was canceled as result of changing agency priorities during the COVID-19 pandemic.

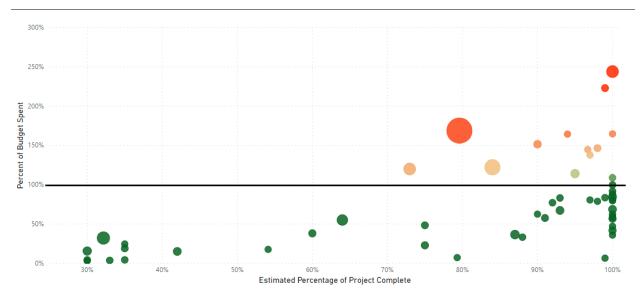
QAT-MONITORED PROJECTS' STATUS

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."

Figures 1 and 2 show the status of QAT-monitored projects that were at least 30.0 percent complete as of November 2019 and November 2020, respectively. Each circle on the two graphs represents a project. Projects that are less than 30.0 percent complete are not included in this analysis because these projects may be in the planning or procurement phases.

Figure 1 on the next page shows the 53 projects that were reported as at least 30.0 percent complete as of November 2019.

FIGURE 1
PERCENTAGE OF PROJECT COMPLETE VS. PERCENTAGE OF BUDGET SPENT ON QUALITY ASSURANCE TEAMMONITORED PROJECTS, AS OF NOVEMBER 2019



NOTES:

- (1) Each circle on the graph represents a project that was at least 30 percent complete (53 of 73 projects). It is assumed that a project within 10 percent of its budget or schedule is considered successful; results greater than 10 percent will change the dots' color. See Appendix A for further information on each project.
- (2) The size of each circle represents the current estimated project budget, and the largest circles represent projects with the largest budgets.

 ${\tt SOURCES: Agency self-reported monitoring reports.}$

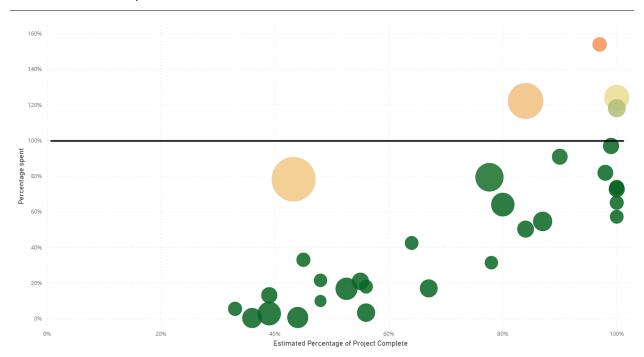
Figure 2 shows the 31 projects that were reported as at least 30.0 percent complete as of November 2020.

POST-IMPLEMENTATION REVIEW OF BUSINESS OUTCOMES

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.

FIGURE 2
PERCENTAGE OF PROJECT COMPLETE COMPARED TO PERCENTAGE OF BUDGET SPENT IN QUALITY ASSURANCE TEAMMONITORED PROJECTS, AS OF NOVEMBER 2020



NOTES:

- (3) Each circle on the graph represents a project that was at least 30.0 percent complete (31 of 49 projects). It is assumed that a project within 10.0 percent of its budget or schedule is considered successful; results greater than 10.0 percent will change the dots' color. See Appendix A for further information on each project.
- (4) The size of each circle represents the current estimated project budget, and the largest circles represent projects with the largest budgets.

SOURCES: Agency self-reported monitoring reports.

The position of each project shown in Figures 1 and 2 is determined by comparing each project's current cost and duration 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 QAT.

COMPARISON OF 2019 AND 2020 PROJECT PERFORMANCE

For projects reporting at least 30.0 percent completion as of November 2019, 43.0 percent were within their original estimated costs and durations, and 18.0 percent exceeded both cost and duration. For projects reporting at least 30.0 percent completion as of November 2020, 61.0 percent are within their original estimated costs and durations, and 12.0 percent exceeded both cost and duration. This consistency may be attributed to the agencies' following actions:

- utilizing agile methodology in their management of new projects;
- allocating more time to developing initial costs, benefits, quality, and scope;
- managing projects in parallel with the agency project management office;
- completing original scope before incorporating new requirements on existing projects;
- thoroughly identifying system requirements; and
- dividing large-scale, system replacement projects into multiple, smaller-scale projects.

Projects with durations of three years or less are becoming common, as information technology often becomes obsolete after that period. Despite this trend for shorter durations, some large-scale systems could have a development duration of five years or more. QAT has observed that these large-scale projects are the most likely to exceed budget or become behind schedule.

PROJECT HIGHLIGHTS DURING THE 2020-21 BIENNIUM

In promoting best practices for agencies, DIR partnered with the U.S. General Services Administration, Technology Transformation Services, 18F office, (18F) to produce a workshop in collaboration with the QAT and the Office of Attorney General (OAG) introducing de-risking strategies for the agency's new IT System Modernization project. The OAG participants included executive management; management and staff from information technology, finance, and contracting divisions; and project team members. The 18F team highlighted de-risking strategies such as incorporating the core tenets of user-centered design, agile software development, product ownership, modular contracting, and measuring success based on iterative outcomes. Overall, the workshop proved successful as the OAG incorporated several aspects into its project. DIR plans to produce the workshop for additional agencies during fiscal year 2021.

As previously mentioned, projects lasting less than 28 months were more likely to be successful (i.e., meet their cost and duration estimates). QAT monitored multiple successful projects during fiscal year 2020, including the following projects:

The Comptroller of Public Accounts (CPA) Web Applications Modernization and Optimization (WAMO)
 Project is intended to simplify the architecture of certain online CPA systems by streamlining and reducing
 overhead support of the environment. The WAMO Project is expected to be implemented across several
 years. The WebFile System will be the first legacy system to be updated as part of the WAMO Project.

Due to the number of taxes, the Updated Web-Based Tax Filing System will be implemented in phases. Phase 1 includes the following functions: (1) User Authorization/Security Portal, (2) Payment Portal, (3) Help Desk (Customer Service) Portal, and (4) Sales Tax Portal. CPA began the WAMO Project during fiscal year 2018. The initial estimated project cost was \$17,353,218. The initial planned project start and finish dates were December 21, 2017, and January 31, 2021, respectively. CPA had an initial estimate of 37 months; by monitoring the project closely, the agency reduced the timeframe to 24 months.

Texas Alcoholic Beverage Commission's (TABC) Licensing and Tax Collection Technology Replacement
Project is in progress and is estimated to be completed within 23 months. The inability for current systems
to communicate with one another limits the agency's ability to leverage data for reporting. The project
would address this issue by replacing paper-based systems and seven manual processes.

The system is intended to use cloud storage as a means of making data more usable to increase the agency's ability to manage and protect information contained in a centralized database. TABC will utilize a hybrid approach using both waterfall and agile methodologies that are commonly applied to development projects. The main difference between agile and waterfall is that waterfall projects are completed sequentially whereas agile projects are completed in smaller more defined cycles of development. The project is within current estimated budget and duration.

ADDITIONAL QAT OVERSIGHT INITIATIVES

Contract Oversight

Pursuant to the 2020–21 GAA, Article IX, Section 9.01, and the Texas Government Code, Section 2054.160, any contract for the development of major information resources projects with an expected value of greater than \$10.0 million must be reviewed by QAT before it can be executed by an agency. QAT will review the contract to check that it follows the best practices established in the *State of Texas Procurement and Contract Management Guide* (TPCMG) and all applicable rules and regulations. QAT may provide recommendations regarding reviewed contracts and reserves the right to waive the contract review requirement within certain circumstances. The CPA's Statewide Procurement Division (SPD) published the TPCMG, Version 1.2, in September 2019. The guide combined the objectives of the previously published *Texas Procurement Manual* and the *Texas Contract Management Guide* and updated best practices and laws in state contracting. TPCMG provides state agencies with guidance regarding the full procurement cycle, and QAT conducts contract reviews based on adherence to the practices within the guide.

Agencies must submit a justification for amendments that increase a contract's value by at least 10.0 percent to the QAT. Agencies must notify QAT when they advertise a request for proposal, request for bid, or other similar process common to the competitive bidding processes for a major information resources project. Additionally, agencies must notify QAT within 10 business days of awarding a contract for a major information resources project valued at \$10.0 million or greater for QAT review.

QAT also has fostered increased collaboration among oversight agencies, enabling DIR, CPA, LBB, and SAO to partner on training initiatives through CPA's mandatory procurement training and continuing education programs. QAT also has provided improved insight into statewide contracting issues, informing the focus of SPD's continuing education offerings. The Procurement Oversight and Delegation team within SPD, which administers the Contract Advisory Team (CAT), has collaborated with QAT to provide additional oversight of state agencies' adherence to contracting requirements. The increased communication and partnership has enabled better overall oversight.

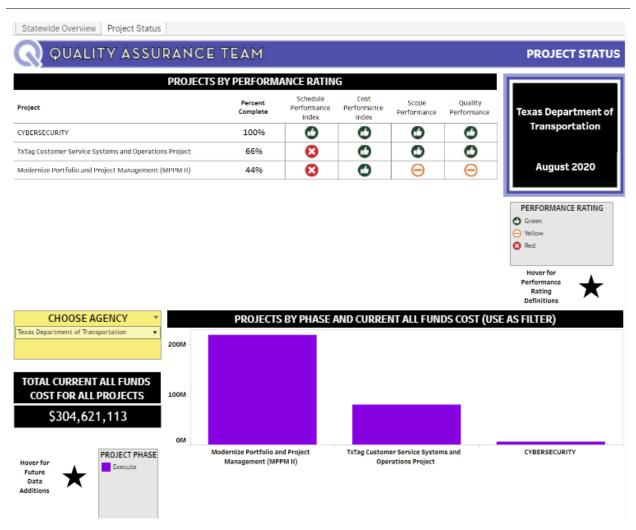
QAT also collaborates with agencies to provide feedback regarding contracts that are not subject to formal approval. For example, QAT continues to collaborate with DIR on its Next Generation DCS procurement. Because this project is not for system development, QAT will not review and approve the contract formally. As required by statute, the solicitation will be reviewed by CAT, and QAT will coordinate with CAT to remain informed regarding the planned DCS procurements. Considering the complexity and the number of agencies affected by DCS services, QAT also may request that DIR periodically provides updates or documents related to the project.

Project Oversight: Public Dashboard

Pursuant to the Texas Government Code, Section 2054.159, DIR, in consultation with QAT, developed performance indicators in the areas of schedule, cost, scope, and quality. Since October 2018, QAT's public website dashboard has included this information to provide state leadership, state agencies, and the public with the ability to view details of major information resources projects online and to track their progress. All major information resources projects currently report all performance measures.

The QAT dashboard includes interactive graphics developed by LBB staff. The dashboard is updated quarterly and shows a summary of projects monitored by QAT each month, along with the detailed performance metrics by project for the month. Figure 4 shows the QAT dashboard.

FIGURE 4
QUALITY ASSURANCE TEAM DASHBOARD, NOVEMBER 2020



SOURCE: https://public.tableau.com/profile/state.of.texas.lbb#!/vizhome/QualityAssuranceTeamQAT-dashboard/StatewideOverview

The performance indicators for the areas of budget, schedule, scope, and quality reported from state agencies for each project are calculated in the following manner:

- schedule performance index (SPI) SPI is a standard project management measure of how close the project is to being completed compared to the schedule. As a ratio, it is calculated by dividing the budgeted cost of work performed, or earned value, by the planned value;
- cost performance index (CPI) CPI is a standard project management measure of the financial effectiveness and efficiency of a project. It represents the amount of completed work for every unit of cost spent. As a ratio, it is calculated by dividing the budgeted cost of work performed, or earned value, by the actual cost of the work performed;

PROJECT LEVEL SCHEDULE PERFORMANCE INDEX AND COST PERFORMANCE INDEX RATING	CORRESPONDING COLOR
0.90 or greater	Green
From 0.80 to less than 0.90	Yellow
Less than 0.80	Red

• scope performance – a measure derived from reviewing the budget impact of project scope changes during the preceding 12 months; and

SCOPE PERFORMANCE INDEX	
SCOPE CHANGES DURING THE PRECEDING 12 MONTHS THAT IMPACT THE PR BY AN INCREASE OF:	OJECT BUDGET CORRESPONDING COLOR
10.0% or less	Green
Greater than 10.0% and less than or equal to 20.0%	Yellow
Greater than 20.0%	Red

quality performance – a measure derived from a series of quality measures specific to each project and
each project phase. Quality is measured throughout the project's life cycle during project deliverable
reviews, during testing, and after the system has been implemented. The quality of vendor performance
also will be measured. Quality performance is measured against agency-developed Quality Management
Plans or Quality Registers.

QUALITY PERFORMANCE INDEX	CORRESPONDING COLOR
Project is achieving its stated quality objectives.	Green
Project is missing some of its quality objectives and requires agency management notification.	Yellow
Project is not achieving its quality objectives and requires agency management intervention.	Red

The metrics are established in the Statewide Project Automated Reporting (SPAR) system to track and review projects. Agencies that are implementing major information resources projects enter project data directly into the SPAR system for QAT's review. Additionally, the SPAR system tracks whether an agency has considered cloud computing service options and whether the agency has considered QAT best practices pursuant to the Texas Government Code, Section 2054.304. To ensure that agencies understand all requirements associated with these projects, the use of the Project Delivery Framework, the use of the SPAR system, and the public dashboard, DIR provides training to agency staff through agency visits, webinars, and DIR-sponsored forums. Agencies are encouraged to request trainings directly with DIR at projectdelivery@dir.texas.gov.

As part of continuous process improvement efforts, QAT and DIR are collaborating on several developments to help agencies improve the delivery of projects. Figure 5 shows these improvements efforts.

FIGURE 5 QUALITY ASSURANCE TEAM AND DEPARTMENT OF INFORMATION RESOURCES IMPROVEMENTS AS OF NOVEMBER 2020

- The Quality Assurance Team (QAT) and the
 Department of Information Resources (DIR) will
 emphasize incorporating best practices in modern
 information technology project management outreach
 and training with agencies using various methods:
 webinars, individual training, classroom settings, and
 electronic delivery of content.
- QAT coordinates information sharing with the Legislative Budget Board's Contract Oversight Team.
- The Texas Administrative Code, Title 1, Part 10, Chapter 216, which pertains to project management practices, was amended during fiscal year 2018 to help agency practitioners manage legislative changes regarding projects.
- QAT may require a project demonstration after project deployment.
- DIR coordinates information sharing among state agencies to disseminate best practices that are practiced by agencies.

SOURCE: Quality Assurance Team.

BEST PRACTICES TO BE CONSIDERED BY AGENCIES

The Texas Government Code, Section 2054.304, requires state agencies to consider incorporating the applicable best practices into their major information resources project plans. Based on what entities across the public sector and at the federal level have demonstrated, QAT identified the following best practices that contribute to the success of state agency information systems:

- divide large projects into smaller, more manageable projects with schedules of less than 28 months and budgets of less than \$10.0 million. For large legacy-replacement projects, consider strategies to migrate the legacy system incrementally by gradually replacing specific pieces of functionality with new applications and services;
- designated DCS customers should engage the DCS team before posting a solicitation to include appropriate
 solicitation language asking vendors to offer a solution option that is hosted in a State Data Center; provide
 for better long-term network planning; and consult on DCS exemptions from the State Data Center if
 necessary;
- consider leveraging DIR's Shared Technology Services Program for project delivery needs related to
 cloud, application development, maintenance, security, and other technology solutions. Participation in the
 STS program may enable an agency to meet evolving project needs, while minimizing risk and maintaining
 project and business continuity. Several agencies are utilizing DIR's Technology Solution Services for
 their major information resources outsourcing needs;
- consider the use of open-source software for less reliance on proprietary software; open-source software
 does not charge users a licensing fee for modifying or redistributing its source code; publicly available
 source code enables continuous and broad peer review, promoting increased transparency and greater
 accountability³;

³ U.S. General Services Administration, Technology Transformation Services, 18F office, Open Source Policy. Retrieved from https://18f.gsa.gov/open-source-policy/.

• couple agile development with user-centered design to enable the development team continuously to iterate toward solving and meeting end users' needs⁴; a culture shift is required across the organization to successfully implement agile development;

- build IT systems using loosely coupled parts, connected by open and available application programming interface (API) to enable flexible, sustainable systems that meet user needs and cost less⁵;
- include security planning in the initiation phase of the project; complete a security risk assessment for the project; include a secure code review and vulnerability testing; conduct a penetration test of the application; and remediate findings before moving to production; obtain and review the Statement on Standards for Attestation Engagements no. 18 (SSAE No. 18) report for any external service provider that will be hosting or managing your data or services;
- engage an independent verification and validation company for projects valued at greater than \$10.0 million to help oversee complex projects; agency budgets should accommodate the estimated cost;
- retain original estimates regarding scope and defer new requirements and functionality to a new project or phase at a later time;
- develop a phase process that requires acceptance of the system test deliverable—that is, remediation of all severity 1 and severity 2 system test defects and correction of any performance-testing deficiencies—before the project proceeds to the user-acceptance testing phase;
- include network performance and capacity planning as part of project scope, particularly when new types of data are sent to field offices as a result of the project;
- consider agile procurement for procurements that have a moderate level of uncertainty and complexity. Agile procurement is a procurement method that embraces change and enables the procurement to be divided into a series of manageable iterative stages, from developing the solicitation in a series of stages to having a series of vendor demonstrations and discussions throughout the procurement phase⁶;
- divide large contracts into shorter-term, lower-dollar-amount contracts through modular contracting. With the use of modular contracting, an agency decreases project risk and incentivizes contractor performance while meeting the agency's need for timely access to rapidly changing technology. Executing a six-month to 12-month contract is likely to carry less risk than a six-year contract that could result in substandard product delivery and be difficult to terminate even at midpoint in the project. By means of modular contracting, the resulting contract language should enable modular product delivery that includes user-centered modules that can be remediated without jeopardizing the success of the entire project, and

⁴ U.S. General Services Administration, Technology Transformation Services, 18F office, *De-risking Custom Technology Projects: A Handbook for State Grantee Budgeting and Oversight*. Retrieved from https://github.com/18F/technology-budgeting/blob/master/handbook.md#basic-principles-of-modern-software-design

⁵ U.S. General Services Administration, Technology Transformation Services, 18F office, *De-risking Custom Technology Projects: A Handbook for State Grantee Budgeting and Oversight*. Retrieved from https://github.com/18F/technology-budgeting/blob/master/handbook.md#basic-principles-of-modern-software-design

⁶ National Association of State Procurement Officials (NASPO), *Modular Procurement: A Primer.* Retrieved from https://naspo.org; Texas Department of Information Resources (DIR), State Strategic Plan. Retrieved from dir.texas.gov/ssp, 2019.

⁷ Id., NASPO; U.S. General Services Administration, Technology Transformation Services, 18F office, Modular Procurement online guide, 2017. Retrieved from https://github.com/18F/Modular-Contracting-And-Agile-Development/blob/master/_strategies/modular-procurement.md

⁸ Id., NASPO; U.S. General Services Administration, Technology Transformation Services, 18F office, *De-risking Custom*

[°] Id., NASPO; U.S. General Services Administration, Technology Transformation Services, 18F office, De-risking Custom Technology Projects: A Handbook for State Grantee Budgeting and Oversight. Retrieved from https://github.com/18F/technology-budgeting/blob/master/handbook.md#basic-principles-of-modern-software-design

• assign a dedicated and empowered agency product owner to lead development efforts. The product owner is different from the traditional role of a project or program manager, who typically focus on ensuring that the initiative runs well and delivers on time or on budget. Product ownership often is treated as "other duties as assigned," but it should be considered a full-time job that involves stage planning and reviews, daily meetings, communicating often with users and stakeholders, and refining any backlog, among other duties⁹. The agency product owner advocates for the business stakeholders and users. The product owner should be empowered to make decisions based on feedback from stakeholders and users, business objectives, and priority of features to achieve the product vision¹⁰.

QAT identified strategies that agencies should use to ensure an appropriate methodology for project selection, control, and evaluation based on alignment with business goals and objectives. Figure 6 shows these strategies as of November 2020.

FIGURE 6 STRATEGIES FOR AN APPROPRIATE PROJECT METHODOLOGY

- Provide adequate time for project procurement activities.
- Consider the allowable funding for a biennium when planning a project and contract.
- Include employee benefit costs as part of full-timeequivalent position costs when reporting project costs in monitoring reports.
- Consider requirements and standards in the Texas Administrative Code, Title 1, Part 10, Chapter 213, Electronic and Information Resources, during software analysis, development, and testing.
- Submit project benefits realization documents on schedule. These documents often are submitted late or are submitted with missing or inadequate information.

- 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 quarterly monitoring reports within 30 days after the quarter's end. Monitoring reports often are 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 at least 10.0 percent.

SOURCE: Quality Assurance Team.

CONCLUSION

Agencies retain ultimate responsibility for project management and success. QAT seeks to increase transparency and provide guidance to agencies executing major information resources projects. To this end, QAT provides recommendations to enhance an agency's ability to satisfy commitments made to state leadership. Although multiple factors contribute to a successful project, one key factor that increases the risk of failure for major state technology projects is the project budget.

Other factors noted for project success are those that provide adequate time for procurement activities, align scope with approved budgets, and defer new requirements until a later phase or a new project can be initiated. QAT will continue to collaborate with agencies and state leadership to execute effective project oversight projects.

⁹ U.S. General Services Administration, Technology Transformation Services, 18F office, *De-risking Government Technology:* Federal Agency Guide. Retrieved from https://derisking-guide.18f.gov/federal-field-guide/

¹⁰ U.S. General Services Administration, Technology Transformation Services, 18F office, Ask 18F – What's the difference between a Contracting Officer's Representative and a Product Owner on agile software development projects? Retrieved from https://18f.gsa.gov/2020/03/10/ask-18f-po-vs-cor/

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.) Expenditures to date are actual expenditures and do not include agency obligation costs. Individual performance metrics color coding is defined on pages 9 and 10 of the report.

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 Indicates the project currently exceeds the original estimated cost OR original estimated duration by more than 10.0 percent.
- Indicates the project currently is within 10.0 percent of the original estimated cost AND original estimated duration.

			(IN MILLIONS)			ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Commission on State O Emergency Communications	State-level Digital 911 Network	\$14.7	\$14.1	\$13.1	90.0%	09/15 to 08/18	09/15 to 08/21
Budget Performance - ●							
Schedule Performance -●							
Scope Performance - ●							
Quality Performance -●							
Comptroller of Public Accounts	Centralized Accounting Payroll	\$15.4	\$15.4	\$11.2	100.0%	09/18 to 10/19	09/18 to 10/19
Budget Performance - ●	and Personnel						
Schedule Performance -●	System (CAPPS) Financials –						
Scope Performance - ●	Agency						
Quality Performance -●	Deployment Fiscal Year 2019 Project						
Comptroller of Public Accounts	CAPPS Financials – Agency	\$13.1	\$13.1	\$10.8	98.0%	09/19 to 09/20	09/19 to 09/20
Budget Performance – •	Deployment Fiscal						
Schedule Performance -●	Year 2020 Project						
Scope Performance - ●							
Quality Performance -●							
Comptroller of Public Accounts	CAPPS HR Payroll – Agency	\$15.1	\$15.1	\$14.7	99.0%	09/19 to 09/20	09/19 to 09/20
Budget Performance - •	Deployment Fiscal						
Schedule Performance -●	Year 2020						
Scope Performance - ●							
Quality Performance - ●							
Comptroller of Public Accounts	CAPPS Financials – Agency	\$8.8	\$8.8	\$0.0	0.0%	09/20 to 09/21	09/20 to 09/21
Budget Performance – •	Deployment Fiscal						
Schedule Performance -●	Year 2021 Project						
Scope Performance - •							
Quality Performance - •							

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			(IN MILLION	IS)		ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Comptroller of Public Accounts	CAPPS HR Payroll - Agency	\$8.4	\$8.4	\$0.0	0.0%	09/20 to 10/21	09/20 to 10/21
Budget Performance - •	Deployment Fiscal					. 5, 2 .	. 5/2 .
Schedule Performance - •	Year 2021						
Scope Performance - •							
Quality Performance - •							
Comptroller of Public Accounts	Geographic Information System	\$14.4	\$8.6	\$0.08	0.5%	04/20 to 08/21	09/20 to 10/21
Budget Performance - •	Software Solution					00/21	10/21
Schedule Performance - •	project (1)						
Scope Performance - ●							
Quality Performance - ●							
Comptroller of Public Accounts	Web Application Modernization and	\$17.4	\$17.4	\$8.7	84.0%	12/17 to 01/21	01/19 to 01/21
Budget Performance -●	Optimization						
Schedule Performance -●							
Scope Performance - ●							
Quality Performance - ●							
Department of Family and Protective Services	Information Management Protecting Adults	\$44.6	\$60.4	\$55.4	100.0%	09/13 to 02/17	09/13 to 11/19
Budget Performance - ●	and Children in						
Schedule Performance - ●	Texas (IMPACT) System						
Scope Performance - ●	Modernization (2)						
Quality Performance - •							
Department of State Health Services	Data Center Services Application	\$0.67	\$0.67	\$0.07	48.0%	11/19 to 08/21	11/19 to 08/21
Budget Performance - •	Remediation						
Schedule Performance -●							
Scope Performance - ●							
Quality Performance - •							

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Indicates the project currently is with		.9	(IN MILLIONS)			ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Department of State Health Services Budget Performance - Schedule Performance - Quality Performance - Quality Performance - Schedule Per	HIV2000, Real- time Education and Counseling Network, AIDS Regional Information Evaluation System (HRAR) Implementation Project	\$14.6	\$15.5	\$1.9	39.0%	06/18 to 09/21	06/18 to 08/21
Department of State Health Services Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Inventory Tracking Electronic Asset Management System (ITEAMS) Replacement (3)	\$8.1	\$3.6	\$0.1	11.0%	09/19 to 03/22	09/19 to 07/22
Department of State Health Services Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Texas Electronic Vital Events Registrar Implementation Project	\$16.5	\$21.8	\$19.6	100.0%	09/15 to 07/18	09/15 to 10/19
Department of State Health Services Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Texas Enhancement of the National Electronic Disease Surveillance System (NEDSS)	\$3.2	\$6.5	\$0.6	56.0%	09/19 to 08/21	09/19 to 08/21
Department of State Health Services Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Texas Healthcare Safety Network Replacement	\$8.5	\$8.5	\$0.0	0.0%	09/20 to 08/22	09/20 to 08/22

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AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Department of State Health Services	Texas Health Trace Project	\$19.2	\$19.2	\$0.0	0.0%	04/20 to 08/21	04/20 to 08/21
Budget Performance – • Schedule Performance – • Scope Performance – • Quality Performance – •							
Department of State Health Services Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Tuberculosis, HIV and STD Integrated Systems (THISIS) Improvement Implementation	\$5.0	\$8.8	\$7.8	97.0%	02/14 to 06/16	02/14 to 11/20
Department of State Health Services Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Upgrade Laboratory Information Management System (LIMS)	\$6.8	\$6.8	\$0.1	17.0%	09/19 to 08/21	09/19 to 08/21
Health and Human Services Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	1915(c) Waivers Migration to the Texas Medicaid Healthcare Partnership (TMHP) Long Term Care On-line Portal (LTCOP)	\$13.0	\$8.7	\$0.0	20.0%	10/19 to 08/21	10/19 to 09/21
Health and Human Services Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Application Remediation for Data Center Consolidation Project	\$0.6	\$1.5	\$0.03	21.0%	09/19 to 08/21	09/19 to 08/21

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			(IN MILLIONS)			ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Health and Human Services Commission Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Electronic Visit Verification Restructuring and Expansion Project	\$7.8	\$7.8	\$5.1	100.0%	11/18 to 09/19	11/18 to 09/19
Health and Human Services Commission Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Enterprise Data Governance	\$50.7	\$50.7	\$32.5	79.0%	9/11 to 01/22	08/15 to 03/22
Health and Human Services Commission Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Foster Care Litigation Project	\$5.3	\$5.3	\$0.0	0.0%	08/20 to 08/22	08/20 to 08/22
Health and Human Services Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance - Quality Performance -	HCS/TxHmL Program Migration Phase I	\$10.7	\$11.2	\$7.9	100.0%	08/18 to 12/19	08/18 to 08/20
Health and Human Services Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Medicaid Fraud Waste and Abuse System (MFADS) – Migration and Modernization	\$5.0	\$5.3	\$1.6	78.0%	09/19 to 08/21	09/19 to 08/21

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AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Health and Human Services Commission	Migration of Medicaid Management	\$15.3	\$15.3	\$0.0	0.0%	08/20 to 08/21	08/20 to 08/21
Budget Performance - •	Information System						
Schedule Performance - •	Applications from Riata to Data						
Scope Performance – •	Center Services						
Quality Performance - •							
Health and Human Services Commission	Migrate Vision21 Off Non-Stop Kernel (Highly	\$10.1	\$10.1	\$0.0	0.0%	08/20 to 02/22	08/20 to 02/22
Budget Performance - •	Faulty Servers)						
Schedule Performance - •							
Scope Performance - •							
Quality Performance - •							
Health and Human Services Commission	MMIS Modernization -	\$44.0	\$44.0	\$0.0	0.0%	09/19 to 06/21	09/19 to 06/21
Budget Performance - ●	Claims Processing (4)						
Schedule Performance - •	(4)						
Scope Performance - ●							
Quality Performance -●							
Health and Human Services Commission Budget Performance – Schedule Performance – Scope Performance –	Office of Civil Rights Corrective Action Plan (HIPAA Compliance)	\$23.4	\$22.5	\$4.0	67.0%	09/18 to 09/21	09/18 to 09/21
Quality Performance -●							
Health and Human Services Commission	Performance Management and Analytics System	\$19.3	\$19.3	\$4.1	55.0%	09/19 to 08/21	09/19 to 08/21
Budget Performance - ●	(PMAS)						
Schedule Performance - •	Assessment, Acquisitions						
Scope Performance - •	Planning, and Pilot						
Quality Performance – •	Support						

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			(IN MILLIONS)			ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Health and Human Services Commission	Procurement and Contracting Improvement Plan	\$5.0	\$5.0	\$1.1	48.0%	11/19 to 08/21	11/19 to 08/21
Budget Performance - •	(PCIP)						
Schedule Performance - •							
Scope Performance - ●							
Quality Performance - ●							
Health and Human Services Commission	Provider Management and Enrollment System	\$20.5	\$22.0	\$4.9	14.0%	12/18 to 07/20	12/18 to 11/21
Budget Performance – • Schedule Performance – • Scope Performance – •	(PMES)						
Quality Performance - •							
Health and Human Services Commission	Regulatory Services Systems Modernization	\$4.7	\$5.8	\$2.0	64.0%	09/18 to 08/21	09/18 to 03/22
Budget Performance - ● Schedule Performance - ● Scope Performance - ●	(RSSM) Phase IV - Protecting People in Regulated Facilities (PPRF)						
Quality Performance – •	,						
Health and Human Services Commission	Systemwide Business Enablement	\$6.9	\$6.9	\$0.04	33.0%	9/19 to 08/21	09/19 to 08/21
Budget Performance – •	Platform						
Schedule Performance - •							
Scope Performance - •							
Quality Performance - •							
Health and Human Services Ocommission	Vendor Drug Program (VDP) Pharmacy Benefit	\$37.3	\$37.3	\$0.02	44.0%	09/19 to 08/22	09/19 to 08/22
Budget Performance - ●	Services (PBS)						
Schedule Performance - •	Modernization						
Scope Performance - •							
Quality Performance - •							

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AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Health and Human Services Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Women, Infants and Children (WIC) MOSAIC	\$43.0	\$32.0	\$0.02	36.0%	09/19 to 09/21	02/20 to 08/21
Office of Attorney General Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	IT System Modernization Phase I	\$51.0	\$51.0	\$0.02	15.0%	03/20 to 08/21	03/20 to 08/21
Office of Court Administration Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	eFile Texas 2.0	\$23.7	\$23.7	\$0.8	56.0%	09/19 to 09/21	09/19 to 09/21
Teacher Retirement System Budget Performance - ● Schedule Performance - ● Scope Performance - ● Quality Performance - ●	TRS Enterprise Application Modernization (5)	\$96.1	\$138.0	\$129.0	100.0%	09/11 to 03/17	09/11 to 04/20
Texas Alcoholic Beverage Commission Budget Performance – • Schedule Performance – • Scope Performance – • Quality Performance – •	Licensing and Tax Collection Technology Replacement Project	\$7.4	\$7.4	\$2.4	45.0%	09/19 to 08/21	09/19 to 08/21

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AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Texas Department of Criminal Justice Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Corrections Information Technology System (CITS) (6)	\$29.2	\$29.2	\$0.4	2.0%	08/19 to 08/21	08/19 to 08/22
Texas Department of Transportation Budget Performance – • Schedule Performance – • Scope Performance – • Quality Performance – •	I2MS Materials Analysis Testing (MATS) Project (7)	\$1.0	\$1.5	\$1.4	97.0%	06/16 to 03/17	06/16 to 07/20
Texas Department of Transportation Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Cybersecurity	\$10.0	\$6.0	\$6.0	100.0%	05/18 to 08/19	05/18 to 04/20
Texas Department of Transportation Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Enterprise Information Management Project (8)	\$27.7	\$27.7	\$15.1	87.0%	09/17 to 08/19	09/17 to 03/20
Texas Department of Transportation Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Modernize Project and Portfolio Management (MPPM)	\$125.4	\$218.5	\$99.5	49.2%	08/16 to 08/19	08/16 to 08/21

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Overall project classifications include colored circles identified for projects that are reported as at least 30.0 percent complete as of November 2020. No overall project classification is included for projects less than 30 percent complete.

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	•	(IN MILLIONS)				ORIGINAL	CURRENT
AGENCY	PROJECT	ORIGINAL BUDGET	CURRENT BUDGET	EXPENDITURES TO DATE	PERCENTAGE COMPLETE	ESTIMATED DATES	ESTIMATED DATES
Texas Department of Transportation Budget Performance – • Schedule Performance – • Scope Performance – • Quality Performance – •	TxTag Customer Service Systems and Operations Project	\$80.1	\$81.1	\$63.6	77.7%	09/17 to 09/20	09/17 to 02/21
Texas Railroad Commission Budget Performance – • Schedule Performance – • Scope Performance – • Quality Performance – •	Mainframe Transformation Phase I	\$42.3	\$42.3	\$7.1	52.6%	09/19 to 08/21	09/19 to 08/21
Texas Workforce Commission Budget Performance – Schedule Performance – Scope Performance – Quality Performance –	Unemployment Insurance (UI) System Replacement	\$66.5	\$66.5	\$0.6	5.0%	09/19 to 01/24	09/19 to 01/24
Texas Workforce Commission Budget Performance - Schedule Performance - Scope Performance - Quality Performance -	Workforce Case Management (WFCM)	\$24.7	\$11.7	\$0.6	13.0%	09/19 to 08/25	09/19 to 07/23

NOTES:

- The project was re-scoped and no longer meets the definition of a Major Information Resources Project. The agency is completing the development (1) internally.
- The agency closed out the project during Phase II and is completing the project internally.
- The project was re-scoped and no longer meets the definition of a Major Information Resources Project.
- The agency re-scoped the project in February 2020 from a development project to a managed service contract. (4)
- The agency canceled the vendor contract and will complete the project internally. (5)
- The agency canceled the project due to the state's 5.0% budget reduction.
- Due to the number of defects found during testing, the project was not extended. The agency is reevaluating how to proceed.
- The agency closed out the project in January 2020.

SOURCE: Quality Assurance Team information from agency monitoring reports. Original costs and schedules are derived from agency business case submissions at the time of project approval.

CONTACT

An electronic version of this report is available at qat.dir.texas.gov. If you have any questions, please contact Robert Wood of the Comptroller of Public Accounts at (512) 463-3973, Tom Niland of the Department of Information Resources at (512) 475-4700, Richard Corbell of the Legislative Budget Board at (512) 463-1200, or Michael Clayton of the State Auditor's Office at (512) 936-9500.