



2022 Biennial Performance Report

Project Management Practices

This report addresses Section 2054.157(b) of the Government Code requiring the Texas Department of Information Resources (DIR) to report on state agencies' progress in developing and implementing project management practices.

Background

Strong project management practices help state agencies complete Information Technology (IT) projects within scope, on time, and within budget. Texas Government Code Section 2054.153 requires DIR to set rules establishing project management practice guidelines for state agencies' IT projects. ¹ Texas Administrative Code Chapter 216, which establishes these guidelines, incorporates clarifying language for monitoring projects during the procurement process. In addition, Government Code Chapter 2054, Subchapter J, requires state agencies undertaking major IT projects to use the Texas Project Delivery Framework, a consistent statewide method for project selection, control, and evaluation based on business objectives and goals.

DIR is a member of the Quality Assurance Team (QAT), a statutorily created group that provides oversight of state agencies' major IT projects and develops best practices leveraging the Project Delivery Framework. ² DIR serves on this team alongside the Texas Comptroller of Public Accounts, the Texas State Auditor's Office, and the Legislative Budget Board.

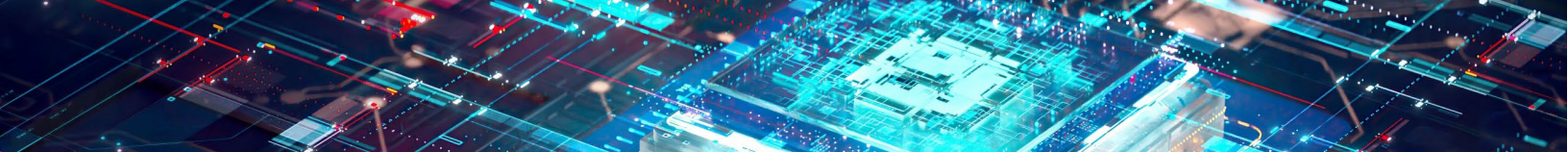
Status of Project Delivery Framework Initiatives

The 87th Texas Legislature passed several key bills updating the Project Delivery Framework statutes including:

- Senate Bill 799 expanded the definition of a "major information resources project" in Government Code Section 2054.003 (10) to include projects costing more than \$5 million that the State Auditor's Office designated for "additional monitoring."
- Senate Bill 1541 amended the definition of "business case" to mean "a comparison of business solution costs and project benefits based on a solution assessment and validation for a major information resources project, which may include alternative financing requirements and an evidence-based scoring method delivered by an independent third party that includes measurement and corrective actions for the state agency's operational and technical strengths and weaknesses related to the project."
- Senate Bill 475 amended Government Code Section 2054.161 to require that upon initiation of a project, state agencies must classify, determine the appropriate security, and identify the retention schedule of all data produced from or used in the project.

¹ This term includes institutions of higher education. Government Code Section 2054.003(13).

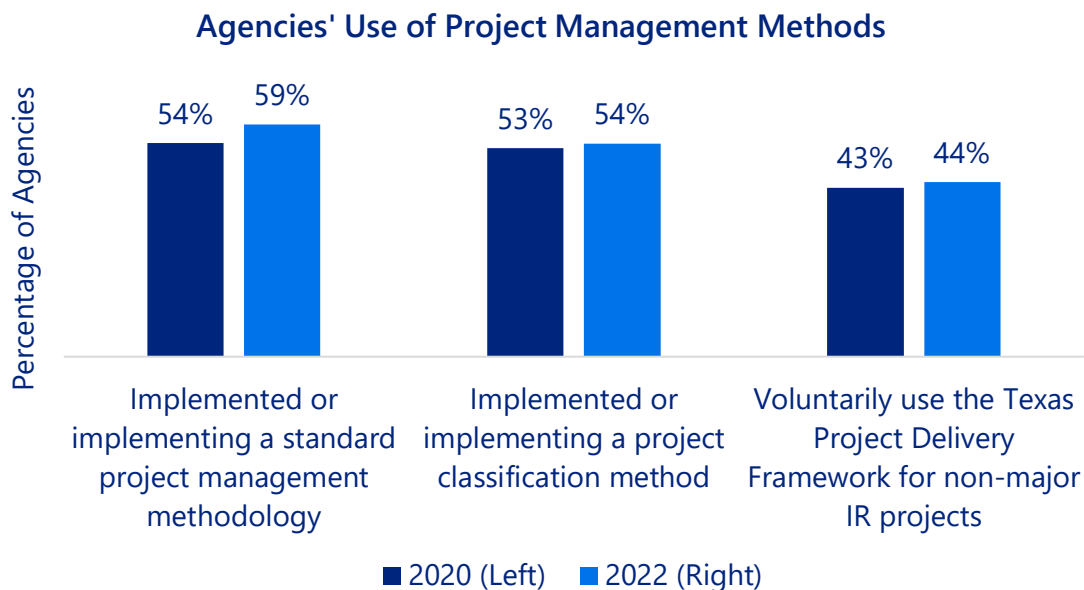
² Government Code Section 2054.158.



In September 2021, DIR published the Project Delivery Framework updates, which incorporated the legislative change, on the DIR website and held a series of webinars to educate state project management personnel on the updates.

Progress

The biennial Information Resources Deployment Review (IRDR) reports on state agency³ progress in developing and implementing project management practices.⁴ Progress is measured by analyzing the differences between the two most recent reviews.



Sources: 2020, 2022 IRDR

Project Delivery Trends

The Quality Assurance Team Annual Report, released in December 2021, provides an overview of major IT projects and delivery trends.⁵ Agencies also report delivery trends in the biennial IRDR. The following trends were identified from those reports.

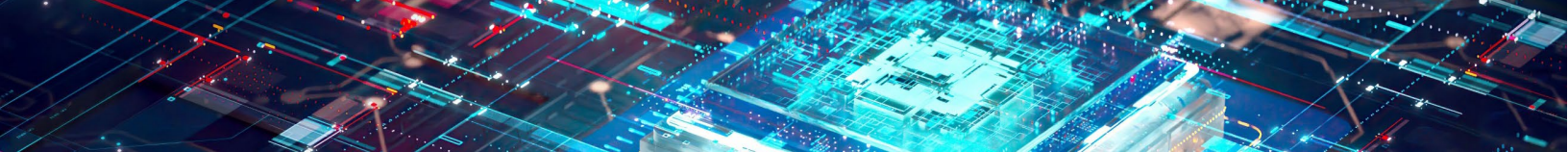
- Projects with a development schedule of fewer than 28 months with budgets of less than \$10 million have a significantly greater chance of meeting initial cost and duration estimates.
- In 2022, agencies using adaptive project methodologies – like the agile⁶ project methodology – grew nine percent compared to 2020. Of the agile approaches used, 46% of agencies report using Scrum

³ Government Code Section 2054.1211 excludes IHEs from reports or plans generally mandated for a state agency under Chapter 2054 unless required by department rule. 1 Texas Administrative Code 201.8 identifies specific plans and reports that IHEs must prepare and submit to DIR. This list does not include the IRDR; therefore, IHEs' responses to the questions used to collect the data for this report are optional by law.

⁴ Government Code Section 2054.0965.

⁵ Government Code Section 2054.158 (a)(5).

⁶ See Gartner Glossary for the definition of [agile](#).



and 22% use Kanban, which are both iterative work systems that rely on process flows and aim to reduce waste.

- In 2022, 42% of respondents indicated that they either have implemented or are implementing open-source⁷ software development for IT projects. The use of open-source software allows for cost savings and reusability without the restrictions of purchasing proprietary vendor software or licenses.
- The top five challenges to IT project success reported by agencies are: competing agency priorities (65%), lack of resources (57%), changing requirements and specifications (32%), technical challenges (32%), and long budget cycles that do not match modern software design practices (22%).

DIR Initiatives

DIR works with other agencies to share strategies that decrease risks in major IT projects and modern software development best practices. The QAT publishes best practices in the annual report that agencies are required to consider for inclusion in their major IT projects.⁸ The 2021 report includes new best practices for security, data management, and accessibility. To address the growing demand for digital government interactions because of the pandemic, the QAT also added best practices around agile development and user-centered design in major IT projects.

To facilitate consistent project delivery across projects, DIR's Project Management Office developed the [Project Management \(PM\) Essentials](#), a project management methodology and toolset for small and non-major IT projects. PM Essentials does not supersede the Texas Project Delivery Framework but rather provides successful project management processes to assist agencies on smaller projects. PM Essentials processes and templates are available on the DIR website for use on non-major IT projects and have been updated to facilitate and encourage agile project delivery.

Next Steps

To further promote the use of project management processes within state government, DIR is committed to the following:

- Collaborating with agencies to enhance and improve the Project Delivery Framework with a focus on adapting templates to monitor projects developed using agile methodologies.
- Training state agency staff on Project Delivery Framework processes, procedures, and best practices.
- Consulting with individual agencies on project delivery from planning through implementation and sharing project management best practices to improve the project outcomes.

⁷ See Gartner Glossary for the definition of [open-source](#).

⁸ Government Code Section 2054.304 (d).