2022 Prioritization of Cybersecurity and Legacy Modernization Projects

June 22, 2022

DIR
Texas Department of Information Resources

Transforming How
Texas Government
Serves Texans

Agenda

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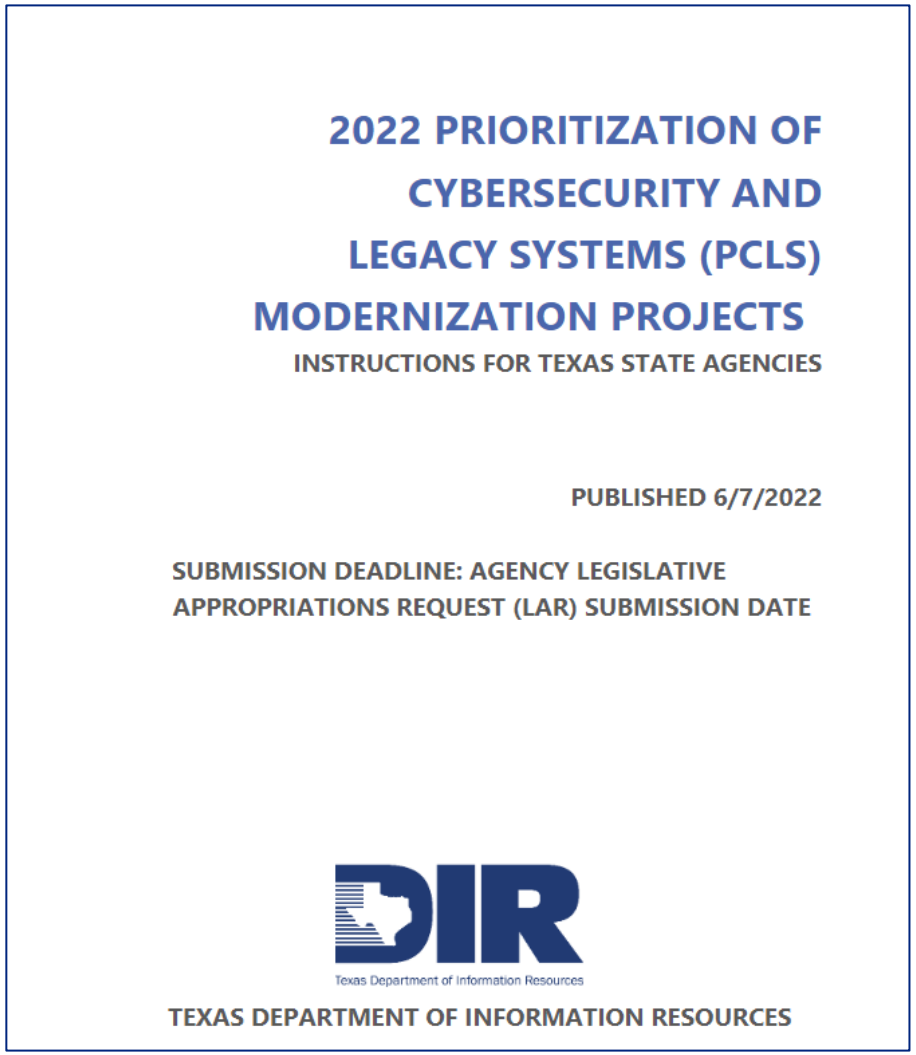


Introductions

Chief Technology Office

- John Hoffman | Chief Technology Officer
- Krishna Edathil | Director, Enterprise Solution Services
- Robert Benejam | Enterprise Architect, Enterprise Solution Services

Office of the Chief Information Security Officer

- Nancy Rainosek | State Chief Information Security Officer
- Matt Kelly | Deputy CISO for Policy and Governance

Overview

John Hoffman

Enabling Statute

Section 2054.069, Government Code entitled *Prioritized Cybersecurity and Legacy Systems Projects Report* requires the Texas Department of Information Resources (DIR) to report on state agency cybersecurity projects and projects to modernize or replace legacy systems, as defined by Section 2054.571, Government Code to the Legislative Budget Board (LBB) no later than October 1 of each even-numbered year.

Background

2014
- Legacy Systems Study, HB 1890 (84R)

2016
- 1st PCLS Report (85R)

2018
- 2nd PCLS Report (86R)
- APM Assessments w/ IRDR

2020
- 3rd PCLS Report (87R)
- PCLS Codified

2022
- 4th PCLS Report (88R)

Purpose

- The PCLS Project Questionnaire provides agencies with the opportunity to demonstrate the risks and potential impacts of failing to address their cybersecurity and legacy modernization projects.

- DIR will use the responses provided in the PCLS Project Questionnaire along with the Application Portfolio Management (APM) assessment responses of the business applications associated with the project in determining the project prioritization that will be sent to the LBB in October 2022.

PCLS Content

Questionnaire Structure

Required for Cyber Projects

Required for Legacy Projects

- **Part 1:** General Information
- **Part 2:** Associated Business Applications
- **Part 3:** Cybersecurity Issues and Controls
- **Part 4:** Legacy Issues
- **Part 5:** Probability Determination
- **Part 6:** Impact Determination

Part 1 – General Information

- **18-24 questions**
- Project Narrative
- Project Type
- LAR/Funding Information
- Project Characteristics
- STS Funding

Cybersecurity Projects must possess at least one of the following criteria:
►The project's primary purpose must be improving the organization's cybersecurity or enhancing the organization's capability to identify, detect, protect, respond, or recover from cybersecurity threats and vulnerabilities. ►The project must have clear objectives that will improve the organization's cyber maturity as measured in the biennial information security plan.
Legacy Modernization Projects must possess at least one of the following criteria:
►The project's primary purpose must be modernizing the agency's legacy systems as defined in Sec. 2054.571, Government Code. "Legacy system" means a computer system or application program that is operated with obsolete or inefficient hardware or software technology. ►The project must also be intended primarily to support continued systems currency through monitoring the agency's application portfolio and IT infrastructure.

Part 2 – Associated Business Applications

A Business Application name is the high-level label used by an agency to easily identify a group of functions provided by one or more systems to accomplish the specific business needs of the agency.

A Business Application is typically a combination of integrated hardware and software (including data and applications), internally developed custom systems, commercial off the shelf (COTS) applications, and/or customized third-party systems.

Part 2 – Associated Business Applications

Information Resources Deployment Review
March 31, 2022

IRDR

- ✓Inventory applications
- ✓Determine applications to assess

Application Portfolio Management Assessments
Prior to PCLS Submission

APM

- ✓Complete APM assessments as needed

Prioritization of Cybersecurity and Legacy Systems Projects
Agency LAR Due Date

PCLS

- ✓Associate applications to relevant project questionnaires

Part 2 – Associated Business Applications

All applications associated with a PCLS project must…

1. have an APM assessment completed within the last four years and
2. have the required fields completed in the application record

Mission Critical	Most Recent Completed APM Assessment Year	PCLS Requirements Met?
Yes	2020	Yes

Directly Related

- the business applications related to the project are directly impacted by the project (replaced, modernized, consolidated, improved, etc.).

Indirectly Related

- the business applications that receive a secondary benefit from the project.

Part 2 – Associated Business Applications

▼ PART 2 - BUSINESS PROCESS AND APPLICATION INFORMATION

Business Application Information

Select the Business Application(s) that are directly impacted (Question 2.01) or indirectly impacted (Question 2.02) by this project using the "Look Up" option below. The Business Applications listed are those that were identified during the biennial IRDR. If an impacted Business Application does not appear in the list below, you may use the "Add New" button.

A Business Application name is the high-level label used by an agency business and IT organization to easily identify a group of functions provided by one or more systems to accomplish the specific business needs of the agency. A Business Application is typically a combination of integrated hardware and software (including data and applications), internally developed custom systems, commercial off the shelf (COTS) applications, and/or customized third-party systems. Information systems include interconnected set of information resources under the same direct management control that shares common functionality. An Information System normally includes, but is not limited to, hardware, software, network Infrastructure, information, applications, communications, and people.

Business Application Requirements for PCLS Submission

Business Applications that are linked in either question 2.01 or question 2.02 must have the following completed before the PCLS record may be submitted:

1. Mission Critical value: in the Business Application record, identify if the application is essential to your organization's operations.
2. Recently Completed APM Assessment: Business Applications must have had an APM Assessment performed within the last 4 years. If the "Most Recent Completed APM Assessment Year" field below is blank, or greater than 4 years old, you will need to generate a new APM Assessment via the application record.

Please select any Business Applications directly impacted by this project, i.e. being refreshed/replaced/migrated/modernized as part of this project

2.01 Related Applications Add New Lookup

ID	Application Name	Application Full Name	Mission Critical	Most Recent Completed APM Assessment Year	PCLS Requirements Met?
No Records Found					

Please select any other related Business Applications that are indirectly impacted by this project

2.02 Indirectly Impacted Applications Add New Lookup

ID	Application Name	Application Full Name	Mission Critical	Most Recent Completed APM Assessment Year	PCLS Requirements Met?
No Records Found					

2.03 Project Impact: Does this project impact the entire application portfolio of the agency? e.g. the project will enhance the security of all the agency's business applications.

○ Yes ○ No

Edit

Part 3 – Cybersecurity Issues & Controls

Cybersecurity Issues

- Narrative of the existing issues, challenges, and future considerations concerning cybersecurity as it relates to the project.

Cybersecurity Controls

- Narrative of the current safeguards/countermeasures in place that would lower the probability or lessen the impact of security incidents if the project is not funded.

Part 4 – Legacy Issues

- **14-16 questions**
- Modernization Benefits
- Cost-Benefit Analysis & Methodology
- Modernization Scope (servers & software)
- System Characteristics

Part 4 – Legacy Issues

Cost Analysis: Business Case Cost

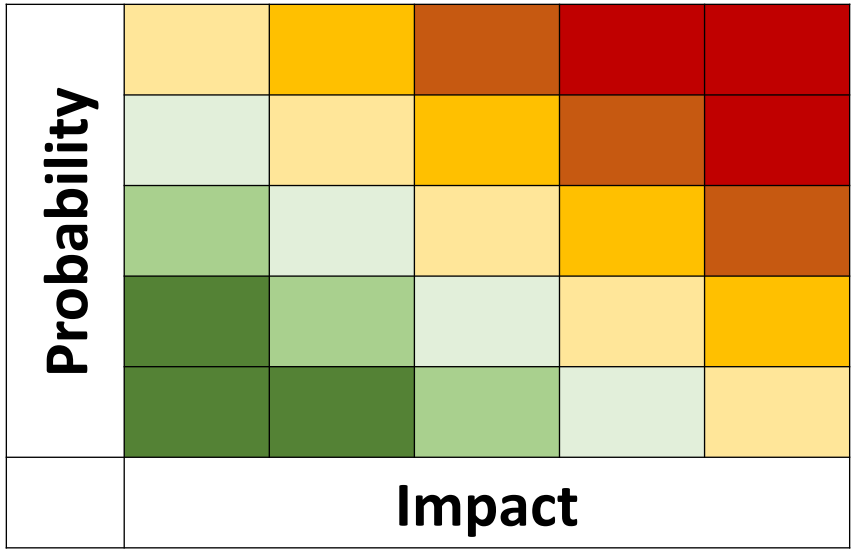
Line	Category		Year 1	Year 2	Year 3	Year 4
			FY20XX	FY20XX	FY20XX	FY20XX
	Agency Personnel and Contractor Costs					
P1-I	**Project Agency Personnel Services - Implementation**	**Comment/ Method for Calculating**				
	Project Management/Administration		0	0	0	0
	Policy and Procedures		0	0	0	0
	Requirements		0	0	0	0
	Design		0	0	0	0
	Development/Programming		0	0	0	0
	System Test		0	0	0	0
	Training		0	0	0	0
	Conversion		0	0	0	0
	Implementation		0	0	0	0
	Database Administration		0	0	0	0
	System Operations		0	0	0	0
	Technical Support		0	0	0	0
	Documentation		0	0	0	0
	Help Desk Personnel		0	0	0	0
	Network Administration		0	0	0	0
	IV&V Costs		0	0	0	0
	Other (describe)		0	0	0	0
	Other (describe)		0	0	0	0
	Other (describe)		0	0	0	0

Parts 5 & 6 – Probability & Impact

Part 5 – Probability Determination

7 questions

- Threat Capability
- Incentive
- Control Effectiveness
- Control Reliability
- Threat Event Frequency
- Asset Exposure



Part 6 – Impact Determination

8 questions

- Reputational Impacts
- Operational Impacts
- Physical Impacts
- Legal Impacts
- Financial Impacts

SPECTRIM

Access

- Information Resources Managers (IRM) are responsible for completing PCLS Questionnaires but may delegate to any active SPECTRIM users.
- Additional users can be requested and delegated to a PCLS questionnaire by the IRM (via support request or email GRC@dir.texas.gov).
- Accounts must be active to receive system notifications.
- Inactive/Locked accounts cannot reset passwords themselves. If you don't receive a pw reset email within 10 minutes, your account is probably inactive.
- **Contact GRC@dir.texas.gov to have inactive/locked accounts reactivated.**

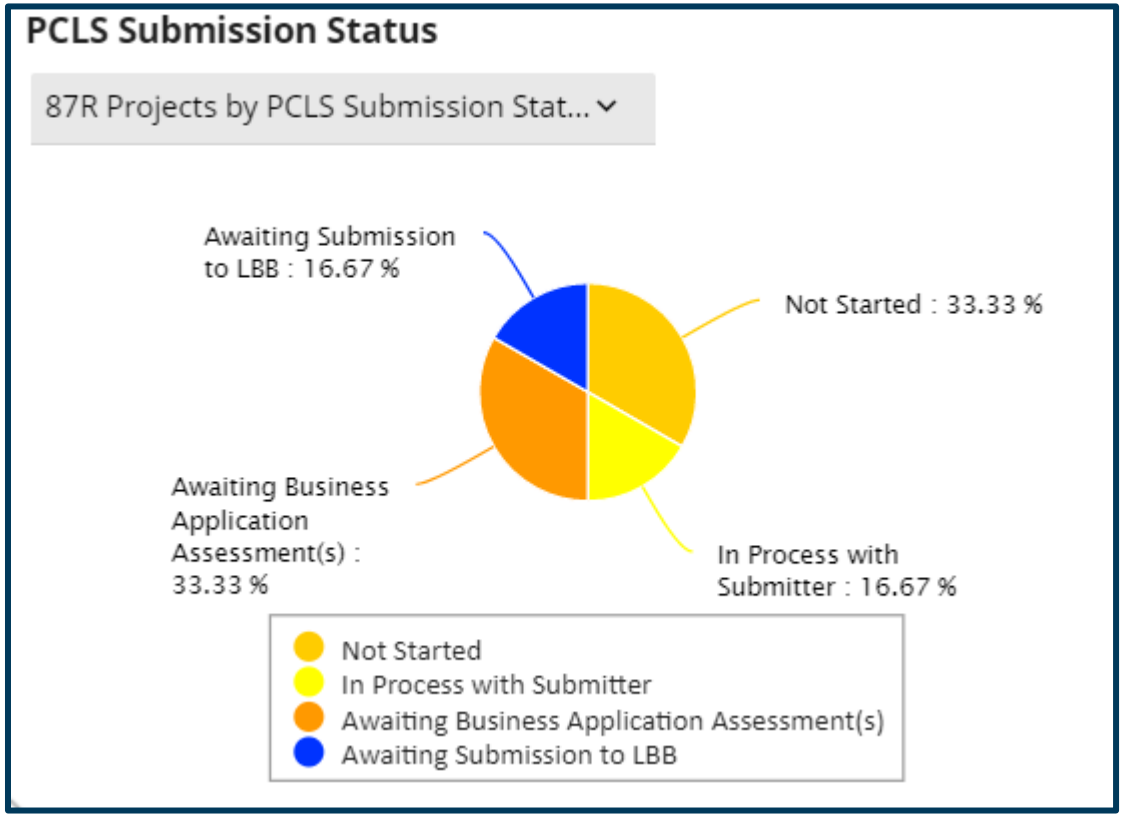
Access

- https://myaccess.texas.gov/portal/ (TDIS SSO)
- https://dir.archerirm.us (Manual login)

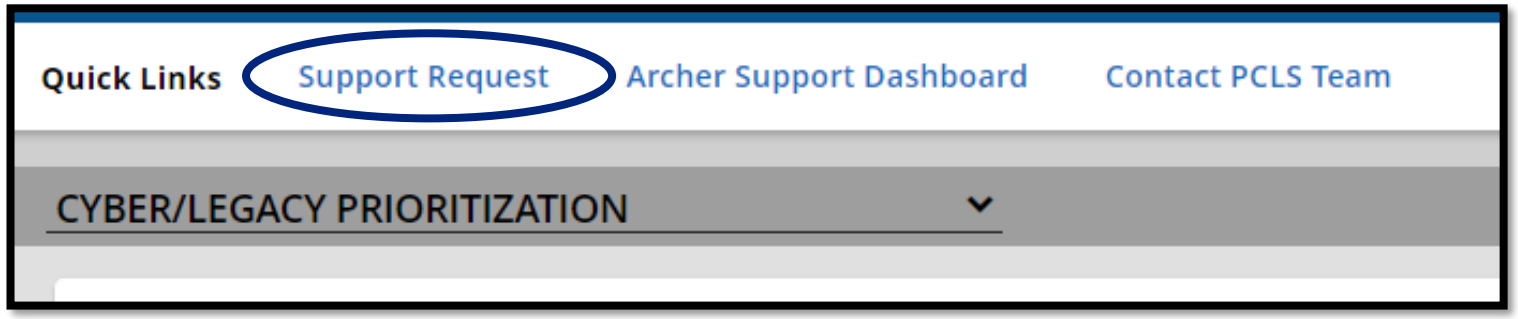
PCLS Dashboard

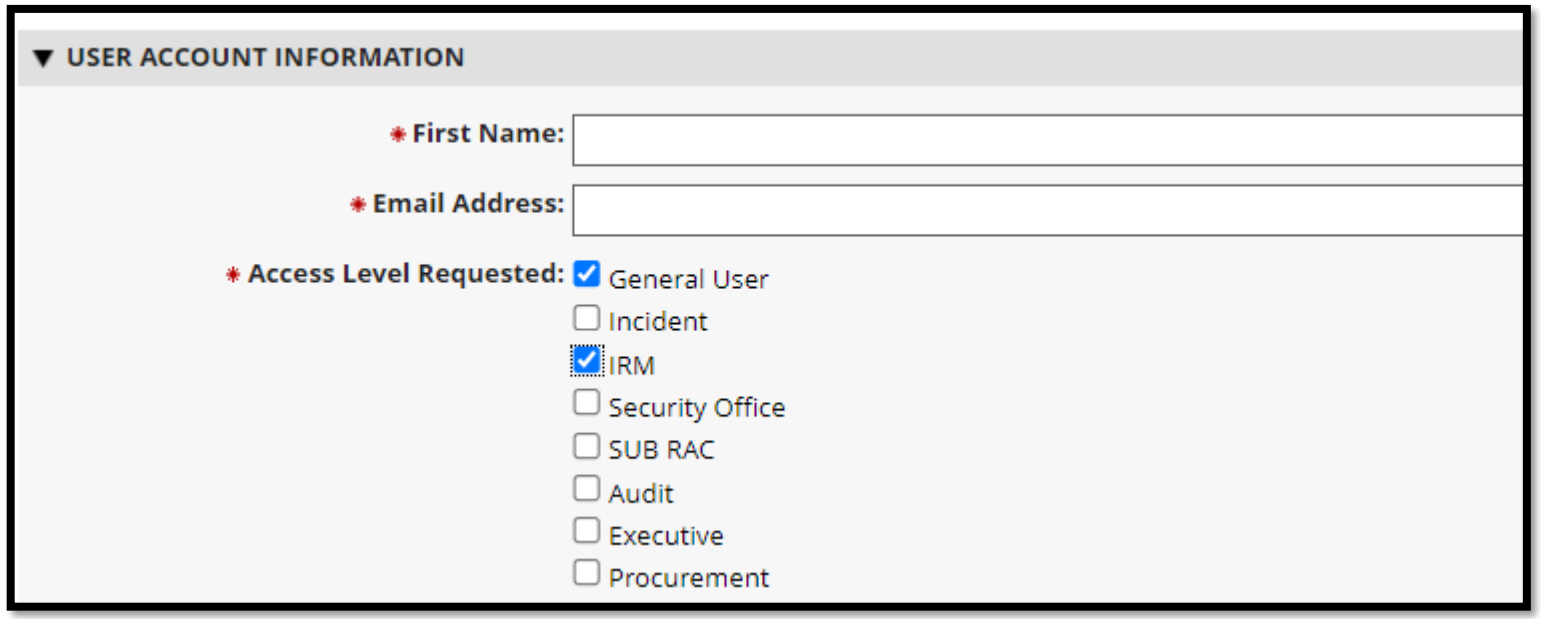
Select the PCLS workspace tab on the top banner to access the dashboard. If you do not see the tab, you may have to select the vertical ellipsis on the far right to view additional workspaces.

If the workspace is not available, contact GRC@dir.texas.gov to check if you have the appropriate access rights.



Support Requests

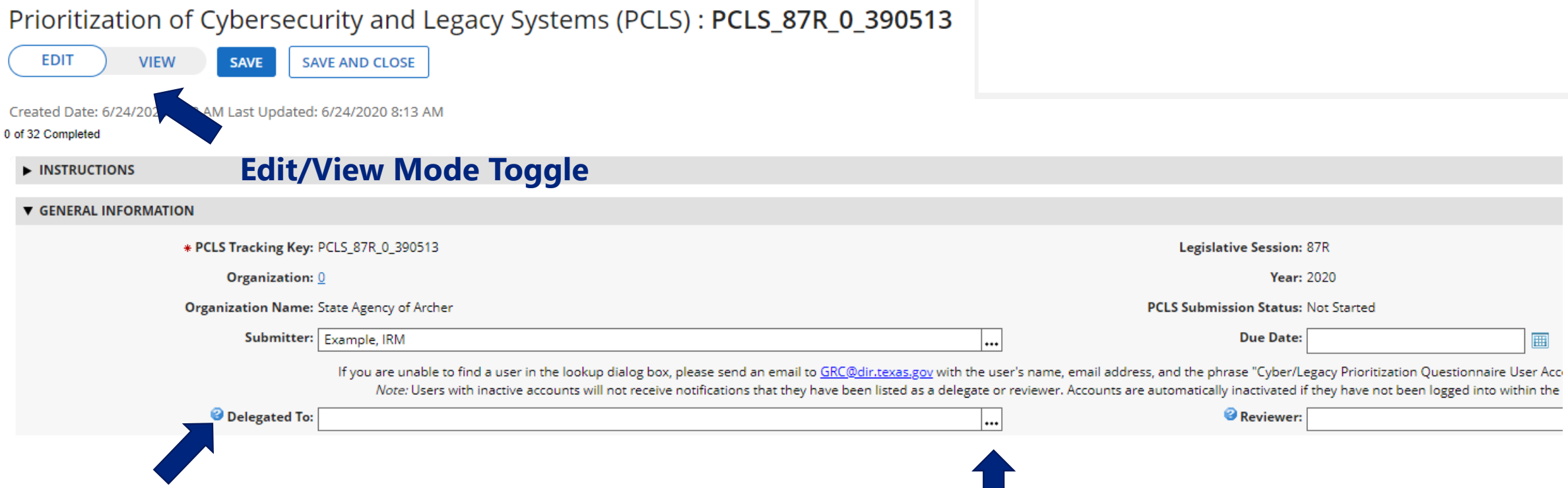




PCLS Questionnaire Record

Delegated To

The creator of the PCLS record is automatically listed as the submitter. If the record creator wishes to allow other active users to edit and submit the PCLS record, they can look-up the user in the "Delegated To" field.



Edit/View Mode Toggle

Help Text Display Icon

Delegate User Field Lookup

Submission Process

Submission Process

Identify Applicable Projects

- Determine Project Type

Identify Related Business Applications

- Ensure related applications have APM assessment < 4 years
- Ensure required application fields completed

Create PCLS Project Questionnaire

- Determine who will fill out questionnaire
- Determine if reviewer needed

Submit Questionnaire in SPECTRIM

Submit PCLS Tracking Key with LAR

- Change SPECTRIM Status to “Submitted to LBB”

Questionnaire Statuses

- **Not Started** – initial status indicating that the PCLS record has been created, but no questions have been completed.
- **In Process with Submitter** – questionnaire record has been saved, but content has not been submitted for next stage. The submitter or delegate can come back to the record and update responses in this stage.
- **Awaiting Business Application Assessment(s)** – the questionnaire has business applications associated in Part 2 that do not meet the required criteria to be included in the project questionnaire. Associated applications must have the required application fields completed (e.g. Mission Critical) and must have an APM assessment completed on the application within the last 4 years. The agency will need to either complete the required APM assessment(s) or exclude applications that do not meet the requirements to submit the questionnaire.
- **In Process with Reviewer** – indicates that the questionnaire record has been finalized by the submitter and is awaiting review. This stage will only occur if the submitter or delegate assign someone to the optional reviewer field. The reviewer will need to review the questionnaire record to approve or reject the questionnaire back to the submitter.
- **Rejected by Reviewer / Re-Finalize** – indicates the optional reviewer has rejected the questionnaire. The submitter or delegate will need to revise the questionnaire content and re-finalize to submit for review again.
- **Awaiting Submission to LBB** – indicates that the PCLS questionnaire has successfully been submitted to DIR via SPECTRIM. The record will questionnaire content will become read-only at this time. Once the PCLS Tracking Key has been submitted via the agency's LAR, the submitter will need to return to the PCLS questionnaire record and update the "Project submitted to LBB with its PCLS Tracking Key" field to "Yes" and populated the "Date Submitted to LBB" field.
- **PCLS Tracking Key Submitted to LBB** – indicates that the PCLS questionnaire submission has been fully submitted to both DIR and LBB. Most of the record will become read only, but users may still update information about the project including Funding Status and Project Status.
- **Not Submitted – Archived** – indicates that the PCLS record was created during a previous legislative session and was not indicated as submitted to LBB. The record is read-only and may not be updated. If users want to submit the request for the 87th legislative session, they will need to create a new PCLS record.

Assistance

- DIR will use the TX-IRM mailing list for primary communications.
- For **general inquiries** about PCLS content (e.g. question clarification, process questions) email pcls@dir.texas.gov.
- For **support with the SPECTRIM portal** (e.g. password resets, obtaining credentials) email grc@dir.texas.gov or open an archer support request from within the portal.
- PCLS Webpage: https://dir.texas.gov/enterprise-solution-services/prioritization-cybersecurity-and-legacy-systems-projects-pcls

Q & A

Thank You

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