

Objectives

This Reporting Assessment describes the Project's activities to address Proviso in Specific Appropriation 2394 of the Fiscal Year 2022-23 General Appropriations Act. Specific requirements include the following:

- Designate a position to lead the implementation of reporting functionality for Florida PALM;
- Provide quarterly reports to state agencies on the design, development, and implementation of reporting functionality; and
- Provide a report that details the approach and the specific historical reporting functionality that will be available when the Florida PALM Financials and Payroll waves go-live. The report must include, at a minimum: how current data will be mapped to historical data; a list of data that will not be mapped and why; if and how users will be able to view a combination of historical FLAIR data (e.g., legacy) and new Florida PALM data in a single report in the legacy FLAIR format; how PALM functionality will be validated using legacy format data comparisons, and tools that will provide the historical data functionality.

This report is intended to address the Proviso requirements for the reporting approach and planned reporting capabilities. However, due to both the Proviso requirements contained in Specific Appropriation 2395 that suspended further work for replacing FLAIR functionality, and ongoing Amendment 8 contract negotiations, this information is subject to change once design efforts for Financials and Payroll Waves restart.

This Reporting Assessment focuses on activities completed during the 2022 calendar year. This report includes three sections: Summary; Data Warehouse and Business Intelligence Assessment; and Reports and Data Analysis. Appendix A – Resources identifies information available to support understanding of Florida PALM functionality, reports, and data. The report sections are described below:

- Summary describes the activities completed or on-going to address Proviso requirements for reports and data topics. Each question in Proviso is answered.
- Data Warehouse and Business Intelligence Assessment provides an overview of the independent assessment, conducted by Gartner, for options to meet the state's reporting needs, inclusive of Florida PALM and FLAIR data.
- Reports and Data Analysis describes activities to map reports and data and provides an overview of current data issues.
- Appendix A – Resources describes the Florida PALM resources available on the Florida PALM website or provided to agencies. This list includes descriptions and links.

Summary

Activities

The Project's operating structure was updated to include a Reporting Architect that focuses on implementation of reporting functionality.

The Project published [Quarterly Reporting Updates](#) to describe activities and resources related to Florida PALM reports and data (e.g., design, development, and implementation activities for CMS Wave, Proviso requirements, and planning for future Waves). The Project described agency engagements, available resources, CMS remediation efforts, the Information Warehouse (IW) assessment, and other activities.

The Project has ongoing activities to review legacy reports and data, review requirements for reports, discuss reporting needs and usage with agencies and stakeholders, and update Florida PALM resources to address questions identified in Proviso. These activities include the following:

- The Project engaged Gartner to complete an independent assessment of an information warehouse solution that retains the current historical reporting functionality and data provided by the FLAIR Information Warehouse and inclusive of Florida PALM data. During August through November 2022, Gartner conducted an analysis, interviewed agency users and stakeholders, and produced a report with recommendations for a data warehouse (DW) and business intelligence (BI) reporting solution. The DW and BI solution is separate from Florida PALM (e.g., the transactional system) but will be inclusive of Florida PALM data and FLAIR (e.g., legacy, historical) data.
- In September 2022, the Project initiated activities to review and disposition FLAIR functionality with DFS stakeholders. The Project also initiated the Personalized Agency Working Sessions, a series of meetings with individual agencies, to discuss and understand agency unique needs. These discussions support the Project's review and update of Florida PALM requirements. These on-going activities will support an updated implementation approach, contract amendment and schedule for the Financials and Payroll Waves.
- The Project updated and shared various *Approach* documents (e.g., Configuration, Conversions, Data Management, Interfaces, and Reporting Approach) to describe expectations for activities and reporting functionality. These *Approach* documents are published to the [Florida PALM website](#).

Status

The status and results of activities required by Proviso are summarized below:

- Legacy and Florida PALM reports and data are mapped for CMS Wave, and shared in the *Reports Catalog* and *Data Dictionary*, respectively.
- An inventory of legacy FLAIR reports, available through the IW and legacy reporting tools, was created and published in the Pathfinder. These reports are indexed by topic to crosswalk to the *Reports Catalog* or marked as not applicable due to a change in business process or system functionality. These report mappings and dispositions will be updated during design activities for Financials and Payroll Waves.
- The Project created an inventory of legacy FLAIR data elements, referred to as the *FLAIR Data Element Inventory*, that are used by agencies to support reporting needs. Additional information, such as relationship of legacy and Florida PALM data elements, will be completed during design activities for Financials and Payroll Waves.

Reports and Data Approach

Proviso includes specific questions about the Reports and Data Approach and expectations about how reporting needs will be met when the Financials Wave and Payroll Wave are implemented. These questions are answered here with additional information provided in this report.

What is the approach to meet reporting functionality, including historical reporting?

A DW and BI reporting solution implementation must be implemented with the Florida PALM Financials and Payroll Waves. State agencies need a data warehouse and robust reporting solution to perform their mission critical business operations.

As part of the data warehouse implementation, both Florida PALM and legacy FLAIR data will be available for reporting. Additionally, standard reports, using Florida PALM data, will be available to users. Authorized users will also be provided self-service reporting tools to support agency unique needs and to support reporting on FLAIR and Florida PALM data. This report includes additional information about the independent assessment of the Information Warehouse and recommendations for the future approach. Also, the *Reporting Approach* and *Reports Catalog* offers additional information for reporting expectations.

How will current data be mapped to historical data?

This question is answered differently for data elements (e.g., fields) and data values (e.g., the information recorded in each field).

Data elements:

- The Project created an inventory of legacy data elements and discussed general usage with DFS stakeholders and agencies as part of Personalized Agency Working Sessions. The Project continues the review of Florida PALM requirements to determine if any updates or new requirements are needed to provide similar functionality in Florida PALM. The Project will map the legacy data elements with Florida PALM data elements (or other means) as part of design activities. Various resources, such as interface and conversion file layouts and the *Data Dictionary* will be updated to provide more information about comparable data elements. The *Interface Approach* and *Conversion Approach* provide more information about these activities.
- The Florida PALM and legacy chart of accounts (COA) were mapped for CMS Wave. Any changes to the Florida PALM COA for Financials Wave or Payroll Wave will be updated and communicated to agencies. For example, the COA may include an additional data element as discussed with the Agency Advisory Council and Executive Steering Committee to meet grant and project accounting and reporting needs.

Data values:

- Legacy information needed to support operations in Florida PALM beginning at implementation will be converted or configured from the legacy data. The *Conversions Approach* and *Configuration Approach* provide more information about these activities and resources.
- Some COA values were established for use for CMS Wave. Additional values will be established for Financials and Payroll Waves. Agencies will have tasks to provide and validate agency specific data values. Testing activities will include validation of the values configured for Florida PALM to account for comparable legacy data values.

What legacy data will not be mapped and why?

This question is answered in two parts:

What legacy data will not be converted or configured in Florida PALM? Legacy transactional data (whether residing in FLAIR, an agency business system or other application) will not be recorded in Florida PALM. Rather, key fields, balances and related information will be converted and loaded into Florida PALM. Specifically, only the data required to complete transactions, apply edits and to support current business operations will be converted or configured in Florida PALM. Data residing in the FLAIR IW (e.g., historical transactional data) will be loaded in the DW, as it resides within the IW at the time of Financials and Payroll Waves go-live.

Why will this legacy data not be converted? Various factors, such as inconsistent use of fields in the legacy systems by state agencies (i.e., agency unique uses of standard fields), the lack of standard accounting practices, the extent of differences in FLAIR and Florida PALM functionality and differing levels of technology being used from agency to agency, make it nearly impossible to accurately map this data. Simply put, over the lifespan of FLAIR, agencies have repurposed standard fields to accomplish objectives outside of the defined purpose of the fields. Stakeholders described research needs and trend analysis as the primary uses for using historical data. The Project will support agencies in understanding the reporting tools and data offered through the DW to support creation or updates of queries, using Florida PALM and historical data, including providing mapping resources for the defined use of standard fields, in order to meet specific agency-unique reporting or research needs.

How will users be able to view a combination of historical FLAIR data and new Florida PALM data in a single report in the legacy FLAIR format?

Florida PALM data will only be available to users through new reports, not legacy report formats. Changes in system functionality, business processes and data structure do not support the continued use of legacy reports with Florida PALM data. Historical FLAIR data and Florida PALM data will be available through the DW. Users can use BI tools to create reports or data extracts using both data sets that are meaningful for a particular agency or purpose. The Project will provide tools to support users in understanding Florida PALM data elements and values, and crosswalk relevant data elements and values to legacy counterparts as of the go-live date. The Project will share tasks for agencies to create agency-specific crosswalks to account for agency variations and to build user knowledge of agency data and processes. The Project will support agency adoption of the DW and BI solution through training, tools, and readiness activities. Legacy data and reports will be retained in accordance with applicable retention requirements.

How will Florida PALM functionality be validated using legacy format data comparisons, and tools that will provide the historical data functionality?

The Project will develop specific tasks for data configuration and conversions which include validating that legacy data is accounted for appropriately. Agencies will be engaged in this process to account for agency unique uses.

The approach for testing in general will be changed for Financials and Payroll Waves for the Project and agencies. Agencies will have access to a Florida PALM environment to support agency-directed testing activities for an extended period (e.g., several months) prior to go-live. This environment is intended to support agencies in completing testing applicable to their daily operations, systems, processes and users.

The DW and BI implementation will include testing to validate that legacy FLAIR data is successfully loaded (e.g., accurate, complete, usable). Additionally, testing will include verification that legacy FLAIR data and Florida PALM data can be used to create queries that successfully compile both data sets. Tests will be designed to evaluate the test results against expected results.

Data Warehouse and Business Intelligence Assessment

As the Florida PALM implementation moves forward to replace FLAIR, the Project must provide a solution to retain historical FLAIR IW data along with Florida PALM data. Per section 122 of the 2022-23 General Appropriations Act, the Project conducted a procurement for an independent assessment to evaluate solution options to meet future state DW and BI needs based on planned and existing data, data structures, integrations, current/legacy information warehouse capabilities

and uses, as well as future requirements. Gartner was selected to conduct the independent assessment. Gartner is an experienced partner with market research and insights into leading practices for public sector organizations. Gartner conducted the assessment during August through November 2022. The scope of the engagement included the following:

- Analysis of the existing FLAIR IW, including the structure of the data and uses (e.g., reporting, integration with other systems and sub-systems).
- Analysis of Florida PALM data and uses (e.g., reporting, integration with other systems and sub-systems).
- Analysis of information warehousing solutions that are capable of storing, integrating, and transforming data from multiple sources, where the data is structured differently in a manner to provide a user-friendly and scalable solution.
- Analysis of BI reporting and integration solutions that allows for end users to use the proposed information warehousing solution in a manner that supports using combined data for trending, forecasting, and other analytical reporting needs.
- Interviews with agency stakeholders about their use of the current IW and agency reporting needs.

On November 30, 2022, Gartner provided DFS a report with recommendations for options and next steps to implement a DW and BI solution. The report included the top three recommended solutions for DW and BI, in ranked order. A comparison of the pros and cons of each solution was included. The report identified change management impacts, a potential implementation project plan and timeline (using a count of months) for implementing the proposed solution options. As part of the assessment, Gartner and the Project identified the critical functionality and expectations for the DW and BI solution. Gartner provided potential technical and functional requirements for the solution. The recommended implementation approach includes data governance activities as a foundation for the DW and BI solution.

The assessment report included information needed to support key decisions for the development and implementation of the solution. An overview of this report was presented by Gartner in the Executive Steering Committee meeting on December 14, 2022. This information is provided to support decisions for the next steps (e.g., a contract amendment or separate procurement) for the DW and BI solution.

Reports and Data Analysis

Current State Overview

Accounting and financial information is available to agencies through the IW and reporting tools. Key points and observations from the current state analysis and discussions with agencies and business owners include the following:

- Some agencies are solely dependent on the IW, legacy reporting tools and standard reports to meet reporting needs.
- However, more common is agencies obtain FLAIR transaction files to update agency databases or systems and create or update custom reports to meet their agency-specific reporting needs. Agencies shared the following reasons for relying on agency-managed tools for reporting:
 - Agency reporting tools provide a simplified user experience.
 - Custom reports have been created to meet agency reporting needs.
 - Agencies maintain data for longer periods than the IW retention periods, to support agency specific research and reporting needs.

- The FLAIR information is combined with other agency information for analysis or reporting.
- Agencies control access to financial and accounting data through their reporting tools.
- Some FLAIR data elements are used consistently across agencies. For example, information controlled through the budgeting process, such as fund and category, are used consistently. Information such as general ledger code is restricted to data values that are used for the state's annual comprehensive financial report, and other financial reports. However, some accounting transactions and activities are not recorded in a standard manner across or within agencies. To summarize:
 - A FLAIR data element may be used to capture information not consistent with the field name or purpose.
 - For example, FLAIR does not have fields to record some information that is needed for reporting, such as invoice service dates, so the information is collected in different fields in different agencies.
 - Each agency has developed unique alternative practices to collect needed information, and numerous other FLAIR fields are used to record this information.
 - Agencies have unique practices for recording and managing operational activities (e.g., grants, projects, contracts, accounts payable and encumbrances, accounts receivable and billing, and assets). For example, agencies have unique and varied practices to record and manage grant activities. Agencies generally use one or more of the following FLAIR data elements: grant identification number, project identification number, other cost accumulator, and/or organization code. Some standard reports, such as Schedule of Allotment Balance, are used to manage grants. However, custom agency reports are often used to manage and account for these activities and transactions. Enterprise reports that use this information, such as the Schedule of Expenditures of Federal Awards, and agency grant reports, are compiled using manual processes.

Report Mapping

CMS Wave

The *Reports Catalog* includes a mapping of Florida PALM reports implemented for CMS Wave to the related legacy reports. Due to changes in the system functionality and data structures from legacy CMS to Florida PALM, many Florida PALM reports are not identical to the legacy counterpart. The mappings were made to identify reports that met the user objectives of the legacy reports. As part of CMS remediation activities, some Florida PALM reports were refined to better meet user expectations and objectives. These updates are described in the previously issued *Quarterly Reporting Updates* and the *CMS Remediation Reports*.

Financials and Payroll Waves

The *Pathfinder* includes a tab that identifies standard FLAIR reports that have been indexed by topic. Each topic corresponds to a filter within the Reports Catalog to support user identification of related reports. Where applicable, some legacy reports have been dispositioned as not applicable. For example, reports used to reconcile Central FLAIR and Departmental FLAIR are not applicable when Florida PALM is fully implemented.

The *Reports Catalog* identifies the reports planned for future implementation based on work completed through March 2022. The Florida PALM report inventory will be updated after implementation activities resume. Resources will be updated to account for changes in requirements and expectations for Florida PALM and the DW and BI solution. The *Reports*

Catalog will be updated with legacy report mappings when applicable design activities are completed.

Data Mapping

CMS Wave

The *Data Dictionary* is available on the Florida PALM website. This document identifies the Florida PALM tables and fields applicable at CMS Wave, including definitions and general information about each data element. The Florida PALM data elements are mapped to the corresponding legacy FLAIR data elements used for CMS Wave. There are a limited number of data elements used in both Florida PALM and FLAIR during CMS Wave.

Financials and Payroll Waves

The *Data Dictionary* will be updated when additional data tables and fields are identified as part of design activities (e.g., business processes, interfaces, forms) for Financials and Payroll Waves. The Project created and shared with agencies *FLAIR Data Element Inventory*. This task was shared with agencies to support their identification of FLAIR data elements in business systems, databases, and processes. This current state analysis will support agency change management and remediation planning activities. As part of the task, agencies have been asked to provide feedback about their usage of the FLAIR data elements. This feedback will be used in Project design activities and creation of resources to support agencies in identifying comparable Florida PALM information. These activities will support agency identification of existing business objectives and usage for legacy data with mappings to how those objectives will be met with Florida PALM data (either through a similar data element or through other relational concepts, such as tree [hierarchal] relationships and data attributes).

The implementation of Florida PALM and retirement of FLAIR (e.g., Departmental FLAIR, Central FLAIR, and Payroll) will be a major change in that all activities and transactions will be recorded in a single system. Users will rely on the data collected in the single system to meet a variety of reporting needs. The Project will work with enterprise partners and the Agency Advisory Council to support data management initiatives and guidance to support cleansing of legacy data and defining policies for using Florida PALM data going forward. These efforts will require collaboration of all parties to adopt new practices that will improve reporting and use of accounting and financial data.

Appendix A - Resources

Resources to support users and stakeholders are published to the Florida PALM website¹. For items with protected data, access can be provided by the Agency Liaison. The key resources and tools applicable to reports and data include:

- [Pathfinder](#) – The Project published a Pathfinder tool to assist agencies in understanding and evaluating how they will use Florida PALM functionality beginning at Financials Wave. This tool links the business processes, legacy terminology for key activities, and the related interfaces, conversions, and report topics. This tool provides related legacy information for user reference, including a directory of legacy reports and the related topic used in the Pathfinder.
- [Business Process Models](#) – Business process models describe general functionality, such as process steps, interfaces, and reports. Florida PALM screenshots were included to share information about data elements based on delivered functionality.
- [Reports Catalog](#) – Reports implemented for CMS Wave or planned for future Waves are described here, with additional information such as key data elements and navigation paths.
- Catalog of Interface Offerings – The inventory of interfaces is available to agency-designated users via Smartsheet. This tool includes access to the file layouts, screenshots, and sample data.
- Catalog of Conversions – The inventory of conversions is available to agency-designated users via Smartsheet. This tool includes access to the file layouts and sample data.
- [Approach documents](#) – Each Approach describes the general expectations for Project and agency activities for specific topics. These documents were updated for the Financials and Payroll Waves.
 - Configuration Approach – This approach describes how specific data values will be collected and set up for use in Florida PALM. Examples of data values that must be configured in Florida PALM include agency budget entities and voucher status options.
 - Conversions Approach – This approach describes the legacy data that will be converted for use in Florida PALM. Types of data to be converted include the following: balances (e.g., general and subsidiary ledgers, grants, contracts, and projects); master data (e.g., suppliers, employees, and customers); and subsidiary ledger records (e.g., accounts payable/encumbrances, accounts receivable, and assets).
 - Data Management Approach – This approach describes agency responsibilities for managing legacy data in preparation for conversion activities. Agencies should leverage legacy tools and processes to monitor and manage data for accuracy, completeness, and relevance.
 - Data Protection Approach – This approach describes how sensitive data is protected for CMS Wave. Similar practices will be used for future Waves.
 - Interface Approach – This approach describes how agencies can prepare to select interfaces and plan for remediation activities and testing of interfaces.
 - Reporting Approach – This approach describes expectations for meeting reporting and data needs.
- [Data Dictionary](#) – This document describes the data elements and tables used for CMS Wave. Definitions and related reports are also identified.

¹ For Financials and Payroll Waves, applicable resources will be updated to account for the updated approach.
<https://www.myfloridacfo.com/floridapalm/>

- [Training](#) – Role-based training is available on-demand to all PeopleFirst users through the Learning Management System. Training includes coverage of reports and queries.
- [Manuals, Job-Aids, and Training Videos](#) – Numerous job aids and training videos for Florida PALM reporting tools and specific reports are available on the Florida PALM website.
- [Quarterly Reporting Updates](#) – These updates describe activities and resources related to Florida PALM reports and data.
- [CMS Remediation Reports](#) – Found under Monthly Status Reports on the Florida PALM website, these reports describe the Project’s activities completed as part of CMS Remediation. Examples include reconciliation of Florida PALM and Central FLAIR transactions and balances, resolving incident tickets, solution updates, training, and agency assistance.
- [Personalized Agency Working Sessions Checkpoints](#) – Found under Implementation, Meetings and Workshops on the Florida PALM website, these checkpoints provide status, guidance and observations from the agency and Project discussions.
- [Understanding Agency Unique Processes](#) – A self-assessment tool was provided to assist agencies in completing a current state analysis. Agencies should use this tool to consider and identify potential change impacts for business systems, databases, and processes that use FLAIR data.
- [Chart of Accounts](#) – The COA and the COA Design Structure Overview describe the Florida PALM data structure and includes a mapping to the FLAIR COA.
- [Readiness Workplan](#) – The RW identifies agency tasks to prepare for the implementation of Florida PALM or to provide information needed by the Project to complete implementation or operational activities.
- [FLAIR Data Elements Inventory](#) – An inventory of the FLAIR data elements used by agencies in reports was provided to agencies as part of Readiness Workplan Task 324.