STATE OF HAWAI'I | *KA MOKU'ĀINA O HAWAI'I*
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | *KA 'OIHANA LOIHELU A LAWELAWE LAULĀ*

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | *KE'ENA HO'OLANA 'ENEHANA*

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

October 7, 2024

The Honorable Ronald D. Kouchi
President of the Senate
and Members of the Senate
Thirty-Second State Legislature
State Capitol, Room 409
Honolulu, Hawai'i 96813

The Honorable Scott K. Saiki
Speaker and Members of the
House of Representatives
Thirty-Second State Legislature
State Capitol, Room 431
Honolulu, Hawai'i 96813

Aloha Senate President Kouchi, Speaker Saiki, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within 10 days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawai'i, Department of Labor and Industrial Relations (DILR) Hawai'i Unemployment Insurance Modernization (Hui Huaka'i) Project

In accordance with HRS section 93-16, this report may be viewed electronically at http://ets.hawaii.gov (see "Reports").

Sincerely,

Christine M. Sakuda
Chief Information Officer
State of Hawai'i

Attachments (2)

HUI Huaka'i Project

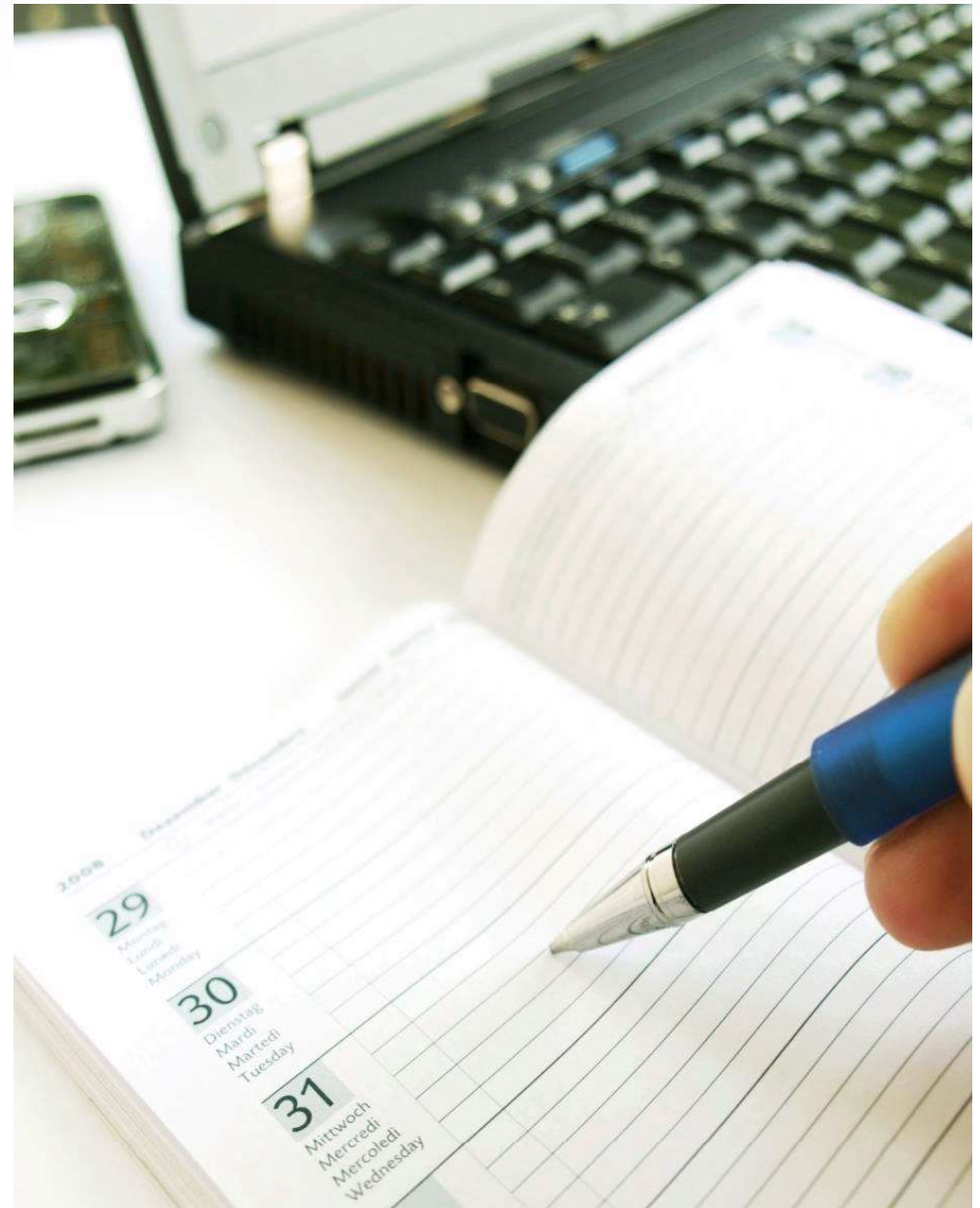## Department of Labor and Industrial Relations (DLIR)

IV&V Monthly Status Report – **[Final]**

For Reporting Period: **[August]**

Draft Submitted: September 6, 2024

Final Submitted: 10/02/2024

PUBLIC CONSULTING GROUP

Solutions that Matter

Overview

- Executive Summary

- IV&V Findings and Recommendations

- Appendices
    - A – IV&V Criticality Ratings
    - B – IV&V Standard Inputs
    - C – IV&V Details

Executive Summary

The HUI Huaka'i Project is in the early stages of Design, Development, and Implementation (DDI) and is currently in low-risk (green) status.

During August, the PCG Team submitted the July Monthly Report. The IV&V team reported one (1) preliminary concern, six (6) project risks, and one (1) positive project observation detailed in the IV&V Findings and Recommendations section of this report.

The IV&V team will continue to attend requirement sessions, review project documentation and ADO boards, and make document observations. Final document reviews are in progress for the Communication Plan, Risk Management Plan, OCM Strategy, BPR Strategy, and Data Conversion Strategy, and IV&V will report observations and recommendations in the September Monthly Report.

Executive Summary

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Project Organization Management	Project Management is Green with the following **Observations**: The Hawaii UI PMO received the draft project management plan (PMP) in June 2024. The initial plan versions were missing numerous elements, so it was returned to the UI Solution Vendor for editing and revision and went through multiple iterations. The Hawaii UI PMO has implemented risk mitigation strategies to address the project plan with the Vendor. It was reported by the UI PMO that the UI Solution vendor added additional resources to assist in project management activities. While IV&V had concerns that the PMP was not delivered during the August reporting period, a final draft was delivered on September 6, 2024, and is currently under review. IV&V has observed improvements in the misalignment of elicitation session agendas. These agendas are now centrally stored in a repository, a positive step towards improving organization and accessibility. However, challenges persist with aligning the agendas with actual meeting content. See finding #10 for the full update. **IV&V Recommends:** • Thoroughly reviewing and validating the project schedule with the project team and stakeholders. considering resource availability, constraints, and potential risks. • Obtaining stakeholder approval and setting the schedule as the baseline, i.e., the official project plan, once the schedule is approved. . **Related Open Findings:** **Finding #10** – Misalignment of Elicitation Session Agendas **Finding #15-** Project Management Plan

Executive Summary

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Cost and Schedule Management	Cost and Schedule Management is Green with the following **Observations**: The Hawaii UI PMO received the draft project schedule in June 2024. The initial schedule was returned to the UI Solution Vendor for editing and revision and underwent multiple iterations. The Hawaii UI PMO has implemented risk mitigation strategies to address the project schedule with the Vendor. The Hawaii UI PMO reported that the UI Solution vendor added additional resources to assist in project management activities. While IV&V had concerns that the schedule was not delivered during the August reporting period, it was delivered on September 6, 2024, and is currently under review. **IV&V Recommends:** • Clearly document and communicate the baseline to all stakeholders • Include the eta for completion of the Project Plan date. • Assigning resources to the detailed tasks. **Related Findings:** **Finding #9 -** Baseline project schedule

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Requirements Management	Requirements Management is Green with the following **Observations**: • There are anomalies with the traceability and linking of the Requirements Traceability Matrix to Feature items in Azure DevOps • **Positive Observation** -- The UI PMO proactively addressed deficiencies in the requirements-gathering process, implementing effective mitigating procedures. The resulting requirements Action Plan has been provided to the UI Solutions vendor, who has committed to following best practices for requirements gathering as required by the State. The Hawaii UI PMO meets weekly with the vendor to measure progress. IVV will continue to monitor the UI Solution Vendor's progress in meeting the Action Plan guidance to assist in keeping requirements management in a low-risk status. • **Positive Observation**—Surveys are sent to SMEs after requirement gathering sessions. Surveying the SMEs after meetings allows for immediate feedback on the quality and content of the meeting. The Hawaii UI PMO can analyze the feedback and make necessary corrections in meeting format and content. This process engages the SMEs, creates ownership in the project, and can identify SME burnout. **IV&V Recommends:** • All parties should conform their efforts to the requirements of the Action Plan • Including application demonstrations to provide context to requirements sessions would provide valuable context for staff and may benefit OCM **Related Findings:** **Finding #4** – Traceability Concerns in Requirements Traceability Matrix and Azure DevOps Feature Items **Finding #11** – Pace of Requirement Completion

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	System Architecture and Design	**There are no updates for this period.** In July, IV&V reviewed and provided recommendations on the Implementation Strategy document, versions 1 and 2. Overall, the Implementation Strategy document creates a good framework for their approach and future documentation. High-level strategy and objectives were provided, and the expectation was that more detailed plans and information would be contained in the Go Live Playbook. Until the Go Live Playbook is finalized, IV&V cannot validate many of its observations and findings. Several recommendations were made for inclusion in the Playbook. **IV&V Recommends:** • Include physical posture for user readiness in the Go Live Playbook or future documentation. • The Go Live Playbook or Implementation plan should include information regarding operational readiness. • Inclusion of an implementation strategy checklist.

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month]	Category	IV&V Observations
	L	L	Testing (Sprint, Unit, System, Integration, UAT)	**There are no updates for this period.** In July, IV&V reviewed and provided recommendations on version 1 of the Testing Strategy document. The strategy document created a good baseline, but IV&V expects additional information to be included, as reflected in the comments and recommendations. **IV&V Recommends:** • Including more details about how tools will be utilized, as well as information on environments and configuration/data posture. • Including additional information in future documentation regarding the traceability of requirements and how these requirements will influence the definition, creation, and execution of test cases. • Including more details on methodology and phases, or planned levels, of testing that will be executed (unit testing, regression, system integration, acceptance, etc.) • Including a high-level testing schedule detailing activities, milestones, and retesting activities, in future documentation. • Including information regarding a regression strategy in future documentation.
	L	L	Operational Preparedness	**There are no updates for this period.**

Executive Summary (cont'd)

[2 Months Prior]	[Prior Month]	[Current Month]	Category	IV&V Observations
	L	L	Data Conversion / Management	Data Conversion / Management is Green with the following **Observations**: In July IV&V reviewed the Data Conversion Strategy document, versions 1 and 2. The strategy document provided a structured approach to managing the data conversion process. Status and reporting will be provided through the Data Conversion Traceability Matrix. The project has separate weekly data conversion and data cleansing meetings, which are progressing well. Data conversion activities are currently focused on completing the Data Dictionary. The data cleansing vendor is utilizing SAP Information Steward. This comprehensive software solution helps organizations manage and improve the quality of their data through data profiling, monitoring, and information policy management. The data cleansing vendor will run the data rules and provide a data quality Score Card every month. The project manages all Data Dictionary (DD) tasks through a Conversion Traceability matrix. IV&V does not have access to the Data Conversion sprint boards in Azure DevOps (ADO) to verify and validate the information on the task boards, for example, the status of the tickets, ticket assignments to developers, and if sprints are mostly for housekeeping items, e.g., giving access to CATCH, getting data from Mainframes. Data Cleansing tasks are managed through sprint boards in ADO which IV&V currently cannot access. **IV&V recommends:** • A rollback plan and process are included in future documentation. • Including a project schedule detailing data conversion processes in future documentation. • Creating a risk to the project for the lack of legacy data documentation, such as a data dictionary. • Including legacy data source information in future documentation. • Including a more in-depth training approach for conversion procedures and activities in future documentation. • Defining a business glossary during data conversion. While defining a business glossary is not always the primary focus of the conversion process itself, integrating one into the data conversion phase can enhance overall data management. It is a strategic and beneficial practice. • .
	L	L	Security	**There are no updates for this period.**

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Training / Knowledge Transfer	**There are no updates for this period.** In July, IV&V reviewed and provided feedback on the UI Solution Vendor's Training Plan, Version 2. The updated version includes a high-level timeline for training analysis, training development, train-the-trainer preparations, train-the-trainer training, final training, and refresher training. **IV&V Recommends:** • Define the scope of work to be accomplished as the project progresses and recommend including a more detailed timeline for conducting each activity and when classroom, online, in-person, and webinar training classes will occur. • Ensure all training participants are informed; a definitive list of prerequisites and pre-assessments should be identified and communicated to all the training participants ahead of time for effective planning. In Version 1 of the plan, a list of six (6) deliverables (Training Plan, Training Needs Assessment, Training Curriculum, Training Artifacts, Training Assessment, and Training Performance Monitoring Report) were included. However, this list was missing in version 2. The latest version should be updated to include this list and the due dates for each deliverable. • Include the roles and responsibilities of key UI Solution Vendor training personnel to better understand the UI Solution Vendor's role in providing training.
	L	L	Interfaces	**There are no updates for this period.**
	L	L	Quality Management	**There are no updates for this period.**

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Software Development	**There are no updates for this period.**
	L	L	Human Resources Staffing Management	Human Resources Staffing Management is Green with the following **Observations:** The Resource Management Plan is being developed and updated. Once the document is reviewed, IV&V will update this category. HUI Huaka'i Weekly Status report for the week ending September 01, 2024, states that the Hawaii UI PMO and the UI Solution Vendor will identify and hire experts to fill resource gaps, and the project will continuously monitor resource usage and performance through KPIs in Azure DevOps (ADO). UI Solution Vendor has partnered with a subcontractor to supplement in areas such as requirements gathering and project scheduling, helping alleviate and mitigate the associated risk/IV&V Finding. **IV&V Recommends:** • Monitoring and tracking project resourcing as resources are onboarded/offboarded and the impact onboarding/offboarding has on team dynamics, team morale, project momentum, productivity, re-assignment of responsibilities, and knowledge transfer (KT). **Related Findings:** **Finding #3** – Monitor and Track Project Resourcing
	L	L	Scope Analysis	**There are no updates for this period.**

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Contract Management	Contract Management is Green with the following **Observations:** The HUI Huaka'i Project gave UI Solution Vendor a Vendor Improvement Action Plan early in the project to establish a common understanding of the State's expectations. Additionally, they established a weekly review process to ensure the vendor remediated issues. Delivering a Vendor Improvement Action Plan early in the project clearly establishes the vendor's expectations so that small problems don't become larger issues as the project progresses. The Hawaii UI PMO is meeting with the UI Solution Vendor weekly to assess performance. As of the last Improvement Plan meeting the UI Solution Vendor has: • Met expectations in four (4) areas • Partially met expectations in six (6) areas • Has not improved in two (2) areas **IV&V Related Findings**: **Finding #16:** Project Vendor on a PIP
	L	L	Communication Management	**There are no updates for this period.** In July IV&V reviewed the Communications Strategy and Communications Management plan documents. The documents were measured against standards, including CMMI-DEV, PMBOK, and ISO/IEC. The Communications Management Plan references a Communication Tracker, which is not available to IV&V. IV&V made several recommendations to bolster existing and future communication plans and approaches. **IV&V Recommends:** • Details regarding dealing with sensitive and confidential information and who authorizes it to be included in the process. • Including additional details regarding how the UI Solution Vendor communicates and disseminates updates and corrections to previously distributed materials. Additionally, they should clarify what is reviewed in their regular review of the Communication plan and how that is communicated. • Including additional details on preparatory and production work for key activities, the level of effort, and approximate preparation time before delivery. • Including details of how information can be accessed between scheduled communications by stakeholders.

Executive Summary (cont'd)

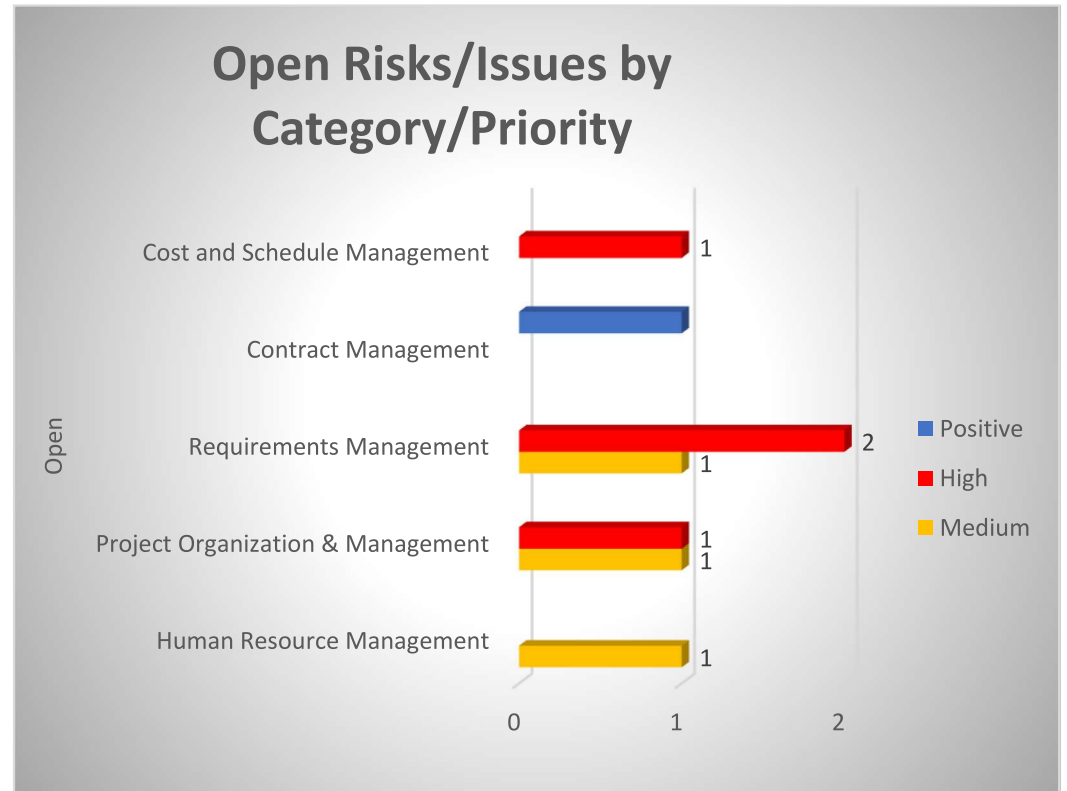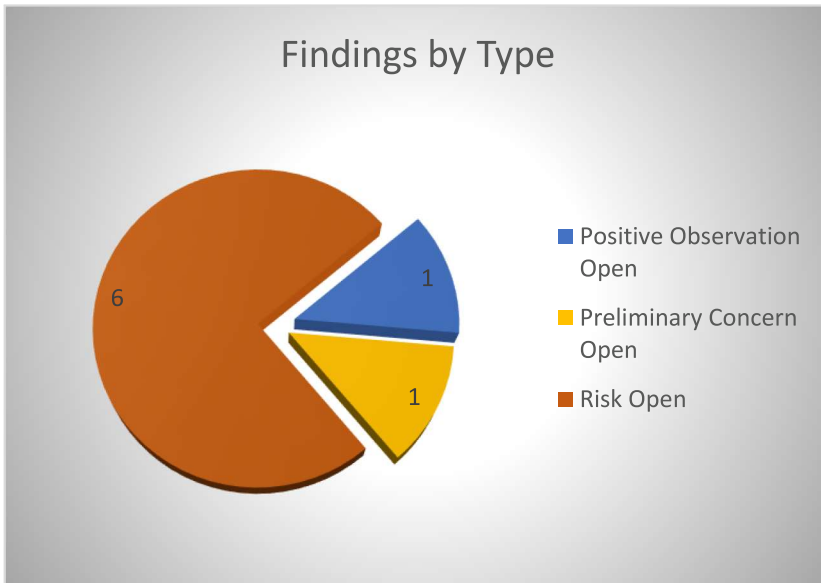| 2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Organizational Change Management	**There are no updates for this period**
	L	L	Risk & Issue Management	Risk and Issue Management is Green with the following **Observations**: The UI project team has Weekly Risk Management Meetings on Fridays. IV&V reviewed the Draft Risk Management Plan document and is in the process of reviewing the final document. **IV&V Recommends:** • Defining all relevant inputs and outputs in the risk management process in an appendix. • Considering risks at two levels (i.e., individual and overall) within the project. • Detail the five steps of the vendor's risk management framework and include all relevant inputs and outputs for each step. • Incorporating stakeholder risk appetite and thresholds into the plan. • Outlining the communication plan for risk management. • Listing all relevant vendors, related state agencies, and third-party administrators (TPAs) with the relevant stakeholder types when defining the different roles and responsibilities. • A section that lists the tools and software used for risk management is included. • Including a section that outlines the training requirements for the project team on risk management practices and initiatives.

Executive Summary (cont'd)

2 Months Prior	Prior Month	Current Month	Category	IV&V Observations
	L	L	Technical Architecture	**There are no updates for this period.** In July IVV reviewed the Technical Architecture Strategy Version 1.0 document. The Risk Management plan was measured against standards maintained by PCG's Center of Excellence. The Final Technical Architecture Strategy document should include the following: **IV&V Recommends:** • Documenting how the technical architecture supports the business vision, business objectives, and goals. • Clarifying Data Station's .NET design framework and version. • Elaborating on modern Angular or React-based UI development or moving in that direction. • Provide an overview of the different Data Station modules and illustrate how they interact/ flow with each other. • Including an appendix with an inventory of technologies, databases, tools, services, and third-party applications to be used. • Provide information about data sources. • Provide examples or evidence of how scalability is achieved. • Documenting how the architecture would address potential single points of failure, redundancy, unexpected traffic spikes, and failover scenarios. • Providing more information about Data Management. • Documenting the governance policies that would be established and the maintenance responsibilities.

IV&V Findings and Recommendations

IV&V identified 8 findings (1 preliminary concern, 6 risks, and 1 positive observation) for this reporting period. The following charts break down the findings by type/category/priority.

Findings by Type

- Positive Observation Open
- Preliminary Concern Open
- Risk Open

Open Risks/Issues by Category/Priority

- Positive
- High
- Medium

Cost Tracking

IV&V reporting on costs, including original vendor award, additional project funding, and funds expended.
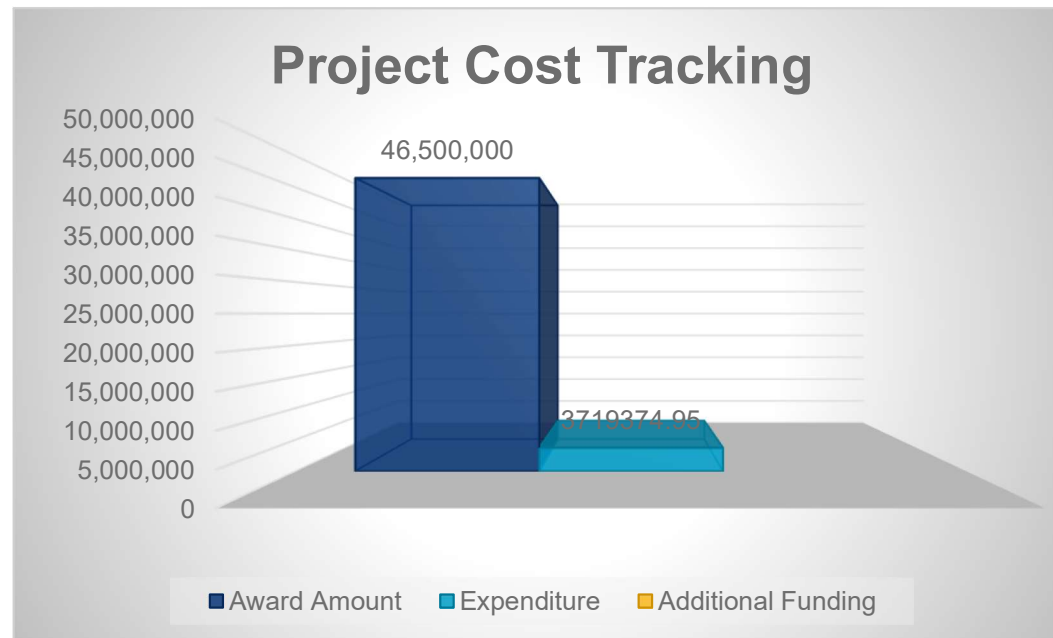
Solution Scope Completion

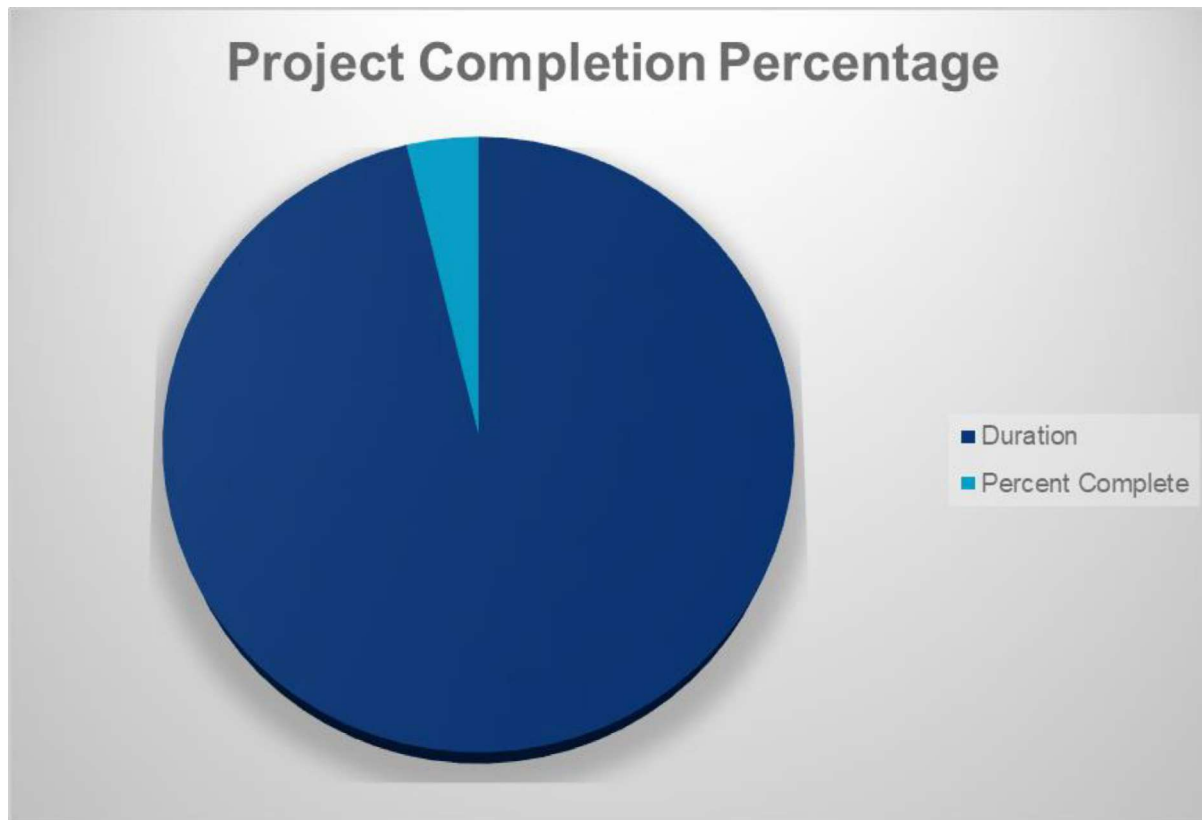*IV&V reporting on the estimated percentage of scope implemented, percentage of testing competition for implemented scope, and scope changes. *Additional measures will be added as the project matures.*

Project Completion Percentage

- Duration
- Percent Complete

Organizational Change Management (OCM)

OCM is progressing well. All required OCM roles are filled and there are no vacancies.

OCM Activities	Date
Project kick-off	3/20/24
Site visits to internal groups (17 Sessions)	4/17/2024 - 5/14/2024
Stakeholder interviews/analysis (15 Interviews)	7/2/2024 – 7/19/2024
Bento Sessions	
• Claim and Claimant	5/30/24
• Tax	6/4/24
• Appeals	7/8/24
• Monetary Determination	8/7/24
Project Advisory Committee (PAC)/External Stakeholders outreach	
• Initial PAC meeting held	8/28/24
Project HUI Huaka'i Intranet site	
• Site Live email sent	8/9/24
Project Update Communications	

IV&V Findings and Recommendations

Ⓛ **Project Management**

The following slides list the findings in each category (focus area) that IV&V tracks throughout the project. Criticality ratings are provided by category and finding. Findings are itemized and described, including the impact on the project and recommendations for mitigating risk. A separate findings log spreadsheet can be referenced as supporting documentation to provide greater detail on each IV&V finding.
Findings will include Issue Analysis (Open/Closed Issues), Risks/Concerns/Observations/Deficiencies, and Recommendations for Remediation.

#	Key Findings	Criticality Rating
5	Preliminary Concern **– Time Management for Extended Meetings:** *During Elicitation/Requirements Sessions, Demos, and other Extended meetings, IV&V observed some discrepancies in time and meeting management practices. IV&V participated in several 2+ hour meetings with no breaks for participants, leading to decreased engagement and productivity. Occasionally, facilitators provided ad hoc breaks, but this was inconsistent.*	Low

Update	Status
• This finding has been closed this reporting period as IV&V has observed positive outcomes and more optimized time management efforts. IV&V will continue to monitor as needed.	**Closed – 8/30/2024**

IV&V Findings and Recommendations

Ⓛ **Project Management**

#	Key Findings	Criticality Rating
10	Preliminary Concern – **Misalignment of Elicitation Session Agendas:** *IV&V observed that the agendas provided for the elicitation/requirements sessions are not consistently provided and not consistently accurate. This often leads to misalignment with the actual discussions during the meetings. Participants are instructed to prepare by reading and familiarizing themselves with the user stories and features to be discussed. However, the sessions often diverge from the prescribed agenda.* *Additionally, the meeting minutes, while accurately reflecting the discussions that took place, need to match the agenda distributed beforehand. This inconsistency hinders participants' engagement, leading to inefficiencies and a lack of productive engagement.* *Analysis and significance:* *As a result of inconsistent and inaccurate agendas, participants are unable to adequately prepare for sessions, leading to ineffective discussions and a lack of productive engagement. The discrepancies between the meeting minutes and the agenda further exacerbate these inefficiencies, potentially hindering the progress of elicitation activities.*	Medium

Recommendations	Status
Recommendations found on the following slide*	

IV&V Findings and Recommendations

(L) Project Management

Recommendations	Status
IV&V Recommends: 1. Ensuring that meeting agendas are closely followed during Elicitation sessions to provide structure and allow participants to prepare and engage effectively. 2. Communicate any changes to the agenda in advance to give participants ample time to adjust their preparations. 3. Implement feedback to gather participant input on meeting effectiveness	Open

Update(s)
8/26/2024 – IV&V has observed improvements in some areas. These agendas are now centrally stored in a repository, a positive step towards improving organization and accessibility. However, challenges persist with aligning the agendas with actual meeting content. Actions Taken: - Agendas are consistently provided and are now stored in a central repository, making them easily accessible to all participants. - In one instance, a revised agenda was distributed prior to the meeting, and this version was more aligned with the actual meeting content, which proved to be more effective. Summary: While agendas are being consistently provided, there are still notable discrepancies between the prescribed agendas and the actual meeting contents. Over a three-week observation period, IV&V noted that 8 user stories matched the prescribed agendas, while 16 user stories were not included in any of the agendas, preventing SMEs from adequately preparing. Additionally, while meeting minutes continue to accurately reflect meeting content, the agendas for subsequent meetings remain misaligned. The one week where a revised agenda was distributed demonstrated that this approach could be effective when deviations from the plan are anticipated.

IV&V Findings and Recommendations

Ⓛ Project Management

#	Key Findings	Criticality Rating
12	Risk **–** IV&V has identified several concerns during the initial development phase kickoff, first benefit sprint planning meeting, and daily scrum meetings: - Short Meeting Duration: The Benefit Sprint Planning meeting lasted only 15 minutes, raising concerns about the depth and effectiveness of discussions. It is unclear if all key participants were involved in this critical meeting, which ties to another finding regarding the involvement of stakeholders. - Lack of Discussion on Story Movement: There was no discussion about the reasoning behind stories being moved from the backlog to the current sprint cycle. This lack of clarity could lead to confusion regarding prioritization, decision-making processes, and the project's alignment with its goals. - Ineffective Scrum Meetings: The first daily scrum meeting lasted two minutes, with no substantial updates shared. This suggests that the scrum meetings may not be utilized effectively to track progress, which could delay the identification and resolution of potential issues. - Lack of Detail in Stories: The stories presented in the sprint lacked sufficient detail. This could lead to misunderstandings, incomplete work, and difficulties in estimating the effort and resources required for tasks.	High

Recommendations	Status
Recommendations found on the following slide*	

IV&V Findings and Recommendations

Ⓛ **Project Management**

Recommendations	Status
IV&V recommends: The HUI Huaka'i project has 2-week development Sprints. IV&V recommends: - Based on Best Practices, the following durations for key Scrum events for 2-week Sprints: 1) Sprint Planning, up to 4 hours. 2) Daily Scrum, 15 minutes. 3) Sprint Review, 2-4 hours. 4) Sprint Retrospective, up to 1.5 hours. - Leveraging the Stakeholder register and RACI to ensure adequate participation and approval from state staff. - Extending the duration of sprint planning meetings to ensure thorough discussion and involve all key stakeholders. - Incorporating a detailed review of story movement from the backlog to the current sprint during sprint planning to clarify prioritization and decision-making. - Utilizing daily scrum meetings to provide meaningful updates on progress, blockers, and next steps. Ensure full team participation. - Enhancing the level of detail in stories to improve clarity and accuracy in execution and planning.	Open - Initial Report/ Recommendation

Update(s)
N/A

IV&V Findings and Recommendations

Ⓛ **Project Management**

#	Key Findings	Criticality Rating
15	Risk – IV&V had concerns that the PMP was not delivered during the August reporting period, however, a final draft was delivered on 9/6/2024 and is currently under review. PMBOK best practices recommend developing the Project Management Plan (PMP) during the planning phase to ensure that teams meet vital benchmarks for project completion. The PMP establishes the project scope granularly and establishes risks, timelines, milestones, and budget. Without a PMP, there is no blueprint for project completion and no control over the execution of project phases. The lack of a finalized PMP could lead to uncertainty around project scope and uncertainty about how the project will be executed or managed, which can reduce overall project cadence, productivity, and accountability.	High

Recommendations	Status
IV&V recommends finalizing the project management plan as soon as possible.	Open - Initial Report/ Recommendation

Update(s)
Draft PMP was delivered to the Hawaii UI PMO on 9/6/2024 and is under review.

IV&V Findings and Recommendations

(L) Project Schedule and Cost Management

#	Key Findings	Criticality Rating
9	Risk—Baseline the Project Schedule: The Project Milestone Performance section in the HUI Huaka'i Weekly Status report for the week ending September 01, 2024, has the baseline completion date of the project schedule as 06/01/2024. IV&V had concerns that the schedule was not delivered during the August reporting period. However, a draft project schedule was delivered on September 6, 2024, and is currently under review.	High

Recommendations	Status
Baselining a project schedule is a critical step in project management. It ensures that the planned schedule is set as the standard for measuring progress and performance. IV&V recommends: • Conducting a thorough review of the schedule with the project team and stakeholders. • Validating the schedule's feasibility. Resource availability, constraints, and potential risks should be considered when validating feasibility. • Obtaining stakeholder approval. • Setting the baseline: Once the schedule is approved, set it as the baseline, i.e., the official project plan. Ensure that the baseline is clearly documented and communicated to all stakeholders.	Open

Update(s)
Draft project schedule was delivered to the Hawaii UI PMO on 9/6/2024 and is under review.

IV&V Findings and Recommendations

Ⓛ **Requirements Management**

#	Key Findings	Criticality Rating
4	**Risk – Traceability Concerns in Requirements Traceability Matrix and Azure DevOps Feature Items:** *IV&V identified anomalies with the traceability and linking of Requirements Traceability Matrix items to Feature items in Azure DevOps. During the review of the tax backlog features, IV&V found that 91 out of 149 Tax Features had no link to an existing Requirement. Several features were identified with the same title as an existing Requirement but were not linked (e.g., T1.71 is not linked to a feature, yet there is a feature with the same title within the tax backlog that isn't linked, such as Feature #39125). Numerous work items in Azure DevOps displayed related items listed as "Work item not found or no permission." Lack of traceability and proper linking can lead to incomplete or inaccurate tracking of project requirements and features. Potentially corrupted links may hinder project progress and cause delays. Misalignment between requirements and features could result in unmet project objectives.*	Medium

Recommendations	Status
IV&V recommends conducting a thorough review of all related items in Azure DevOps to identify and correct any corrupted or missing links. Additionally, IV&V recommends establishing a routine audit process to ensure ongoing traceability and proper linking of requirements to features. If needed, additional training or guidance to team members on the importance of maintaining accurate and consistent links between requirements and features in Azure DevOps could be helpful.	Open

Update(s)
*Updates found on the following slide**

IV&V Findings and Recommendations

(L) **Requirements Management**

Update(s)
8/26/2024 – *IV&V reviewed the tax backlog again and found that two more features have been added to the backlog, bringing the total to 151 tax features. Of these, 92 features still need a link to an existing requirement, further exacerbating the traceability concerns. Limited progress has been identified with this risk. According to the 20240901 Project HUI Huaka'i Weekly Status Report, the UI Solution Vendor has partnered with a subcontractor to supplement in the areas of Requirements Gathering. Recommendations remain consistent.*

IV&V Findings and Recommendations

Ⓛ **Requirements Management**

#	Key Findings	Criticality Rating

11	Risk – **Pace of Requirement Completion:** *At the current pace of completing User Stories in the Tax Backlog, IV&V is concerned that the team will not be able to complete all 186 user stories in the allotted 120 days without adding additional resources.*
	Supporting Evidence with current resources (As of 7/24/2024):
	Current Progress
	    - Current Duration Completed: 20% of 120 days = 24 [business] days
	    - User Stories Started: 11% of 186 = 20 items
	    - User Stories Completed: 1% of 186 = 2 items
	Planned (Expected Completion Rate at the current 20% duration mark, ideally):
	    - User stories that "should" have been completed: 20% of 186 = ~37 items
	Required/Ideal completion rate for timeliness:
	    - Weekly Rate: Remaining Items/Remaining Weeks = 13.5 User Stories per week (184/13.6)
	This rate is significantly higher than the current pace of completion.
	
	As a result of the current pace of completing User Stories, the project is at risk of significant delays. The discrepancy between the ideal and actual rates of completion could lead to extended timelines and cascading impacts on dependent project activities such as development and testing. If not addressed, these delays may affect the overall project delivery and success.
	IV&V understands that these metrics are based on planned and expected, or ideal, rates. The project and completion rates will realistically vary throughout the requirements phase.
		High

Recommendations	Status
*Recommendations found on the following slide**	

IV&V Findings and Recommendations

(L) Requirements Management

Recommendations	Status
IV&V recommends: 1. Assessing the current resources and their allocation, creating a recovery plan to reach the expected progress. 2. Optimizing meeting agendas and format of elicitation sessions to allow for efficient preparation and turnaround of User Stories. 3. Ensure individuals are held accountable and responsible for different stages of the User Story, in that they are responding and approving in a timely manner.	Open

Update(s)

8/26/2024 -
Current Date: August 26, 2024
Percentage of Duration Elapsed: 45% (54 business days)
Items Started: 18 out of 193
Items Completed: 16 out of 193
Total Items: 193
End Date: November 26, 2024
Resources: No change to resourcing to support these efforts have been identified.

Current vs Expected Progress:
Items Started: Actual = 18, Expected ≈ 87
Items Completed: Actual = 16, Expected ≈ 87

Pace of Completion: Actual = 0.296/day, Expected/Ideal = 2.72/day

Summary:
The Requirements project task is significantly behind schedule in both starting and completing items. Only about 9.3% of the items have been started (18 out of 193), and about 8.3% have been completed (16 out of 193), whereas approximately 45% should have been addressed by now.

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IV&V Findings and Recommendations

Ⓛ **Human Resource Staffing Management**

#	Key Findings	Criticality Rating
3	Preliminary Concern – ***Monitor and track project resourcing:*** *It is the nature of IT projects that resources can be onboarded/offboarded during the project's duration. Onboarding/offboarding impacts project areas such as team dynamics, project momentum, and productivity.*	Medium

Recommendations	Status
IV&V recommends that the HUI Huaka'i project • Monitor and track project resourcing as resources are onboarded/offboarded and the impact onboarding/offboarding has on areas such as team dynamics, team morale, project momentum, productivity, re-assignment of responsibilities, and knowledge transfer (KT). • Provides a Resource Management Plan.	Open

Update(s)
08/31/2024 - The UI Solution Provider is updating the Resource Management Plan.

Appendix A – IV&V Criticality Ratings

See definitions of Criticality Ratings below:

Criticality Rating	Definition
H	A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.
M	A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely and a different approach may be required. Mitigation strategies should be evaluated and implemented as soon as feasible.
L	A low rating is assigned if there is a possibility of slight impact to product quality, scope, cost, or schedule. Minimal disruption is likely and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.

Appendix B – IV&V Standard Inputs

Artifacts reviewed during the reporting period:
No Project Documents were reviewed during this reporting period.

To keep abreast of status throughout the project, IV&V regularly:

- **Attends the project meetings**
- **Reviews the project documentation**
- **Utilizes Eclipse IV&V® Base Standards and Checklists**

PCG Eclipse IVV
Checklists

Appendix C – IV&V Details

- ## What is Independent Verification and Validation (IV&V)?
    - Oversight by an independent third party that assesses the project against industry standards to provide an unbiased view to stakeholders
    - The goal of IV&V is to help the State get the solution they want based on requirements and have it built according to best practices
    - IV&V helps improve design visibility and traceability and identifies (potential) problems early
    - IV&V objectively identifies risks and communicates to project leadership for risk management

- ## PCG IV&V Methodology
    - Consists of a 4-part process made up of the following areas:
        1. **Discovery** – Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools
        2. **Research and Analysis** – Research and analysis is conducted in order to form an objective opinion.
        3. **Clarification** – Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
        4. **Delivery of Findings** – Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

Note: This report is a point-in-time document with findings accurate as of the last day in the reporting period.

Solutions that Matter