HawaiiPay Project
Department of General Services (DAGS)

IV&V Monthly Status Report

For Reporting Period: June 23 – July 29, 2018

Draft submitted: August 16, 2018
Final submitted: September 4, 2018

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Executive Summary

Overall the project continues to make good progress as Group 2 rollout success has increased stakeholder confidence in the project's ability to meet deadlines and achieve high levels of payroll accuracy. The project has worked hard to address IV&V findings, as a result, IV&V closed 16 findings this reporting period. For Group 3, DOE parallel testing preparations have seen significant progress and data cleanup is underway to prepare for parallel testing and the project indicates they are on track. However, there is currently significant risk that UH may not be included in the final Group 3 rollout, which could impact project's budget and schedule. Subsequently, IV&V's overall project rating for this reporting period is Red, or "at risk".

May	Jun	Jul	Category	IV&V Observations
L	L	M	Communications Management	During Group 2 roll-out, project communications increased significantly due to the volume of departments included in Group 2's implementation and to unforeseen individual letters to State of Hawaii employees which included instructions for resolving their respective payroll errors. Though the project has had challenges coordinating communications through external organizations to employees (e.g., banks), the project demonstrated communication efficiency by addressing unanticipated global and ad hoc communications both quickly and seamlessly. However, IV&V has opened new Risk #27, "Communications to external entities may be ineffectual", as project communications to date with Group 3 departments seem to be ineffective in producing the expected exchange of information. IV&V recommends more overt messaging and persistent follow-though for stakeholders with communication challenges. IV&V has closed Risk #1 in this category related to communication metrics, but will continue to monitor.
L	L	L	Contract Management	The DAGS contract office is responsible for actively tracking all contract requirements; however, the spreadsheet has not yet been updated to reflect requirement approvals, changes, and deferrals resulting from the Group 2 deployment. While the vendor has maintained and shared a spreadsheet which tracks the technical requirements for the project, this list only indicates the method of delivery for each requirement, not when it will be delivered. IV&V recommends that the state update its tracking spreadsheet to be current through Group 2 so that remaining scope is clearly understood by both the state and the vendor prior to the conclusion of Group 3 UAT.
M	H	H	Cost and Schedule Management	IV&V previously reported significant risks around DOE readiness but recently, DOE parallel testing preparations have seen significant progress and data cleanup is underway. However, there is new risk that UH will not be ready for the final Group 3 rollout since they missed deadlines for Round 1 Parallel testing, which could significantly impact project budget and schedule. IV&V recommends HawaiiPay and UH agree on a collaboration plan for UH Group 3 transition and work to remove any communication obstacles. IV&V has closed Risk #3 in this category related to an integrated project schedule, but will continue to monitor.

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Executive Summary (cont'd)

May	Jun	July	Category	IV&V Observations
M	M	L	Human Resources Management	IV&V has reduced the overall risk for this category to a "Low" as a result of IV&V closure of the resource attrition Risk #5. IV&V has observed good management of this risk and key team members are committed to the project through Phase one and the project has accepted the risk. IV&V will continue to monitor overtaxed resource effectiveness as well as over reliance on 3-4 key individuals. Payroll errors have occurred recently, in part due to overtaxed mainframe resources. IV&V will continue to monitor progress on succession planning, knowledge transfer, and knowledge management planning.
L	L	L	Knowledge Transfer	IV&V continues to track the turnover Risk #23 as the lack of a detailed turnover plan may lead to insufficient planning and execution of important turnover activities, which could lead to stakeholder confusion and hinder knowledge transfer for M&O. A recent bug in production has highlighted the lack of good infrastructure documentation as the SI struggled to track down important server details for troubleshooting. The SI and state plan to work together to document infrastructure details to mitigate this risk going forward.
L	L	L	Operational Preparedness	The project identified a number of defects from Group 2 Parallel testing that were required to be resolved manually. Although, the user population of the Group 2 go live was substantially larger than the previous go live, the project was able to manage the increased number of manual processes during the cutover period. This required a substantial effort from key project team members including a significant amount of work over the final weekend prior to cutover. IV&V continues to recommend that, where possible, all defects are resolved with an automated and predicable solution. These solutions should be clearly defined, scoped and resourced in the project's cutover planned. This will help to ensure that all activities can and will be completed within the cutover timeframe. IV&V closed Risk #8 in this category, "Detailed processes for Help Desk and end user support not finalized"; the project has mitigated this risk.

Executive Summary (cont'd)

May	Jun	July	Category	IV&V Observations
(M)	(M)	(L)	Organizational Change Management	IV&V has reduced the overall risk for this category to a "Low" as IV&V continues to see substantial OCM efforts that appear to be mostly effective. The project has accepted the risk of an informal OCM structure and dedicated strategic leadership. The project sufficiently mitigates this risk through the efforts of the HawaiiPay Program Manager who champions the OCM overall strategy. The project has also described plans to better mobilize Super SMEs to enhance existing OCM efforts.
(L)	(M)	(L)	Project Organizational and Management	IV&V has reduced the overall risk for this category to a "Low" and has closed Risk #15, "Impact of Legislative Actions", as the project proved adept at handling last minute interface requirements to comply with Janus. Though, UHPA deduction mistakes were made, the project was quick to respond to correct the errors and institute manual validation processes to ensure it wouldn't happen again.
(M)	(L)	(M)	Quality Management	IV&V noted that the processes related to the development and testing of interfaces has improved since the Group 1 go live. However, IV&V also noted that unexpected errors in processing of key interfaces occurred. These errors appear to be caused by the lack clear operational processing documentation as well as a lack of controls regarding interface processing. IV&V recommends that all procedures related to the execution of interfaces be documented and communicated to all appropriate support staff. The use of checklists that outline the key components of each interface can help to reduce the risk of processing incomplete or non-current data which could result in inaccurate pay checks. IV&V also recommends that automated controls be implemented that archive interface data once processing is complete and prevent an interface process from running if the data is not current and complete. IV&V opened a new risk in this category, "DHRD users' access to shared tables could result in corrupt payroll data".

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Executive Summary (cont'd)

May	Jun	July	Category	IV&V Observations
L	L	L	Requirements Management	This category currently has no open findings, however, a related Risk #2 has been logged under "Contract Management" that address concerns around tracking of non-functional requirements. IV&V will continue to monitor requirements management processes and the projects use of the SI's proprietary ALM tool. Budget risks related to out-of-scope requirements are currently being mitigated as the SI continues to process them as $0 change orders.
L	L	L	Risk Management	The project continues to actively mitigate risks identified across project implementation process areas. As a result, IV&V has closed Risk #20 in this category related to mitigation strategy documentation. As the Group deployments have become progressively more complex, the project team has focused its risk and issue analysis and mitigation strategy development on items that immediately impact the project's ability to complete cutover activities or process payroll in Groups 2 and 3. IV&V has observed less focus on risk identification and mitigation planning for other downstream activities.
L	L	L	Systems Architecture and Design	Due to security concerns, IV&V was not able to walk through the production data center and system environments as planned. However, IV&V is not aware of any critical concerns related to the design and deployment of the HawaiiPay systems and infrastructure. However, a recent production problem highlighted the fact that existing system and infrastructure architecture documentation may be insufficient to aid in the resolution of critical support issues. IV&V did not note any key support issues that were unresolved during this reporting period.

IV&V Findings and Recommendations

As of this reporting period, PCG has identified a total of 11 open findings (2 issues, 8 risks and 1 preliminary concern). Of the open risks/issues, 3 are related to Quality Management. Four new findings were recorded and 9 were closed during this reporting period. The following graphs breakdown the risks by status, priority, and category.

Risk Status Summary

Closed, 4, 19%
Open, 11, 52%
Closed but monitoring, 6, 29%

- Closed
- Closed but monitoring
- Open
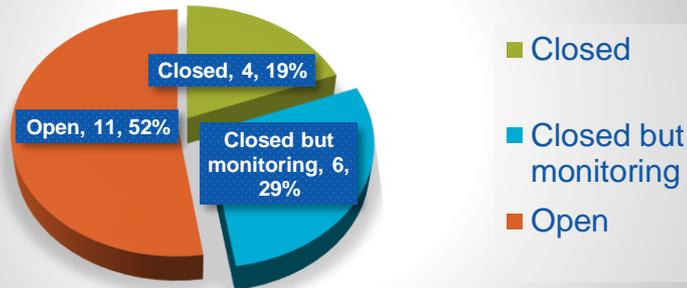
Open Risks/Issues by Priority

High 10%
Medium 50%
Low 40%

- High
- Low
- Medium
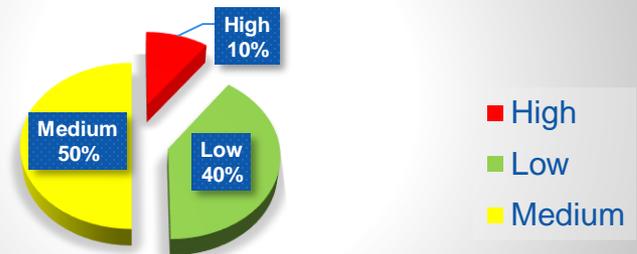
Open Risks/Issues by Category/Priority

Category	Value	Priority color
Quality Management	3	Medium
Operational Preparedness	1	Low
Knowledge Transfer	1	Low
Human Resource Management	1	Medium
Cost and Schedule Management	1 / 1	High / Low
Contract Management	1	Low
Communications Management	1	Medium

Scale: 0 0.5 1 1.5 2 2.5 3

- High
- Low
- Medium

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IV&V Findings and Recommendations (cont'd)

#	New Findings	Category
25	**Issue** - **Insufficient data validation, checks and balances**: Data validation processes and procedures to ensure data accuracy are insufficient and have resulted in data errors during payroll processing.	Quality Management
26	**Risk** - **DHRD users' access to shared tables could result in corrupt payroll data**: Inadequate controls to manage access to update payroll data by both DHRD and Payroll Division users could result in payroll data corruption.	Quality Management
27	**Risk** - **Communications to external entities can be ineffectual:** While IV&V has observed good efforts by the project to provide reasonable levels of communications to external entities (departments, TPA, banks, etc.), some communication have been misinterpreted or mishandled and have not produced their intended result.	Human Resource Management
28	**Risk** - **Lack of sufficient resources:** The project seems to lack sufficient resources in key areas, primarily mainframe payroll staff.	Human Resource Management

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IV&V Findings and Recommendations (cont'd)

#	Closed (*but Monitoring*) Risks/Issues	Category
1	Risk - Undefined communication metrics and performance targets	Communications Management
3	Risk - Project schedules not integrated	Cost and Schedule Management
5	Risk - Impact of project resource attrition	Human Resource Management
12	Risk - Less than optimal OCM management structure	Human Resource Management
15	Risk - Impact of Legislative	Project Organization & Management
20	Risk - Mitigation strategies and activities not documented	Organizational Change Management

#	Closed Risks/Issues	Category
6	Risk - Lack of dedicated leads filling key roles	Human Resource Management
8	Risk - Detailed processes for Help Desk and end user support not finalized	Organizational Change Management
16	Risk - Lessons Learned for Group 1	Organizational Change Management
21	Risk - Negative impacts from user generated PS queries	Organizational Change Management

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IV&V Findings and Recommendations (cont'd)

Summary of IV&V Open Risks/Issues Criticality

Category		Finding Title	Criticality
Communications	Risk	27 – Communications to external entities may be ineffectual	Med
Contract	Risk	2 - Non-functional contract requirements not tracked	Low
Cost & Schedule	Risk	22 – Lack of departmental readiness could impact project budget/schedule	High
	Risk	4 - Group 2 and 3 planning and execution activities overlap	Low
Human Resource	Risk	28 - Lack of sufficient resources	Med
Knowledge Transfer	Issue	23 - Lack of detailed turnover plan	Low
Knowledge Transfer	Issue	7 - High volume of manual processes at cutover	Low
Quality Management	Risk	19 - Inadequate interface development and testing coordination	Med
	Issue	25 - Insufficient data validation, checks and balances	Med
	Risk	26 - DHRD users' access to shared tables could result in corrupt payroll data	Med

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IV&V Findings and Recommendations (cont'd)

Communications Management ⓜ

#	Key Findings	Criticality Rating
27	**Risk** **- Communications to external entities may be ineffectual:** While IV&V has observed good efforts by the project to provide reasonable levels of communications to external entities (departments, TPA, banks, etc.), some communication have been misinterpreted or mishandled and have not produced their intended result.	Medium

Recommendations	Progress
• Enact overt and persistent efforts to address communications that have proven to be ineffective and with organizations that have known communication challenges.	In progress
• Over-communicate important messages as well as messages that are likely to be missed. For example, multiple emails can be sent to reiterate important messages or restate them in increasingly simple or overt terms.	In progress
• Reassess existing communications and provide further clarification to TPA's to ensure clear understanding and provide guidance on future communications.	In progress
• Request TPA forward all of their HawaiiPay related state employee communications to HawaiiPay for review prior to sending.	Not started

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IV&V Findings and Recommendations (cont'd)

Contracts Management   (L)

#	Key Findings	Criticality Rating
2	**Risk - Non-functional contract requirements not tracked**: When non-functional requirements are not proactively monitored as the project progresses, there is increased potential that contract performance gaps may be identified too late in the project's timeline resulting in schedule delays or unmet contract requirements. The Requirements Traceability Matrix (RTM) does not include non-functional requirements and the project does not regularly report on contract performance metrics.	Low

Recommendations	Progress
• Create a checklist of non-functional contract requirements to be satisfied in order to actively monitor and measure progress, and close-out the contract	Not started

IV&V Findings and Recommendations (cont'd)

Cost and Schedule Management (H)

#	Key Findings	Criticality Rating
4	**Risk - Group 2 and 3 planning and execution activities overlap**: Concurrently planning and executing tasks for both Groups 2 and 3, which are running in parallel, may result in less efficient use of project resources and cause an overall delay if new tasks are introduced later in the project.	Low
22	**Risk - Lack of departmental readiness could impact project budget/schedule**: Departments transitioning to the Hawaii Information Portal (HIP) as part of the HawaiiPay project are expected to perform readiness activities and meet specified milestone deadlines. If any department does not transition to HIP by their designated rollout date, the HawaiiPay project schedule and budget could be negatively impacted.	High

Recommendations	Progress
• Ensure readiness deadlines/milestones are clearly communicated to appropriate stakeholders on a regular basis.	In progress
• Document missed readiness deadlines, communicate the possible consequences of missed deadlines clearly to department leaders in a timely manner to help ensure leadership is not surprised and has ample opportunity to respond and manage the risks.	In progress
• Consider implementing a strategy of over-communication for departments that may have communication challenges.	Not started
• Coordinate regular readiness discussions between HawaiiPay and departments that may have readiness challenges.	In progress
• Request the SI offer departments that are struggling to provide prerequisite files for UAT/Parallel testing a technical resource to offer in-person guidance and assistance to their technical staff.	In progress

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IV&V Findings and Recommendations (cont'd)

Human Resource Management (L)

#	Key Findings	Criticality Rating
28	**Risk – Lack of sufficient resources**: The project does not have dedicated Leads filling key roles needed during the implementation phase, resulting in existing resources serving multiple roles which may impact their overall effectiveness or timely execution of tasks. Current designated Leads often focus on execution and rely on the Project Management team to support strategy and management activities.	Medium

Recommendations	Progress
• Engage in succession planning and identify near-term knowledge transfer activities	In progress
• Develop a Knowledge Management strategy to help ensure project knowledge (tacit and otherwise) is not lost when staff leave the project or state employment	Not started
• Evaluate which project resources are needed to allow for dedicated strategic leadership in key project areas and to alleviate project resources with multiple responsibilities	In progress

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IV&V Findings and Recommendations (cont'd)

Knowledge Transfer (L)

#	Key Findings	Criticality Rating
23	**Issue - Lack of detailed turnover plan**: The lack of a transition plan can lead to poor transition planning, important turnover activities can get missed, and can lead to stakeholder confusion since they are left ill-equipped to effectively maintain the system once the vendor has left the project.	Low

Recommendations	Progress
• Request the SI utilize detailed checklists for turnover to ensure an effective turnover to the state and that nothing is overlooked.	Not started
• The state immediately draft and take ownership of a turnover plan and request the SI review and offer guidance.	Not started
• Assign turnover tasks to individuals and require task signoff by task owners once they validate tasks have been effectively completed.	In progress
• Utilize readiness checkpoints and key performance indicators (KPI's) to monitor readiness effectiveness and report to project leadership. KPI's can be utilized to assure a timely and effective system turnover as well as provide project leadership an opportunity to shore up efforts when turnover efforts are not achieving expected results.	Not started
• Request the SI update relevant documents to ensure an effective turnover to the state for M&O.	In progress

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IV&V Findings and Recommendations (cont'd)

Operational Preparedness (L)

#	Key Findings	Criticality Rating
7	Risk - **High volume of manual processes at cutover:** The number of manual processes that need to be executed during the cutover window and post implementation for future Group deployments may grow to a level of effort that cannot be accomplished during the designated timeframes thereby causing a delay in the implementation schedule. The project is reaching out to Agencies 60 days before go live and providing them instructions for required data cleanup prior to go live (e.g., social security number mismatches in Central Payroll). It is unknown if the time provided will be enough for all Agencies to complete within the implementation schedule.	Low

Recommendations	Progress
• Append the cutover checklist with detailed descriptions of how to execute the task (as if for a back-up resource) and ensure that all dependencies between cutover tasks are identified and have designated contacts	Not started

IV&V Findings and Recommendations (cont'd)

Quality Management (M)

#	Key Findings	Criticality Rating
18	**Preliminary Concern - Increasing parallel testing defect resolution scope:** An increasing number of manual workarounds to resolve defects discovered during parallel testing may cause delays during the production cutover or confusion for end users who require supplemental training regarding work around functionality. It is unclear if all the workarounds are documented in the cutover plan and schedule.	N/A
19	**Risk - Inadequate interface development and testing coordination:** The lack of a functioning process and signoff to coordinate both parties regarding the development and comprehensive end to end testing of interfaces may cause unnecessary risk. IV&V has observed many process improvements for coordinating and tracking interfaces in Group 2.	Medium
25	**Issue - Insufficient data validation, checks and balances:** Data validation processes and procedures to ensure data accuracy are insufficient and have resulted in data errors during payroll processing.	Medium
26	**Risk - Increasing parallel testing defect resolution scope:** An increasing number of manual workarounds to resolve defects discovered during parallel testing may cause delays during the production cutover or confusion for end users who require supplemental training regarding work around functionality. It is unclear if all the workarounds are documented in the cutover plan and schedule.	Medium

Recommendations	Progress
• Establish a communications plan and signoff procedure that ensure all parties clearly understand the expectation related to interface testing and signoff that they have the capacity to complete the testing, document defects, re-test and signoff that the interface is fully functional.	In progress
• Establish enhanced validation processes to ensure interface updates are thoroughly validated prior to applying updates to production system data.	In progress
• Explore methods to secure critical payroll data that DHRD does not need permissions to edit.	In progress

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IV&V Status

The activities that PCG performed to inform the IV&V report for the current period are listed below. Upcoming activities are also included. For specifics, see Appendix B – IV&V Standard Inputs.

- IV&V Project Milestones

Milestone / Deliverable Description	Baseline Due Date	Draft Submitted	Final Submitted	Approvals / Notes
IV&V Management Plan (IVVP)	04/06/18	03/18/18	03/29/18	Approved
IV&V Work Plan (Schedule)	04/06/18	03/18/18	03/29/18	Approved
Initial IV&V Assessment	05/09/18	05/18/18	06/08/18	Approved
June IV&V Monthly Status Report (MSR)	05/30/18	07/10/18	7/31/18	Initial assessment delay pushed monthly report to next period
Deployment Audit Report – Grp 2	07/20/18	8/5/18		PCG onsite week of July 16
IV&V Management Plan (IVVP) Update	n/a	8/15/18		
July IV&V Monthly Status Report (MSR)	08/10/18	8/16/18		
End of Go Live Implementation Milestone Report – Grp 2	08/24/18			PCG onsite week of Aug 13
Deployment Audit Report – Grp 3	10/19/18			
End of Go Live Implementation Milestone Report - Grp 3	11/23/18			
Deployment Audit Report – Grp 4	01/18/19			
Final IV&V Monthly Status Report	02/19/19			

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IV&V Status (cont'd)

- **IV&V activities performed during the reporting period:**
    - Reviewed the Group 1 Parallel testing results and Group 2 Parallel testing components
    - Attended Parallel Round 2 Results meeting
    - Attended Group 2 Cutover Plan Review meeting
    - Attended DOE User Acceptance Testing session
    - Provide briefing for Monthly Executive meeting
    - Attended Monthly Payroll & TLM Modernization Project Executive meeting
    - Attended PCAB meeting
    - Attended Daily Scrums
    - Attended RIO-D meeting
    - Attended Project Schedule meeting
    - Attended HawaiiPay State/CRT Project meeting
    - Interviewed key team members for Group 2 Deployment Audit Report Assessment

- **IV&V next steps in the coming reporting period:**
    - Deployment Audit Report – Group 2
    - Go Live Implementation Report – Group 2
    - IV&V Monthly Status Report – August 2018

Appendix A – IV&V Criticality Ratings

This appendix provides the details of each finding and recommendation identified by IV&V. Project stakeholders are encouraged to review the findings and recommendations log details as needed.

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 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.

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Appendix B – IV&V Standard Inputs

This appendix identifies the artifacts and activities that serve as the basis for the IV&V observations.

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

- **Attends the following meetings**
    - Weekly Infrastructure/Technical/Deployment Track (meeting series cancelled in June 2018)
    - Weekly Project Schedule (State) Meeting
    - Weekly State/CRT (Joint) Project Meeting
    - Weekly Risks-Issues-Opportunities-Decisions (RIOD) Meeting
    - Bi-Weekly Project Change Advisory Board (PCAB)
    - Monthly Payroll & TLM Modernization Project Executive Meeting

- **Reviews the following documentation**
    - HawaiiPay - Executive Committee Agendas
    - State/CRT (Joint) Meeting Notes
    - State Project Schedule (in Smartsheet)
    - Risks-Issues-Opportunities-Decisions (RIOD) Workbook
    - CherryRoad BAFO and Contract

- **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.

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Id	Identified Date	Title / Summary	Finding Description	Analysis and Significance	Recommendation	Updates	Category	Type	Priority	Status
2	5/17/2018	Non-functional contract requirements not tracked	If CherryRoad's contract is not actively monitored and tracked, specifically for non-functional requirements, as the project progresses, contract performance gaps may be identified too late in the project's timeline which could result in a schedule delay or unmet contract requirements.	The Requirements Traceability Matrix (RTM) does not include non-functional requirements and the project does not have a separate mechanism for tracking contract performance. The project processes $0 change orders and, therefore, relies on the Change Advisory Board (CAB) to monitor changes to functional requirements. It is unclear how and when non-functional requirements are being met.	• Create a checklist of non-functional contract requirements that CherryRoad must satisfy in order to close-out the contract and actively monitor progress	8/9/18 - While initially the SI reported that non-functional requirement were being carefully tracked by the DAGS contracts office, IV&V has not been provided evidence that this is happening. IV&V is awaiting response from DAGS contracts office. 7/26/18 - CRT provided Attachment 8 - Responses to Technical Requirements - Oracle Confidential file to demonstrate their tracking for non-functional requirements which are not included in the Implementation Tracker. 6/8/18 - IV&V has not observed progress towards mitigating this risk.	Contract Management	Risk	Low	Open
4	5/17/2018	Concurrent execution and production support activities for Group Implementations	Executing implementation and support tasks for multiple deployment Groups running in parallel may result in less efficient use of project resources and cause an overall delay if new tasks are introduced later in the project.	Concurrently planning and executing tasks for both Groups 2 and 3, which are running in parallel, may result in less efficient use of project resources and cause an overall delay if new tasks are introduced later in the project.	• Update the schedules for Group 2 and Group 3 with tasks and lessons identified from the Group 1 pilot implementation • Finalize new baseline schedules for Groups 2 and 3 which confirm that all the tasks and deliverables are achievable in prescribed timeframes • Continually monitor changes to the schedule and the impact on defined implementation dates	8/14/18 - DAGS continues strategize to mitigate this risk. Traci to update Analysis column. 7/31/18 - DAGS met with DOE on July 31 and Parallel Testing for Group 3 has been pushed out (yet to be rescheduled) until after Group 2 Payroll is complete (Friday, August 3) due to concerns and constraints that a key resources would become overwhelmed. 6/8/18 - Development tasks are ongoing and the team continues to identify requirements and/or processes through UAT and OCM activities which need to be re-reviewed or re-addressed. Further Group 2 training begins next week concurrent to Round 2 Parallel testing.	Cost and Schedule Management	Risk	Low	Open
7	5/17/2018	High volume of manual processes at cutover	The number of manual processes that need to be executed during the cutover window and post implementation for future Group deployments may grow to a level of effort that cannot be accomplished during the designated timeframes thereby causing a delay in the implementation schedule.	During the cutover and post implementation a number of manual processes are executed to produce the appropriate conversion and configuration of data needed to operate the system. While avoiding manual processes is unavoidable, since some are needed to ensure the proper sequencing of activities and to avoid post implementation pre-notes and paper checks, the timeframes for manual processing are constrained to data conversion dependencies. During Group 1 deployment, the pilot and smallest of the three deployments, these processes were able to be executed in a timely manner. However, new data and functional anomalies were identified during Group 1 deployment and additional manual processes have been added to the rollout schedules for future Groups 2 and 3. It is unknown at this time since these groups involve much larger end user communities, whether, in the aggregate, all manual processes will be able to be executed during the cutover and post implementation windows. Further, the project is strategically reaching out to Agencies less than 60 days in advance of go live and providing them instructions for required data cleanup prior to go live (e.g., social security number mismatches in Central Payroll). These pre-go-live activities are not directly under the control of the project since they need to be performed by external project stakeholders and it is unknown if the time provided will be enough for all Agencies to complete within the implementation schedule.	N/A	7/31/18 - IV&V observed the number of manual processes increase during the cutover period for Group 2. Recent UPA deduction interface errors has triggered new manual processes for validation. 6/8/18 - Though the project focuses on identifying and sequencing the cutover tasks appropriately, IV&V has not observed progress towards mitigating the risk of cutover tasks not being able to complete during the timeframe.	Operational Preparedness	Risk	Low	Open
18	5/17/2018	Increasing parallel testing defect resolution scope	An increasing number of manual workarounds to resolve defects discovered during parallel testing may cause delays during the production cutover or confusion for end users who require supplemental training regarding work around functionality.	A continuing number of defects discovered during Parallel testing are being rectified with manual workaround. It is unclear if all the workarounds are documented in the cutover plan and schedule. The project should plan to ensure that all defect resolutions are prioritized and tracked in the cutover plan and that manual workarounds are resourced with appropriate staff. Further, as function work arounds are identified for end users, they may or may not be receiving supplmental training in a timely manner.	N/A	7/31/18 - IV&V observed the project successfully manage the testing defect resolution scope for Group 2; however, the number of potential defects that require manual resolution is not yet known for Group 3. The total scope of manual activities may still become too time consuming for the cutover timeframe. 6/8/18 - The Cutover Planning is very detailed for steps and workarounds identified during parallel.	Quality Management	Preliminary Concern	N/A	Open

Id	Identified Date	Title / Summary	Finding Description	Analysis and Significance	Recommendation	Updates	Category	Type	Priority	Status
19	5/17/2018	Inadequate interface development and testing coordination	The lack of a functioning process and signoff to coordinate both parties regarding the development and comprehensive end to end testing of interfaces may cause unnecessary risk.	It is unclear if each party responsible for the complete end to end testing of an interface has the capacity and capability to complete detailed testing. There does not appear to be any method for the project to get assurance that the testing is planned and executed as needed. To date, there seems to be a low volume of feedback from TPAs and approval of TPA readiness lacks rigorous evaluation from the project. For example, contacts for interfaces need to be confirmed as having the appropriate IT skills and availability to perform the required tasks in the project's timeline.	• Establish a communications plan and signoff procedure that ensure all parties clearly understand the expectation related to interface testing and signoff that they have the capacity to complete the testing, document defects, re-test and signoff that the interface is fully functional. • Establish enhanced validation processes to ensure interface updates are thoroughly validated prior to applying updates to production system data.	7/31/18 - Although IV&V observed significant improvement in interface development and testing procedures, a number of errors were reported in the UPA interface. These issues may have been caused by a lack of clear and comprehensive documentation regarding the operational processes required to generate the correct interface data. When relying on human interaction, documented procedures can help mitigate the possibility of human error. Best practice is to have documented procedures and a thorough validation process for each interface prior to updating production data. Stakeholder confidence in the HawaiiPay project's ability to consistently deliver accurate payroll processing for their constituents may have been diminished as a result of these processing errors. IV&V will update this risk priority/severity to Medium during the next reporting period. 6/25/18 - IV&V is reducing severity from Medium to Low. Since Group 1 - lots of process improvements; moved responsibilities from Technical to PMO tracts to craft clear communication and guidance for TPAs for testing and cutover; Jen put together a process that tracks testing activity of TPAs more accurately - when file received and reviewed (from CRT) before sending to TPAs' IT contact with instructions for FTP site, credentials, reporting issues, testing, etc.; get technical and functional sign off (b/c lesson learned from P1 where functions didn't work but technically it processed); 60% are complete and remainder are Mainframe-to-mainframe jobs and are tricky b/c ETS needs to participate in testing and requires coordination; sign-off is in the form of email (P/F) from various levels of the TPA org). 6/8/18 - IV&V has not observed progress towards mitigating this risk.	Quality Management	Risk	Medium	Open
22	6/15/2018	Lack of departmental readiness could impact project budget/schedule	Departments transitioning to the Hawaii Information Portal (HIP) as part of the HawaiiPay project are expected to perform readiness activities and meet specified milestone deadlines. If any department does not transition to HIP by their designated rollout date, the HawaiiPay project schedule and budget could be negatively impacted.	Departments transitioning to HawaiiPay have each been assigned to one of three rollout groups and the project's budget and planned coordination activities allow for little to no flexibility in group rollout dates. The HawaiiPay project contract and budget is currently limited to the three rollout groups, departments who have not transitioned by the final rollout group will need to find alternative means for producing payroll outside of HIP. While details of the impact of any department not transitioning to HawaiiPay in their planned group is unclear, there will likely be a negative impact to DAGS and the HawaiiPay project schedule and budget. Any department unable to transition to HIP would likely either request extended use of the existing DAGS mainframe or seek non-DAGS payroll alternatives. If departments are allowed to continue on the mainframe payroll system, the planned benefits of moving off this antiquated and problematic system may not be fully realized. DAGS would then be faced with having to plan for and acquire additional resources for maintaining two payroll systems (HIP and the mainframe system). Departments that opt out of DAGS payroll services altogether would have little time to plan for, procure and implement their own payroll system. Further, DAGS, and/or the HawaiiPay project team, will likely have limited time and resources to assist departments with any alternative as they will be in the midst of HawaiiPay group implementation. IV&V was informed that additional funding for the project will likely not be approved by the state legislature, therefore expansion of HawaiiPay contract scope to accommodate departments that are unable to meet readiness deadlines may not be possible.	• Ensure readiness deadlines/milestones are clearly communicated to department leaders. • Provide clear expectations regarding readiness activity deadlines and important milestones to each department. • Document missed readiness deadlines, communicate the possible consequences of missed deadlines clearly to department leaders in a timely manner to help ensure leadership is not surprised and has ample opportunity to respond and manage the risks. • Consider implementing a strategy of over-communication for departments that may have communication challenges. • Coordinate regular readiness discussions between HawaiiPay and departments that may have readiness challenges. • Regularly provide clear and timely communication to appropriate governing bodies (e.g. legislature, unions, etc.), as appropriate, to ensure they are not caught off guard by a department that is at risk of not meeting readiness requirements/deadlines. • Request the SI offer departments that are struggling to provide prerequisite files for UAT/Parallel testing a technical resource to offer in-person guidance and assistance to their technical staff.	8/14/18 - IV&V attended a HawaiiPay/UH conference call where they addressed project concerns, clarified some miscommunications, and informed UH they have missed the Group 3 round 1 parallel test. UH seemed unclear on the consequences of missing round 1 or missing group 3 go-live. HawaiiPay/UH lack of communication seemed evident from what appeared to be serious fundamental misunderstandings by UH of interface file expectations. Communication failures may also be why these misunderstandings were being addressed this late in the game, that is, only after they had already missed round 1 parallel testing. Ultimately both parties agreed on a plan to accelerate pre-go-live activities to include UH in Group 3 go-live but the project will also draft contingency plans. IV&V recommends the project document a detailed plan, schedule, clear description of risks and detailed risk mitigation strategy for State CIO and Executive Sponsor approval. Suggest obtaining written commitment from UH leadership for important milestones and key activities and communications. 8/9/18 - IV&V was informed that UH has failed to provide the project with essential files and the project has stated they will likely not be included in the group 3 rollout. The project has reported that HawaiiPay leadership, the State CIO, and DAGS leadership have made multiple attempts to reach out to UH leadership to resolve any barriers to delivery of UH payroll files. Reportedly, UH leadership appears to be largely unresponsive to project requests for status updates and has offered little in the way of explanation of why they are unable to provide required prerequisite conversion files. The project has further stated that it seems unclear whether UH leadership understands the urgency or the financial consequence to the state of being excluded from the final group 3 rollout. 8/8/18: The project reports great progress with DOE HR and Payroll UAT and pre-parallel testing activities. Progress has been made to address DOE data cleanliness issues and the project has expressed a good deal of optimism for DOE going into parallel testing. The project has reported that DOE payroll and HR staff thus far have been extremely organized and productive. 7/31/18: IV&V met with DOE and HawaiiPay leadership to discuss draft comments from the June IV&V Monthly report. DOE took exception to IV&V comments, stating they were unfavorable to DOE. DOE leadership reiterated their full commitment to transitioning to HawaiiPay by November, but also reiterated their same concerns with regard to data quality, enrollment workstation security, and the limited amount of time they've been given to prepare for transition. DOE admitted they have missed several project deadlines and milestone but indicated there continues to be confusion regarding the specifications provided for the multiple HR systems of record and DOE's payroll file. DAGS provided specifications to DOE in October and November of 2017, and a series of meetings was held to answer DOE's questions regarding the specifications. DOE has stated that some issues have yet to be resolved but HawaiiPay has stated they have provided all that they need and have resolved most if not all issues. The project reported that as of 7/31/18, DOE has passed UAT and sees no significant problems in their preparations for parallel testing. DOE leadership and HawaiiPay leadership has admitted leadership level communication challenges needs to be resolved in order to ensure a smooth transition. However, the project reports that communication at the DOE worker/data analyst level, of late, has been highly productive and they continue to make good progress. 7/11/18: UH has expressed concern that they have not been given enough time to prepare for Group 3 rollout. The project has	Cost and Schedule Management	Risk	High	Open

Id	Identified Date	Title / Summary	Finding Description	Analysis and Significance	Recommendation	Updates	Category	Type	Priority	Status
23	6/15/2018	Lack of detailed turnover plan	The lack of a detailed turnover plan may lead to insufficient planning and execution of important turnover activities which could lead to stakeholder confusion and cause a delay in project closure or transitioning of system support responsibilities to appropriate state staff.	Turnover plans typically describe the detailed activities involved in transitioning a new system to the new owners, usually in the form of detailed checklists that assign accountability to individuals responsible for ensuring activities get done and are validated. Turnover plans are typically utilized to ensure that important transition details are not overlooked and are effectively coordinated. Turnover plans can also be used an effective communication tool to stakeholders to ensure there is full understanding of turnover activities, roles, and responsibilities. Proper awareness of turnover plans and activities provided early on to stakeholders can go a long way toward managing stakeholder expectations and triggering important discussions, help manage expectations and support effective resource planning. Commonly reported system turnover challenges include stakeholders being caught unaware of activities, roles, and responsibilities they were expected to perform. Typically, turnover activities involve a multitude of activities carried out by multiple groups and stakeholders. Coordination of these activities can be a significant challenge; ensuring turnover effectiveness can be even more challenging. Ensuring proper understanding by state personnel of each process the SI has been performing for the past several months/years requires careful planning. Ensuring they are fully equipped to not only maintain and enhance the system but are also fully able to troubleshoot problems when critical system incidents occur (e.g. when the system goes down) can be even more challenging without a detailed plan. The SI is typically responsible for producing a transition plan deliverable, however, this deliverable was not a contractual deliverable for HawaiiPay. A project turnover phase typically has a limited budget and has limited timeframes to ensure turnover success. Organizations that fail to effectively turnover systems during this phase can be left ill-equipped to effectively maintain the system once the SI contract has closed out and they have left the project. Leadership can be left scrambling to acquire/procure the proper support to ensure system viability.	• Request the SI utilize detailed checklists for turnover to ensure an effective turnover to the state and that nothing is overlooked. • The state immediately draft and take ownership of a turnover plan and request the SI review and offer guidance. • Assign turnover tasks to individuals and require task signoff by task owners once they validate tasks have been effectively completed. • Utilize readiness checkpoints and key performance indicators (KPI's) to monitor readiness effectiveness and report to project leadership. KPI's can be utilized to assure a timely and effective system turnover as well as provide project leadership an opportunity to shore up efforts when turnover efforts are not achieving expected results. • Request the SI update relevant documents to ensure an effective turnover to the state for M&O.	8/14/18 - CRT is working on providing further documentation to assist turnover to state M&O team. 7/31/18 - A recent production problem (unable to access paystub from mobile device) highlighted the fact that SI lacks a consolidated detailed architecture/infrastructure maps to support troubleshooting. DAGS also noted that the SI Managed Services had difficulty resolving this ticket due to their lack of understanding of the state's infrastructure. Seems the SI Managed Services team currently relies on a few SI HawaiiPay project onsite resources to provide these details and the state CIO has expressed sustainability concerns (i.e. "what will happen when the project is complete and these resources leave?"). In response, state CIO has requested SI (alongside state technical staff) produce consolidated, detailed architecture/infrastructure maps. The incident highlights the risk of the lack of a detailed turnover and transition plan which would typically include activities to produce/update architecture documents and/or consolidate detailed architecture/infrastructure information for the state M&O team. SI has stated their intent to also update the B05 M&O plan to address the state CIO concerns. 6/15/18 - Opened as a new risk.	Knowledge Transfer	Issue	Low	Open
25	7/27/2018	Insufficient data validation, checks and balances	Data validation processes and procedures to ensure data accuracy are insufficient and have resulted in data errors during payroll processing.	Insufficient data validation processes and procedures resulted in system errors including inaccurate paychecks and reports. Recently HawaiiPay ran (legacy) payroll for two pay periods in a row that included a significant number of incorrect deductions for UH employees. The state reported that already constrained HawaiiPay mainframe IT staff were in the midst of preparations for a major software release when the Janus supreme court ruling came down with no allowable timeframe to implement system changes, requiring an immediate update, creating additional activities to make the next payroll run. Errors may have been avoided if proper data validation processes and procedures (checks and balances) had been in place that could have caught the errors prior to the payroll run. Extensive efforts were required to manage and resolve the errors and reimburse affected employees. Many validation activities are performed manually with limited or no automated support. Overreliance on manual validation processes not only increase error rates but also increase the risk associated with over-allocating key resources (see risk #5, "Impact of project resource attrition"), risk #4, "Group 2 and 3 planning and execution activities overlap", and risk #6, "Insufficient project resources").	* Revisit existing data validation processes and procedures (automated and otherwise) to identify which should be implemented/enhanced and prioritized based on criticality and impact to payroll processing and stakeholder confidence. Once identified, an implementation plan can be created and implemented based on available resources to mitigate this risk. * Automated data validation support can not only increase data accuracy but also reduce the level of effort of manual processes for already constrained project resources. * Explore the feasibility of having the agencies and TPA's to validate the final payroll run data before payroll is run.	7/31/18 - Opened as a new issue. To mitigate future UPA interface errors, the project has implemented a manual validation process that must be performed every pay period. This is intended to in place until all employees are migrated off the mainframe (i.e., Group 3 deployment).	Quality Management	Issue	Medium	Open