



# 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

# Overview

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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-through 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.

# 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 predictable solution. These solutions should be clearly defined, scoped and resourced in the project's cutover plan. 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”.

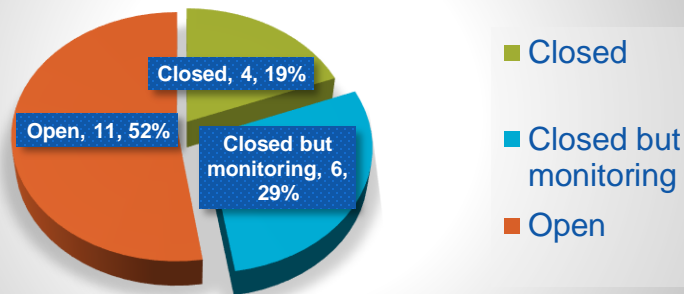
# Executive Summary (cont'd)

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.

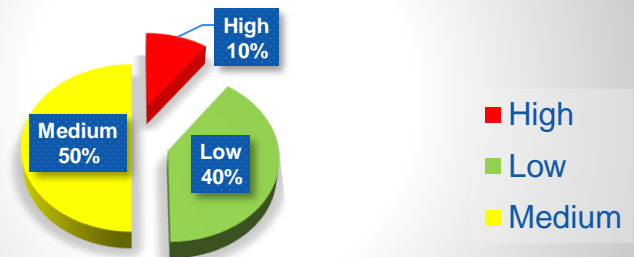
# IV&V Findings and Recommendations

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



## Open Risks/Issues by Priority



## Open Risks/Issues by Category/Priority



# IV&V Findings and Recommendations (cont'd)

#	New Findings	Category
25	<b>Issue - Insufficient data validation, checks and balances:</b> Data validation processes and procedures to ensure data accuracy are insufficient and have resulted in data errors during payroll processing.	Quality Management
26	<b>Risk - DHRD users' access to shared tables could result in corrupt payroll data:</b> 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	<b>Risk - Communications to external entities can be ineffectual:</b> 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	<b>Risk - Lack of sufficient resources:</b> The project seems to lack sufficient resources in key areas, primarily mainframe payroll staff.	Human Resource Management



# IV&V Findings and Recommendations (cont'd)

#	Closed ( <i>but Monitoring</i> ) 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

# IV&V Findings and Recommendations (cont'd)

## Summary of IV&V Open Risks/Issues Criticality

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

# IV&V Findings and Recommendations (cont'd)

## Communications Management



#	Key Findings	Criticality Rating
27	<b>Risk - Communications to external entities may be ineffectual:</b> 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
<ul style="list-style-type: none"> <li>Enact overt and persistent efforts to address communications that have proven to be ineffective and with organizations that have known communication challenges.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>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.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>Reassess existing communications and provide further clarification to TPA's to ensure clear understanding and provide guidance on future communications.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>Request TPA forward all of their HawaiiPay related state employee communications to HawaiiPay for review prior to sending.</li> </ul>	Not started

# IV&V Findings and Recommendations (cont'd)

## Contracts Management



#	Key Findings	Criticality Rating
2	<b>Risk - Non-functional contract requirements not tracked:</b> 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
<ul style="list-style-type: none"><li>Create a checklist of non-functional contract requirements to be satisfied in order to actively monitor and measure progress, and close-out the contract</li></ul>	Not started

# IV&V Findings and Recommendations (cont'd)

## Cost and Schedule Management



#	Key Findings	Criticality Rating
4	<b>Risk - Group 2 and 3 planning and execution activities overlap:</b> 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	<b>Risk - Lack of departmental readiness could impact project budget/schedule:</b> 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

# IV&V Findings and Recommendations (cont'd)

## Human Resource Management

#	Key Findings	Criticality Rating
28	<b>Risk – Lack of sufficient resources:</b> 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
<ul style="list-style-type: none"><li>Engage in succession planning and identify near-term knowledge transfer activities</li></ul>	In progress
<ul style="list-style-type: none"><li>Develop a Knowledge Management strategy to help ensure project knowledge (tacit and otherwise) is not lost when staff leave the project or state employment</li></ul>	Not started
<ul style="list-style-type: none"><li>Evaluate which project resources are needed to allow for dedicated strategic leadership in key project areas and to alleviate project resources with multiple responsibilities</li></ul>	In progress

# IV&V Findings and Recommendations (cont'd)

## Knowledge Transfer



#	Key Findings	Criticality Rating
23	<b>Issue - Lack of detailed turnover plan:</b> 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
<ul style="list-style-type: none"> <li>Request the SI utilize detailed checklists for turnover to ensure an effective turnover to the state and that nothing is overlooked.</li> </ul>	Not started
<ul style="list-style-type: none"> <li>The state immediately draft and take ownership of a turnover plan and request the SI review and offer guidance.</li> </ul>	Not started
<ul style="list-style-type: none"> <li>Assign turnover tasks to individuals and require task signoff by task owners once they validate tasks have been effectively completed.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>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.</li> </ul>	Not started
<ul style="list-style-type: none"> <li>Request the SI update relevant documents to ensure an effective turnover to the state for M&amp;O.</li> </ul>	In progress

# IV&V Findings and Recommendations (cont'd)

## Operational Preparedness



#	Key Findings	Criticality Rating
7	<b>Risk - High volume of manual processes at cutover:</b> 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
<ul style="list-style-type: none"><li>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</li></ul>	Not started



# IV&V Findings and Recommendations (cont'd)

## Quality Management



#	Key Findings	Criticality Rating
18	<b>Preliminary Concern - Increasing parallel testing defect resolution scope:</b> 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	<b>Risk - Inadequate interface development and testing coordination:</b> 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	<b>Issue - Insufficient data validation, checks and balances:</b> Data validation processes and procedures to ensure data accuracy are insufficient and have resulted in data errors during payroll processing.	Medium
26	<b>Risk - Increasing parallel testing defect resolution scope:</b> 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
<ul style="list-style-type: none"> <li>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.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>Establish enhanced validation processes to ensure interface updates are thoroughly validated prior to applying updates to production system data.</li> </ul>	In progress
<ul style="list-style-type: none"> <li>Explore methods to secure critical payroll data that DHRD does not need permissions to edit.</li> </ul>	In progress

# 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			

# IV&V Status (cont'd)




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- **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.

# 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

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- 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.

