

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA



DEPT. COMPTROLLER
KA LUNA HO'OMALU HANA LAULĀ

KEITH A. REGAN
COMPTROLLER
CHRISTINE M. SAKUDA
CHIEF INFORMATION OFFICER
LUNA 'ENEHANA

STATE OF HAWAII | KA MOKU'ĀINA O HAWAI'I
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWÉ LAULĀ
OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | KE'ENA HO'OLANA 'ENEHANA
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

November 21, 2025

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

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

Aloha Senate President Kouchi, House Speaker Nakamura, 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 ten 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 Human Services, Systems Modernization 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)

Hawai'i Department of Human Services

Child Welfare Services

HI THRIVE (Comprehensive Child Welfare Information System)

IV&V MONTHLY STATUS DASHBOARD October 2025 Final V1



IV&V Monthly Executive Summary

This IV&V Monthly Activity Report (MAR) covers the October 01 – 31 2025 reporting period.

IV&V Project Health Metrics

IV&V Project Health Metrics are based on the HI THRIVE PMO Metrics and Best Practice Metrics developed by IV&V and approved in the IV&V Management Plan.

- Schedule has slipped due to late tasks and planned Go-Live is greater than 75 days beyond Baseline 8/26 date per the Vendor schedule and estimated to be beyond 90 days after additional schedule analysis.
- Budget **RED**, Quality **RED**, Schedule **RED**, Scope **GREEN**

October 2025 Executive Summary

The State of Hawaii has delivered official performance management communications and requested a Corrective Action Plan from the Vendor for deviations in contract expectations. The Vendor has not replied at the time of this report. Prior to providing the request for a Corrective Action Plan the Vendor had submitted a "stop work" to the State of Hawai'i due to contract management and payment disagreements. At this time IV&V is not aware of any Vendor related work or progress being performed on the project.

IV&V continued Vendor Deliverable artifact review and collaborative involvement with the HI THRIVE PMO.

Prior to the request for CAP and stop work activities, the SI Vendor while improving on some deliverable management activities continued to be unable to consistently provide deliverables and work products that are acceptable on first or subsequent review passes due to mismatches between Vendor understanding and HI THRIVE expectations. IV&V continued to observe that the HI THRIVE PMO Vendor management practices are acceptable for the associated project management tasks, however the Vendor has not been able to demonstrate a consistent ability to meet contract obligations.

There was no improvement of the development and review iterations necessary for Deliverable Approvals. Vendor Contract deliverables require an average 3.3 iterative updates and reviews prior to HI THRIVE approval and incur an average of 2.2:1 rejections per deliverable. The updates and rejections have degraded from the previous month. The HI THRIVE Project Team has developed Issue 8 related to deliverable quality and is continuing to work with the Vendor to manage this item to closure.

As of November 1, the Vendor has accrued 657 late deliverable days for deliverables that are active and currently not approved and 679 late deliverable days for deliverables that have already been approved. The Vendor contract includes a Liquidated Damages clause of \$1000 per calendar day for any deliverables that are approved late after the baseline planned approval date. This would create a maximum of \$1,336,000 in LDs from the Vendor if there are associated estimated impacts to State resources due to the deviations.

Although the SI-Vendor is now operating under an approved baselined schedule (SI-5) IV&V continues to observe a consistent pattern of missed deliverable and milestone dates. IV&V has identified a total of 514 active tasks (tasks that have previous start dates and are unfinished and/or tasks that are expected to start within 45 days of November 1). Out of those active project tasks 357 have deviations; 42 project tasks are late to finish and 315 project tasks are late to start as of November 1.

The current late deliverables and tasks have shifted the planned Go-Live from 8/2026 to 11/2026 in the project schedule. IV&V and the HI-THRIVE Team has documented Risk 40 that the Critical Path is incorrectly defined and does not show accurate impacts from late dates. IV&V believes that the projected Go-Live has a much greater un-reflected impact. IV&V believes that without effective mitigations the projected shift to Go-Live will exceed the approved maximum Vendor contract time period.

IV&V questions the rigor applied and the ability by the Vendor to manage the schedule and associated project tasks accurately. IV&V strongly believes the HI THRIVE PMO and Executive Stakeholders should carefully assess the patterns and historical delivery performance of the SI-Vendor to determine if any additional performance or contract management steps are necessary to ensure the success of the HI THRIVE Project.

IV&V and HI-THRIVE also request that the Vendor update the level of detail, dependency identification, and critical path identification on any future updates to the project schedule.

IV&V Focus Area Health

IV&V Focus Area Health are metrics derived from the conformance to the eight IV&V technical focus areas: Technical Project Management, Support, Architecture, Continuous Delivery, Product Increment Planning, Development, Implementation, and Project Closure.

IV&V Technical Project Management Health

- Technical Project Management IV&V Focus Area maintains RED due to the Vendor stopping work over contract management discussions and the Go-Live date slipping at least two months due to multiple contract tasks that are late to finish or late to start.
- The HI THRIVE PMO is reporting RED for the October Monthly Schedule Scorecard.

IV&V Support Focus Area Health

- The Support Focus Area has shifted RED due to poor deliverable quality and continued SI Vendor Deliverable rejections during October.
- The HI THRIVE PMO is reporting RED for October Monthly Quality Scorecard as well.

IV&V Architecture Focus Area Health

- There were no new observations for Architecture in October.

IV&V Continuous Delivery Focus Area Health

- IV&V is maintaining YELLOW for Continuous Delivery due to lack of visibility to test data.
- HI THRIVE and IV&V have been unsuccessful in requesting greater visibility to the Vendor testing data. The Vendor has denied access to the test configuration tool Test Rails that feeds test report data to Jira. Without this data IV&V is unable to validate accuracy of test results or overall quality of implementation.

IV&V Product Increment Planning Focus Area Health

- IV&V is maintaining YELLOW for Product Increment Planning due to inconsistent Sprint processes.
- Vendor did not complete entry and exit criteria for Sprint 1 and did not complete entry criteria for Sprint 2.

IV&V Development Focus Area Health

- IV&V is maintaining YELLOW for Development due to inaccuracy of daily/weekly Sprint status communication.

IV&V Implementation Focus Area Health

- IV&V is maintaining YELLOW for Implementation due to timing of planned Sprints do not meet planned Go-Live or contract dates.

IV&V Project Closure Focus Area is Blue for not enough data to report.

IV&V Active Observations:

Medium Observation 6.2.2.1 Ineffective Jira Configuration and Setup for HI THRIVE.

- During SPRINT 1 IV&V observed the use and configuration of JIRA by the Vendor and has found only 30% of the recommendations verifiably implemented or in the process of being updated. IV&V received access to Jira during the start of Sprint Two but was unable to finish verification of compliance before the Vendor removed access again. IV&V has not seen adequate progress to date. The Vendor has not provided the HI THRIVE or IV&V Teams access to the Test Rails test data source for JIRA to validate the integrity of reporting and IV&V no longer has adequate access to the JIRA platform to confirm if recommended changes have occurred.

Medium Observation 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools.

Medium Observation 5.0.1 Sprint Iterations are not utilizing effective sprint planning processes.

Medium General Security Observation 4.6.2 Vendor vulnerability scanning and penetration testing processes are unclear and present risk.

IV&V Active Observations Summary

| IV&V Observation Number | Observation Title | IV&V Observation Description | IV&V Recommendation | State Ongoing Update | Priority | Owner | Date Identified |
|-------------------------|--|---|---|----------------------|----------|-----------------------|-----------------|
| 6.2.2.1 | 6.2.2.1 Ineffective Jira Configuration and Setup for HI THRIVE | On June 16, 2025, the IV&V team assessed Cardinality AI HI-THRIVE's current Jira configuration implementation for managing the HI DHS HI THRIVE CCWIS COTS solution. The IV&V team submitted a formal Task and Activity Report (TAR) to the DHS HI THRIVE PMO on June 17, 2025. The TAR is related to | Recommendation 6.2.2.1 IV&V General recommendation with detailed recommendations in the observation document. The initial default setting of the Cardinality JIRA setup is sound, with some easily corrected defects before full deployment of the project instance. Cardinality needs to fix these defects, configure sprint boards, clean up unused fields, and enable the basic zero-cost automation and notifications before commencing sprint activity. There are 28 individual recommendations for Jira updates in the Observation. | | Medium | marmstrong@dhs.hawaii | 06/16/25 |

| | | | | | | | |
|-------|--|--|---|--|--------|-------------------|----------|
| | | <p>The IV&V is related to the IV&V Statement of Work tasks in Section 6, Implementation.</p> <p>The Cardinality AI HTHRIVE Jira setup shows gaps in the following areas: - Observation 6.2.2.1.1 JIRA Project Basics - Observation 6.2.2.1.2 Issue Types and Workflows - Observation 6.2.2.1.3 Fields and Screens - Observation 6.2.2.1.4 Permission and Access Control - Observation 6.2.2.1.5 Sprint Boards - Observation 6.2.2.1.6 Notifications - Observation 6.2.2.1.7 Automation Rules - Observation 6.2.2.1.8 Dashboards and Reports - Observation 6.2.2.1.9 Jira integration and Add-ons - Observation 6.2.2.1.10 Governance</p> | | | | | |
| 6.1.1 | Ineffective Transparency and Reporting in Agile Ceremonies and Tools | <p>Observation 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools.</p> <p>The IV&V team observes that the SI Vendor's current Agile practices and supporting tools do not provide adequate visibility or accountability for HI THRIVE. Specifically, IV&V has been denied visibility into defects, which limits its ability to conduct independent verification.</p> <p>Daily standups during Sprint 1 have not been accurately reported, and Jira reports from daily standups and weekly status updates are either missing or untimely. While the vendor is effectively using TestRail internally, access has been denied to both HI THRIVE and IV&V, further reducing transparency.</p> <p>Additionally, the vendor continues to disregard IV&V recommendations to enhance Agile ceremonies, including accurate sprint reporting and improved utilization of configuration management tools.</p> | <p>Recommendations for 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools:</p> <p>Recommendation 6.1.1.1.1 Provide HI THRIVE and IV&V with read-only access to TestRail and defect tracking tools</p> <p>Recommendation 6.1.1.1.2 . Improve the accuracy and timeliness of daily standup and weekly Jira reports.</p> <p>Recommendation 6.1.1.1.3. Incorporate IV&V recommendations into Agile ceremonies, ensuring sprint reviews include transparent defect, backlog, and progress reporting.</p> <p>Recommendation 6.1.1.1.4. Align issue tracking and reporting across Jira and Test Rails to ensure consistency, visibility, and compliance with contractual traceability obligations.</p> | <p>November_2: The CAP has been reviewed and none of the items raised by IV&V were addressed by Cardy with corrective actions. IV&V's CAP response was received by DHS and is under review while DHS formulates their response.</p> <p>November_1: CAP response was received by DHS on 11/10/25 and currently under review. Cardy's responses will affect the state's actions for 6.1.1.1, 6.1.1.3, and 6.1.1.4. For 6.1.1.2, Cardy informed DHS on 11/10/25 that sprint work is still halted. PMO Services recommended that DHS do not move forward with Sprint 2 Retrospective or Sprint Reports until work halt is lifted as these are included within sprint work per Agile best practices and Cardy's SDLC process doc.</p> <p>October: 6.1.1.1, 6.1.1.3, and 6.1.1.4 are part of the Corrective Action Plan. This has been provided to executive leadership and planned to be sent to Cardy by EOD 10/28/25. 6.1.1.2 another email was sent to Cardy on 10/22 specific to issues found in the Sprint 2 test reports. If no response is received from Cardy by 11/3/25 (or 2 days after project work resumes), a project risk will be raised.</p> | Medium | Michael Armstrong | 10/01/25 |
| 5.0.1 | 5.0.1 Sprint Iterations are not utilizing effective sprint planning processes | 5.0.1 Vendor's current sprint process combines sprint planning (Increment Planning) with delivery execution | Recommendation 5.0.1.1 IV&V recommends that the Vendor adopt a SAFe model I1.S1 , I1.S2 , I1.S3, I1.S4 (IP); I2.S5.... With a shortened 1 week Increment Planning sprint occurring once per team for every 3 , three week sprints increasing the overall team efficiency 15% to 90%. | November: Cardy informed DHS on 11/10/25 that sprint work is still halted. This observation cannot be addressed until sprint work resumes. | Medium | Michael Armstrong | 10/01/25 |
| 4.6.2 | 4.6.2 Cardinality.ai vulnerability scanning and penetration testing processes are unclear and present risk | 4.6.2 IV&V observes that: 1. While ACF and CFR requirements do not specifically include requirements for vulnerability scanning or penetration testing, the HITHRIVE system has been identified as requiring information security control protections in accordance with the NIST SP 800-53b Moderate control baseline. Among other controls, the Moderate control baseline requires implementing control RA-5 Vulnerability Monitoring and Scanning. This control requires scanning for vulnerabilities, analyzing identified | <p>Recommendation 4.6.2.1 IV&V recommends that the HITHRIVE team request clarification from Cardinality.ai as follows:</p> <p>1. Will vulnerability scanning be conducted in the HITHRIVE environment? If so, by whom and with what tools? How will the vulnerability scanning, if any, be conducted, and will it be driven primarily by human effort or primarily by automated or artificial intelligence processes?</p> <p>2. Will penetration testing be conducted in the HITHRIVE environment? If so, by whom and with what tools? How will the penetration testing, if any, be conducted, and will it be driven primarily by human effort or primarily by automated or artificial intelligence processes?</p> <p>Recommendation 4.6.2.2 IV&V recommends that:</p> <p>1. The HITHRIVE team collaborate with IV&V to analyze the Cardinality.ai responses to these questions.</p> <p>2. Determine whether these responses indicate that Cardinality.ai vulnerability scanning and penetration testing processes protect the confidentiality, integrity, and availability of PII, PHI, and other sensitive information held in the HITHRIVE system sufficiently to meet DHS needs and satisfy</p> | <p>November_2: Cardy added the verbiage requested during a deliverable walkthrough meeting to SI-24 Test Plan. IV&V needs to determine if those changes satisfy this observation.</p> <p>November_1: DHS is not aware if our recommendation of adding security related test procedures to the SI-24 Test Plan feedback was accepted by IV&V or if a different route was preferred/taken.</p> | Medium | Michael Armstrong | 10/01/25 |

| | | | | | | | |
|--|--|--|---|--|--|--|--|
| | | <p>vulnerabilities, and implementing appropriate remediation measures at a frequency appropriate for the sensitivity of the data handled by the system and aligned with organizational requirements.</p> <p>2. While penetration testing is only required in the NIST SP 800-53b High control baseline, third-party penetration testing for systems handling sensitive data is widely recognized as an information security best practice because it provides an unbiased assessment, specialized expertise, and risk reduction.</p> <p>3. It is not clear, however, based on the Cardinality.ai SI-9 Technology Environment and Infrastructure Specifications deliverable, whether vulnerability scanning, penetration testing, or both will be conducted on the HITHRIVE environment, and by whom these activities will be conducted. It is also not clear what tools will be used for these tasks, and whether penetration testing, if conducted, will be conducted by the Cardinality.ai team or by an independent third party, and whether the penetration testing will be conducted primarily via human effort or primarily through automated tools.</p> | <p>compliance requirements.</p> <p>3. To the extent that Cardinality.ai vulnerability scanning and penetration testing processes do not protect PII, PHI, and other sensitive information held in the HITHRIVE system sufficiently to meet DHS needs and satisfy compliance requirements, request that Cardinality.ai adjust these processes to meet DHS needs.</p> | | | | |
|--|--|--|---|--|--|--|--|

Project and Focus Area Health Summary

This area provides stoplight indicators of overall IV&V assessed Project Health and also individual Technical Process Areas that are evaluated by the IV&V Team during the reporting period.



The IV&V Team set the metrics Baseline in the 5/25 reporting period, 8 months after Vendor contract execution, due to the late approval of SI-5 Vendor Project Schedule. IV&V is now reporting monthly against the Baseline for Project Health.

Project Health is showing significant risks due to inconsistent delivery of Vendor Deliverables to HI-THRIVE expectations and inconsistent management of project schedule and tasks.

| IV&V Monthly Overall Project Health | | | | |
|-------------------------------------|-----------------------|------------------------|-------------------------|----------------------|
| Overall Project Status | Monthly Budget Health | Monthly Quality Health | Monthly Schedule Health | Monthly Scope Health |
| <div></div> | <div></div> | <div></div> | <div></div> | <div></div> |

| Monthly Project Health Detail | | | | | | | |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---|
| Project Health Area | 10/25 | 9/25 | 8/25 | 7/25 | 6/25 | Baseline | Details and Trend: |
| Health Overall | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 17.3% 10/25, 17% 9/25, 19% 8/25, 18% 7/25, 15% 6/25 |
| Budget Overall | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Neutral 63% 10/25, 63% 9/25, 63% 8/25, 66% 7/25, 55% 6/25 |
| Cost Variance Ratio | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Cost Variance is less than 1 and negligible change. |
| Schedule Performance Indicator | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Neutral 24% 10/25, 24% 9/25, 21% 8/25, 19% 7/25, 61% 6/25 |
| Quality Overall | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 29% 10/25, 27% 9/25, 41% 8/25, 34% 7/25, 29% 6/25 |
| Deliverable Quality | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 11% 10/25, 10% 9/25, 12% 8/25, 10% 7/25, 10% 6/25 |
| Deliverable Schedule Variance | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 147% 10/25, 141% 9/25, 232% 8/25, 191% 7/25, 133% 6/25 |
| Requirements Process Quality | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Neutral 0% 10/25, 0% 9/25 |
| Design Process Quality | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 14% 10/25, 2.25% 9/25 GREEN to YELLOW |
| Sprint Process Quality | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Positive 40% 10/25, 56% 9/25 |
| Test Process Quality | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Unable to measure, denied access from Vendor, YELLOW |
| Schedule Overall | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 17.3% 10/25, 17% 9/25, 15% 8/25, 14% 7/25, 12% 6/25 |
| Milestone Variance | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Neutral 15.3% 10/25, 15.3% 9/25,14% 8/25, 12% 7/25, 15% 6/25 |
| Schedule Variance | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | Negative 17.3% 10/25, 17% 9/25, 16% 8/25, 16% 7/25, 15% 6/25 |
| Scope Overall | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | 0 No changes to scope that impact budget |
| Change Request Ratio | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | 0 No defined scope changes |

| IV&V Monthly Project Health by Focus Area | | | | |
|---|-------------------------|------------------------|---|--|
| IV&V Focus Area | Previous Month's Health | Current Month's Health | Comments | |
| 1.0 Technical Project Management | <div></div> | <div></div> | Schedule shows Go-Live delayed. | |
| 2.0 Support Process IV&V | <div></div> | <div></div> | Transition from Yellow to Red, late deliverable. | |
| 3.0 Solution Architecture | <div></div> | <div></div> | No observations. | |
| 4.0 Continuous Delivery | <div></div> | <div></div> | Insufficient test visibility, no State-IV&V access to Test Rails. | |
| 5.0 Product Increment Planning | <div></div> | <div></div> | Vendor did not complete entry criteria for Sprint 1 or 2. | |
| 6.0 Development IV&V | <div></div> | <div></div> | Daily/weekly Sprint status updates are inaccurate. | |

| | | | |
|-------------------------|---|---|---|
| 7.0 Implementation IV&V |  |  | Go-Live >90 days, Implementation exceeds contract |
| 8.0 Project Closure | | | No data. |

Project Health Metric Legend

| Budget | Quality | Schedule | Scope |
|---|--|----------------------------------|-------------------------------------|
| Baseline Cost Variance Ratio (CVR) | Baseline Deliverable Quality (DQ) | Approved Baseline 4/1-5/31: | Baseline Change Request Ratio (CRR) |
| Baseline Schedule Performance Index (SPI) | Baseline Deliverable Schedule Variance (DSV) | Baseline Schedule Variance (SV) | |
| | | Baseline Milestone Variance (MV) | |
| .Green 0-10 | Yellow 10-20 | Red >20 | |

IV&V Monthly Project Health Legend

| GREEN | YELLOW | RED | BLUE |
|---|--|---|---|
| <p>Satisfactory – No corrective actions necessary. All life cycle activities conform to requirements. Implemented processes are satisfactory. Risks or issues may exist and contain appropriate mitigation or resolution steps and the project is adequately addressing them.</p> <p>The current technical risk to the project and software quality is low.</p> <p><10% Variance</p> | <p>Caution – There may be a need for corrective action now or quite soon.</p> <p>Some life cycle activities are not in alignment with requirements. Some processes may require process improvements.</p> <p>Risks or issues are often not identified or contain stale mitigation or resolution steps.</p> <p>The current technical risk to the project and software quality is moderate.</p> <p>> 10% and < 20% Variance</p> | <p>Critical – Escalated for immediate action.</p> <p>Many life cycle activities are not in alignment with requirements. Many processes require corrective action.</p> <p>Risk mitigation is not effective, or issue resolution is not timely. Critical processes are not effective and are resulting in delays or rework.</p> <p>The current technical risk to the project and software quality is significant.</p> <p>>20% Variance</p> | <p>Not enough data is available to make a determination about project health.</p> |

Observations Active During Reporting Period

This section provides detail on all IV&V Observations that were opened, closed, or active and their type Risk, Issue, or Neutral. Initial Observations remain Neutral (not issue or risk) until formal agreement is reached with HI THRIVE Project Team.

IV&V Observations Active During the Month

| Observation Title | IV&V Observation Description | IV&V Impact Description | IV&V Recommendation | State Ongoing Update | IV&V Ongoing Update | Status |
|---|--|--|---|--|--|--------|
| Ineffective Transparency and Reporting in Agile Ceremonies and Tools | <p>Observation 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools.</p> <p>The IV&V team observes that the SI Vendor's current Agile practices and supporting tools do not provide adequate visibility or accountability for HI THRIVE. Specifically, IV&V has been denied visibility into defects, which limits its ability to conduct independent verification.</p> <p>Daily standups during Sprint 1 have not been accurately reported, and Jira reports from daily standups and weekly status updates are either missing or untimely. While the vendor is effectively using TestRail internally, access has been denied to both HI THRIVE and IV&V, further reducing transparency.</p> <p>Additionally, the vendor continues to disregard IV&V recommendations to enhance Agile ceremonies, including accurate sprint reporting and improved utilization of configuration management tools.</p> | <p>Impact 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools</p> <p>These gaps result in limited traceability, reduced confidence in reporting accuracy, and the inability of IV&V to validate progress or identify risks in a timely manner independently.</p> <p>The lack of standardized reporting and access to tools prevents DHS and ACF from obtaining a clear view of project health, scope control, and quality outcomes.</p> | <p>Recommendations for 6.1.1 Ineffective Transparency and Reporting in Agile Ceremonies and Tools:</p> <p>Recommendation 6.1.1.1.1 Provide HI THRIVE and IV&V with read-only access to TestRail and defect tracking tools</p> <p>Recommendation 6.1.1.1.2 . Improve the accuracy and timeliness of daily standup and weekly Jira reports.</p> <p>Recommendation 6.1.1.1.3. Incorporate IV&V recommendations into Agile ceremonies, ensuring sprint reviews include transparent defect, backlog, and progress reporting.</p> <p>Recommendation 6.1.1.1.4. Align issue tracking and reporting across Jira and Test Rails to ensure consistency, visibility, and compliance with contractual traceability obligations.</p> | <p>November_2: The CAP has been reviewed and none of the items raised by IV&V were addressed by Cardy with corrective actions. IV&V's CAP response was received by DHS and is under review while DHS formulates their response.</p> <p>November_1: CAP response was received by DHS on 11/10/25 and currently under review. Cardy's responses will affect the state's actions for 6.1.1.1, 6.1.1.3, and 6.1.1.4. For 6.1.1.2, Cardy informed DHS on 11/10/25 that sprint work is still halted. PMO Services recommended that DHS do not move forward with Sprint 2 Retrospective or Sprint Reports until work halt is lifted as these are included within sprint work per Agile best practices and Cardy's SDLC process doc.</p> <p>October: 6.1.1.1, 6.1.1.3, and 6.1.1.4 are part of the Corrective Action Plan. This has been provided to executive leadership and planned to be sent to Cardy by EOD 10/28/25. 6.1.1.2 another email was sent to Cardy on 10/22 specific to issues found in the Sprint 2 test reports. If no response is received from Cardy by 11/3/25 (or 2 days after project work resumes), a project risk will be raised.</p> | <p>Not required on initial observation - Observation type is neutral until it is reviewed by the State and Priority is Medium.</p> | Open |
| 5.0.1 Sprint Iterations are not utilizing effective sprint planning processes | 5.0.1 Vendor's current sprint process combines sprint planning (Increment Planning) with delivery execution | <p>5.0.1 The combination of sprint planning and delivery execution results in an inefficient project schedule and negatively impacts the project team's capability to measure execution burn down across sprints.</p> <p>The first week of each sprint is currently dedicated to sprint planning, no actual sprint configuration and test activities occur until week two. This results in an involuntary stop for the majority of the development and quality assurance team every fourth week with development and QA sprinting at only 75% of</p> | Recommendation 5.0.1.1 IV&V recommends that the Vendor adopt a SAFe model I1.S1 , I1.S2 , I1.S3, I1.S4 (IP); I2.S5.... With a shortened 1 week Increment Planning sprint occurring once per team for every 3 , three week sprints increasing the overall team efficiency 15% to 90%. | November: Cardy informed DHS on 11/10/25 that sprint work is still halted. This observation cannot be addressed until sprint work resumes. | Not required on initial observation - Observation type is neutral until it is reviewed by the State and Priority is Medium. | Open |

| | | | | | | |
|--|--|--|--|---|---|------|
| | | their true capacity. Combining the planning and execution in a single sprint has a secondary negative impact of deferring burndown against story points until one third into the sprint. | | | | |
| 4.6.2 Cardinality.ai vulnerability scanning and penetration testing processes are unclear and present risk | 4.6.2 IV&V observes that: 1. While ACF and CFR requirements do not specifically include requirements for vulnerability scanning or penetration testing, the HITHRIVE system has been identified as requiring information security control protections in accordance with the NIST SP 800-53b Moderate control baseline. Among other controls, the Moderate control baseline requires implementing control RA-5 Vulnerability Monitoring and Scanning. This control requires scanning for vulnerabilities, analyzing identified vulnerabilities, and implementing appropriate remediation measures at a frequency appropriate for the sensitivity of the data handled by the system and aligned with organizational requirements. 2. While penetration testing is only required in the NIST SP 800-53b High control baseline, third-party penetration testing for systems handling sensitive data is widely recognized as an information security best practice because it provides an unbiased assessment, specialized expertise, and risk reduction. 3. It is not clear, however, based on the Cardinality.ai SI-9 Technology Environment and Infrastructure Specifications deliverable, whether vulnerability scanning, penetration testing, or both will be conducted on the HITHRIVE environment, and by whom these activities will be | 4.6.2 IV&V observes that without knowing whether and how vulnerability scanning and penetration testing will be conducted on the production HITHRIVE environment, DHS and the HITHRIVE team cannot evaluate whether these activities are being conducted to an extent and in a way that protects the confidentiality, integrity, and availability of PII, PHI, and other sensitive information held in the HITHRIVE system sufficiently to meet DHS needs and satisfy compliance requirements. | Recommendation 4.6.2.1 IV&V recommends that the HITHRIVE team request clarification from Cardinality.ai as follows: 1. Will vulnerability scanning be conducted in the HITHRIVE environment? If so, by whom and with what tools? How will the vulnerability scanning, if any, be conducted, and will it be driven primarily by human effort or primarily by automated or artificial intelligence processes? 2. Will penetration testing be conducted in the HITHRIVE environment? If so, by whom and with what tools? How will the penetration testing, if any, be conducted, and will it be driven primarily by human effort or primarily by automated or artificial intelligence processes? Recommendation 4.6.2.2 IV&V recommends that: 1. The HITHRIVE team collaborate with IV&V to analyze the Cardinality.ai responses to these questions. 2. Determine whether these responses indicate that Cardinality.ai vulnerability scanning and penetration testing processes protect the confidentiality, integrity, and availability of PII, PHI, and other sensitive information held in the HITHRIVE system sufficiently to meet DHS needs and satisfy compliance requirements. 3. To the extent that Cardinality.ai vulnerability scanning and penetration testing processes do not protect PII, PHI, and other sensitive information held in the HITHRIVE system sufficiently to meet DHS needs and satisfy | November_2: Cardy added the verbiage requested during a deliverable walkthrough meeting to SI-24 Test Plan. IV&V needs to determine if those changes satisfy this observation. November_1: DHS is not aware if our recommendation of adding security related test procedures to the SI-24 Test Plan feedback was accepted by IV&V or if a different route was preferred/taken. | Not required on initial observation - Observation type is neutral until it is reviewed by the State and Priority is Medium. | Open |

| IV&V Monthly Budget Summary | | | | | | | | | | | |
|-----------------------------|-----------------------|-------------------------|-----------------------|---------------------------|-----------------------------|---------------------|-----------|-------------|-----------|-----------------------|---|
| Development Project Costs | Total Contract Amount | Actual To Date | Remaining on Contract | Quarter 1 Oct - Dec Total | Quarter 2 Jan - March Total | Quarter 3 Apr - Jun | July | August | Sept | Quarter 4 July - Sept | Reason for Variance or Action Plan to Correct |
| | Total Contract Amount | Actual To Date FFY 2025 | Remaining on Contract | Q1 Oct - Dec 2024 | Q2 Jan - March 2025 | Q3 April - Jun 2025 | July 2025 | August 2025 | Sept 2025 | Q4 July - Sept 2025 | Reason for Variance |
| Contractor: TMS IV&V | \$2,095,322 | \$70,550 | \$2,024,772 | \$70,550 | \$0 | \$0 | \$0 | | \$0 | \$0 | |

| IV&V Monthly Project Summary | |
|------------------------------|---|
| Year/Month | Monthly Summary |
| 2025 - 10 | "IV&V PROJECT SUMMARY: WORK COMPLETED: September IVV.5, IVV.7, IVV.10 Report Deliverables Submitted and Approved Deliverable Re-Review SI-18, SI-21, SI-31 DED Review: None OBJECTIVES: Start SPRINT evaluations, continue Deliverable and DED reviews WORK IN PROGRESS: Oct/Nov IVV.5, IVV.7, IVV.10 Report Deliverables Review of DEDs and Deliverables UNPLANNED OR AD-HOC WORK: Review of Vendor Performance Management documentation. PLANNED WORK NOT ACCOMPLISHED: ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD: November IVV.5, IVV.7, IVV.10 Continue SPRINT evaluations, review of vendor artifacts as delivered." |

| HI THRIVE Comprehensive Project Plan Summary | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|------------|----------|----------|------------|------|----|------|----|------|----|------|----|------|----|------|----|------|----|----|----|----|----|----|----|
| Summary Task / Milestone | | Start Date | End Date | Duration | % Complete | 2023 | | 2024 | | 2025 | | 2026 | | 2027 | | 2028 | | 2029 | | 20 | | | | | |
| | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| HI THRIVE CCWIS Project | | 12/01/22 | 02/28/29 | 1617d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS PMO SERVICES | | 12/01/22 | 11/28/25 | 750d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS PROCUREMENTS | | 12/30/22 | 10/20/26 | 950d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS SOLUTION Procurement | | 12/30/22 | 04/21/25 | 577d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS IV&V Procurement | | 09/18/23 | 09/01/24 | 238d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS PM Services Procurement | | 11/07/25 | 10/20/26 | 235d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS FODQA Procurement | | 03/01/24 | 12/04/25 | 441d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS PMO Vendor - Exercise YR3 | | 08/02/24 | 10/01/24 | 41d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS FIELD ENGAGEMENT PLAN | | 03/01/23 | 11/29/24 | 437d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS TECHNICAL SOLUTION | | 09/03/24 | 11/16/27 | 789d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS DATA DISCOVERY | | 01/02/23 | 05/30/25 | 604d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS DATA INTERFACES | | 08/01/23 | 10/16/25 | 553d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS FODQA | | 12/02/24 | 12/17/26 | 508d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS IV&V | | 09/01/24 | 08/30/27 | 782d | | | | | | | | | | | | | | | | | | | | | |
| CCWIS OCM (Placeholder) | | 09/01/26 | 09/02/30 | 1045d | | | | | | | | | | | | | | | | | | | | | |

IV&V Calendar and Meetings Attended

IV&V Calendar and Meetings Attended

This area provides a summary of IV&V out of office dates, ongoing meetings, and scheduled ad-hoc meetings.

IV&V Monthly Calendar

| Resource | Start Date | End Date | Days | Forward Contact | Nov | | | | | | | | | |
|----------|------------|----------|------|-----------------|-----|-------|-------|--------|--------|--------|-------|--------|--------|--|
| | | | | | C | Nov 2 | Nov 9 | Nov 16 | Nov 23 | Nov 30 | Dec 7 | Dec 14 | Dec 21 | |
| | | | | | | | | | | | | | | |

IV&V Monthly Meeting Register

| Meeting Name | Type | Purpose / Topics Discussed | Meeting Minutes | Minutes Approved | Feedback & Follow-ups | Mandatory Attendance | Optional Attendance | Date - Time |
|-----------------------------|------|----------------------------|-----------------|------------------|-----------------------|----------------------|---------------------|---------------------------------|
| No Additional Meetings Held | | | | | | | | 09/01/25 - 10:00 - 11:00 AM HST |

IV&V Recurring Meeting Register

| Meeting Name | Purpose / Topics Discussed | Type | Mandatory Attendance | Optional Attendance | Cadence (Frequency) | Meeting Length (Minutes) |
|--|---|-----------|--|---------------------|---|--------------------------|
| IV&V Observations | Weekly Check-In with TMS (IV&V) vendor to discuss weekly observations and if applicable adhoc items | Recurring | Core Team PMO IV&V Vendor | | Weekly Tuesdays 9:00-9:30 am HST & Thursdays 10:00 - 10:30 am HST | 30 |
| IV&V Review of Monthly Report | Review of all observations for the month and discussion of items to be included in the Monthly Report that will be distributed to ACF/ETS/DHS Executive Leadership/Hi THRIVE project team | Recurring | Core Team PMO IV&V Vendor | | Thursday of the 1st week of the following month 9:00 - 9:50 am HST | 50 |
| HI THRIVE Core, OET, & Cardy Technical Meeting | Meeting to discuss technical topics relating to the HI THRIVE project. Agenda will be created for each meeting with topics for discussion and sent to attendees before hand. Agenda topics may include architecture, access and controls, interfaces, standards and protocols, etc. Security will be discussed in a separate meeting. | Recurring | Executive Core Team PMO SME - System IV&V Vendor | | Every Wednesday 11:00 - 11:50 am HST | 50 |
| TMS IV&V - Mark Choi | Discuss CCWIS technical topics with Mark Choi | Recurring | Executive IV&V Vendor | Core Team PMO | Every other Friday 07:30 - 08:00 AM HST | 30 |
| Weekly Tech Check-in | •Overall Technical Updates •Integration and Data Migration Activities •Items Requiring Intervention •Open Discussion | Recurring | Core Team PMO SME - System IV&V Vendor | | Every Thursday 10:00 AM - 10:20 AM HST | 20 |

Project Meeting Register with IV&V Attendance

| Meeting Name | Purpose / Topics Discussed | Type | Mandatory Attendance | Optional Attendance | Meeting Date | Meeting Length (Minutes) |
|---|---|-------|---|---------------------|--------------|--------------------------|
| Sprint 2 Planning - Referral Day 2 | Sprint Planning Session for the Referral Module | Topic | Core Team PMO SME - Business SME - System IV&V Vendor Technical Vendor | | 10/01/25 | 180 |
| HI THRIVE Project SI-18 Tech Design Review Discussion | Review the changes made and discuss comments received from the last review of the SI-18 Tech Design document for the HI Thrive project | Topic | Core Team PMO SME - System IV&V Vendor Technical Vendor | | 10/01/25 | 60 |
| Sprint 2 Planning - Licensing/Intake Day 1 | Sprint Planning Session for the Licensing and Intake Modules | Topic | Core Team PMO SME - Business SME - System IV&V Vendor Technical Vendor | | 10/02/25 | 180 |
| Sprint 2 Planning - Referral Day 3 | Sprint Planning Session for the Referral Module | Topic | Core Team PMO SME - Business SME - System IV&V Vendor Technical Vendor | | 10/03/25 | 60 |
| KOLEA/Hi THRIVE Technical Follow-Up | Continue discussions on the interface technical items between KOLEA and HI THRIVE following the kickoff. | Topic | Core Team PMO SME - System IV&V Vendor Technical Vendor | | 10/06/25 | 30 |
| HI THRIVE Sprint 2 Referrals Planning Follow-up | Meeting to review Functional Requirement 4.13 (Referral Priority Level) to determine what the requirement needs to be and how the system can meet the requirement. | Topic | Core Team PMO SME - Business IV&V Vendor Technical Vendor | | 10/07/25 | 50 |
| Discuss CPSS to Oracle replication gaps | Meeting to 1. Identify gaps between ADABAS and current Oracle replication database 2. Discuss any issues during the replication process and share the error logs if it exists during the replication process. | Topic | Core Team PMO IV&V Vendor Technical Vendor Vendor | | 10/09/25 | 30 |
| LAVA – FAMIS Interface Discussion with DAGS & DHS | This meeting will focus on aligning LAVA's integration goals with DAGS in supporting the transition of FAMIS interfaces to HI THRIVE. The discussion will include an overview of current LAVA–FAMIS data exchanges, and address requirements for maintaining interface continuity, data format compliance, and scheduling. Also, to testing approaches, and outline roles, timelines, and next steps. | Topic | Executive Core Team PMO IV&V Vendor Technical Vendor Vendor | | 10/10/25 | 60 |
| SI-31 Training Plan Deliverable Review | • Follow Up on Action Items (5 mins) – SharePoint Access request for Theresa and Meg (SMXTech.us accounts), will be handled in email to allow the focus to be on the deliverable review. • SI-31 Training Plan Deliverable Review (25 mins) | Topic | Core Team PMO SME - Business IV&V Vendor Technical Vendor Training | | 10/16/25 | 25 |
| SI-21 Data mapping Feedback review | 1. Review feedback items. 2. Data mapping process overview. | Topic | Core Team PMO SME - System IV&V Vendor Technical Vendor | | 10/16/25 | 60 |
| Review of Phase Gate - SI-7 | Review SI-7 Phase Gate deliverable to determine process for moving from planning to execution | Topic | Core Team PMO IV&V Vendor Technical Vendor | | 10/17/25 | 30 |
| Review of Phase Gate - SI-7 | Review SI-7 Phase Gate deliverable to determine process for moving from planning to execution | Topic | Core Team PMO IV&V Vendor Technical Vendor | | 10/27/25 | 30 |
| HI THRIVE Monthly Project Report Review | Review monthly status report from Smartsheet dashboard Discuss project health indicators | Topic | Core Team PMO IV&V Vendor Technical Vendor | | 10/31/25 | 25 |

IV&V Scope and Purpose

This report documents observations that the Technology Management Solutions, Inc. (TMS) Independent Verification and Validation team (IV&V) made on the HI THRIVE Comprehensive Child Welfare Information System (CCWIS) Project during the current reporting period.

The objective of the IV&V efforts is to review and/or test selected HI THRIVE Project processes and products to assure that the associated systems meet functional and non-functional requirements, and are successfully implemented within the processes, time frames, and constraints identified in the HI THRIVE Project contracts. The IV&V team determines whether project staff members are following planned processes, and whether contractor work meets project requirements. The IV&V team provides independent technical review and verification of project deliverables, independent testing and auditing of project deliverables against requirements, and a special emphasis on deliverable quality assurance and reviews of information security control.

The TMS IV&V team approach encourages these positive outcomes:

- 1. Collaborative identification and communication of successes and recommended improvements.
- 2. Detection and correction of errors early in the project life cycle.
- 3. Reduction in development risks, costs and adverse schedule impacts.
- 4. Enhancement of project products' quality, integrity, and security.
- 5. Increased visibility into and greater understanding of the project and processes.

IV&V evaluations will include:

- 1. Review of content quality
- 2. Review of conformance to standards and best practices
- 3. Quality assessments of work products
- 4. Quality assessments of work practices
- 5. Process improvement identification
- 6. Recommendations for deficiency remediation

For the detailed scope and approach of the IV&V reviews, assessments and evaluations refer to the IV&V Deliverable: IVV.1 IV&V Management Plan and the IV&V guiding process document IEEE 1012-2016 Standard for System, Software, and Hardware Verification and Validation.