

# STATE OF RHODE ISLAND UNIFIED HEALTH INFRASTRUCTURE PROJECT

## IV&V MONTHLY PROJECT STATUS REPORT PERIOD ENDING NOVEMBER 30, 2015

Submitted by: William Vacha





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Author	Bonnie Harris; William Vacha
Owner (if different from Author)	William Vacha, CSG Project Manager

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## 1. PROJECT BACKGROUND

The UHIP project was launched on January 22, 2013.

The goals of the UHIP project are:

- ➤ To provide Rhode Islanders and their families, Rhode Island businesses and their employees, and issuers serving the Rhode Island market an integrated, end-to-end service solution for health insurance and human services programs
- To create an integrated multi-channel solution (web, phone, and walk-in) for Medicaid/CHIP, SNAP, TANF, and other human services programs, as well as (subsidized and unsubsidized) commercial health insurance
- To modernize the eligibility systems for the State's health and human services programs
- To add value to small business health insurance purchasing
- > To enhance the customer experience—and the State's efficiency—for all programs involved

#### **1.1 Project Constraints**

The State's limited resources (staff and funding) and aggressive project schedule have provided unique challenges:

- The UHIP Project requires State subject matter experts with business and technology experience; the State's focus on day-to-day operations limits the number of available resources to assist with the project
- The project's aggressive schedule has been driven by external (Federal) milestones:
  - ✓ October 1, 2013 Open enrollment began
  - ✓ January 1, 2014 Implementation of a fully ACA-compliant Exchange
  - ✓ December 31, 2015 90% Federal matching funding for Integrated Eligibility Systems (permanent change to 90% matching is pending) and waiver of program cost allocation requirements (extension to December 31, 2018 is pending)





#### 2. IV&V OVERVIEW

The HHS Enterprise Performance Life Cycle (EPLC) framework defines IV&V as a rigorous independent process that evaluates the correctness and quality of the project's business process to ensure that the project is developed in accordance with customer requirements and is well engineered.

#### 2.1 IV&V Objectives

The objectives of performing IV&V include:

- Facilitate early detection and correction of cost and schedule variance
- Enhance management insight into process and product risk
- Support project life cycle processes to ensure compliance with regulatory, performance, schedule, and budget requirements
- Validate the project's products and processes to ensure compliance with defined requirements
- Provide supporting evidence that the product satisfies client requirements

CSG recognizes the need for maintaining strict independence from the overall project management team and implementation vendor. In this role, CSG provides an objective perspective that is intended to minimize risk and maximize the opportunity for the success of the overall project effort.





## 3. IV&V APPROACH

CSG's risk assessment primarily focuses on:

- Schedule/Resources Is the schedule defined, managed, and properly resourced?
- Scope Is scope defined and managed; including requirements management traceability?
- Cost Are budget requirements defined and managed?
- Quality
  - ✓ Are quality processes defined and followed?
    - System Development Life Cycle (SDLC) processes
    - Project Management (PM) processes
  - ✓ Do these SDLC and PM processes result in quality outcomes and deliverables?

Inputs into our assessment include project documentation and industry standards:

- Project meetings with the State, Deloitte, Northrop Grumman, KPMG, and PCG
- The State of Rhode Island and Deloitte Unified Health Infrastructure Project Agreement/Bridging Document and contract amendments
- > The UHIP Project Management Plan (i.e., Plan 01) and related deliverables
- Industry Best Practice documents, including the following:
  - ✓ A Guide to the Project Management Body of Knowledge (PMBOK)
  - ✓ Multiple IEEE Standards





## 4. IV&V PROJECT HIGHLIGHTS

	RI UHIP IV&V Monthly Project Status Report								
Project Name	RI UHIP (IV&V) – Phase 1	Project Health	Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified						
Project Name	RI UHIP (IV&V) – Phase 2	Project Health	Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified						
Project Period	03/04/2013-02/24/2016	Reporting Period	11/01/2015-11/30/2015						

This Monthly Project Status Report provides a review of the project status of Phase 1 and Phase 2 from November 1, 2015 through November 30, 2015. Risk mitigation/avoidance actions taken since the prior IV&V report are outlined in Section 7 of this report. These activities did not change the Phase 1 and Phase 2 overall health rating assessments of "Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified" compared to last month.

#### **Key Messages/Highlights**

UHIP Project risks are categorized into the following areas: Scope, Cost, Schedule/Resources, and Quality. A summary of project risks and related concerns (as of November 30, 2015) is provided below. The progress of corrective actions taken during November is outlined in Section 7 – IV&V Risk Status.

#### Scope

- ✓ The goal of scope management is to apply and enforce scope management processes:
  - Requirements Traceability Matrix (RTM) management, as outlined in approved project planning deliverables, must be applied and enforced to ensure existing requirements are delivered and new/changed requirements are addressed
  - Change Control, as outlined in approved project planning deliverables, must fully consider the impact of each change on the project's schedule, resource requirements, and finances
- ✓ Scope management is intended to address the scope issues experienced in November:
  - Development of a consolidated database under construction
  - Contractual 2015 Disaster Recovery Plan and test date delayed
  - Phase 1 and Phase 2 Functional and Technical RTM have not been finalized
  - Several change requests (CRs) currently on hold; additional CRs are work in progress
    - Deloitte providing rough order of magnitudes (ROMs) for small changes only

#### Cost

- ✓ Three contract amendments, between the State and Deloitte, are under construction
  - #35 Supports development activities 12/12/15 thru 02/29/16
  - #36 Supports 2016 M&O activities 01/01/16 thru 06/30/16





#### **Key Messages/Highlights**

- #37 Supports development activities 03/01/16 thru RIBridges go-live
- ✓ Additional State funds have been requested via the revised FY16 budget process to cover pending EOHHS and DHS UHIP costs
- ✓ Additional UHIP costs will be incurred to extend the UHIP development and M&O activities

#### Schedule/Resources

- ✓ Phase 1 Release 6.6 SIT target completion date extended; UAT targeted to start 01/04/16
- ✓ Three IV&V attestation efforts for CMS planned during Phase 1 Release 6.6 UAT
  - Failure to Reconcile (FTR)
  - Periodic Verification Composite (PVC)
  - 1095A
- ✓ Phase 2 Release 7 UAT Cycle 2 end date and UAT Cycle 3 start/end dates needed.
- ✓ Limited Deloitte engagement to discuss the development of the consolidated database

#### Quality

- ✓ 20 deferred defects remain from previous UATs: 1 critical, 16 highs, and 3 mediums
- ✓ Deloitte monitoring application performance and open enrollment activities
- ✓ Bimonthly Automated and Manual Code Review Report #8 under construction
- ✓ Deloitte Security Team creating Application Vulnerability Security Report for Release 6.6

The remaining sections of this document outline the basis for CSG's assessment.





## 5. IV&V PROJECT DASHBOARD

OVERALL HEALTH RATING							
Previous	Current						
Moderate Risk (Phase 1) – Consider corrective	Moderate Risk (Phase 1) - Consider corrective						
action or monitor previous corrective action.	action or monitor previous corrective action.						
Moderate areas of concern have been identified.	Moderate areas of concern have been identified.						
Moderate Risk (Phase 2) - Consider corrective	Moderate Risk (Phase 2) – Consider corrective						
action or monitor previous corrective action.	action or monitor previous corrective action.						
Moderate areas of concern have been identified.	Moderate areas of concern have been identified.						

Risk mitigation/avoidance actions have been taken since the prior IV&V report and are outlined in Section 7 of this report. The key activities include:

- Scope
  - ✓ Medicaid 1095-B UAT defined
  - ✓ Phase 2 Release 7 FDDs approved
- Cost
  - ✓ Deloitte Contract Amendment #34B was approved to support UHIP thru 12/11/15
  - ✓ State continues to coordinate with the Budget Office for increased EOHHS and DHS UHIP funding
- Schedule/Resources
  - ✓ Medicaid 1095-B UAT testers identified; testing started on 11/30/15
  - ✓ Discussions to end Phase 2 Release 7 UAT Cycle 2 and begin UAT Cycle 3
- Quality
  - ✓ Hot Fixes deployed throughout the month to address Production issues
  - ✓ December M&O test scenarios and test results under review
  - ✓ Presented IV&V observations of Mock Pilot #2

### **5.1 Project Status Indicators**

The following tables represent the current project status indicators for both Phase 1 and Phase 2 activities. The areas of Scope, Cost, Schedule/Resources, and Quality are assessed separately for Phase 1 and Phase 2.

Table 1 - Phase 1 & Phase 2 Project Status Indicators

	PHASE 1 - PROJECT STATUS INDICATORS – Overall Status Indicator = Moderate										
SCOPE		COST		SCHEDULE / RESOURCES		QUALITY					
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Neutral





PHASE 2 - PROJECT STATUS INDICATORS – Overall Status Indicator = Moderate											
SCOPE		COST		SCHEDULE / RESOURCES		QUALITY					
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	High Risk	High Risk	Positive	Moderate Risk	Moderate Risk	Neutral

## 5.2 Project Status Indicator Criteria

The following criterion is used to define the indicator in Section 5.1.

- Low Risk Project is on track with minor concerns.
- Moderate Risk Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.
- ➤ High Risk Immediate corrective action required. Significant concerns have been identified.





## 6. MILESTONES / IV&V DELIVERABLE STATUS

The following table lists the CSG IV&V deliverables for the reporting period as of November 30, 2015.

Table 2 - Table of Milestone and IV&V Deliverable Status

Description	Status	Target Date	Date Submitted	Date Approved
IV&V Monthly Review and Assessment Report for September 2015	Approved	10/16/2015	10/21/2015	11/04/2015
IV&V Monthly Review and Assessment Report for October 2015	Submitted	11/19/2015	11/19/2015	
Monthly Financial Status Report for August 2015	Submitted	11/20/2015	11/20/2015	
Upcoming Deliverables				
Monthly Financial Status Report for September 2015	In Progress	12/11/2015		
IV&V Monthly Review and Assessment Report for November 2015	In Progress	12/18/2015		
Monthly Financial Status Report for October 2015	Not Started	12/31/2015		
Bimonthly Automated and Manual Code Review Report #8	In Progress	12/31/2015		





## 7. IV&V RISK STATUS

UHIP project risks have been summarized into four (4) groupings: scope, cost, schedule/resources, and quality.

#### 7.1 IV&V Risk State: Scope

- Development of a consolidated database under construction
- Contractual 2015 Disaster Recovery Plan and test date delayed
- Phase 1 and Phase 2 Functional and Technical RTM have not been finalized
- Several change requests (CRs) currently on hold; additional CRs are work in progress
  - ✓ Deloitte providing rough order of magnitudes (ROMs) for small changes only

#### **Major Impacts:**

- Deloitte to provide a list of all system, network, and hardware changes for submission to CMS
- Disaster Recovery site change cutover date and final test plan pending
- Scope may expand from outstanding functional requirements, technical requirements, and CRs

#### **Risk Mitigation:**

- Consolidated Assessment Readiness Report under construction
- Deloitte is establishing the 2015 Disaster Recovery Plan and test date
- Contract amendments are work in progress to define the RTM and scope of work for 2016

#### 7.2 IV&V Risk State: Cost

- > Three contract amendments, between the State and Deloitte, are under construction
  - √ #35 Supports development activities 12/12/15 thru 02/29/16
  - √ #36 Supports 2016 M&O activities 01/01/16 thru 06/30/16
  - ✓ #37 Supports development activities 03/01/16 thru RIBridges go-live
- Additional State funds have been requested via the revised SFY2016 budget process to cover pending EOHHS and DHS UHIP costs
- > Additional UHIP costs will be incurred to extend the UHIP development and M&O activities

#### **Major Impacts:**

- ➤ EOHHS, DHS, and HSRI will need additional funding to meet their long-term UHIP financial commitments from a State funds perspective
- EOHHS, DHS, and HSRI will be asked to approve additional spending that will require additional UHIP budget appropriations for State funds

#### **Risk Mitigation:**

Continue to coordinate with the Budget Office for increased EOHHS and DHS SFY2016 funding





#### 7.3 IV&V Risk State: Schedule/Resources

- Phase 1 Release 6.6 SIT target completion date extended
- Three IV&V attestation efforts for CMS planned during Phase 1 Release 6.6 UAT
- Phase 2 Release 7 UAT Cycle 2 end date and UAT Cycle 3 start/end dates needed
- Deloitte limited engagement to discuss the development of the consolidated database

#### **Major Impact:**

- Phase 1 Release 6.6 UAT start date may be delayed
- Attestation preparation and completion during Release 6.6 UAT stresses resource bandwidth
- Phase 2 Release 7 UAT timeline needed to ensure readiness (e.g., reporting and resources)
- Increased engagement from Deloitte needed for information to create the Consolidated Database Readiness Report

#### **Risk Mitigation:**

- Closely monitor Phase 1 Release 6.6 SIT and prepare a UAT execution plan accordingly
- Attestation timeframe needs to be defined, coordinated with Release 6.6 UAT, and approved
- Approved Phase 2 Release 7 UAT timeline between Deloitte and the State
- Weekly meetings between Deloitte, the State, and CSG specifically to discuss the consolidated database development efforts

#### 7.4 IV&V Risk State: Quality

- > 20 deferred defects remain from previous UATs: 1 critical, 16 highs, and 3 mediums
- Deloitte monitoring application performance and open enrollment activities
- Bimonthly Automated and Manual Code Review Report #8 under construction
- > Deloitte Security Team generating application vulnerability security report for Release 6.6

#### **Major Impacts:**

- Deferred Phase 1 UAT defects may impact scope, cost, schedule, and resources
- Hot fixes required to address auto renewal and open enrollment issues
- Code review focused on RIBridges and may result in needed improvements
- Vulnerability security report may result in needed updates

#### **Risk Mitigation:**

- Address all UAT defects during UAT; when deferred, conduct an impact analysis to share
- Continue to closely monitor and measure system performance and open enrollment
- Establish a plan and timeline to address previous issues identified via the IV&V code reviews
- Create a Security Assessment Report to identify issues within RIBridges prior to go-live





## 7.5 Issues That Require Attention

There are no issues that require attention from CSG's risk assessment; however, observations and recommendations are listed under Section 9.1.





## 8. Project Summary - November

This section contains a summary of project accomplishments and activities for this period based on CSG's Statement of Work (SOW).

#### 8.1 Manage IV&V Services

CSG provided the following IV&V services in the month of November 2015:

- Reviewed Deloitte deliverables for Phase 2
- Reviewed Daily Operations Summary and KPIs
- Observed daily Open Enrollment triage meetings
- Created the following IV&V deliverables:
  - ✓ Weekly IV&V Status Reports (multiple submitted)
  - Monthly Financial Status Reports for August (submitted)
  - ✓ IV&V Monthly Review and Assessment Report (submitted)

#### 8.2 Coordinate and Oversee UAT

Continued to manage and oversee Phase 1 and Phase 2 UAT efforts

#### 8.3 Validate Automated Code Review Results

Continued working on Bimonthly Automated and Manual Code Review #8

#### 8.4 Validate Continuous Integration Test Results

No continuous integration activities conducted in the month of November

#### 8.5 Verify Implementation Readiness

No implementation readiness activities conducted in the month of November

#### 8.6 Verify Component Reusability

No reusability verification activities conducted in the month of November

#### 8.7 Perform a System Audit

Awaiting the end of Phase 1 and Phase 2

#### 8.8 Perform Financial Reviews

Please refer to section 7.2 for information on key IV&V Financial observations for this month.





# 9. SUMMARY OF KEY RECOMMENDATIONS AND OBSERVATIONS

The following is a summary of Key Risk Mitigation:

- Consolidated Assessment Readiness Report under construction
- Deloitte establishing the 2015 Disaster Recovery Plan and test date
- Contract amendments are work in progress to define the RTM and scope of work for 2016
- Continue to coordinate with the Budget Office for increased EOHHS and DHS SFY2016 funding
- Closely monitor Phase 1 Release 6.6 SIT and prepare UAT execution plan accordingly
- > Attestation timeframes need to be defined, coordinated with Release 6.6 UAT, and approved
- An approved Phase 2 Release 7 UAT timeline between Deloitte and the State
- Weekly meetings between Deloitte, the State, and CSG specifically to discuss the consolidated database development efforts
- Address all UAT defects during UAT; if deferred, an impact analysis is conducted and shared
- Continue to closely monitor and measure system performance and open enrollment
- > Establish a plan and timeline to address previous issues identified via the IV&V code reviews
- Create a Security Assessment Report to identify issues within RIBridges prior to go-live





## 9.1 Observations and Recommendations

Below is a log of the remaining observations and recommendations made by the IV&V team for the month of November 2015.

**Table 3 - Observations and Recommendations** 

ID	Functional Area	Observations	Recommendations	Actions
382	Quality Assurance	Mock Pilot 2 of RIBridges System Mock Pilot 2 execution phase of parallel testing between InRhodes and RIBridges was conducted 09/21/15 through 10/29/15. The Pilot Plan Mock 2 document detailed the overall plan for the Pilot. However, the plan was missing processes for handling defects, use cases, and a test management plan. In addition, the majority of the workers participating in the Pilot did not have hands-on experience with RIBridges and the training provided prior to the start of Pilot did not include a side-by-side view between InRhodes and RIBridges, nor new business processes.  The absence of written processes to guide workers through RIBridges and to provide consistency in validating eligibility determinations and benefit calculations. Additionally, use cases and a test plan offer consistency in identifying steps required to enter cases into RIBridges. Written processes also provide worker more independence and the Pilot support team with a better insight to effectively determine when there are system issues or a need for additional training.	IV&V recommends that the State considers the IV&V observations and recommendations from the presentation on 11/10/15 (version 2 distributed on 11/23/15) to facilitate process improvement for future Pilots. Some of the recommendations include: develop a process to manage defect resolution, monitoring defects for completion, guidelines for workers to identify and log defects, develop use cases and a test management plan, ensure adequate training for workers prior to the start of pilot and through the duration, and ensure business processes for RIBridges are included in Pilot training. Refer to the presentation for more details.	11/23/15, BH - Revisions made to the presentation after meeting with the State about their concerns.  11/11/15 BH - Presented observations and recommendations to the State and sent a copy of the presentation to Deloitte, DHS, EOHHS, and HSRI.



ID	Functional Area	Observations	Recommendations	Actions
381	Quality Assurance	Post Auto Enrollment Production Issues Issues were identified with the auto renewal batch in Production that had a negative impact on some accounts. Changes in account coverage start date, incorrect APTC calculations, etc. This prompted numerous tickets to be logged and a number of hot fixes (code and data) to be deployed to resolve the issue.	It is recommended that more detail testing is done in SIT to reflect real-life scenarios and that automated regression testing is conducted during each release. Data quality scripts should run on a frequent basis to identify and fix data integrity issues. It is also recommended that code review/design review are performed by experienced team members.	11/20/15 several data fixes and code fixes have been deployed into the productions. Deloitte continues to conduct root cause analysis on the auto renewal issues.
380	Plan	Release 6.6 UAT Test Cases and Test Case Execution Plan Phase 1 UAT test case creation, along with the execution plan to run them, is contracted with KPMG; however, the State's contract with KPMG expires on 12/31/2015. The State is working to extend KPMG's contract, but past contract extensions between the two have been slow to materialize. KPMG is actively working on the Release 6.6 test cases and execution plan for the January UAT efforts. Their presence during UAT is equally important to ensure the execution plan is properly managed.	Any issue related to keeping KPMG onboard to support Phase 1 Release 6.6 after 12/31/15 needs to be raised by the State immediately and resolved as a priority. In the event that KPMG does not return after 12/31/15, the State needs to derive a contingency plan that is acceptable to all stakeholders involved with the UAT activities.	11/17/15 BV – State discussing with KPMG. 11/03/15 BV - Discussed with the State during today's Weekly IV&V Update Meeting. The State plans to meet with their Purchasing Department this week.



ID	Functional Area	Observations	Recommendations	Actions
379	Testing	Incomplete Testing Efforts for Interfaces in SIT Deloitte's Interface SIT efforts primarily entails ensuring the files are correctly formatted and the data can be read. There does not appear to be a testing effort that includes viewing the data collection screens to see if the data is correctly displayed and the appropriate case action is taken per the data received. As a result, Interface testing in UAT has essentially replaced SIT as the initial test to see how the data is received and displayed in Bridges. This places a significant burden on the State to fully test all interfaces, and increases the amount of time and effort needed to test Interfaces in UAT.	The State should require that Deloitte fully test all interfaces in SIT prior to deploying the functionality into UAT, as described in Deloitte's P2 Application Development Plan: The objective of Perform System Integration Testing activity is to test the customized RI UHIP solution and confirm that various sub-systems and interfaces integrate with the solution and function as required. This testing will be performed in the System Test environment. The SIT testing effort should include not only receiving the files from partners, but reading and displaying data appropriately in Bridges.	
378	Technical	Health Insurance Exchange Code Quality based on Bimonthly Code Review #7 The random sample that CSG selected from recently modified modules and the fourth code review was used for the manual code review. The sample revealed several findings that falls into three basic areas of review 1) Comments 2) Organization 3) Error Handling. Although there were several issues identified during the code review, improvement was observed during this review on too.	Based on the issues found and recommendations, the following steps are recommended for the UHIP team to consider: a) Reduce the SONAR major issues within each release. b) Peer code reviews are a standard approach and are mandatory. c) Discuss the approach for new single database design; conduct meetings with CSG and the State to provide more insight on the integrated development to inform all the areas of the code which are planned to be refactored. d) Provide the code quality checklist to the development team and closely monitor if they make sure to RUN Sonar and complete peer code reviews before checking in class to the repository. e) Continue making efforts to improve the code quality and code as per best industry standards.	10/09/15 BM - Deloitte has been asked to focus on adding comments in the class. Files longer than 2,000 lines should be avoided. Refactored code where it performs multiple purpose.



ID	Functional Area	Observations	Recommendations	Actions
377	Technical	Integrated Eligibility Services Code Quality based on Bimonthly Code Review #6 The random sample was selected from recently modified modules and the fifth code review was used for the manual code review and automated code review. The sample revealed several findings that fall into three basic areas of review 1) Comments and 2) Organization and Error Handling. However, all issues still remained from the fifth code review with very few deficiencies remediated.	Based on the issues found and recommendations, the following steps are recommended for the UHIP team to consider: Provide the code quality checklist to the development team and closely monitor if they make sure to RUN Sonar and complete peer code reviews before checking in class to the repository. Continue making efforts to improve the code quality and code as per best industry standards. Every developer must run the SONAR report during development and during defect repair. Code should be SONAR compliant for critical and blockers. Reduce the SONAR major issues within each release.	11/02/15 — BM The findings will be reevaluated during the IV&V 8 <sup>th</sup> Bimonthly Code Review
375	Technical	Disaster Recovery (DR) site moving to Sacramento Deloitte verbally informed the State that the DR site managed by NTT Data will be relocated to Sacramento from San Jose. In addition, the contractual DR planned for October may not happen because of the pending site change. The disaster recovery environment is a mirror image of the Warwick data center technology, where both data and the server images are replicated asynchronous to the DR facility. The State is required to communicate any DR site change to CMS for prior approval.	Deloitte should provide more explanation to the State about the new DR site change. The new site change, including testing efforts should be documented or update the DR Plan 12 and then circulated through the State PMO process for formal approval. CMS should also be of the pending change for prior approval. Deloitte should make arrangements with the State designee to inspect the new Sacramento site.	11/27/15 BM — NTT Data/ Deloitte have failed to provide the San Jose cutover date to the State, testing plan have also not been submitted. 11/20/15 BM- No activity performed on this by NTT/Deloitte. The DR site change testing plan has not been submitted to the State. 10/30/15 BM - Deloitte is in the process of outlining the testing plan. Deloitte will provide a cutover date to the State. 10/23/15 BM - Deloitte to coordinate with NTT to submit the testing plan and hardware inventory to the State. The State and Deloitte will select the date for the cutover from the San Jose DR site.



ID	Functional Area	Observations	Recommendations	Actions
373	Requirements	State Contract Manager Needed A full-time Contract Manager would enable the State to more thoroughly address functional and technical requirements during both the approval process of contract amendments and post-approval compliance period.	The Contract Manager's responsibility is to ensure contracts and contract amendments are properly structured and followed. This focus protects the State and all project stakeholders from both failing to meet contractual requirements and broadening scope. The State would benefit most by acquiring a contract manager before the Phase 2 contract amendments are finalized; however, the acquisition of a dedicated contract manager is beneficial at any time to properly enforce existing contracts.	11/10/15 BV — No indication that the State will acquire a Contract Manager. 09/09/15 BV - The role of a Contract Manager was discussed during the Weekly IV&V Status Update.
371	Requirements	Phase 2 - Requirement Traceability Matrix (RTM)  The current RTM partially supports the new centralized database approach for the UHIP architecture framework. The citizen and the worker portal applications will be integrated with shared functionalities. This will be a significant change to existing architecture, including security and shared application frameworks. Without an updated RTM it will be difficult for the State to interpret and keep track of the requirements. The RTM helps to create a downstream flow of connecting software requirements to product requirements.	As changes are implemented, Deloitte and the State should perform the required updates to the RTM. The RTM will help ensure that the project requirements are met as well as track all changes made to the system.	11/27/15 BM- No update on this during the week. 10/30/15 BM - Deloitte will provide a timeline of when Functional P2 updated RTM will be available for the State to review. 10/23/15 BM - Phase 2 Technical RTM will be updated collaboratively by the State and the Deloitte. Deloitte has scheduled weekly meetings with the State and IV&V on the RTM. 10/09/15 BM - No update so far on the Phase 2 RTM. 09/25/15 BM - CSG has provided feedback to the State. 09/11/15 BM - An inquiry was made to Deloitte's technology roundup representative; no updates so far on Appendix N from Deloitte.



ID	Functional Area	Observations	Recommendations	Actions
369	Testing	HIX Application Vulnerability Testing Deloitte is currently conducting security testing within the HIX application; the security testing plan and the scope have not been shared with the State Security team. Deloitte has not made the State aware of what areas of the application where security scans are planned or have been conducted. Nor does the State have insight into any information on when and what level of defects were found during testing. Without this information, there may be security vulnerabilities yet to be identified, discussed, and resolved.	It is recommended that Deloitte informs the State Security team about all activities related to Security testing. The State should be notified about the severity of all defects found and provided with a detailed plan, recommendations, and steps taken to fix any issues identified.	11/20/15 BM - Deloitte to conduct 6.6 release vulnerability security test, reports will be submitted to the State.  11/06/15 BM - There was no progress observed during the week on this.  10/23/15 BM - No update and discussion held during the week on the app security testing reports.  10/09/15 BM - No activity was performed on this during the week.  09/25/15 BM - During Deloitte weekly security meeting, they stated that they are in the process of outlining a report, which will have all security related activities.  09/11/15 BM - Security activities performed on HIX application will be discussed with the State and Deloitte during the next tech meeting.  08/28/15 - There was no discussion on the security testing during the week.  08/19/15 - CSG discussed the observation with the State tech team; the State will follow up with the Deloitte to share the results of the Security application testing



ID	Functional Area	Observations	Recommendations	Actions
368	Quality Assurance	Section 508 Compliance (Accessibility) Testing Section 508 requires that all website content be accessible to people with disabilities. It was inadvertently discovered that a list of codes were being excluded from Deloitte's accessibility testing, and the list was not properly documented within any deliverables. This prompted Deloitte to update the Phase 1 Detailed Test Plan (outside of the Change Management process) with the list of exclusions. Since accessibility is not tested in UAT, the State and CSG require Deloitte to provide a letter of attestation that accessibility testing has been completed; however, this does not equate to the true user experience. The State could face serious fines if it is later discovered that the application is not truly 508 compliant and end-users with disabilities are not able to fully utilize the	CSG recommends the State identify testers who are visually or hearing impaired to test the accessibility functionality.	10/15/15 - GJD: CSG Is continuing to monitor Accessibility testing throughout the various releases. 09/11/15 - GJD: CSG will continue to monitor and report Accessibility testing analysis for State review while consideration and vendor selection is discussed. 08/13/15 - GJD: State discussed the options of employing a company to check the 508 Compliance of UHIP and/or utilizing State staff that may be visually and/or hearing impaired. The State is considering a date that will allow testing to occur to cover both Phase 1 and Phase 2. CSG will continue to monitor.



ID	Functional Area	Observations	Recommendations	Actions
367	Technical	CMS Security Update CMS has asked the State to provide the list of all the major areas which will be changed or modified in the system with the new centralized database approach (that will share the functionalities between citizen and the worker portal). CMS shared a link to download the form, which needs to be filled out by the security team with all changes listed. As per CMS guidance, any changes that require data conversions/migrations i.e. staging environment have to be MARS-e compliant, the same document and third-party test assessment will be required of that environment for CMS approval.	The State should ask Deloitte to update the architecture document that should contain all the areas to be refactored, modified, and changed in the new database approach; the updates should include all the updated information at least on all the significant areas listed by CMS. The State security team with Deloitte should schedule a meeting to discuss the changes with CMS.	11/27/15 BM- No update on this during the week. 11/20/15 BM - Security team continue to work/document all the significant changes for the CMS review. 10/23/15 BM - DR changes documented by Deloitte, which will be submitted to CMS by the State. Deloitte is in the process of documenting architecture/ security changes in another change request form for CMS review. 10/09/15 BM - State to finalize the date to update CMS on DR site change, system changes, and security changes. 09/25/15 - The State is planning to have a call with CMS to update them on the DR site change and progress on the change request form for the single database design. 09/11/15 BM - Deloitte is still in the process of drafting all the system changes for the State and CMS to review. 08/28/15 BM - There were no discussions on this area/piece of work during the week.



ID	Functional Area	Observations	Recommendations	Actions
366	Technical	The 2015 DR plan has not been documented. Viewing disaster recovery at an enterprise level may reveal missing or critical interdependencies. In addition, a complete business continuity plan has not been finalized. There is limited time available to the open enrollment. Disaster recovery should be scheduled and executed before November 2015 (the State previously decided to have a DR test before or after an open enrollment period, same will/can be considered for 2015). There has been no point of contact from Deloitte as to whether NTT Data has been identified.	Recommend creating a 2015 Disaster Recovery (DR) Plan. Deloitte should identify the point of contact from NTT and Deloitte's Infrastructure team for all DR related activities and finalized a date for testing. It is also recommended that Deloitte create and maintain a Disaster Recovery Tracker to track DR plans across vendors and agencies.	11/27/15 BM - As of today, the 2015 DR plan has not been submitted to the State by Deloitte. Circuit connection have also not been completed between NJ-State DR site.  11/20/15 BM - Deloitte to incorporate CMS DR testing requirement in 2015 DR test.  11/06/15 BM - Deloitte in the process to document the plan to test VLP from DR site as part of 2015 DR test.  10/30/15 BM - 2015 contractual DR tentatively scheduled in January 2016. Deloitte in the process to outline / finalize the test scenarios for the test.  10/09/15 BM - Deloitte is outlining a DR plan.  09/15/15 BV - The State requested a copy of the DR plan.  08/28/15 - Deloitte is currently waiting on the test cases and final list of all the interfaces to be tested during the 2015 DR from the State.  08/07/15 - During the Deloitte technology roundup meeting, the tentative scope of the 2015 UHIP DR test was discussed. The State has asked Deloitte to finalize the vendor



ID	Functional Area	Observations	Recommendations	Actions		
364	Quality Assurance	Production Dashboard does not accurately reflect the correct number of non-closed work requests	CSG would encourage Deloitte to update the non-closed work requests to include the Clarification and Ready for Production Deployment statuses and in turn this would reflect the correct number of work requests currently in a "Not Closed or Cancelled" status.	10/16/15 – GJD: Email sent to Deloitte requesting to have the dashboard corrected. 08/24/15 - An email was sent to the listed owner of the Production dashboard, Matt Rufener on 08/12/15; however, an undeliverable email was received stating the email address was rejected. CSG will continue to work on who should be contacted to resolve this issue.		
357	Technical	MFA for Phase 2 Remote Access The IRS asked the State to implement MFA for IES worker portal. UHIP/IES Worker Portal will only be accessible from within the state's network. The IRS guidelines state that the individual accessing system containing FTI from a remote location requires an encrypted modem and/or Virtual Private Network. Additionally, two-factor authentication - cryptographic identification device, token, is required whenever FTI is being accessed from an alternate work location. The IRS has also stated that FTI can only be viewed using State provided laptop or workstation.	Business approval from all the agencies is immediately required for the remote access. The state must determine how this implementation needs will be funded. State and Deloitte must work together to find out if something can be leveraged from the Phase 1 MFA implementation. Gaps and the requirement must be documented instantaneously so that the scope of work can be included in APD.	11/27/15 BM-NTTData/Deloitte to schedule a call with State to discuss next steps for using UHIP/Cisco VPN for Phase 2 solution. 11/20/15 BM - Requirements have been gathered for possible FTI/FTR remote access/outside of State network for the HSRI, DHS, EOHHS workers. UHIP VPN/cisco one of the options which will be discussed during upcoming security session. 11/06/15 BM- Meeting has been scheduled by DOA to walk through the scenarios in which worker (HSRI, EOHHS, DHS) would need access to FTI. 10/30/15 BM - HSRI and EOHHS to provide the business need for MFA to Deloitte.		



ID	Functional Area	Observations	Recommendations	Actions
356	Technical	Centralizing Common Functionalities Between Worker Portal and HSRI Integration Deloitte presented 3 different options to the State for IES and Exchange integration. State selected the option to centralize the common functionalities. New design approaches will not require Synchronization of P1 and P2 Databases. Eligibility and enrollment HIX data model will replace with IES data model. The approach will integrate functions across Public Assistance and Exchange for EOHHS, CC, and DHS. Reports and Notices between IES and Exchange will be limited to case data only. Integrated eligibility system will be considered as a system of record Eligibility, case management, FDSH, Enrollment Data. If any agency is down for maintenance, for release activities or for any unexpected disaster all the areas will be affected and will be out of service. There is very minimal technical architecture, information shared with the State at this time. Plan 10, DMP, Security design plan and other technical documents, which were based on a separate DB approach, need to be updated with the new approach.	Deloitte should be required to provide technical expertise to help the State understand how and what areas of the system will be refactored or modified to incorporate single database efforts. Deloitte has failed to discuss with the State how the immediate storage area for the staging DB data processing will work. Deloitte must work closely with the State and all the agencies to discuss the Phase 2 new architecture approach. An Initial assessment of the new approach is highly recommended to identify any gaps. Critical areas such as 834 and1095 should also be assessed in parallel.	11/27/15 BM - Deloitte to present an implementation draft plan outlining all the Go-Live technology related activities. 11/20/15 several phase 2 technology related questions were asked by the State tech team. Deloitte to submit Batch calendar to the State. 11/06/15 BM - State requested Deloitte to set up a weekly Phase 2 technology call to discuss phase 2 extension related development. 10/23/15 BM- Deloitte in the process of scheduling a weekly meeting to engage in phase 2 technical architect with CSG and the State. 10/09/15 BM - Deloitte hasn't scheduled weekly development session with the State and CSG. Plan 10, 05, 12 security documents haven't been updated as of now. 09/25/15 BM - CSG requested Deloitte involve IV&V, so IV&V gains a better understanding of the single database development. 09/18/15 BM - the State have requested Deloitte to update the technical design document (Plan 10, security design document, DMP, RTM).



ECHHS/DHS FY15 and FY16 State Funds The Governor's Recommended budget for FY15 and FY16 provides additional funding for UHIP; however, since the budget was developed in late 2014, additional Costs have been incurred through various Deloitte amendments. Including Contract Amendment 31, the deflict for GR State funds is estimated to be approximately S1.2 million. The UHIP Finance Group Budget Office representative stated that there is no plan to add additional State funds for UHIP/ that would limit the State to reallocating funds from within the EOHHS/DHS budgets.  BEOHHS and DHS need to determine how they will development effort has been developed in late 2014, additional State funds have resulted in extending the availability of State funds have resulted in extending the resulted in extending the availability of State funds have resulted in extending the development project from 10/31/2015 thru 12/11/15. The path forward after 12/11/15 is under discussion.  BEOHHS and DHS will be approximately S1.2 million. The DHIP Finance Group and the development project from 10/31/2015 thru 12/11/15. The path forward after 12/11/15 is under discussion. 10/09/15 - EOHHS and DHS will submit revised FY16 State budget requests. 9/30/15 - Additional State funds have been requested via the revised FY16 budget process to cover pending EOHHS and DHS will submit revised budget process. By the end of September, EOHHS and DHS will submit revised budget requests of rY16. This will include a request for additional UHIP funding, it is uncertain if the request for additional UHIP funding, it is uncertain if the request for additional funding will be approved. As a part of this process the agencies will also present their FY17 budget requests. 07/07/15 - No update available.	ID	Functional Area	Observations	Recommendations	Actions
	350	Finance	The Governor's Recommended budget for FY15 and FY16 provides additional funding for UHIP; however, since the budget was developed in late 2014, additional costs have been incurred through various Deloitte amendments. Including Contract Amendment 31, the deficit for GR State funds is estimated to be approximately \$1.2 million. The UHIP Finance Group Budget Office representative stated that there is no plan to add additional State funds for UHIP' that would limit the State to reallocating funds from within the	be able to obtain or reallocate State funds sufficient to meet the total UHIP funding	development effort has been extended (RIBridges go-live targeted for July 2016), concerns regarding the availability of State funds have resulted in extending the project incrementally. The most current contract amendment (34B) extends the development project from 10/31/2015 thru 12/11/15. The path forward after 12/11/15 is under discussion. 10/09/15 – EOHHS and DHS submitted revised FY16 State budget requests.  9/30/15 - Additional State funds have been requested via the revised FY16 budget process to cover pending EOHHS and DHS UHIP costs.  09/09/15 - The State has a revised budget process. By the end of September, EOHHS and DHS will submit revised budget requests for FY16. This will include a request for additional UHIP funding. It is uncertain if the request for additional funding will be approved. As a part of this process the agencies will also present their FY17 budget requests. 07/07/15 - No



ID	Functional Area	Observations	Recommendations	Actions
308	Requirements	Semi-annual Security Report There are several requirements (approx. 8 to 10) traced out from the RTM which are being marked as NOT MET, for example-Deloitte has not developed a security report, which is expected to be submitted every 6 months to the State. As per the requirement, the report must define all security-related activities, upcoming security initiatives, and long-range security plans. The state has not been provided with any such document from the DDI vendor for upcoming security plans, activities to protect the system and application appropriately.	The state should ask Deloitte to provide clarification or have the credit over to the State on the undeveloped reports and all such requirements, which are not being MET. Moving forward Deloitte must submit the security report every six months.	11/27/15 BM - No progress observed on this from the past several weeks. 11/06/15 BM - No progress observed on this during the week. 10/09/15 BM - Negotiations on NOT MET items is still under the leadership decision. 09/11/15 - The State tech lead stated that all the NOT MET appendix N items will be negotiated with Deloitte in the upcoming contract amendment. 08/20/15 - No update on the RTM items which were identified as NOT MET. 07/31/15, there are discussions planned which will take place between the State and Deloitte on all the NOT MET RTM requirements. 07/03/15 - Findings from the RTM Appendix N have been shared with the State leadership, NOT MET items will be negotiated towards the upcoming CA with the Deloitte. 06/04/15 - Findings from the RTM Appendix N have been shared with the State leadership, NOT MET items will be used as leverage during the



## **Appendix A: Production Defect Analysis**

> A comparison of open production defects in JIRA from November 1, 2015 through November 30, 2015 (based on information in JIRA)

Table 4 - JIRA Defects without AM-PM Tickets

JIRA Defects without AM-PM Tickets							
Severity	10/31/2015	11/01/2015	+/-				
Critical	0	0	0				
High	3	6	+3				
Medium	3	6	+3				
Low	0	0	0				
Total	6	12	+6				

Table 5 - JIRA Defects with AM-PM Tickets

JIR.	JIRA Defects with AM-PM Tickets								
Severity	10/31/2015	11/01/2015	+/-						
Critical	0	2	+2						
High	29	26	-3						
Medium	54	62	+8						
Low	3	4	+1						
Total	86	94	+8						

- ✓ Defects logged without AM-PM tickets increased from the previous month
- ✓ Production defects increased by 13% from the previous month
- Total production defects = 106
  - Ready for Production = 30



> The following graph depicts critical and high defects created and closed weekly over the past six months

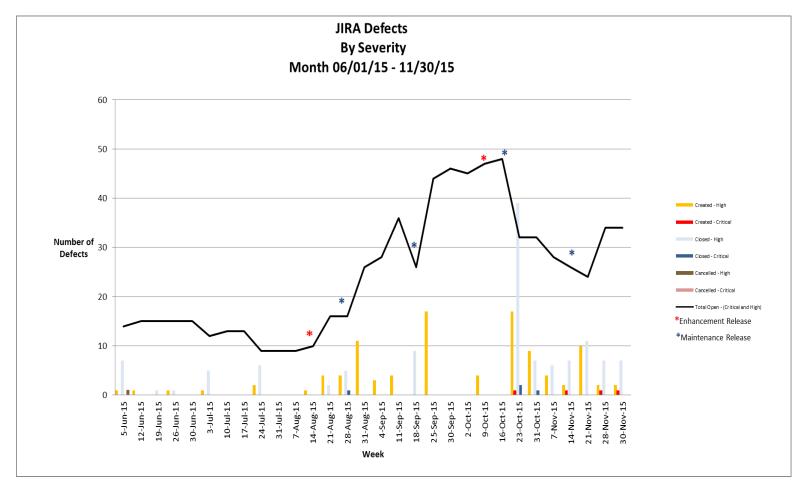


Figure 1 - JIRA Defects with AM-PM Tickets, Past Six Months



Historical View of Critical and High Defects Aging

Table 6 - JIRA Open Production Defects Aging

JIRA Open Production Defects (Aging)												
Days		Critical				High						
	JUN	JUL	AUG	SEP	ОСТ	NOV	JUN	JUL	AUG	SEP	ОСТ	NOV
60 - 90	0	0	0	0	0	0	0	0	2	1	2	2
91 - 120	0	0	0	0	0	0	1	0	0	2	1	2
>120	0	0	0	0	0	0	11	5	3	3	1	2
Total	0	0	0	0	0	0	12	5	5	6	4	6

Current View of all Open Defects as of November 30, 2015

## **JIRA Aging Open Defects**

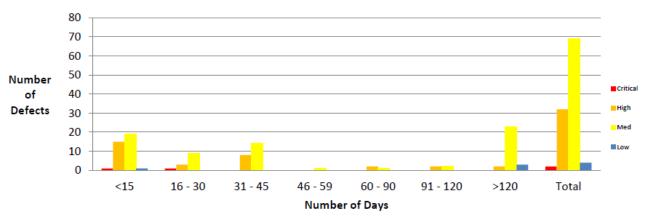


Figure 2 - JIRA AM-PM Aging Open Defects





The following graph illustrates the number of open Production defects, the number of defects addressed within SIT, and the number of defects closed

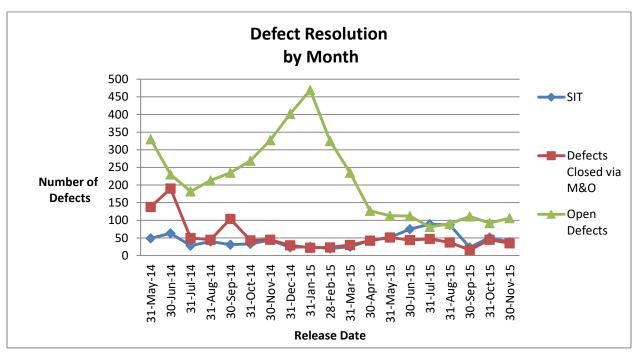


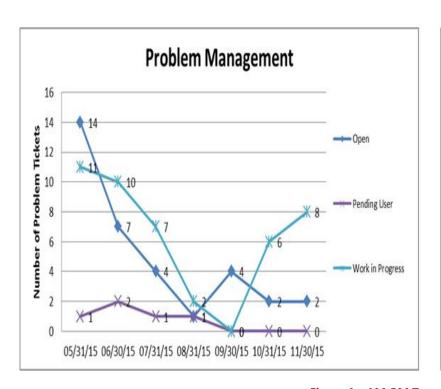
Figure 3 - Work Requests Deployed by Month

- ✓ The November M&O Release closed 35 defects; SIT addressed 38 defects
  - 23 non-data defect resolutions and 12 data defect resolutions deployed into Production
- ✓ The following breakdown categorizes defects closed with the top 3 root causes:
  - Coding-related = 33
  - Invalid = 12
  - Not Reproducible = 6
- √ 37 Hot Fixes deployed to Production (28 non-data and 9 data fixes)





AM-PM is the trouble ticketing system; where deficiencies are reported from the service desk or a user enters a deficiency. AM-PM provides ticket management functionality and tracking against service level agreements.



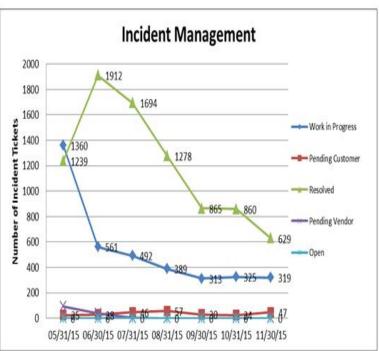
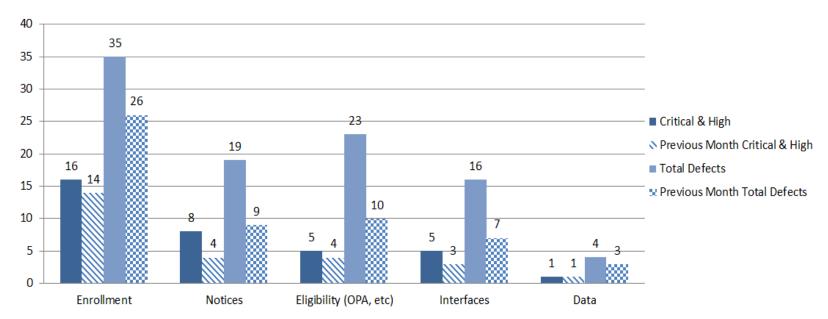


Figure 4 - AM-PM Trending Weekly

- ✓ 995 incident tickets are in a status other than closed; an 18% decrease from the previous month
- ✓ The number of 'Resolved' tickets decrease by 27%; State is encouraged to continue their review
- ✓ There are 10 problem tickets open in AM-PM; up from 8 compared to the previous month



> The following graph shows the Top 5 Defect Tracks ranked by both Critical & High and Total Defects



Track	Critical & High	Previous Month Critical & High	Total Defects	Previous Month Total Defects
Enrollment	16	14	35	26
Notices	8	4	19	9
Eligibility (OPA, etc)	5	4	23	10
Interfaces	5	3	16	7
Data	1	1	4	3

Figure 5 – Top Five Defect Tracks