



**STATE OF RHODE ISLAND
UNIFIED HEALTH
INFRASTRUCTURE
PROJECT**

**IV&V MONTHLY PROJECT STATUS REPORT
PERIOD ENDING DECEMBER 31, 2015**

Submitted by: William Vacha



Document Information

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1. PROJECT BACKGROUND

The Unified Health Infrastructure Project (UHIP) was launched on January 22, 2013.

The goals of the UHIP 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 UHIP 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. Please refer to Section 9.1 Observations and Recommendations.

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 Institute of Electrical and Electronics Engineers (IEEE) Standards

4. RI UHIP PROJECT HIGHLIGHTS

RI UHIP IV&V Monthly Project Status Report			
Project Name	RI UHIP – Phase 1	Project Health	Low Risk – Project is on track with minor concerns; Phase 1 ends after Release 6.6
Project Name	RI UHIP – 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	12/01/2015–12/31/2015

This Monthly Project Status Report provides a review of the RI UHIP project status of Phase 1 and Phase 2 from December 1, 2015 through December 31, 2015. For this period, the IV&V team assigned a project health rating of: **“Low Risk – Project is on track with minor concerns” to Phase 1**; and a **“Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified” to Phase 2**.

Key Messages/Highlights

UHIP Project risks identified are categorized into the following areas: Scope, Cost, Schedule/Resources, and Quality. A summary of project risks and related concerns (as of December 31, 2015) is provided below. The progress of corrective actions taken during December 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 December:
 - Phase 1 ends after the implementation of Release 6.6 (02/01/16)
 - Release 7 UAT Cycle 3 test cases and execution plan under construction
 - Consolidated Database Readiness Assessment Report under construction
 - Change requests pending discussions regarding deferred Release 7 UAT defects
 - Phase 1 and Phase 2 Functional and Technical RTM have not been finalized
 - Contractual 2015 Disaster Recovery Plan and test date delayed
 - Grant Thornton proposed to conduct AT101 instead of SOC 2 Type II Security Audit

➤ Cost

- ✓ The goal of cost management is to ensure costs are included and adequately funded through completion. It is intended to address the issues experienced in December:
 - Two contract amendments, between the State and Deloitte, are under construction
 - #36 – Supports 2016 Maintenance and Operations (M&O) activities from 01/01/16 thru 06/30/16
 - #37 – Supports development activities 03/01/16 thru RIBridges go-live
 - Additional UHIP costs will be incurred to extend IV&V and UAT activities thru the end of CY16

Key Messages/Highlights

➤ Schedule/Resources

- ✓ The goal of schedule management and resource management is to ensure a comprehensive project schedule with detailed tasks, work estimates, timeframes, and dependencies for ALL project resources; and align ALL project resource requirements with the project schedule. It is intended to address the issues experienced in December:
 - Release 6.6 UAT scheduled to start 01/04/16; Release 6.6 is the last Phase 1 release
 - Release 7 UAT Cycle 2 scheduled to end 01/15/16
 - Release 7 UAT Cycle 3 scheduled to start 02/01/16
 - Three IV&V attestation efforts for CMS planned during Release 6.6 UAT
 - Periodic Verification Composite (PVC), Failure to Reconcile (FTR), and 1095-A
 - Limited Deloitte engagement to discuss the development of the consolidated database

➤ Quality

- ✓ The goal of quality management is to apply and enforce project management processes outlined in approved project management deliverables and system development lifecycle processes and deliverables and ensure appropriate State participation and collaboration. It is intended to address the issues experienced in December:
 - Production performance issues experienced throughout the month
 - Deloitte closely monitoring open enrollment activities
 - Total of 20 deferred defects remain from previous Phase 1 UATs: 1 critical, 16 highs, and 3 mediums
 - Completed Bi-Monthly Automated and Manual Code Review Report #8
 - Deloitte Security Team continued working on an Application Vulnerability Security Report for Release 6.6
 - Deloitte to submit a Semi-Annual Security Report to the State by the end of 02/2016
 - AM-PM analysis conducted to ensure incidents that require a ticket get assigned in JIRA

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

5. IV&V UHIP PROJECT DASHBOARD

OVERALL HEALTH RATING	
Previous	Current
Moderate Risk (Phase 1)	Low Risk (Phase 1)
Moderate Risk (Phase 2)	Moderate Risk (Phase 2)
<p>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:</p> <ul style="list-style-type: none"> ➤ Scope <ul style="list-style-type: none"> ✓ Defined Release 6.6 UAT activities ✓ Defined defect testing and test case execution to complete Release 7 UAT Cycle 2 ➤ Cost <ul style="list-style-type: none"> ✓ Deloitte Contract Amendment #35 was approved to support UHIP thru 02/2016 ✓ EOHHS met with the Governor to address UHIP funding; the Governor will support some additional funding in the Revised FY16 and FY17 Recommended Budget ✓ A Contact Center procurement is underway to obtain a new contract, to be effective 03/2016, that improves integration of services within HHS ➤ Schedule/Resources <ul style="list-style-type: none"> ✓ Release 6.6 SIT completed and officially exited ✓ Release 6.6 UAT testing resources identified; testing on schedule to start on 01/04/16 ✓ Release 7 UAT Cycle 2 scheduled to end 01/15/16; UAT Cycle 3 targeted to begin 02/01/16 ➤ Quality <ul style="list-style-type: none"> ✓ Hot Fixes deployed throughout the month to address Production issues; several for performance fixes ✓ Conducted IV&V on December M&O test case scenarios; results were distributed to the State and Deloitte 	

5.1 Project Status Indicator Criteria

The following criterion is used to define the indicators in Section 5.2.

- 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.

5.2 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											
SCOPE			COST			SCHEDULE/RESOURCES			QUALITY		
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate	Low	+	Moderate	Low	+	Moderate	Low	+	Moderate	Moderate	NA

PHASE 2 PROJECT STATUS INDICATORS											
SCOPE			COST			SCHEDULE/RESOURCES			QUALITY		
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate	Moderate	+	Moderate	Moderate	+	High	High	NA	Moderate	Moderate	NA

6. MILESTONES / IV&V DELIVERABLE STATUS

The following table lists the CSG IV&V deliverables for the reporting period as of December 31, 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 October 2015	Approved	11/19/2015	11/19/2015	12/03/2015
Monthly Financial Status Report for August 2015	Approved	11/20/2015	11/20/2015	12/04/2015
Monthly Financial Status Report for September 2015	Submitted	12/11/2015	12/11/2015	
IV&V Monthly Review and Assessment Report for November 2015	Submitted	12/18/2015	12/18/2015	
Monthly Financial Status Report for October 2015	Submitted	12/31/2015	12/30/2015	
Bi-Monthly Automated and Manual Code Review Report #8	Submitted	12/30/2015	12/30/2015	
Upcoming Deliverables				
Database Consolidation Readiness Assessment Report	In Progress	01/15/2016 (first draft)		
IV&V Monthly Review and Assessment Report for December 2015	In Progress	01/20/2016		
Monthly Financial Status Report for November 2015	Not Started	01/29/2016		
Bi-Monthly Automated and Manual Code Review Report #9	In Progress	03/11/2016		
Continuous Integration Review – Phase 1 Release 6.6	Not Started	02/19/2016		
UAT Summary Report – Phase 1 Release 6.6	Not Started	02/29/2016		

7. RI UHIP RISK STATUS

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

7.1 Scope

- Release 7 UAT Cycle 3 test cases and execution plan under construction
- Consolidated Database Readiness Assessment Report under construction
- Change requests pending discussions regarding deferred Release 7 UAT defects
- Phase 1 and Phase 2 Functional and Technical RTM have not been finalized
- Contractual 2015 Disaster Recovery Plan and test date delayed
- Grant Thornton proposed to conduct AT101 instead of SOC 2 Type II Security Audits

Major Impacts:

- Starting Release 7 UAT Cycle 3 dependent on test cases and execution plan; only interfaces were scripted
- Consolidated database research requires question and answer support from Deloitte
- Outstanding functional requirements, technical requirements, and CRs may expand scope
- Disaster Recovery site change cutover date and finalized test plan pending
- Deloitte to perform SAS level 2 or an equivalent security audit every other year

Risk Mitigation:

- Release 7 UAT Cycle 3 test case tracking and execution plan discussions
- Consolidated database question and answer sessions needed on a regular basis
- Contract amendments are work in progress to define the RTM and scope of work for CY16
- Deloitte establishing the 2015 Disaster Recovery Plan and test date
- State review of detailed list of security controls to determine appropriate security audit needed

7.2 Cost

- Two contract amendments between the State and Deloitte under construction
 - ✓ #36 – Supports 2016 M&O activities from 01/01/16 thru 06/30/16
 - ✓ #37 – Supports development activities 03/01/16 thru RIBridges go-live
- Additional UHIP costs will be incurred to extend IV&V and UAT activities thru the end of CY16

Major Impacts:

- EOHHHS and DHS need to manage UHIP expenses within the revised budget approved by the Governor for FY16 and FY 17
- The Legislature has to approve the Governor's recommended FY16 and FY17 budget

- A workable plan to balance HSRI's share of UHIP expenses against other agency fiscal needs based on current spending and projections

Risk Mitigation:

- Continuously assess priorities and limit change requests in order to manage costs within the budget approved by the Governor
- Explore with Deloitte the possibility of delaying some costs until FY17

7.3 Schedule/Resources

- Release 6.6 UAT scheduled to start 01/04/16
- Release 7 UAT Cycle 2 scheduled to end 01/15/16
- Release 7 UAT Cycle 3 scheduled to start 02/01/16
- Three (3) IV&V attestation efforts for CMS planned during Phase 1 Release 6.6 UAT
 - ✓ Periodic Verification Composite (PVC), Failure to Reconcile (FTR), and 1095-A
- Limited Deloitte engagement to discuss the design and development of the consolidated database

Major Impact:

- Time off during the last two weeks of the year limited Release 7 UAT Cycle 2 testing efforts
- Release 7 UAT Cycle 3 test scripts, testers, and testing location needed
 - ✓ Test script creation fell significantly behind schedule; jeopardizing the 02/01/16 UAT Cycle 3 start date
 - ✓ UAT cannot start without an adequate level of test scripts and a test script execution schedule
- Attestation preparation and completion during Release 6.6 UAT stresses resource bandwidth
- Areas of the Consolidation Database Readiness Assessment Report require clarification from Deloitte

Risk Mitigation:

- Closely monitor and continuously report Release 7 UAT Cycle 2 testing activities
- Release 7 UAT Cycle 3 preparation efforts need to be tracked and communicated
- Document questions and concerns pertaining to the consolidated database for Deloitte's review
- Attestation timeframes need to be defined, coordinated with Release 6.6 UAT, and approved

7.4 Quality

- Production performance issues experienced throughout the month
- Deloitte closely monitoring open enrollment activities
- Total of 20 deferred defects remain from previous Phase 1 UATs: 1 critical, 16 highs, and 3 mediums

- Completed Bi-Monthly Automated and Manual Code Review Report #8
- Deloitte Security Team continued working on an Application Vulnerability Security Report for Release 6.6
- Deloitte to submit a Semi-Annual Security Report to the State by the end of 02/2016
- AM-PM analysis conducted to ensure incidents that require a JIRA get assigned

Major Impacts:

- Research and hot fixes required to address production performance, auto renewal, and open enrollment issues
- Deferred Phase 1 UAT defects may impact scope, cost, schedule, and resources
- Comments needed within code to facilitate the maintainability of the system
- Vulnerability Security Report and Semi-Annual Security Report may result in needed updates
- AM-PM and JIRA require manual involvement to stay in sync

Risk Mitigation:

- Continue to closely monitor and measure system performance and open enrollment
- All deferred UAT defects require an impact analysis and State approved resolution plan (target date)
- Review M&O code for 'comments' prior to it being deployed into Production
- Create a Security Assessment Report to identify issues within RIBridges prior to go-live
- Continue to analyze AM-PM and JIRA to report disconnections to Deloitte for resolution

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 – DECEMBER

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 December 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 September and October (submitted)
 - ✓ IV&V Monthly Review and Assessment Report (submitted)
 - ✓ Bi-Monthly Automated and Manual Code Review Report #8 (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

Submitted Bi-Monthly Automated and Manual Code Review #8

8.4 Validate Continuous Integration Test Results

No continuous integration activities conducted in the month of December

8.5 Verify Implementation Readiness

No implementation readiness activities conducted in the month of December

8.6 Verify Component Reusability

No reusability verification activities conducted in the month of December

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

- Key Recommendations and Observations:
 - ✓ Release 7 UAT Cycle 3 test case tracking and execution plan discussions
 - ✓ Consolidated database question and answer sessions needed on a regular basis
 - ✓ Contract amendments are work in progress to define the RTM and scope of work for CY16
 - ✓ Deloitte establishing the 2015 Disaster Recovery Plan and test date
 - ✓ State review of detailed list of security controls to determine appropriate security audit needed
 - ✓ Continuously assess priorities and limit change requests in order to manage costs within the budget approved by the Governor
 - ✓ Explore with Deloitte the possibility of delaying some costs until FY17
 - ✓ Closely monitor and continuously report Release 7 UAT Cycle 2 testing activities
 - ✓ Release 7 UAT Cycle 3 preparation efforts need to be tracked and communicated
 - ✓ Document questions and concerns pertaining to the consolidated database for Deloitte's review
 - ✓ Attestation timeframes need to be defined, coordinated with Release 6.6 UAT, and approved
 - ✓ Continue to closely monitor and measure system performance and open enrollment
 - ✓ All deferred UAT defects require an impact analysis and State approved resolution plan (target date)
 - ✓ Review M&O code for 'comments' prior to it being deployed into Production
 - ✓ Create a Security Assessment Report to identify issues within RIBridges prior to go-live
 - ✓ Continue to analyze AM-PM and JIRA to report disconnections to Deloitte for resolution

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 December 2015.

Table 3 - Observations and Recommendations

ID	Functional Area	Observations	Recommendations	Actions
383	Technical	<p>Slow Production System Performance</p> <p>System performance consistently observed to be slower than usual starting the week of 12/14/15. Application submissions and verifying tasks are the most heavily impacted, while page navigation and other activities also experienced degraded performance at peak times. All users, including individuals and workers across DHS offices and the Contact Center, have been impacted. The impact is heaviest during peak hours (M-F, 8 am - 5pm).</p>	<p>There is an immediate need for workarounds to track system performance. RIBridges, with the single database design, will have shared/common functionalities and the expected load will be heavy on the IES code. It is recommended to mimic the Phase 2 “to-be” production environment within a performance environment. All issues found and fixed during the previous and current open enrollments should be documented. An actionable plan should be built with metrics captured on a regular basis, benchmarks, and shared wide area network bandwidth utilization tracked - all based on the new RIBridges. Any known performance issues should be communicated to the State.</p>	

ID	Functional Area	Observations	Recommendations	Actions
381	Quality Assurance	<p>Post Auto Enrollment Production Issues</p> <p>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.</p>	<p>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 reviews/designs be performed by experienced team members.</p>	<p>12/31/15 BM - Deloitte continues to track open enrollment issues; several defects have been addressed and some of them are fixed as part of ongoing Hot Fixes and M&O release.</p> <p>12/04/15 BM- Deloitte continues to track open enrollment issues; several defects have been addressed and some of them are fixed as part of ongoing Hot Fixes and M&O release.</p>
379	Testing	<p>Incomplete Testing Efforts for Interfaces in SIT</p> <p>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.</p>	<p>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.</p>	

ID	Functional Area	Observations	Recommendations	Actions
378	Technical	<p>Health Insurance Exchange Code Quality based on Bi-Monthly Code Review #7</p> <p>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.</p>	<p>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.</p>	<p>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.</p>
377	Technical	<p>Integrated Eligibility Services Code Quality based on Bi-Monthly Code Review #6</p> <p>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 issues that fall into two 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.</p>	<p>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 the 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.</p>	<p>11/02/15 BM - The findings will be reevaluated during the IV&V 8th Bi-Monthly Code Review.</p>

ID	Functional Area	Observations	Recommendations	Actions
375	Technical	<p>Disaster Recovery (DR) site moving to Sacramento</p> <p>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.</p>	<p>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.</p>	<p>12/31/15 BM – Deloitte in process of scheduling meeting between NTT Data and State to discuss San Jose related cutover concerns.</p> <p>12/04/15 BM – No update on this observed during the week by the IV&V.</p> <p>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.</p> <p>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.</p>

ID	Functional Area	Observations	Recommendations	Actions
371	Requirements	<p>Phase 2 - Requirement Traceability Matrix (RTM)</p> <p>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.</p>	<p>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.</p>	<p>12/23/15 BV - Per Deloitte, "Generally we update and send the document when we complete UAT since system continually evolves until the implementation".</p> <p>11/27/15 BM- No update on this during the week.</p> <p>10/30/15 BM - Deloitte will provide a timeline of when Functional P2 updated RTM will be available for the State to review.</p> <p>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.</p> <p>09/25/15 BM - CSG has provided feedback to the State.</p>

ID	Functional Area	Observations	Recommendations	Actions
369	Testing	<p>HIX Application Vulnerability Testing</p> <p>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.</p> <p>Without this information, there may be security vulnerabilities yet to be identified, discussed, and resolved.</p>	<p>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.</p>	<p>12/22/15 BM - Deloitte Security Team plans to deliver the report by 02/01/16.</p> <p>12/04/15 BM - Report is under construction as per Deloitte. Report to be submitted to the State as soon its accomplished.</p> <p>11/20/15 BM - Deloitte to conduct 6.6 release vulnerability security test, reports will be submitted to the State.</p> <p>11/06/15 BM - There was no progress observed during the week on this.</p> <p>10/23/15 BM - No update and discussion held during the week on the app security testing reports.</p>

ID	Functional Area	Observations	Recommendations	Actions
368	Quality Assurance	<p>Section 508 Compliance (Accessibility) Testing</p> <p>Section 508 requires that all website content be accessible to people with disabilities.</p> <p>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.</p> <p>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.</p> <p>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 system.</p>	<p>CSG recommends the State identify testers who are visually or hearing impaired to test the accessibility functionality.</p>	<p>11/30/15 - GJD: CSG is continuing to monitor Accessibility testing throughout the various releases.</p> <p>10/15/15 - GJD: CSG is continuing to monitor Accessibility testing throughout the various releases.</p> <p>09/11/15 - GJD: CSG will continue to monitor and report Accessibility testing analysis for State review while consideration and vendor selection is discussed.</p> <p>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.</p>

ID	Functional Area	Observations	Recommendations	Actions
367	Technical	<p>CMS Security Update</p> <p>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.</p>	<p>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.</p>	<p>12/31/15 BM – Deloitte have accomplished FTR change form, have been submitted to the State. Deloitte currently in process to outline CR form to suffice single database enhancements.</p> <p>12/15/15 BM – Update from Deloitte to be provided next week.</p> <p>12/04/15 BM- Deloitte in process to submit CR on FTR indicating the required changes on UHIP to the CMS by the end of Dec.</p> <p>11/27/15 BM- No update on this during the week.</p> <p>11/20/15 BM - Security team continue to work/document all the significant changes for the CMS review.</p> <p>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.</p>

ID	Functional Area	Observations	Recommendations	Actions
366	Technical	<p>2015 Disaster Recovery Testing</p> <p>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.</p>	<p>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.</p>	<p>12/31/15 BM – No update observed during the week.</p> <p>12/04/15 BM – No updates on this from past couple of weeks.</p> <p>11/27/15 BM - As of today, the 2015 DR plan has not been submitted to the State by Deloitte. Circuit connectives have also not been completed between NJ-State DR site.</p> <p>11/20/15 BM - Deloitte to incorporate CMS DR testing requirement in the 2015 DR test.</p> <p>11/06/15 BM - Deloitte in the process to document the plan to test VLP from DR site as part of the 2015 DR test.</p>

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.	<p>12/30/15 BV – Will be resolved and closed next week.</p> <p>11/30/15 – GJD: No response from Deloitte.</p> <p>10/16/15 – GJD: Email sent to Deloitte requesting to have the dashboard corrected.</p> <p>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.</p>

ID	Functional Area	Observations	Recommendations	Actions
357	Technical	<p>MFA for Phase 2 Remote Access</p> <p>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.</p> <p>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.</p>	<p>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.</p>	<p>12/31/15 BM – NTTData to submit the LOE to the State on implementing soft token MFA approach.</p> <p>12/04/15 BM- Deloitte submitted Phase 2 VPN solution draft to the State for review.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>10/30/15 BM - HSRI and EOHHS to provide the business need for MFA to Deloitte.</p>

ID	Functional Area	Observations	Recommendations	Actions
356	Technical	<p>Centralizing Common Functionalities Between Worker Portal and HSRI Integration</p> <p>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.</p> <p>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.</p>	<p>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 and 1095 should also be assessed in parallel.</p>	<p>12/31/15 BM – No progress observed on batch calendar, implementation plan.</p> <p>12/04/15 BM - Implementation Plan / Go-Live calendar, discussions kicked off by the Deloitte. Deloitte to provide follow up on Phase 1 and Phase 2 batches during upcoming Technology Round Up.</p> <p>11/27/15 BM - Deloitte to present an implementation draft plan outlining all the Go-Live technology related activities.</p> <p>11/20/15 several phase 2 technology related questions were asked by the State tech team. Deloitte to submit Batch calendar to the State.</p> <p>11/06/15 BM - State requested Deloitte to set up a weekly Phase 2 technology call to discuss phase 2 extension related development.</p> <p>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.</p>

ID	Functional Area	Observations	Recommendations	Actions
350	Finance	<p>EOHHS/DHS FY15 and FY16 State Funds</p> <p>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 EOHHS/DHS budgets.</p>	<p>EOHHS and DHS need to determine how they will be able to obtain or reallocate State funds sufficient to meet the total UHIP funding commitments through the end of FY16.</p>	<p>12/15/15 – The Governor is willing to commit a limited amount of additional funds to UHIP; worked out thru the supplemental budget process.</p> <p>11/30/15 - Although the 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.</p> <p>10/09/15 – EOHHS and DHS submitted revised FY16 State budget requests.</p>

ID	Functional Area	Observations	Recommendations	Actions
308	Requirements	<p>Semi-annual Security Report</p> <p>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.</p>	<p>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.</p>	<p>12/22/15 BM - Deloitte plans to deliver the report to the State by 01/22/16.</p> <p>12/04/15 BM – No update on this during the week.</p> <p>11/27/15 BM - No progress observed on this from the past several weeks.</p> <p>11/06/15 BM - No progress observed on this during the week.</p> <p>10/09/15 BM - Negotiations on NOT MET items is still under the leadership decision.</p> <p>09/11/15 - The State tech lead stated that all the NOT MET appendix N items would be negotiated with Deloitte in the upcoming contract amendment.</p>

10. APPENDIX: PRODUCTION DEFECT ANALYSIS

- A comparison of open production defects in JIRA from December 1, 2015 through December 31, 2015 (based on information in JIRA)

Table 4 - JIRA Defects without AM-PM Tickets

JIRA Defects without AM-PM Tickets			
Severity	11/30/2015	12/31/2015	+/-
Critical	0	0	0
High	6	8	+2
Medium	6	6	0
Low	0	0	0
Total	12	14	+2

Table 5 - JIRA Defects with AM-PM Tickets

JIRA Defects with AM-PM Tickets			
Severity	11/30/2015	12/31/2015	+/-
Critical	2	3	+1
High	26	30	+4
Medium	62	47	-15
Low	4	5	+1
Total	94	85	-9

- ✓ The number of defects logged without AM-PM tickets slightly increased from the previous month
- ✓ The total number of production defects decreased by 7% from the previous month
- ✓ Total production defects = 99
 - Ready for Production = 14

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

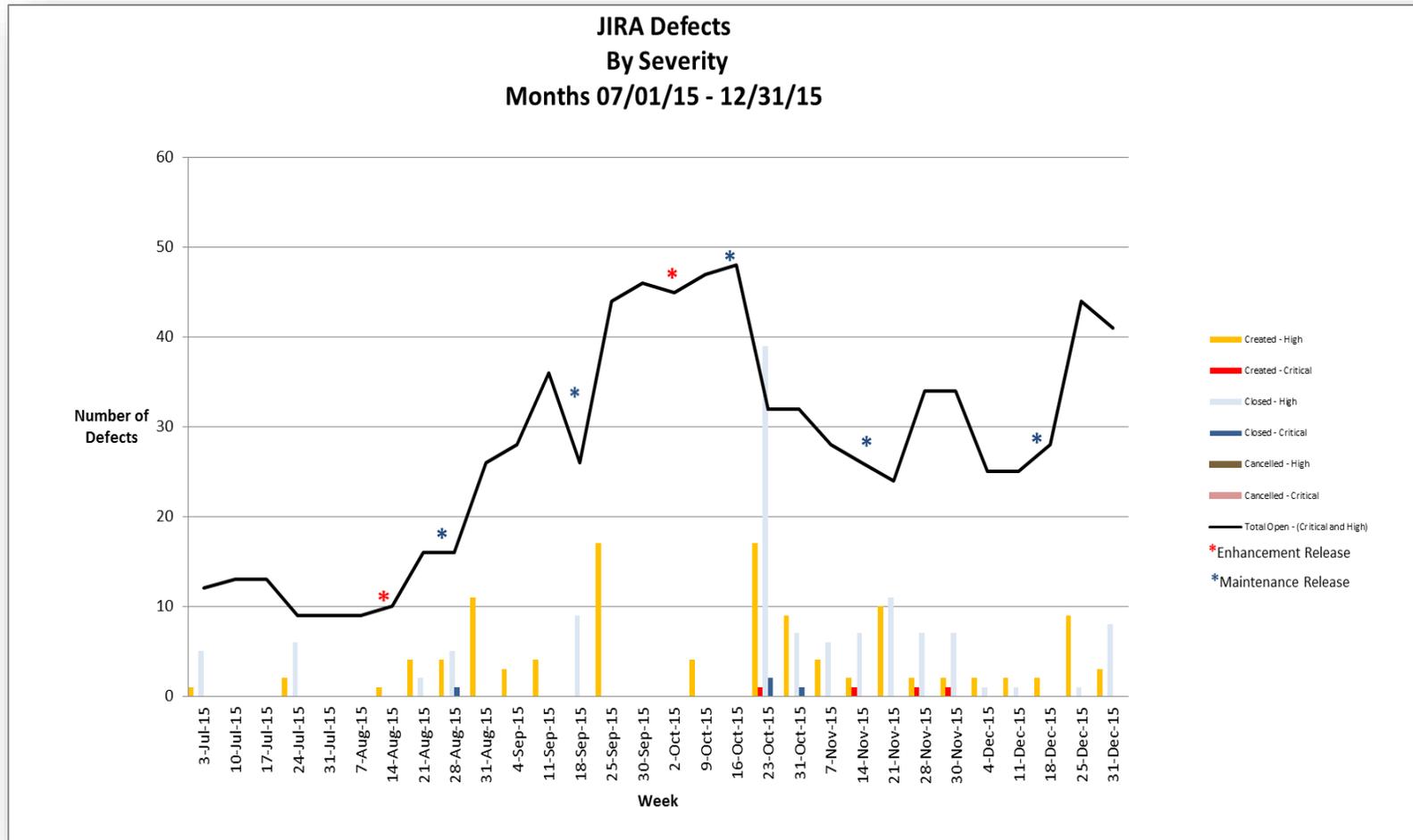


Figure 1 - JIRA Defects with AM-PM Tickets, Past Six Months

➤ Historical View of Critical and High Defects Aging

Table 6 - JIRA Open Production Defects Aging

JIRA Open Production Defects (Aging)												
Days	Critical						High					
	JUL	AUG	SEP	OCT	NOV	DEC	JUL	AUG	SEP	OCT	NOV	DEC
60 - 90	0	0	0	0	0	0	0	2	1	2	2	4
91 - 120	0	0	0	0	0	0	0	0	2	1	2	1
>120	0	0	0	0	0	0	5	3	3	1	2	5
Total	0	0	0	0	0	0	5	5	6	4	6	10

➤ Current View of all Open Defects as of December 31, 2015

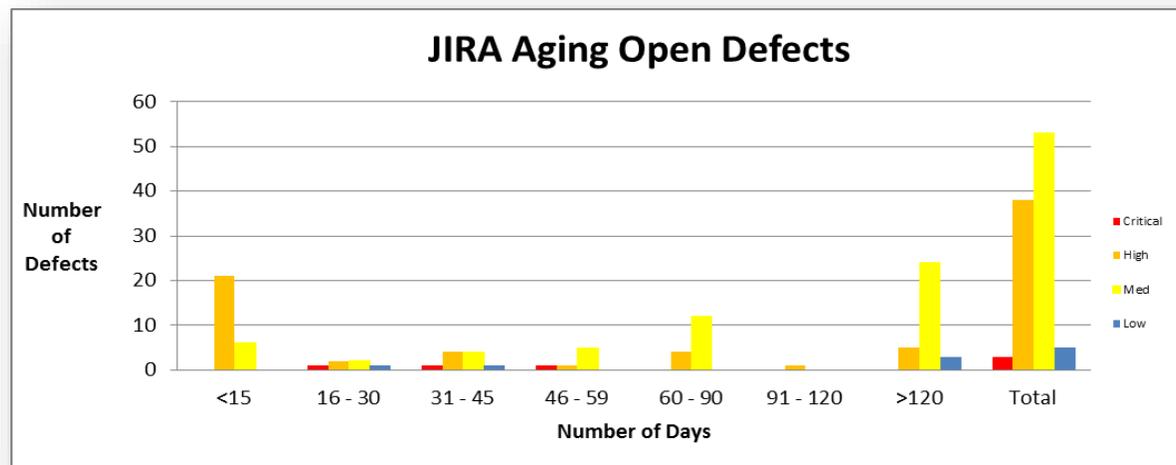


Figure 2 - JIRA AM-PM Aging Open Defects

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

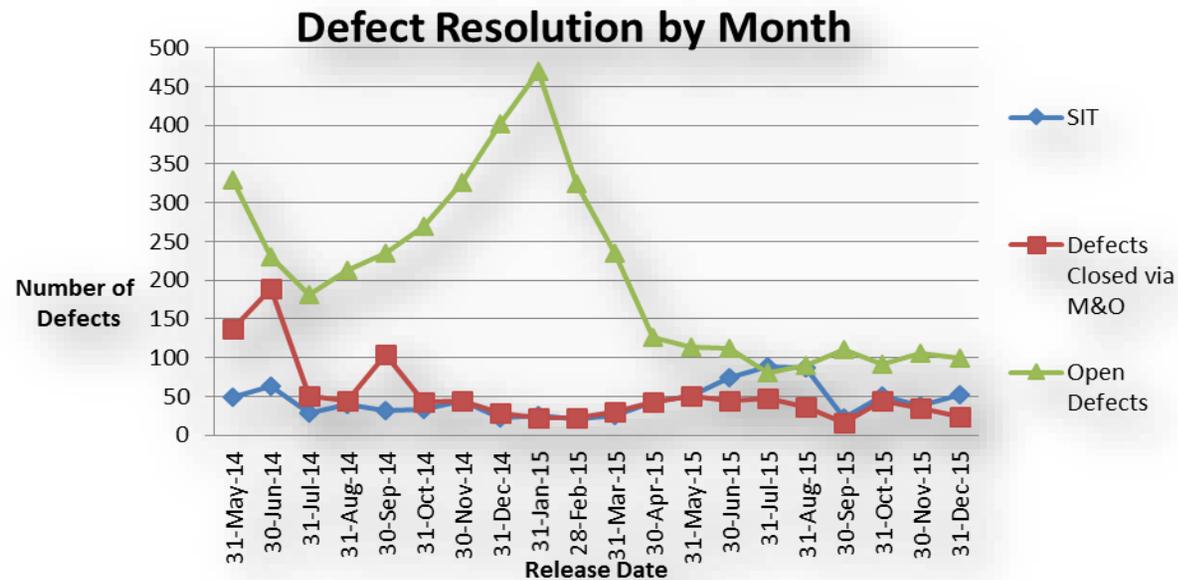


Figure 3 - Work Requests Deployed by Month

- ✓ The December M&O Release closed 24 defects; SIT addressed 52 defects
 - 14 non-data defect resolutions and 10 data defect resolutions deployed into Production
- ✓ The following breakdown categorizes defects closed with the top 3 root causes:
 - Coding-related = 44
 - Environment Issue = 9
 - Functional Specification = 7
- ✓ 15 Hot Fixes deployed to Production (7 non-data and 8 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.

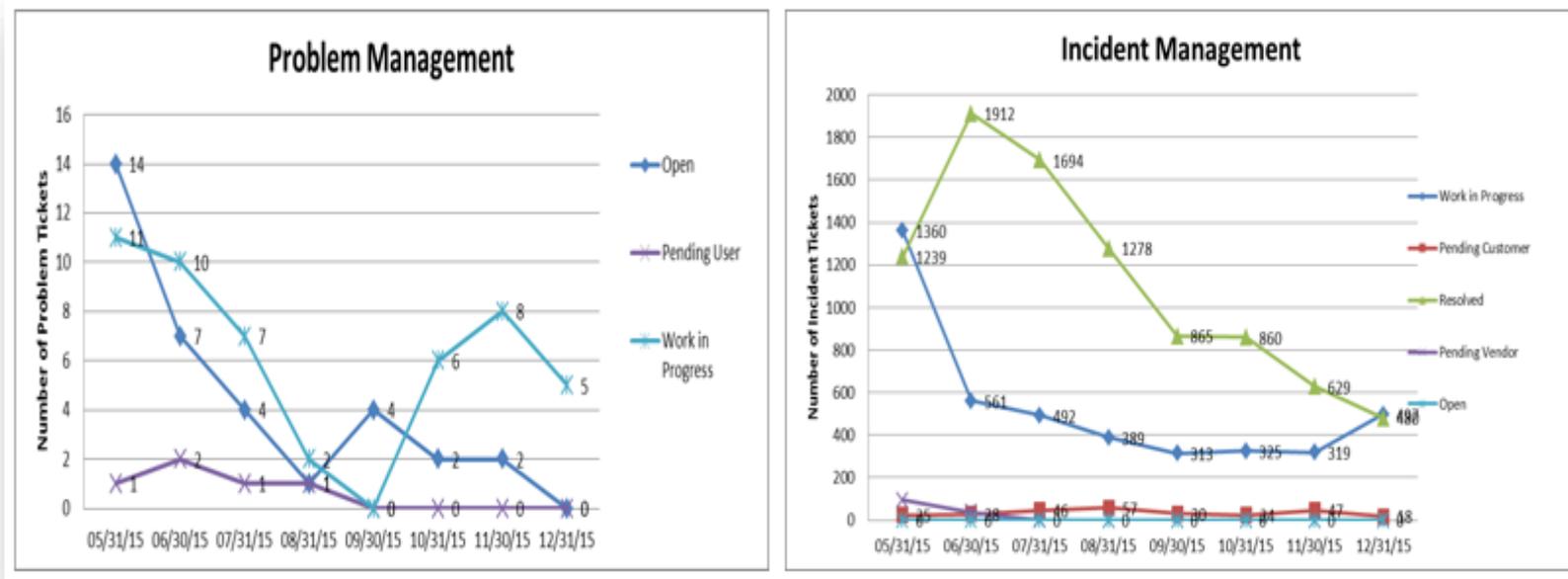


Figure 4 – AM-PM Trending Weekly

- ✓ 995 incident tickets are in a status other than closed; no change from the previous month
- ✓ The number of ‘resolved’ tickets decreased by 24%; State is encouraged to continue reviewing
- ✓ 5 problem tickets are open in AM-PM; down from 10 the previous month
- ✓ 187 incident tickets are linked to Triage issues

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

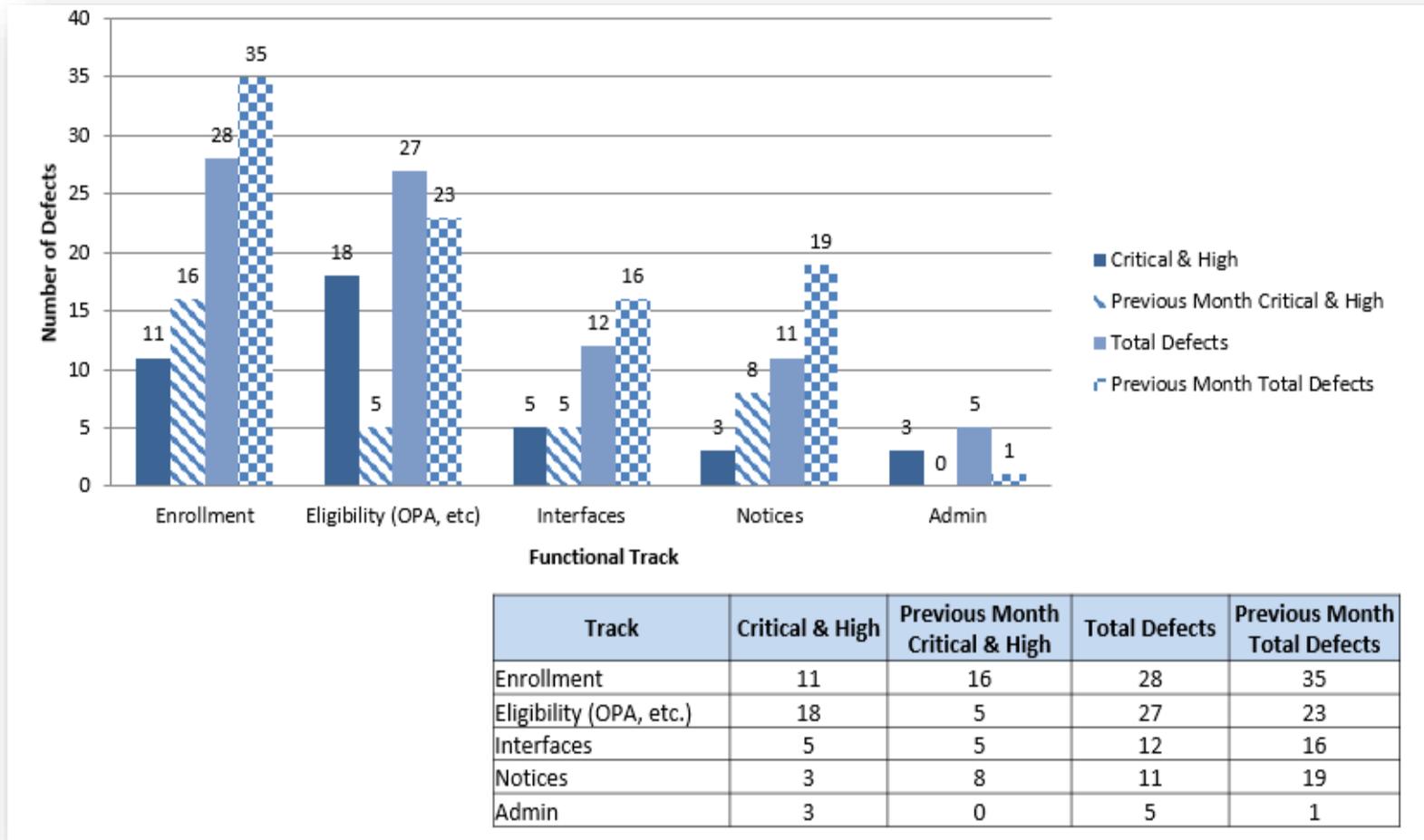


Figure 5 – Top Five Defect Tracks