2020
2021

State of Rhode Island UHIP IAPD-U As Needed

FFY 2021 Draft Submission

July 31, 2020

Name of State: Rhode Island
Name of State Medicaid Agency: Executive Office of Health and Human Services

Name of Contact(s) at State Medicaid Agency:
Matt Stark, Chief Administrative Officer
Executive Office of Health and Human Services (EOHHS)

E-Mail Address(es) of Contact(s) at State Medicaid Agency: Matt.Stark@ohhs.ri.gov
Telephone Number(s) of Contact(s) at State Medicaid Agency: (401) 462-6012

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Brief Description of Latest Version Additions/Changes/Deletions:
Rhode Island is requesting continued funding from the Centers for Medicare and Medicaid Services
(CMS) and the Food and Nutrition Service (FNS) to support the continued development and operations
of RIBridges, which provides benefit access for more than 300,000 Rhode Islanders. Please see
Attachment A for a timeline of changes to this IAPD. This submission includes updated project, budget,
and cost-allocation details. Included are an IAPD - As Needed request for FFY 2020 and an IAPD-Update
for FFY 2021.

Table of Contents

1 EXECUTIVE SUMMARY

In Rhode Island, the Executive Office of Health & Human Services, the Department of Human Services (DHS) and HealthSource RI (HSRI), the State's health exchange are charged with promoting health, nurturing quality of life, and supporting our most vulnerable residents by preserving and improving access to quality healthcare, and ensuring efficient, effective, and timely delivery of human services. The State's work on the Unified Health Infrastructure Project (UHIP) serves approximately one third of the State and is a critical part of these efforts. Our highest priority remains ensuring that Rhode Islanders receive timely and accurate benefits.

Federal fiscal year 2020 (FFY 2020) represented a major step forward for the UHIP project. Leveraging the sound governance foundations laid in FFY 2019, the team delivered several significant system enhancements to the business and ultimately moved the project into a position of increased stability, consistency and predictability. Many of the enhancements developed were extremely complex and required a great deal of detailed design work up front to ensure the operational workflows required to support the various business scenarios were considered in each end-to-end solution. Despite the business complexity, the Major Releases were implemented with very high quality due to the State's rigorous focus on quality across the Software Development Life Cycle (SDLC), as well as the increased attention on the release readiness activities including post-release monitoring and business validations. Patch Releases were also used effectively in addressing a high volume of system defects each month. As a result, both incident and problem ticket backlogs reached new lows, decreasing by 78% and 60% respectively over the last 12 months.

Clearly, the continued improvement of UHIP is not solely about technical implementation of RIBridges. The State is committed to a strong workforce and management structure. Furthermore, the UHIP team continues to be focused on strong project governance, IT and agency operations, and vendor oversight and administration. These efforts have already resulted in improved outcomes and more efficient project operations.

This IAPD details the State's proposal for continuing to improve the business and technical functions of RIBridges – the UHIP technology platform — along with continuous improvement in project management through administration and process changes. The activities, plans, and resource requests contained in this IAPD are intended to capitalize upon the tremendous progress achieved in FFY 2020 as we maintain stability while modernizing the system through key technical upgrades including the Oracle Policy Administration (OPA) and reducing the rate of change to the system. Limited major application enhancements will take place in support of select and targeted business outcomes including improving RIteShare enrollment. Advances in governance and project administration will also be considered as the project shifts towards Maintenance & Operations (M&O).

The document also details major achievements from FFY 2020. Among the many FFY 2020 highlights are:
- Supplemental Nutrition Assistance Program (SNAP) and SNAP Expedited Timeliness met or exceeded 96% every month until onset of COVID-19

- Auto-processing rates for annual processes, such as Federal Poverty Line (FPL) changes, increased across the board
- Usage of the Customer Portal increased across multiple metrics, even before onset of COVID-19
- Enhanced Medicaid Eligibility Functions, inclusive of implementing the RI-1115 Waiver, implementing Sherlock Choice capabilities, and addressing *ex parte* requirements
- Completed the Long Term Service and Support (LTSS) Roadmap, moving the LTSS program toward operational maturity by implementing an array of enhancements with a focus on more efficient worker case processing
- Delivered targeted improvements and efficiencies related to SNAP, Child Care Assistance Program (CCAP), and Rhode Island Works (RIW) programs
- Enhanced system audit and administrative functions, creating efficiencies both for auditors as well as State and vendor staff that support audits, and agency administrative staff
- Implemented digitization of notices to improve the customer experience and to reduce costs associated with printing and mailing (September 2020 release)
- Improved system performance and took steps to proactively ensure high system availability
- Implemented network infrastructure and monitoring enhancements, as well as security and privacy improvements
- Introduced improvements to the procurement and maintenance of hardware/software
- Improved oversight of financial, vendor, and contract management processes
- Recognized efficiencies from the Data Review Board (DRB) and capitalized upon the Operations Change Committee (OCC)
- Improved governance of Technical Architecture, Problem Management, Information Management Releases, and processes related to Post-Release Validations and Closures
- Established the Release Management Plan as the framework for governing all aspects of release planning and execution

Looking to FFY 2021, the State currently has three major application enhancement releases planned for FFY 2021, which will focus on delivering the following business outcomes:
- Increasing RIteShare Enrollment
- Enhancing Medicaid Eligibility Functions
- Improving Supplemental Security Income (SSI) Processing
- Improving SNAP Payment Accuracy

Upgrading technical system functions will be a major focus of FFY 2021, with an upgrade to the Oracle Policy Automation business rules engine taking primacy in release planning efforts, with a pilot go-live planned for May 2021. This will require substantial application development and testing efforts. In addition, key upgrades to the IBM Security Access Manager (ISAM), IBM Security Identity Manager (ISIM), Security Information and Event Management (SIEM) Capabilities, and Tableau will be prioritized.

And in the realm of project management, while procuring an M&O vendor will be a focus, opportunities to increase the effectiveness and incisiveness of governance processes will continue to be pursued. These opportunities will be assessed with the recognition that while increased system stability may

allow for certain processes to become leaner, the need for robust oversight remains just as strong. Additional priorities include evaluating the potential for future adoption of iterative and/or agile methodologies, as well as increasing scrutiny of development management processes with the aim of identifying defects earlier in the SDLC, which we anticipate will ultimately result in a reduction in the total cost of ownership.

Through this IAPD, Rhode Island is requesting continued funding from CMS and FNS to support the efficient maintenance and operations of our increasingly stable and effective system, as well as targeted programmatic improvements. Sections 2 and 3 provide more detail on the accomplishments and priorities summarized in this section. Sections 4 and 5 outline the analyses conducted by the State during the development of this IAPD. Sections 6, 8, 9, and 10 respectively lay out the detailed contractor, personnel, budget, and cost allocation requests for the upcoming federal fiscal year. And Section 7 provides an overview of the well-established project governance processes which remain in place to ensure that the priorities outlined in this document are delivered holistically, on-time, and on-budget.

2 RESULTS OF ACTIVITIES INCLUDED IN THE IAPD

FFY 2020 has marked another major step forward for UHIP. UHIP is a complex project that supports the ongoing development, maintenance, and operation of RIBridges, the integrated eligibility system for more than 15 health and human service programs in Rhode Island. Currently, more than 300,000 Rhode Island residents rely on the State to accurately and efficiently provide Medicaid services, food assistance, child care subsidies, health insurance, long-term support services, and other vital social services through this system. It is critical that the resources and level of effort are maintained in a way that allows for the complete maturation of this project.

The following diagram provides an overview of the historical and projected phases of the UHIP implementation:

Table 2a. Rhode Island UHIP System Timeline (FFY basis)

2012 - 2013	2014 – 2015	2016	2017 – 2018	2019	2020	2021
Phase I Design and Go Live	Phase I System Stabilization and Phase II Design	Phase II Go Live	Phase II Turn-around and Stabilization	Phase II Delivery of Baseline Release Plan	Phase II DDI for Program Priorities and M&O	Phase III Limited DDI for Specific Program Priorities and M&O

Phase I of UHIP created HSRI and established Modified Adjusted Gross Income (MAGI) Medicaid eligibility capabilities. This phase was central to improving access to health insurance coverage for Rhode Islanders and achieving one of the lowest uninsured rates in the country at 3.7%. Medicaid expansion through RIBridges has reached 73,773 covered lives as of May 31, 2019. Based on the Kaiser

Family Foundation's review of the Census Bureau's American Community Survey, Rhode Island is ranked second in the nation for children's health coverage, with 98% of children insured. The State continues to prioritize and make progress toward strengthening access to healthcare and other critical support programs. This continued strengthening is evidenced by FFY 2020's HSRI open enrollment period, which was the most successful enrollment period since the inception of the health exchange.

Phase II of UHIP, which included the launch of the full RIBridges system and development and execution of a robust turn-around strategy, was a significant undertaking. Over the course of Phase II, the State has made substantial progress in strengthening project governance, IT and agency operations, and vendor management and administration. Agency operational capabilities have been strengthened through improvements in technology and business processes, while, at the same time, vendor administration and oversight were strengthened via contractual tools such as Key Performance Indicators (KPIs) and service level agreements (SLAs). Because of this work, timeliness and accuracy have increased, backlogs have decreased, and both incidents and technical defects have moved towards steady state levels (inflow + backlog). FFY 2020 continued to build upon the solid foundations laid in FFY 2019 and resulted in the maturation of most system components.

In Phase III of UHIP, the focus will be on maintaining or improving system stability while implementing the major OPA upgrade, delivering the enhancements required to enable the RIteShare roadmap and facilitating the M&O Request for Proposal (RFP) process. In addition, it is expected that all required activities will be delivered to ensure another successful Open Enrollment for HSRI. Ongoing maintenance will continue to address the small changes required to ensure program compliance is maintained. As noted in more detail in Section 3, the State also plans to review the various aspects of the existing governance framework to look for opportunities to become more efficient in administering the project given all the health indicators have shifted to "green".

FFY 2020 Program Accomplishments

System Stability

Tremendous progress was made in FFY 2020 towards achieving system stability as illustrated in Table 2b. For example, since October 2017, the backlog of system incidents has decreased by 98% from a high of 6,634. The weekly inflow of incidents has also continued to trend well below the steady state target of 220-270 incidents declining by 100% since last year. In addition, with the focused attention of the Joint Triage Team, the number of untriaged incidents also remains at a much lower level compared to prior years.

Table 2b. UHIP IT Metrics

Key Progress Metrics	October 2017	June 2019	Dec 2019	June 2020
Unresolved System Incidents (backlog)	6,634	696	177	151
Untriaged Incidents	1,007	154	112	101

Key Progress Metrics	October 2017	June 2019	Dec 2019	June 2020
System Incidents Logged per week (inflow)	500+	200	165	100
Known Code Defects (backlog)	1,387	869	472	344
Code Defects Logged per week (inflow)	30+	30	30	15

Table 2b above also highlights the significant decline in the code fix backlog between October 2017 and June 2020. In the last 12 months alone, there was a 60% decline from 869 items in the defect backlog to a total of 344. Due to the improvements implemented as part of the Problem Management 2.0 initiative, 72% of the defect backlog are currently scheduled for upcoming releases. The weekly inflow of new defects has also continued to decline ahead of the projected steady state targets. Table 2c. shown below further illustrates the steady decline in the problem ticket backlog due in large part to improvements in code quality, the monthly cadence of Patch Releases and the implementation of best practices across the problem management processes.

Table 2c. Problem Ticket Backlog Trend
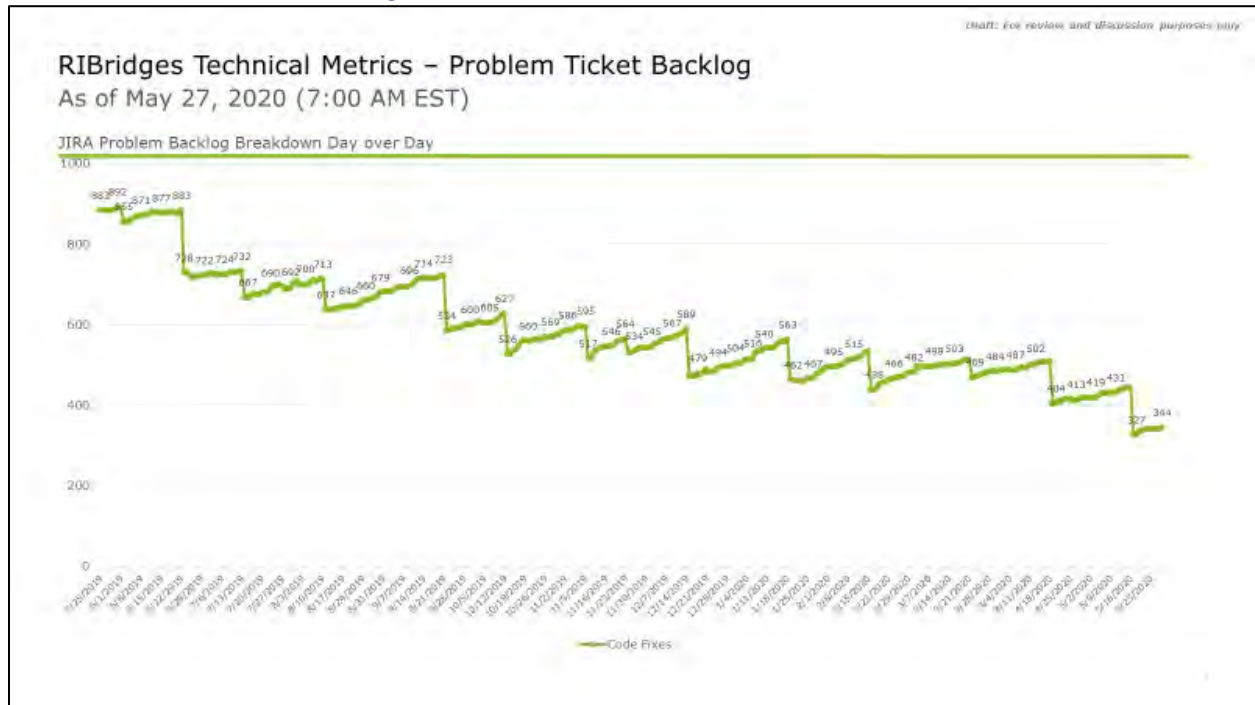
M&O KPIs
The M&O KPIs fall under four categories:
1. Disburse benefits in a timely, accurate manner;
2. Users can process applications without interruption by system deficiencies;

3. Generate and issue accurate client notices on time; and
4. All legal and regulatory requirements are satisfied.

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The KPIs are reviewed on a monthly basis at the newly established Contract Management Meeting. They are also included in the monthly Contract Management Report which is submitted to the State for review and approval each month.

As indicated by the latest KPI monthly performance report in Table 2d, most KPIs continue to meet or exceed the monthly targets. Since the Cash Benefit Accuracy (KPI 1c) has continued to fall just short of the 95% target, a joint initiative between the State and Deloitte is currently underway to complete a comprehensive review of the known failure points to identify and address any remaining systemic issues impacting benefit accuracy. Deloitte has also implemented proactive monitoring of RIW transactions to assist in the analysis. It is expected the Cash Benefit Accuracy target will be met no later than Q4 2020.

Table 2d. Sample Monthly KPI Metric Summary

KPI Metric Summary
Month of May 2020

Draft: For review and discussion purposes only

	Target	Frequency	Measurement Method	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	Comments
1a DHS SNAP and Cash Benefits Timeliness	<= 2	Monthly	Deloitte	1	0	2	2	0	
1b Medical Benefits Timeliness	<= 2	Monthly	Deloitte	0	0	0	0	0	
1c Cash Benefit Accuracy	95%	Quarterly	State			94%			RIW KPI 1c missed in March 2020. Analysis is ongoing and updates provided weekly at IRC (PMOC-1413).
1c SNAP Benefit Accuracy		Quarterly		96.5%			98%		
1d Medical Benefits Accuracy (1/2)	97%	One-time	Deloitte	100%	100%	100%	100%	100%	
1e Medical Benefits Accuracy (2/2)	95%	Monthly	Deloitte	97.13%	95.76%	98.46%	98.85%	98.54%	
1f QHP Eligibility and Enrollment Accuracy	97%	Monthly	State	99%	99%	99%	100%	Pending	May 2020 analysis is pending, completion expected by 6/26.
2a Worker Portal Application Processing	98%	Monthly	Deloitte	99.70%	99.84%	99.75%	99.64%	99.73%	
2b Self Service Portal Application Processing	98%	Monthly	Deloitte	99.29%	99.87%	99.71%	99.83%	99.78%	
3.1 Client Notice - Accuracy	98%	Quarterly	State		99%				Accuracy QC will not be delivered for the month of May, per State decision to focus on RIW KPI 1c.
3.2 Client Notice - Timeliness	98%	Monthly	Deloitte	99.50%	99.50%	99.32%	99.61%	99.76%	
4 Legal and Regulatory Requirements	98%	N/A	Deloitte	Met	Met	Met	Met	Met	

Service Level Agreements (SLAs)

Service Level Agreements (SLAs) continue to be used to track performance and to hold the Vendor accountable for meeting the required service levels.   The SLAs relate to the following areas:
1. Business Continuity
2. Software Deficiency
3. Open Enrollment Discrepancies

4. Development Quality
5. UAT Pass Rate

The SLAs are defined in detail in Appendix F of this document.

The SLAs are also reviewed on a monthly basis at the newly established Contract Management Meeting. They are also included in the monthly Contract Management Report which is submitted to the State for review and approval each month.

Overall, the majority of the SLAs have continued to be met each month as depicted in the latest monthly KPI Report in Table 2e.

Table 2e Service Level Descriptions and Monthly Results

SLA	SLA Description	Target	Jan 2020	Feb 2020	Mar 2020	Apr 2020
5.1.1	Production Environment Hours of System Availability for Citizen facing – Business	99.90%	100%	99.92%	100%	100%
5.1.2	Production Environment Hours of System Availability for Citizen facing - Non-Business	98.00%	99.77%	100%	100%	100%
5.1.3	Production Environment Hours of System Availability for Worker facing – Business	99.90%	100%	99.89%	100%	100%
5.1.4	Production Environment Hours of System Availability for Worker facing - Non-Business	98.00%	100%	100%	100%	100%
5.1.5	Electronic Log Files (Maintenance)	99.5% Critical	100%	100%	100%	100%
5.1.6	Electronic Log Files (Maintenance)	95.0% Important	100%	100%	100%	100%
5.1.7	Electronic Log Files (Maintenance)	90.0% Normal	100%	100%	100%	100%
5.1.8	Electronic Log Files (Processing)	99.5% processed	100%	100%	100%	100%
5.1.9	Inbound Files	100% Processed	100%	98.79%	99.03%	98.81%

SLA	SLA Description	Target	Jan 2020	Feb 2020	Mar 2020	Apr 2020
5.1.10	Outbound File to Data Services Hub	Less than 2%	0.64%	0.25%	0.23%	0.23%
5.1.11	Transactions involving the user interface, business tier, or database tier	1.0 seconds	0.734 seconds	0.57 seconds	0.62 seconds	0.64 seconds
5.1.12	Back-up and Recovery Backups	100% Processed	100%	100%	100%	100%
5.1.13	Failover and Fallback Failover	Failure over will occur < 20 mins	Met	N/A	N/A	N/A
5.1.14	Disaster Recovery refers to major disruptions to the production environment	Site must be operational	100%	100%	100%	100%
5.1.15	Severity 1 - Fatal	<=12 Hours	0	0	0	0
5.1.16	Severity 2 - Serious	<=4 Day Average	0	2	2	0
5.1.17	Severity 3 – Normal	Next Scheduled Release	Within agreed upon timeline	Within agreed upon timeline	Within agreed upon timeline	Within agreed upon timeline
5.1.18	Severity 4 – Minor	By agreement on release schedule	N/A	N/A	N/A	N/A
5.1.19	Contractor will reconcile enrollment discrepancies to meet the targets specified in this SLA, based on the data reported in the HSRI Data Recon Hub.	>Varies month to month	844	726	1142	1034
5.1.20	For each planned Release, the following SIT Exit Criteria are to be met by the scheduled SIT Exit Meeting	SIT Exit Criteria Met by SIT Exit Deadline	N/A	7.28.2: SIT Exit approved at the scheduled 1/23 meeting.	7.29: SIT Exit scheduled for 2/3/2020 and received approval on 2/5/2020.	7.29.1: SIT Exit scheduled for 3/16/2020 and received approval on 3/17/2020.
5.1.21	All outstanding SIT entry criteria exceptions must be cured.	SIT Entry Criteria Met by SIT Exit Deadline	N/A	7.28.2: Met. All scope items in SIT by 1/10 and SIT test	7.28.2: Met. All scope items in SIT by 1/13 and SIT test	7.29.1: Met. All scope items in SIT by 2/14 and SIT test

SLA	SLA Description	Target	Jan 2020	Feb 2020	Mar 2020	Apr 2020
				cases approved on 1/17.	cases approved on 1/22.	cases approved on 3/2.
5.1.22	Script Pass Rate: 95% of all scripts/tickets passed	95% passed	N/A	7.28.2: 99%	7.29: 97.5%	7.29.1: 100%
5.1.23	80% minimum pass percentage per Theme	80% minimum pass per theme	N/A	7.28.2: 94%	7.29: 89.4%	7.29.1: 100%
5.1.24	95% Pass Percentage for all regression scripts (core and targeted)	95% passed	N/A	7.28.2: 99%	7.29: 98.2%	7.29.1: 98.88%
5.1.25	No outstanding Severity 1 Deficiencies	0 Sev1	N/A	7.28.2: 0	7.29: 0	7.29.1: 0
5.1.26	Any outstanding Severity 2 Deficiencies must be reviewed and deferred by the UHIP leadership team	0 unapproved by UHIP Leadership or without a UAT Entry Date	N/A	7.28.2: 0 deferred	7.29: 0 deferred	7.29.1: 0 deferred
5.1.27	For Severity 1 Deficiencies, the UAT Deficiency detection rate during UAT shall not exceed 1 for patch Releases and 3 for major Releases	Patch: 1 Major: 3	N/A	7.28.2: 0	7.29: 0	7.29.1 : 0
5.1.28	For Severity 2 and 3 Deficiencies, the UAT Deficiency detection rate during UAT shall not exceed: For patch Releases: 2% of total UAT test cases in the applicable Release For major Releases: 4% of total UAT test cases in the applicable Release	Patch: 2% Major: 4%	N/A	7.28.2: 0.62%	7.29: 4.71%	7.29.1: 0.90%

Additional Business Metrics

In addition to the progress demonstrated by the IT metrics, KPIs and SLAs shown above, the following program-level business metrics also show positive trends as well. The increased stability of the system continues to enable business results across the full array of programs supported by RI Bridges.

Some examples of these business metrics are listed below:
1. SNAP and Expedited Timeliness met or exceeded 96% every month until the onset of the COVID-19 mitigations.
2. SNAP Federal Poverty Limit (FPL) auto-processing rates increased from 64% to 78%.
3. CCAP Federal Poverty Limit (FPL) auto-processing rates increased from 5% to 72%.
4. Manual CCAP dis-enrollments decreased by 99%.
5. CCAP Provider enrollments increased from 225 to 289.
6. Cost-Of-Living Adjustment (COLA) auto-processing rates increased from 92% to 95.6%.

7. Accuracy of Medicaid enrollment transactions increased from 95% to 98%.
8. LTSS patient information is now 94% synced between RIBridges and Medicaid Management Information System (MMIS); this population's automatic enrollment transaction processing increased to 99.9%.
9. 91% of customers were able to auto-renew their Qualified Health Plans (QHPs) for 2020.
10. 61% increase in new Customer Portal accounts created.
11. 30% increase in submitted DHS applications via the Customer Portal.
12. 208% increase in submitted DHS renewals via the Customer Portal.

Summary of FFY 2020 Key Accomplishments

To further highlight the success experienced in FFY 2020, the following examples are provided to demonstrate certain key accomplishments. The results have been broken down into two major categories: (1) RIBridges system improvements and enhancements; and (2) enhanced project management. Each category contains two subcategories as shown below in Table 2f.

Table 2f. Rhode Island UHIP Project Framework and Key FFY 2020 Accomplishments

Rhode Island UHIP Project			
RIBRIDGES		Project Management	
Business Functions	**Technical (System Functions)**	**Administration**	**Process**
HSRI Open Enrollment Success	Infrastructure, Maintenance, and Process Improvements	Improved Financial Management Processes	Recognized Efficiencies from the Data Review Board (DRB)
Improved System Auditability	Security and Privacy Improvements	Improved Vendor & Contract Management; M&O Vendor RFP	Capitalized on the Operations Change Committee (OCC)
Implemented RI-1115 Waiver	High Availability and System Performance Improvements		Improved Problem Management
Improved Medicaid Eligibility Functions	Network Infrastructure and Monitoring Enhancements		Established the Release Management Plan
Implemented Sherlock Choice Capabilities	Oracle Database Upgrade		Improved Governance of Information Management Releases
Addressed *Ex-Parte* Requirements	Improved Architectural Governance		Enhanced the Process for Post-Release Validations + Closure
Completed the LTSS Roadmap			

Rhode Island UHIP Project			
Improve SNAP Program Functionality			
Automate DHS Functionality			
Implemented CCAP Tiered Rates and Streamlined Payment Process			
Implemented Rhode Island Works (RIW) Policy Change and SNAP/RIW Interims			
Created Admin Override Tool			
Implement Digital Notices & Reduce Print / Mailing Costs			
System Mitigations in Response to COVID-19 Pandemic			

RIBRIDGES – Business Functions

HSRI Open Enrollment Success

HSRI's open enrollment period spanned from November 1, 2019, to January 15, 2020, for the calendar year 2020 coverage year. System fixes that occurred late in FFY 2020, along with strategic open enrollment planning efforts, made a significant impact. Customers enrolled in QHP plans increased by 17% and now exceeds 35% for the first time. This is in large part because 91% of customers were able to auto-renew their QHP plans for 2020, and therefore did not need to take additional steps to ensure coverage in 2020, resulting in efficiencies for both customers and workers. Additional evidence of open enrollment success can be seen in the contact center activities. Activity reports showed a 5% decrease in call duration compared to the prior year open enrollment.

Improved System Auditability

In FFY20, significant enhancements were made to improve the auditor's ability to verify information in the system. The list of improvements includes the following:
- 11 Data collection screens were enhanced to enable auditors to see audit records.
- A 'Read-only' mode was added to the screens to allow specific audit users to see eligibility results and overrides for a case during a specific time period.

- The Eligibility Filing Unit Summary to provide more information to workers with respect to the determination, including details regarding the authorization:
- The interfaces module was enhanced to allow users to export a list of data received from specified interfaces
- Automatic case notes were added to capture key interim/recertification data, including:
    - When an interim/recertification form was received
    - When the worker ran eligibility causing the case to be recertified OR the interim to be completed
    - Which worker ran the eligibility
    - Original recertification date and the new recertification date

Implemented RI-1115 Waiver

FFY 2020 saw the implementation of the technology changes that allowed Medicaid children with special needs to be administered benefits by the Department of Children, Youth & Families (DCYF). These children who are considered disabled but whose income and assets exceed SSI limits per the Section 1115 Waiver are now evaluated within RIBridges by the Children's Behavioral Health Unit Medicaid enabling the facilitation of care for children without disrupting custody agreements. Parent will not have to relinquish custody care for children to receive care.

Improved Medicaid Eligibility Functions

Some of the major eligibility categories that were addressed through releases in FFY 2020 include the following:

- In order to communicate eligibility decisions for extended family planning and MAGI clients more accurately and clearly, the termination notice for Extended Family Planning (EFP) and other MAGI Medicaid programs was merged into one notice and the COR-ENR-07 notice was deprecated. This created more effective communication to the customer by reducing the number of notices going out and updating the language to be federally and policy compliant.
- In order to reduce confusion around special Medicaid programs like Department of Elderly Affairs (DEA) copay, the eligibility notice going out from RIBridges was suppressed. As this is a special Medicaid that is determined outside the system, the eligibility notice with these details was confusing. This improved the content and clarity of the notice.
- In order to more accurately determine a customer's net annual income, enabled the system to prorate a customer's deductions if they were change-reported at some point during the year as opposed to projecting them throughout the year. This has resulted in more reflective net annual incomes for customers, and subsequently, more accurate eligibility determinations for the QHP program.
- As per federal guidelines, enabled income of Census enumerators to be disregarded for eligibility determination for all programs excluding Modified Adjusted Gross Income (MAGI) Medicaid, Extended Family Planning (EFP), Transitional Medicaid (XMA), MAGI Emergency Medicaid (EMER), Cost Sharing Reduction (CSR), Long Term Support Services (LTSS), MAGI, Advance Premium Tax Credits (APTC), Parent/Caretaker Premium Assistance (PCPA), General Public Assistance (GPA) Bridge, and Qualified Health Plans (QHP). The implementation of the

Business Requirement Request (BRR) has resulted in the correct calculation of benefits for census enumerators. Census Enumerator hiring continues through March 2020.

- In order to comply with federal policy, changes were made to not apply FPL limits for pregnant women during post-partum period and newborn infants. This prevented incorrect terminations and Alternative Dispute Resolution (ADR) creation and subsequently resulted in more accurate Medicaid eligibility determination for pregnant women and newborns.
- Based on the State Health Official letter received, the system has been designed to implement the modified MAGI eligibility determination rules. The following changes are included as a part of this enhancement to comply with the guidelines mentioned in the letter:
  o Alimony Income received is excluded for MAGI financial tests
  o Moving Expenses will no longer be deducted for MAGI eligibility determination
  o Alimony paid will no longer be deducted for MAGI eligibility determination
  o Tuition Fees will no longer be deducted for MAGI eligibility determination

Implemented Sherlock Choice Capabilities

Based on the guidance received around the Sherlock program with respect to an individual's ability to opt-in for the program regardless of their eligibility for other Medicaid category, the State implemented a process to present this option to the customer during eligibility evaluation using a Sherlock Consent Form, which allows the individual to opt-in for the Sherlock Medicaid over other Medicaid categories. RIBridges was modified to enable the worker to capture the customer's decision within case data collection screens, and dynamically determine the eligibility hierarchy based on this decision. If a customer opts-in for Sherlock, then based on their circumstances they are first evaluated for the Sherlock program eligibility, and if found ineligible they are evaluated for other Medicaid categories based on their circumstances. This enhancement helped RIBridges comply with Medicaid guidelines, and provided the flexibility to the customer to opt-in for the Sherlock program.

Addressed Ex Parte Requirements

The system was enhanced to complete an eligibility determination for other Medicaid categories for individuals determined ineligible for Medicaid prior to termination leveraging existing information in the system and avoiding unnecessary and repetitive requests for information from families which can cause eligible individuals and families to lose coverage. Until the redetermination of eligibility is disposed through the *ex parte* process, the current eligibility will continue to remain open. This provides the client a reasonable opportunity period to return any required information during which the coverage will not be terminated. Notifications will also be sent to clients as required by policy to inform them regarding the *ex parte* process.

Completed the LTSS Roadmap

The LTSS roadmap was a substantial component of the UHIP development plan for FFY 2020. The ultimate goal of this roadmap was moving the LTSS business functionality toward operational maturity. In FFY 2020 the following areas were addressed through the release process:

Worker inbox enhancements

The system now generates LTSS Processing for LTSS cases/application to allow management of work through the Worker Inbox for LTSS workers and improve their ability to track where in the 90-day application cycle an application is pending. LTSS Workers and Supervisors are now able to use 'Get Task(s)' to manage their work with the new task types and leverage additional information for LTSS tasks such as LTSS Program and LTSS Type filters in Inbox Search.

Streamlined verification process and screens

The process of scanning and indexing LTSS medical documents returned by customers has been streamlined by introducing smart separators and the ability to identify missing documents with increased specificity. The process eliminates manual entry and workers have reported efficiencies as well as a decreased error rate in marking Level of Care (LOC) as pending when medical/verification documents are returned. A new batch was developed to automate the closure of cases with unreturned, overdue verifications eliminating the need for workers to manually process the closure of these cases.

Automated transfers of data from CSM to RI Bridges

Through the implementation of Robotic Process Automation, the entry of nursing home slip information was automated, reducing the need for workers to manually enter this information in the RIBridges system. Additional work through the work through the regular maintenance and release processes is in progress to increase the scope of the automation.

Improved integration of asset verification

The system now automatically requests for the Asset Verification Service (AVS), saving time for E.T.s as the AVS response will now have already been returned when they access the case for Data Collection. The AVS Request Sent task helps the worker track progress and check the AVS response in the portal.

Case closure for overdue renewals

The existing Negative Action Batch was enhanced to automate closure of overdue renewals, where customers have not returned their renewal packets within the expected timelines, eliminating the need for workers to manually process the closure of these cases.

MMIS dashboard development for LTSS work

Using the newly deployed MMIS Dashboard, LTSS workers have access to real-time data from MMIS consolidated into one screen based on various flexible search criteria. This helps in improving worker efficiency and reducing overall case processing time by eliminating the need of context-switching between multiple screens and portals and provides a simplified and organized interface with MMIS to access relevant data points while processing a LTSS case.

Processing program transitions with screen enhancements

The system now generates Case Change tasks specific to LTSS cases to allow management of work through the Worker Inbox for LTSS workers and improve their ability to track Program Changes/Transitions. The Level of Care and Plan of Care screens were consolidated into one screen with dynamic display of information and improved data validation logic. LTSS Workers and OMR Nurses will

be better able to enter and update this information with limited navigation and entry burden, while reducing the risk of data discrepancies.

Regular case data updates for workers, providers, and State agencies
Through updates to the Worker Productivity, Workload Management, Pending Application dashboard, as well as Provider Report views, additional information was made available to the full spectrum of LTSS stakeholders. This information is instrumental in supporting business decisions and managing the progress of the team.

Improved SNAP Program Functionality
Enhancements in the July 2020 release will be focused on ensuring that household composition is accurate. These enhancements along with the implementation of several business process improvements will pro allow for continued benefits to households in certain circumstances with the exclusion of the primary applicant. This will also reduce the need for the impacted applicants to reapply for benefits.

Automated DHS Functionality
RIBridges currently receives death information via interfaces from external sources such as the Social Security Administration (SSA) and the Department of Health (DOH). However, currently, the process for verification of the death information is manual. In July 2020, the information being received will be utilized to automate the process of verification by using the death information in RIBridges and sending out requests for additional information from clients. In addition to the reduction in human time that will be required for the verification process, it is expected that this automation will also produce cost savings associated with returned mail and will improve accuracy of the overall close out process.

Implemented CCAP Tiered Rates and Streamlined Payment Processes
The system is now generating CCAP provider payments based on the Steps / Star ratings. DHS workers are no longer required to manually enter provider rates in the system as the ratings will be automatically updated using a file received from licensed centers. In addition, functionality was added to allow claims to be created to recover overpayments made to providers, to post payments against claims, to recoup overpayments from future payments as well as to identify delinquent providers to refer to collections.

Implemented Rhode Island Works (RIW) Policy Change and SNAP/RIW Interims
The RIW Time Clocks statutory change was implemented in December 2019 to eliminate the "24-in-60 month" limit. In addition, the system now automatically processes SNAP/RIW interims when a "No Change" is reported by the client.

Created Admin Override Tool
In the last 2 years, there have been over 8,000 cases that have been manually corrected in the system due to system, worker, or carrier issues that impact customer benefits and coverage for HSRI enrollees. In December 2019, an admin override screen was delivered to allow updates to be made at the front-end to ensure customers will have correct and timely benefits. This significantly reduces the amount of time (Deloitte and State) being spent on correcting discrepancies in the

system. In addition, the State will save approximately 100-200 hours per month within the monthly Service Request budget. These hours can be applied to other Service Requests or Small Enhancements going forward.

Implement Digital Notices & Reduce Print
In Q4 of 2019, the State identified several opportunities to significantly reduce the ongoing costs associated with printing and mailing client notices. As a result, a number of enhancements were prioritized and scheduled across releases in FFY 2020 to enable the functionality required to achieve the forecasted cost savings. The most significant enhancement, digital notices, will be implemented in September 2020. With this change, clients will have the ability to "go green" by opting in to receive only electronic notices along with email alerts when new notices are available for viewing on the Customer Portal. The State is working with the vendor to produce the necessary reporting to monitor the cost savings over time.

System Mitigations in Response to COVID-19 Pandemic
UHIP was able to respond quickly, accurately, and efficiently to the COVID-19 pandemic, in large part due to the degree of system stability that has been achieved and the governance processes put in place. This resulted in Rhode Island being the first state in the nation to deliver Pandemic EBT (P-EBT) benefits to its citizens.

Table 2g. System Mitigations in Response to COVID-19 Pandemic

Category	High-Level Description of COVID-19 RIBridges Mitigations
CCAP	1. Change CCAP functionality to determine payments based upon enrollment rather than attendance as a result of closure of childcare facilities 2. Waive copays for all payments made for CCAP families during COVID-19 3. Prevent any new CCAP enrollments during the mandated closure period 4. Increase rates for licensed and family child care providers following the mandated closure period
Customer Portal	1. Enhance the customer portal to ensure that all applications are submitted with a program request, thereby easing an operational issue during COVID-19 2. Implement enhanced banner functionality in the customer portal to facilitate multiple dynamic messages providing key COVID-19 information to customers 3. Expansion of customer portal load capacity to account for increased volume during the COVID-19 period

Category	High-Level Description of COVID-19 RIBridges Mitigations

Medicaid	1. Multiple system + operational changes to prevent Medicaid terminations or transitions to lower benefit (and suppress associated notices) via online or batch processes, except for in very limited circumstances (i.e. death, immigration status)
	 2. Suspend sanctions for RIteShare enrollees
	 3. Implemented LTSS waivers:
	    a) Suspended Pre-Admission Screening and annual Resident Review (PASRR) Assessments for 30 days for long term care patients
	    b) Waived copays for all non-institutional long term care clients
	    c) Extended basic personal needs allowance for all individuals that are admitted to an institution during COVID-19
	 4. Implement self-attestation waiver: system change to introduce a new verification type 'Waived - Self attested' as an acceptable proof for all verification points applicable to Medicaid except Citizenship & Immigration
	 5. Change to eligibility logic to exclude Unemployment Insurance (UI) stimulus income from Medicaid eligibility determinations, inclusive of reading the DLT file and updating RIBridges
	 6. Prevent LTSS patient share increases during the COVID-19 period
	 7. Extend EMER applications and prevent terminations
	 8. Allow Aged, Blind and Disabled (ABD) Flex individuals 2 additional months to meet their spenddown limit
	 9. Creation of a Tableau Dashboard to track cases impacted by Medicaid COVID-19 mitigations

QHP	1. Facilitate a special enrollment period for QHP 2. Prevent monthly terminations to ensure that QHP customers continue to receive benefits 3. Extend pend logic to QHP customers not receiving APTC 4. Prevent MAGI customers who become QHP eligible from receiving double coverage (given that they will not be terminated for Medicaid)
RIW	1. Prevent termination of RIW benefits due to 3 months sanctions to ensure that RIW cases continue to receive benefits post the 48 months limit 2. Potential one-time emergency payments to RIW families experiencing hardships
SNAP	1. Extension of Recert + Interim periods for SNAP 2. Suspend all SNAP claims so that recoupment does not take place during the COVID-19 period 3. Suspend the time limit for Able Bodied Adult Without Dependents (ABAWD) recipients 4. Provide emergency allotments to address temporary food needs to bring all households up to the maximum benefit 5. Meet FNS requirements for reporting related to P-EBT benefits and emergency SNAP allotments 6. Provide P-EBT benefits to SNAP and non-SNAP households with children who have temporarily lost access to free or reduced-price school meals due to pandemic-related school closures 7. Enhance case note functionality to increase ease of processing + reporting SNAP recertifications 8. Creation of a Tableau Dashboard to track cases impacted by DHS COVID-19 mitigations

RIBRIDGES - Technical (System Functions)

Infrastructure, Maintenance, and Process Improvements

Infrastructure, maintenance, and process collectively encompasses ongoing maintenance and operations of all UHIP-related infrastructure, including all hardware devices (servers, storage, network devices, etc.) and non-application code software products (operating systems, commercial off-the-shelf (COTS) products, etc.). Over the course of FFY 2020, a wide range of UHIP infrastructure devices, software, and processes have been added to or significantly improved.

Key areas of accomplishment include: N-1 patching for non-application code software items; major version operating system (Windows OS) upgrade; upgrade of the server virtualization platform (VMWare vSphere); upgrade of the RIBridges application transaction database along with Reporting and Datamart databases (Oracle Real Application Clusters); upgrade of the Defect and Change Management System (Atlassian JIRA); upgrade of the Batch Scheduler (OpCon); upgrade of RIBridges Primary Data Storage Device (EMC Xtremio); and upgrade of Backup Data Storage Devices (EMC Data Domain and Avamar); upgrade of perimeter firewall appliance (CISCO ASA) and segregation of production network traffic from non-production; implementation of network firewall between app tier and database tier (CISCO ASA); implementation of network availability and performance monitoring through SolarWinds; implementation of network intrusion detection and prevention system (CISCO FirePower).

During the initial UHIP Phase II go-live, software and operating system patching was not prioritized due to RIBridges system challenges and other priority items. As a result, the software used in the UHIP infrastructure had fallen multiple versions behind. During FFY 2019, however, the system was effectively updated to N-1 status. This continued during FFY2020 meeting N-1 patch compliance. In other words, UHIP software platforms were updated to either the latest available patch version or version immediately prior to that, putting the system on more stable footing.

In August 2019, UHIP successfully completed the upgrade of the virtualization platform (VMWare vSphere) bringing our virtualization platform to N-1 compliance and ending the need for extended support for our previous version which reached end-of-life in September 2018. Competing project priorities and anticipated complexities initially delayed the upgrade. By following our governance processes for prioritization, virtualization platform upgrade was successfully completed. The upgrade provided additional stability and resiliency using the latest VMWare capabilities for UHIP production environment.

The upgrade of the defect and change tracking system [JIRA] in September 2019 brought UHIP to N-1 compliance of a critical Project Management component that tracks and maintains historical data pertaining to incidents, problems, changes, and approvals throughout the UHIP engagement. November 2019 brought forth the UHIP Batch Scheduler [OPCON] which was upgraded to N-1 and the primary driver was to alleviate a bug that caused special characters in notices sent out to customers to render incorrectly. As a result, particular notices with special characters had to be run manually. Post the upgrade, all notices can be run seamlessly through the scheduler without manual intervention.

In October 2019, UHIP successfully completed an upgrade of the Hard Disk Drive Storage Appliance [VNX7500] to a Solid-State Drive Appliance [XtremIO] as the storage appliance was reaching end of life in December 2019. The upgrade also accounted in additional capacity forecasted for 2 years and a device that provided significant performance gains, more reliability, and reduced power consumption.

In November 2019, UHIP successfully upgraded and expanded the existing backup storage device [Data Domain] to accommodate the growing archived data requirements in accordance with IRS and SSA regulatory requirements.

Each of these infrastructure and software upgrades were made possible by the implementation of standard technical and infrastructure maintenance windows and change control processes. In prior FFYs, stabilizing the RIBridges application code meant that the technical teams focused on supporting development, testing, and release of updated versions of the RIBridges application, and, as a result, there were not enough technical maintenance windows. As the RIBridges application runway stabilized and the code release frequency decreased, establishing planned technical and infrastructure maintenance windows (approximately two per month) became possible. During these windows, the team completed the items mentioned above, as well as over 1510 technical maintenance activities (tracked as UHIPOPS in JIRA) ranging from installing new hardware to patching UHIP software.

Finally, UHIP also successfully completed its annual disaster recovery test in October November 2019. Although this testing is performed on an annual basis, the successful results of the testing are viewed as an affirmation of the continued focus on back-up processes. The test results demonstrated a Recovery Point Objective (RPO) of 5 minutes and Recovery Time Objective (RTO) of 8 hours, far below the respective targets of 15 minutes and 48 hours respectively. Additionally, for this year's test, the scope was expanded to include more realistic business operations including access to the system (hosted on the disaster recovery (DR) environment) via laptop over the internet and including Electronic Benefits Transfer (EBT) card printing.

Security and Privacy Improvements
Better governance and process has improved the overall management and correction of security vulnerabilities in the UHIP system code. This effort has significantly reduced the number of security defects released in production and decreased the number of days to correct a defect due to lower ticket volume. The focus of the effort was to improve defect identification analysis, implement secure software development lifecycle enhancements and theme-based security defect resolution.

The Privacy Workgroup has been established to perform Privacy Risk Assessments and to oversee the enforcement of privacy regulations and standards within the UHIP System. The group meets annually to update the Privacy Impact Assessment and then as needed to provide guidance on privacy issues. The Security team participates in the Architecture Review Board to review and assess the impact of architectural changes on security. Technical Change Control Board also includes the security team to ensure security defect corrections stay on track to assure new configurations and enhancements do not increase security risk.

The Continuous Monitoring program has maintained a strict schedule of security scanning, Security and Privacy Impact Assessments, QRadar monitoring, Quarterly Plan of Action and Milestones (POAM) and Corrective Action Plan (CAP) reporting, and a third-party assessment of the cycle year 1 MARS-E_V2 controls was performed. The 2019 Authority to Connect package was submitted and approved on 8/16/2019.

PII data protection has been improved in the non-production environments. A new process using an Oracle masking algorithm was implemented to de-identify PII data while preserving the format and integrity of the data. The masking is applied to DEVDevelopment, System Integration Testing (SIT), and User Acceptance Testing (UAT) environments, except where PII data is necessary to support triage of system issues and testing.

High Availability and System Performance Improvements

As the RIBridges application has stabilized, the Joint IT Team began focusing on performance improvements in the system. In FFY 2020, a temporary performance working group (PWG) was established to identify opportunities for application performance improvement across the UHIP stack. PWG focused on 3 primary objectives:
1. Improve the identification and communication of the anticipated impact of a given release upon system performance by formalizing the SDLC processes for performance testing
2. Proactively identify and remediate existing issues which have the potential to cause a user service interruption
3. Complete performance tuning analysis to identify opportunities to improve performance of eligibility transactions including related screens and functionality

Over the course of the year, the PWG implemented process and technical changes that has improved performance of the application and reduced user service disruptions. PWG tuned webserver, app server, and enterprise service bus configurations for better performance. PWG also undertook database query review, with Eligibility, Batch, and Worker Business Process Flow queries being optimized for performance, as well as full database index recreation.

In FF years prior to 2020, several incidents of user service disruptions were caused by hung threads on app servers hosting RIBridges. In FFY2020, the PWG implemented code and configuration changes that drastically reduced the frequency of these hung threads.

With the advent of the COVID-19 Crisis, the PWG played a key role in applying performance improvement measures and infrastructure enhancements to prevent user service disruptions for RI citizens relying more heavily on the customer portal.

In FFY2020, a thorough review of single-points-of-failure within UHIP and State systems connecting to UHIP was conducted, from both an application component and infrastructure component point of view. An additional internet circuit was installed, along with some single point of failure switches, cables that served traffic to/from the internet gateway. The team also implemented high availability for servers hosting COTS components: Customer Communication Management System (OpenText Exstream), File

Upload Anti-virus scanner (Symantec Protection Engine), and EBT Card Print Server.

Network Infrastructure and Monitoring Enhancements

In FFY2020, UHIP conducted a network refresh activity, composed of three phases.

Phase 1: Upgrade of existing Perimeter Firewalls – the CISCO ASA firewalls were reaching end-of-life in 2019. These devices are now replaced with new hardware.

Phase 2: Installation of new Internal Firewalls – Firewalls were installed and configured between the application tier and database tier for physical separation between the tiers per IRS requirements.

Phase 3:
A. Production/Non-Production Network Segregation
    a. Prior to FFY2020, UHIP perimeter firewall and load balancers were shared between production and non-production. In FFY2020, dedicated firewalls and load balancers were installed for production and non-production traffic. This prevented impact to production availability because of incidents/changes in non-production. This also helped with better change control process as changes could now be testing in non-production prior to production implementation.

B. Security & Monitoring Enhancements
    a. The existing production Network Intrusion Detection and Intrusion Prevention System (IDS/IPS) was replaced with upgraded hardware and a new pair of Network Intrusion Detection and Prevention System (IPS/IDs) were installed to monitor non-production traffic Finally, phase 3 also included the implementation of SolarWinds Network Availability and Performance Monitoring tool for single pane monitoring of real-time statistics of network hardware health, utilization and throughput.

Oracle Database Upgrade

The current version of Oracle database, Oracle Real Application Cluster 11g, which hosts the transactional processing data and analytical processing data for RIBridges, will reach end-of-life in December 2020. The Oracle Database upgrade will be completed in July 2020 to maintain security patch compliance and also reduce expenditure for extended technical support procurement. New features that are available in the new version of Oracle database will also cut down operating cost, improve security and performance.

Some examples of the new features that will be leveraged are provided below:
- Real Time Automatic Database Diagnostic Monitor
- Zero-downtime Oracle Grid Patching
- Options to restore tables through RMAN
- Enhanced Encryption and Data Redaction for Privacy and Compliance
- Adaptive Query Optimization and Online Statistics

- Multiple indexes on the same column
- In Database Archiving and Automatic indexing

Improved Architectural Governance

The charter for the Architecture Review Board (ARB) was reviewed and refreshed to re-establish the ARB as the primary governance board for overseeing the architecture of RIBridges including planning technical upgrades, reviewing technical designs of new application enhancements and enforcing architecture and security standards. Of note, this refresh included the addition of a quarterly code scan review to ensure that code quality improves overtime (with each release). In addition, the Technical Change Control Board was refreshed to include a formal review and recommendation for all technical changes along with the required Change Review Board approval. In prior iterations of TCCB, technical changes had already been allocated as a part of the baseline release plan. These changes are then reviewed and incorporated into the overall release runway as part of ongoing release management governed by the RPC.

Project Management – Administration

Improved Financial Management Processes

The State continues to refine processes to coordinate with State agencies regarding federal budgeting and reporting processes that are outside of the IAPD-U submission. The State coordinated with federal agencies to ensure the federal share of the $50M Deloitte settlement and payments to Deloitte for 2019 services as a result of contract amendment 47 were properly recorded by federal fiscal year. The State continues to work with vendors and contract managers to ensure that accurate cost allocation is utilized for all services provided.

With the State coming to agreement with Deloitte on payment for services in FFY20, the State established processes for invoice format, review and approval. In addition, weekly finance and IT meetings have been established to monitor the release plan and planning activities relative to the cost allocation plan. The purpose of these meetings are to develop the analysis necessary to provide leadership with budget impact information.

Improved Vendor and Contract Management

Improving vendor and contract management has been a primary focus throughout FFY 2020.

The State has established a monthly Contract Management Meeting with its key vendors including Deloitte. The purpose of this meeting is to review the vendor's performance for the prior month and discuss any action plans required to address any gaps or areas of concern. To serve contract managers, the State has developed tools to track and report on invoice payments, forecasting and procurements

Some of the key materials that are reviewed during the Contract Management Meeting with Deloitte include release planning and cost allocation concerns, contract items and performance against the KPIs and SLAs. Many of the SLAs now include financial penalties for missing targets as shown in Appendix F.

These tools provide the State with the ability to ensure that contractors are delivering services and products in accordance with the standards required to meet or exceed the needs of the business. A sample of the monthly agenda is shown below in Table 2h.

Table 2h. CA47 Contract Management Meeting with Deloitte

CA47 Contract Management Meeting	
Meeting Agenda	**Time**
Meeting Agenda	
Action Item Tracker	8:30 – 8:35am
Items for Executive Discussion	8:35 – 8:45am
Contract KPIs	8:45 – 8:50am
Contract SLAs	8:50 – 8:55am
Warranty Report	8:55 – 9:00am
Invoicing Status Update	9:00 – 9:10am
Open Contract Correspondence Letters	9:10 – 9:15am
Key Staffing Updates	9:15 – 9:20am

Appendix
- Monthly Contract Report – Business Outcomes
- Hourly-Based Services Progress Report
- Invoice Backup Document List + State Reviewers
- Invoicing Process Flow

In addition, a detailed Contract Management Report is being created by Deloitte each month to demonstrate their fulfillment of the services and responsibilities outlined in the CA47 contract. This report is reviewed and approved by the State. Deloitte also provides detailed reports in support of the monthly invoice process.

Many of the vendor contracts were also reviewed in FFY 2020 and several key contracts were put out to bid (i.e. IV&V vendor). The most significant effort was focused on developing the M&O RFP for RI Bridges. The M&O RFP has been submitted and activities including preparations for the pre-bid conference are underway. The timeline calls for bids to be submitted by September 2020. A new contract with the selected vendor would be executed by April 2021. If a new vendor is selected, there will be substantial transition activity required prior to October 2021 to ensure there is a smooth handoff from Deloitte. In this case, the State may need to re-evaluate the current release plan and schedule.

Project Management – Process

Data Review Board (DRB)
The DRB was established in FFY 2019 to formalize the process of reviewing and approving each data fix associated with the RIBridges system. And in FFY 2020, following extensive analysis, the decision was made to limit State technical + functional review of data fixes to specific tickets based upon the priority and complexity criteria outlined below. This decision was predicated upon evidence that State technical reviews were proving worthwhile for the most complex tickets and State functional reviews only for the tickets with the greatest business impact. And ultimately this decision facilitated a decrease in the

resources and associated cost devoted to completing State reviews of data fix tickets.

On a weekly basis, the Data Review Board now monitors the % of data fix tickets reviewed by the State which yield script issues and/or are updated based upon State feedback. These metrics have remained steady or slightly decreased since the implementation of the limited review criteria, indicating that the quality and accuracy of data fixes has if anything improved throughout this period, and you can see in the table below that the total tickets reviewed has decreased by approx. 50% which results in savings.

Table 2i. Data Fix Review Criteria
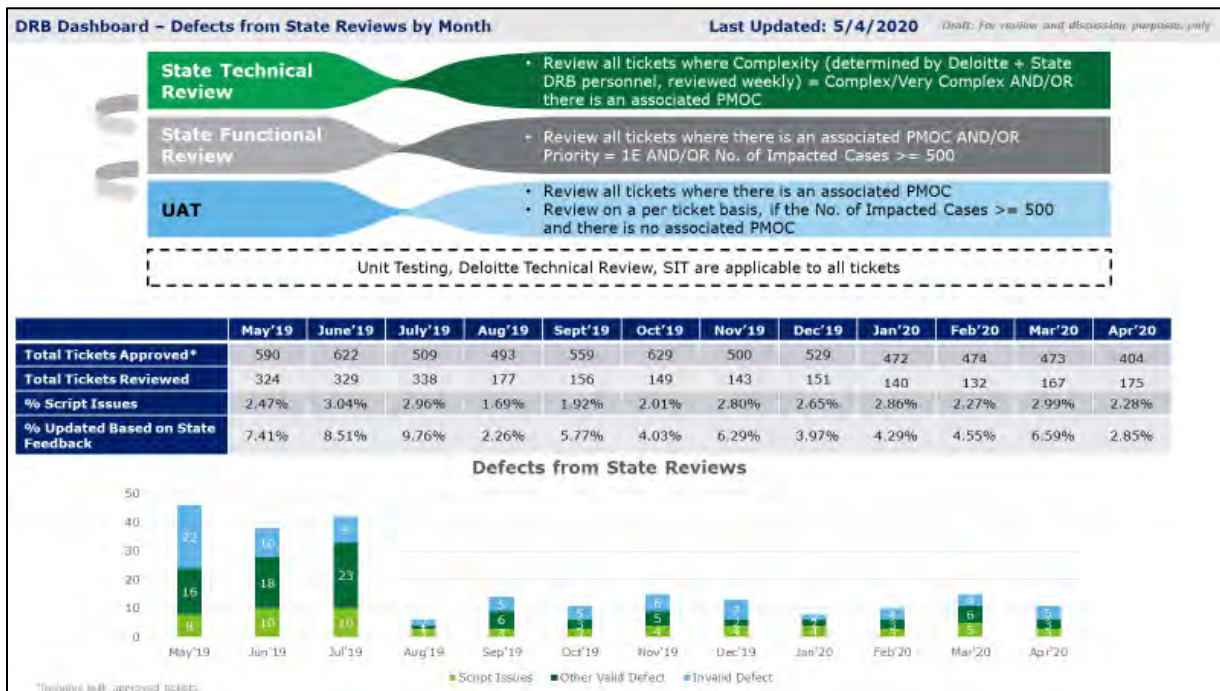
Operations Control Committee (OCC)

The purpose of OCC is to govern actual operations of the RIBridges system itself. Batches and interfaces are executed periodically (nightly, weekly, monthly, etc.) and the OCC is responsible for providing oversight for production operations through coordination and monitoring of batches and interfaces in support of the RIBridges system. The OCC was officially established in FFY 2019 but real maturity was achieved in FFY 2020.

A refresh of batch execution reporting (both daily and weekly) has been completed and allows the team to better monitor and communicate about batch issues and successes. Additionally, the annual special batch calendar continues to be maintained and worked actively. This process has been enhanced by the addition of a batch scorecard slide which is presented at the Issue Resolution Committee (IRC). A sample of the batch scorecard is provided in Table 2j. The batch scorecard documents the steps being taken to reach production execution readiness and the status of each. These steps are primarily comprised of dry

runs/testing and operational readiness activities. The committee is now considered mature although refinements to associated reporting and monitoring processes continue to be made on an as needed basis.

Table 2j. Batch Scorecard

Executive Batch Approvals – Annual Batches (1 of 2)
As of July 3, 2020

Draft: For review and discussion purposes only

Scorecard: Batch Readiness Status

Batch	Planning	Dry Run 1	Dry Run 2	Dry Run 3	Dry Run 4	OCC Approval	Executive Approval	RPC Update	Production Run	Stabilization/Notice Generation
LTC Annual Minimum Monthly Maintenance Needs Allowance	Complete	Complete (6/15 - 6/26)	N/A			Complete (6/22)	Complete (6/23)	Complete (6/25)	Complete (7/1)	N/A
Clothing Allowance	On-Track	Complete (6/22 – 7/1)	Not Started (7/15 – 7/24)			Not Started (7/27)	N/A	Not Started (7/30)	Not Started (7/31)	Not Started
RIDE Annual	On-Track	Not Started (7/26 – 8/8)	Not Started			Not Started (8/17)	N/A	Not Started (8/20)	Not Started (8/22)	Not Started
SNAP FPL	On-Track	Not Started (7/13 - 7/31)	Not Started (8/3 - 8/21)			Not Started (8/24)	Not Started (8/25)	Not Started (9/3)	Not Started (9/5-9/6)	Not Started (9/9 - 9/10)
Auto Renewal Batches	On-Track	Not Started (7/20-8/7)	Not Started (8/17-8/28)	Not Started (9/7-9/25)	Not Started (9/28-10/2)	Not Started (10/5)	Not Started (10/6)	Not Started (10/8)	Not Started (10/10-10/11)	Not Started
1099 For Child Care Provider	On-Track	Not Started	Not Started			Not Started	N/A	Not Started	Not Started (December)	Not Started

Key Updates

Summary
- LTC dry run started 06/15 & validation complete.
- Clothing Allowance Dry Run 1 & validation complete.
- Confirmed file transfer with RIDE trading partner and are on track for dry run beginning 07/26.
- Auto Renewal Production Run dates are tentative. Dry Run 3 is dependent on real plan data becoming available.

Status Key: **G** On-Track **Y** At Risk **R** Off-Track-but Recoverable **R** Off-Track-Decision Needed **C** Complete – Planned Start **H** On Hold ◆ Gate ◆ Go/No Go

Source: Project Runway, Outputs from IT Governance, and JIRA

23

Executive Batch Approvals – Annual Batches (2 of 2)
As of July 3, 2020

Draft: For review and discussion purposes only

Scorecard: Batch Readiness Status

Batch	Planning	Dry Run 1	Dry Run 2 (if Needed)	Dry Run 3 (if Needed)	OCC Approval	Executive Approval	RPC Update	Production Run	Stabilization/Notice Generation
COLA	On-Track	Not Started (10/5-10/16)	Not Started (10/24 - 11/19)	Not Started (11/23 - 12/4)	Not Started (11/2 & 12/7)	Not Started (11/10 & 12/8)	Not Started (12/10)	Not Started (12/12)	Not Started (12/16 – 12/17)
Year End Batches	On-Track	Not Started	Not Started		Not Started	N/A	Not Started	Not Started (12/31)	Not Started
Income SWAP Batches	On-Track	Not Started	Not Started		Not Started	N/A	Not Started	Not Started (12/31)	Not Started
1095A	On-Track	Not Started	Not Started		Not Started	N/A	Not Started	Not Started (1/4-1/31, 2021)	Not Started
1095B	On-Track	Not Started	Not Started		Not Started (1/25)	N/A	Not Started (1/28)	Not Started (2/1-2/7, 2021)	Not Started
Medicaid FPL	On-Track	Not Started	Not Started		Not Started	Not Started	Not Started	Not Started (March, 2021)	Not Started
CCAP FPL	On-Track	Not Started	Not Started		Not Started	Not Started	Not Started	Not Started (March, 2021)	Not Started

Key Updates

Summary
- 1095B pending guidance from IRS schema XML or notice changes (typically received around the first week of September).
- Medicaid & CCAP FPL under review for merging of processes.

Status Key: **G** On-Track **Y** At Risk **R** Off-Track-but Recoverable **R** Off-Track-Decision Needed **C** Complete – Planned Start **H** On Hold ◆ Gate ◆ Go/No Go

Source: Project Runway, Outputs from IT Governance, and JIRA

24

Improved Problem Management

After implementing significant improvements to the incident management process in FFY 2019, we launched a new initiative called Problem Management 2.0 (PM 2.0) in FFY 2020. The focus of PM 2.0 was to build upon the incident manage processes with three main goals in mind:
1. Fix the average problem ticket faster (i.e. reduce the time-to-market)
2. Fix the most urgent problem tickets fastest
3. Meet defined backlog burndown projections as detailed in the CY2020 annual plan

The charter for this initiative is shown below in Table 2k.

Table 2k. Problem Management 2.0 Charter

Significant progress towards these goals have been achieved using a range of different strategies, each of which will remain in place going forward including the following:
- Increased stratification within severity levels to allow for better identification of the most urgent tickets
- More flexibility in scheduling problem tickets based on urgency
- Weekly meetings between Deloitte and the State (PMO Lead, Agency Leads, Agency Project Managers, Release Manager) to review the problem ticket inflow to ensure that any necessary action is taken for the backlog of tickets
- Continuous root cause analysis and solutioning of problem tickets to accelerate release scheduling
- Implementing changes to JIRA to allow tickets to be escalated by the Theme Teams or by the

Joint Triage Team
- Improved management and executive-level reporting including JIRA dashboards to monitor progress towards the goals outlined above

Due to the increased rigor provided by the PM 2.0, there is more transparency regarding the status of each defect in the backlog and tickets are being actively managed through the end-to-end problem management process. As a result, the problem ticket backlog has declined to the lowest levels to date with the majority of those tickets already scheduled for upcoming monthly patch releases (~78%).

Establishment of the Release Management Plan

In collaboration with the vendor, the team created a new work product called the Release Management Plan to comprehensively and cohesively document all aspects of UHIP's release management processes, including Annual Planning, Ongoing Business Prioritization, and end-to-end release-specific SLDC activities to Plan, Build, Test, Prepare, Deploy, Validate, and Close each release. For the most part this was an exercise of presentation rather than process improvement, given that each component of the plan was already in place and documented elsewhere. However, the team identified two opportunities for process improvement during the creation of this document: 1) Information Management Releases and 2) Post-Release Validation + Closure; these items are covered more detail in the remainder of this section. The Release Management Plan is a living document which will continue to be updated periodically, and as necessary, by the combined Release Management team (including the State, Deloitte, and other vendors). The document complements and does not replace the Test Management Plan created in FFY 2019.

Table 2l. Graphic Table of Contents for the Release Management Plan
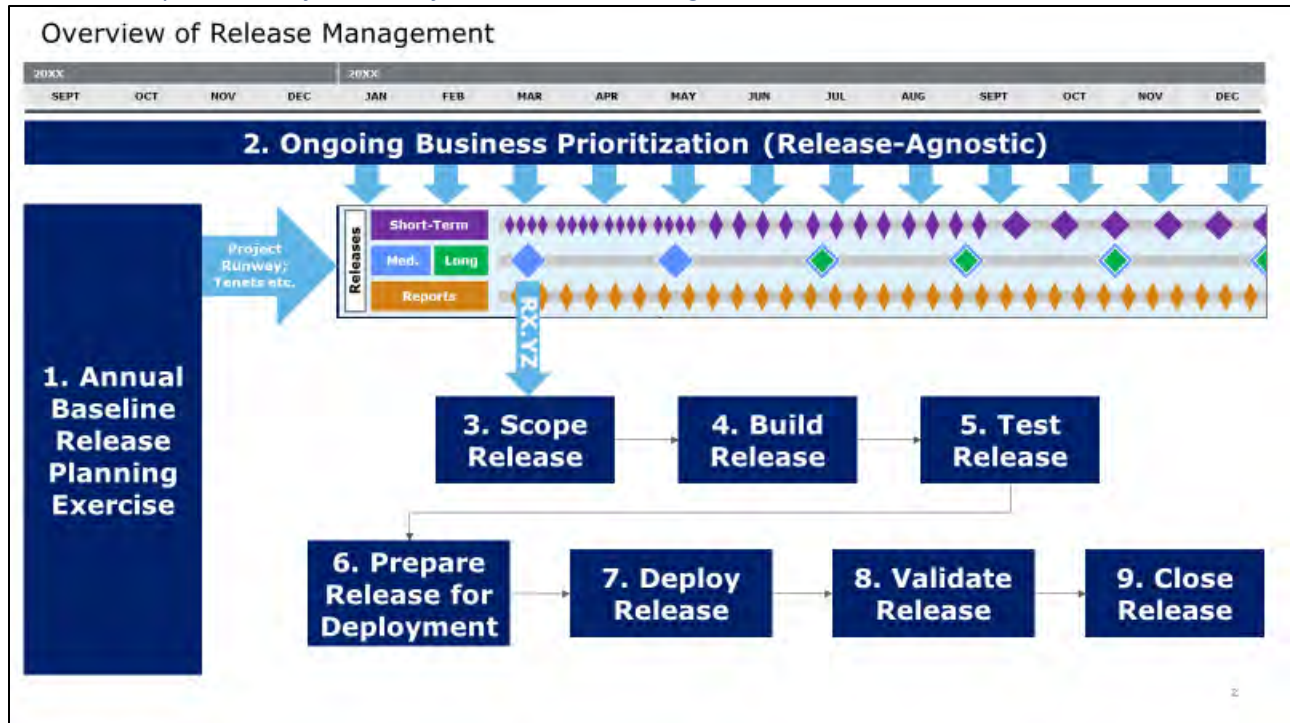
Improved Governance of Information Management Releases

Changes have been made to align the deployment of Information Management (IM) releases including IM Reports and Tableau Dashboards to the standard project governance forums and release management processes which govern application development. The changes have enabled timely delivery of enhancements and defect fixes through improved oversight and adherence to schedules and budgets. One of the key process improvements included incorporating Information Management Releases within the month-by-month status scorecards which are presented at IRC and included in the Executive Status Report (ESR). In addition, the status of User Acceptance Testing of IM releases is being managed more effectively via the daily UAT status meetings. Finally, the Maintenance Prioritization Committee (MPC) manages scope changes and the Release Planning Committee (RPC) manages schedule changes just as they would for any other release.

Enhanced Process for Post-Release Validations + Closure

Significant changes were made to the Stabilization Phase of the SDLC including the addition of more robust post release monitoring. Specifically, for the December 2019 Major Release, each system change was reviewed in detail by the Joint IT team and a detailed plan was developed to ensure validation steps were clearly outlined and requirements for appropriate levels of system monitoring were defined and documented. These plans included setting aside cases for validation, executing more than 20 specific SQL scripts, and performing substantial offline review of sample cases identified by the monitoring scripts. After the release was deployed to production, this approach enabled the joint team to complete validations of the release in a significantly expedited fashion. This led to the early detection of post-

release issues allowing for quicker resolution and preventing or minimizing business disruptions. After piloting the process changes with the December Major Release, these best practices are now part of the ongoing Release Management Processes for all patch and major releases.

In addition, new ticket closure procedures have been implemented for BRRs and problem tickets to ensure tickets are closed in a timely manner. The intent is for changes to be evaluated based on planned validations and post-release monitoring so that any issues are found as quickly as possible immediately following the release. This also allows these defects to be tracked as warranty defects.

Overall System Status

Overall, RIBridges moved substantially closer to system maturity in FFY 2020. The following table provides an overview of the program areas included in RIBridges, split between Phase I and Phase II. These programs are color coded by level of system maturity and substantial compliance with federal and State law and regulation. Programs coded as green are considered mature as of the end of FFY 2020. This indicates a baseline of functionality upon which the State may continue to build in the interest of compliance or other business priorities, like cost-effectiveness. Programs coded in yellow have made major advancements towards maturity but require certain system stabilization efforts to achieve the full baseline functionality of a mature program. Finally, programs coded as red are programs that require significant effort to achieve baseline functionality. As of late FFY 2020, there are no programs classified as red and one program classified as yellow.

Table 2m. RIBridges Program Components
Table Key: Green = Mature Program, Yellow = System Stabilizing

RIBridges	
Phase I	**Phase II**
Qualified Health Plans (QHP)	Special Medicaid
MAGI Medicaid – System Administration	Children's Health Insurance Program (CHIP)
	Long Term Service and Support (LTSS)
	RIteShare
	Medicare Premium Payment Program (MPP)
	Supplemental Nutrition Assistance Program (SNAP)
	Rhode Island Works (RIW)
	Child Care Assistance Program (CCAP)
	General Public Assistance (GPA)
	State Supplemental Payment Program (SSP)

The following programs changed from a category of red to green: LTSS and Medicare Premium Payment Program (MPP). In addition, the SNAP, CCAP and Special Medicaid programs changed from yellow to green. Major Releases in December 2020, February 2021, and August 2021 will deliver additional enhancements for the RIteShare program along with continued improvement for Medicaid programs. As noted previously, some key defect fixes are underway for the RIW program and analysis is in progress to

identify other potential gaps that may still need to be addressed before the KPI target is met. Continued resource support for this project will be essential to obtaining the overall goals and objectives of UHIP.

3 STATEMENT OF NEEDS, OBJECTIVES, AND PROPOSED ACTIVITIES OF THE IAPD

The objective of UHIP in Rhode Island has remained constant over the life of this significant project. Broad goals such as realizing near universal health coverage, improving and modernizing access to human service benefits, improving accuracy and timeliness of provider payments, and creating a no-wrong door approach for Rhode Island families to access services remain as guiding principles of this work. The activities, plans, and resource requests contained in this IAPD are intended to further advance UHIP towards these overarching goals, while capitalizing upon improved system stability to further enhance and modernize the RIBridges system while working within the well- established governance processes.

Sections 6, 8, and 10 respectively lay out the detailed contractor, personnel, and budget requests for the upcoming federal fiscal year. Section 7 of this document provides an overview of the project management and governance processes that are currently in place to ensure that as the needs are fulfilled, they are done in a way that is efficient, effective, and well-managed. These needs are divided between RIBridges priorities and project management priorities as listed below:

Table 3a. UHIP Project Plans for FFY 2021

Rhode Island UHIP Project			
RIBRIDGES		Project Management	
Business Functions	Technical (System Functions)	Administration	Process
Increase RIteShare Enrollment	Oracle Policy Automation (OPA) Upgrade	Procure M&O Vendor	Evaluate Iterative / Agile Methodologies
Enhance Medicaid Eligibility	Upgrade IBM Security Access Manager (ISAM) product and IBM Security Identity Manager (ISIM) platform		Refresh Governance Framework
Improve SSI Processing	Upgrade Security information and event management (SIEM) Capabilities		Improve Development Management (DMM)
Improve SNAP Payment Accuracy	Implement Host-based Intrusion Detection and Prevention System		
	Tableau Upgrade		
	Virtualization Platform Upgrade		

RIBridges – Business Functions

The State will continue to capitalize on overall system stability to deliver enhancements to maintain system compliance, improve the customer experience, establish efficiencies for workers, and reduce the ongoing cost of maintaining and operating the system. Please note that the expected investment in major enhancements in FFY 2020 is significantly reduced from prior years. In addition, implementing the OPA Upgrade will require significant effort across the Joint IT Team.   As a result, the State will remain focused on a few, very specific areas in allocating Major Release scope.

Table 3a above lists the key business outcomes that will be delivered in FFY 2020, each of which is described in more detail below. These outcomes will be delivered over the course of three major releases and a series of patch releases as described in Section 4.

Increase RIteShare Enrollment

Increasing participation in the RIteShare program is an important goal of the plan for FFY 2021. The ultimate outcome of this work is to increase RIteShare enrollment by addressing the following areas:

- Increase efficiency of new or renewed plan/rate information in the system through automation of processes.
    - o Enhancements will be made to provide the ability to automatically upload plan information, cost effectiveness, and pay levels via a template directly to RIBridges. Moreover, the system will notify employers via notices of the updated means of submitting plan information (RS-19, RS-29, RS-05). In addition, employers will be notified of upcoming renewal plans 90 days ahead of their end date.
    - o Improvements will be made to the efficiency of receiving information from employers and to reduce overall notice volume to employers and customers. The system will be enhanced to allow the provider notice (RS-27) to be electronically indexed and available in RIBridges. Enhancements to the existing notices will be made to improve the readability and accuracy of the communication.
- Increase client enrollment based on an existing employer in the system
    - o The system will be enhanced to allow users across Customer Portal, Data Collection, and Provider Management workflows to search for employers using an updated search algorithm based on Name (including Doing Business As/ Also Known As), Federal Employer Identification Number (FEIN), and Address information, in order to improve all users' ability to find existing matching employers in the system. Additional restrictions and guidance will be implemented for the users across both Portals to limit the future creation of duplicate employer records in the system, in turn increasing the efficiency of client enrollment with existing employers.
    - o The DLT batch logic with be updated to improve the align the file matching logic to the enhanced screen Search Algorithm and similarly be based on Name (including Doing Business As/ Also Known As), FEIN, and Address. This will ultimately allow the DLT batch to find better matches to existing employers and maintain the most up to date information in the system for their records, thus reducing the manual work needed to maintain the employer information.
    - o A comprehensive data clean-up activity will be completed in parallel to the system enhancements, including updates to existing case data to align to employers with active

rates, de-duplication of existing employer records, updates to exiting plan information for employers, etc. These activities will address existing challenges with the current system data and provide an improved foundation for the enhancements and operational processes to support the State's business need.

- Increase enrollment process efficiency for RiteShare workers
  - o Updates to the current functionality will be made to improve the Rite Share workers' ability to efficiently enroll clients and employer, by allowing them to more quickly process multiple enrollments for the same customer or the same employer and preventing unnecessary duplicative processes. In addition, system enhancements will prevent incorrect sanctions being applied when employment is terminated/deleted in the case date, thus preventing the need for repetitive work in a number of existing scenarios.

Enhance Medicaid Eligibility

Addressing ongoing CMS and Rhode Island Medicaid eligibility requirements will continue to be a focus in FFY 2021. In the December 2020 Major Release, the following items will be addressed:

- To track Early and Periodic Screening, Diagnostic and Treatment (EPSDT) customers receiving Medicaid via the DCYF office, a new type of assistance and aid category code are being introduced. DCYF workers will be able to indicate on behalf of new customers that they are part of the EPSDT population; they will subsequently be evaluated for Medicaid applying the 'EPSDT' rule base, consistent with policy. If determined eligible, the customer's information, including the new aid category code, will be sent downstream to the MMIS.
- To increase termination accuracy, Medicaid Eligibility Rule updates are being made to prevent the entire Household from being denied Medicaid benefits due to an individual in the household failing to provide verification for Death. In situations where the Head of the Household has an unverified Death Date, notice updates are being incorporated to provide an update to the Household notifying them to report a new Head of Household should there be a change in the status of the existing Head of Household as this may have an impact on their benefits.

The Medicaid Program team will continue to review and prioritize other eligibility related enhancements through the release planning process. Many of these changes are expected to be delivered through monthly patch releases.

Improve SSI Processing

Rhode Island's current processing of SSI is inefficient. These issues have become a high priority to be addressed in full in FFY 2021 as part of the December 2020 Major Release. Per the SSI Processing Roadmap, enhancements will be made to the system to improve various areas within the end-to-end business process associated with SSI cases. A few of the key enhancements associate with this important effort are summarized below:

- Improve accuracy of State Data Exchange (SDX) Batch processing:
  - o The system will be enhanced to improve the accuracy of the eligibility outcomes determined based on the payment status codes, and Medicaid eligibility codes combinations received in the SDX file. Moreover, the SDX process will also be modified to identify auto-termination codes such as incarceration, deceased, out-of-state/country and take the corresponding termination action without triggering the Medicaid *ex parte*

process. Process improvements will be made to trigger worker tasks for the unit to transition a DCYF individual into a DCYF Medicaid case during SSI terminations.

- Updated Eligibility Determination rules for SSI Protected Classes:
  - o The Income limits, and eligibility determination rules for SSI Protected Classes such as Pickle Amendment enrollees, Disabled Adult Child and Widow(er) Medicaid will be updated to be in compliance with the federal policy. Moreover, the Pickle multiplier values were updated to match the latest values published by SSA to accurately determine the protected amount for Pickle eligible individuals.
- Improve Worker Efficiency by providing quick links for SDX/BENDEX Interface data:
  - o While processing Medicaid cases, the workers often refer to the information provided by SSA through SDX and Beneficiary Data Exchange(BENDEX) to verify the individual's latest demographic, income, and household information to update the case with relevant information. Quick links will be added to the Social Security Benefit page as a part of data collection workflow to help the workers access this information easily and efficiently without having to navigate multiple screens to look-up this data.
- Automate Processing of auto-accreted MPP individuals received from CMS:
  - o The system will be enhanced to automatically create a MPP program on the SSI case for an individual who is referred by CMS via the Medicaid Buy-in file as an auto-accrete individual. When the CMS Medicaid Buy-in batch runs, the system will automatically verify the individuals SSI status, adds MPP benefits on their SSI case based on the information provided by CMS and notify the individual of the benefits added without requiring any worker intervention. Overall, this enhancement will improve the traceability of auto-accrete MPP individuals within RIBridges, reduces workload on the unit by automatically processing these cases, accurately communicates information on client's MPP benefit status to the client and provides a way to transition the individual from MPP based on SSI to standalone MPP determination.

Improve SNAP Payment Accuracy

Initial screen changes are being implemented in September 2020 to enforce required fields and produce summary screens for the worker. Additional enhancements are planned in early FFY 2021 to require eligibility workers to work all tasks associated with a case before processing eligibility to avoid ongoing case errors. These changes were identified through analysis of case errors and feedback from Supervisors and case workers.

RIBridges – Technical

Oracle Policy Automation Upgrade

Oracle Policy Automation (OPA) is the business rules engine used by RIBridges. OPA runs eligibility determination rules and returns an XML response containing the eligibility determination results. The XML response information needs to be converted and mapped to a RIBridges data structure in order to be consumed by the RIBridges code.

Current OPA version 10.4 reached end of life in March 2020 and Oracle has limited product support and no security patches for compliance. In June 2021, OPA will be upgraded from v10 to v12. This changes the way OPA functions, but it also changes the OPA XML data format which is what interfaces with RIBridges. The converting and mapping method between the OPA XML and RIBridges would entail major

changes in order to make RIBridges compatible with OPA v12.

IBM Security Access Manager Upgrade and Java/WebSphere upgrade for IBM Security Identity Manager

RIBridges applications leverage IBM Security Identity Manager (ISIM 6) and IBM Security Access Manager (ISAM 7) products for user provisioning and application access management. Of these two products, ISAM 7 reached End of Support (EOS) in September 2018, whereas ISIM 6 continues under active support. To continue support for ISAM 7, IBM offers Extended Support (ES) for purchase annually for three years beyond the EOS date, which would require an upgrade of ISAM prior to the end of the third year. Extended Support has been procured until November 2020. Also, Java and WebSphere Application Server version of ISIM 6 will have be to be upgraded to maintain security compliance. In October 2020, ISAM will be upgraded from version 7 to version 9 and ISIM 6's platform will be upgraded to WebSphere Application Server v9 and Java v8.

Upgrade Security Information and Event Management (SIEM) Capabilities

UHIP currently uses IBM QRadar for Security Information and Event Management (SIEM). In September 2020, QRadar's license and capabilities will be expanded to monitor all infrastructure systems in the path of FTI traffic per IRS requirements. In September 2020, IBM QRadar Vulnerability Manager (QVM) will be set up to sense security vulnerabilities and prioritize remediation activities. QVM will be fully integrated with the expanded QRadar Platform to use advanced analytics to enrich the results of vulnerability scans to lower risk and achieve compliance by correlating vulnerability data with network topology and connection data to intelligently manage risk. A policy engine will automate compliance checks. QVM will help with the development of an optimized action plan to address security exposures to work more efficiently and decrease costs. In September 2020, QRadar Risk Manager (QRM) will be set up to alert about risks by querying all network connections, compare device configurations, filter network topology, and simulate the possible effects of updating device configurations. A set of policies will be defined about RIBridges network and will be monitored for changes. This is an IRS compliance requirement.

Implement Host-based Intrusion Detection and Prevention System

In FFY21, TrendMicro Deep Security will be installed on virtual machines for host-based threat detection and prevention, rogue software process detection, unauthorized software process detection. This is an IRS compliance requirement. TrendMicro Deep Security will also replace the current anti-malware/anti-virus product, Symantec End Point Protection, in UHIP.

Tableau Upgrade

UHIP uses Tableau as the data visualization platform for dynamic and customized analytics to prioritize and target cases for worker action. The current version of Tableau Server will reach end-of-life in February 2021 and will be upgraded in February 2021 to the latest version to maintain patch and security compliance.

Storage (Primary & Backup) Expansions

As the UHIP system matures, more data is being retained in its databases and document repositories. Per IRS compliance, data needs to be retained for minimum 7 years. The UHIP system has four types of data repositories: transactional processing database, document management repository, reporting

database, and analytical processing database, which are all seeing terabytes of growth per year. Similarly, the non-production environments used for active development and testing are growing at similar rates as they are a copy of production data. Capacity analysis projects that the utilization will be at 85% by June 2021 for both its primary storage which serves these databases as well as the backup storage which stores VM-level images, audit logs, and backed up Database copies. Capacity for both primary and backup storage appliances will be expanded in August 2021.

Virtualization Platform Upgrade

VMWare vSphere is used as the virtualization platform for UHIP to efficiently manage and utilize available physical resources available through 27 Cisco UCS physical servers. The current version of VMWare vSphere will reach end of life in November 2021. In October 2021, vSphere platform, the management center, as well as the underlying Cisco UCS firmware will be upgraded for security patch compliance and for continued technical support from the vendor with no additional cost.

Project Management

Evaluate Iterative / Agile Methodologies

UHIP currently adheres to a waterfall SDLC and will continue to do so throughout FFY 2021. However, in pursuit of ultimately being able to deliver software changes in a faster and more flexible manner, the Joint IT Team will evaluate and pilot the use of certain principles of agile software development on select projects including the RIteShare program enhancements and the Tableau Dashboard enhancements during FFY 2021.

The team is currently evaluating and / or piloting the following Agile principles:
- Allowing the business to view prototype or partial functionality earlier in the SDLC
- Enabling parallel and continuous SIT + UAT testing
- Establishing product owners for both State + Deloitte
- Maintain a product backlog mapped to user stories
- Increasing the frequency of meetings and a more collaborative team structure
- Delivering problem ticket scope iteratively to allow more flexibility in addressing urgent tickets faster

The results of these pilots will be evaluated by the Joint IT Team and may ultimately result in recommendations for go-forward changes to our standard SDLC.

Refresh Governance Framework

The robust governance framework that is currently in place across UHIP has been highly successful in leading the project team through a time of significant instability and change. It is extremely comprehensive and intentionally "heavy handed" because when at the time it was developed the structure was needed to move the project forward. The State has even leveraged many of the concepts and principles from the UHIP governance model across other projects.

As the system continues to remain stable and the rate of change is significantly reduced, the plan is to revisit the existing governance model to identify opportunities to work more efficiently while maintaining the appropriate levels of oversight. This initiative is expected to begin in Q3 2020. All

proposed changes will be reviewed and approved by the Executive Committee before they are implemented.

Improve Development Management (DMM)

The Joint IT Team continues to work on improving the quality of releases through the recent formulation of the Development Management Meeting (DMM). The objectives of the DMM are outlined below in Table 3b. The DMM will continue to meet on a bi-weekly basis to discuss and implement improvements to the development process by conducting post mortems after releases, evaluating Root Cause Analyses (RCAs) of production issues and gathering valuable input from the development staff.

Table 3b. Objectives for Development Process Improvement

Objectives for Development Process Improvement

- Reduce defect leakage into SIT, UAT
- Coverage for module level unit testing in addition to functional unit testing
- Comprehensive review of Unit Test cases, RCA and Solution by the Development Leads
- Extend coverage of Unit Test cases
- Tracking/Logging of code review defects and root cause analysis of the same for continuous improvement
- Additional SME reviews for critical component changes
- Review framework level changes impact by ARB
- Tracking/Monitoring of UT defects
- Release retrospective meetings
- Update developer guideline, checklists based on release retrospective findings

One of key improvements the team has already implemented includes the Quality Scorecard shown in Table 3c which tracks the defect leakage across the different phases of development. This will continue to be an important tool in evaluating the impact of improvements on the quality of development.

Table 3c. Sample Quality Scorecard

Quality Scorecard (as of 6/26/20)

Draft: For review and discussion purposes only

- In the past IM defects have been included in the Quality Scorecard metrics, but going forward IM will be reported separately
- The Joint IT team agreed to revise the SIT to UAT Leakage Calculation by changing the formula denominator to "Valid SIT defects"

Major Releases

Release	Release Scope	Number of Test Cases				New Defects Found and Fixed During Testing (Sev 1-3 Valid coding-issue and valid-functional coding issue)							Post-Implementation Defects	
		Unit	SIT	UAT	Total	Unit	SIT	Unit to SIT Leakage	UAT	Revised SIT to UAT Leakage	Previous SIT to UAT Leakage	Total	Total	Defect Leakage
R7.29 (3/20)	# BRR: 4 # Req in BRR: 21 # of PT: 43 # of Req changed: 8	405	902	646	1953	52	105	34.2%	31	22.8%	11.4%	188	19	7.7%
R7.30 (7/17)	# BRR: 9 # Req in BRR: 57 # of PT: 50 # of Req changed: TBD	802	1378	807	2180	185	30	9.9%	5	14.3%	1.0%	216	N/A	N/A

Patch Releases

Release	Release Scope	Number of Test Cases				New Defects Found and Fixed During Testing (Sev 1-3 Valid coding-issue and valid-functional coding issue)							Post-Implementation Defects	
		Unit	SIT	UAT	Total	Unit	SIT	Unit to SIT Leakage	UAT	Revised SIT to UAT Leakage	Previous SIT to UAT Leakage	Total	Total	Defect Leakage
R7.29.1 (4/17)	# BRR: 6 # Req in BRR: 13 # of PT: 100 # of Req changed: 12	793	1329	779	2901	67	31	21.2%	6	16.2%	4.3%	104	1	0.8%
R7.29.2 (5/15)	# BRR: 4 # Req in BRR: 9 # of PT: 109 # of Req changed: 2	988	1514	715	3217	77	29	16.2%	4	12.1%	3.4%	110	1	0.8%
R7.29.3 (6/26)	# BRR: 3 # Req in BRR: 11 # of PT: 87 # of Req changed: 3	970	1229	754	2953	157	23	9.8%	3	11.5%	1.9%	183	N/A	N/A

Dev to SIT Leakage: < 25% | 25 – 40% | >40%   SIT to UAT Leakage: < 20% | 20 – 30% | >30%

4 REQUIREMENTS ANALYSIS, FEASIBILITY STUDY, AND ALTERNATIVE CONSIDERATIONS

The Annual Release Plan for FFY 2021 was finalized early in the fourth quarter of FFY 2020 following the completion of the annual planning processes described in Section 7 of this document. This plan will allow the State to maintain system compliance and capitalize upon the improved stability of the system. The plan was built around a major technical upgrade to the OPA software which is planned for June 2021. This is a significant upgrade to the system, so the release plan accounts for limited changes to the system in early 2021 to allow for ample testing of OPA and to reduce unnecessary risk. The plan also supports the primary business objective of increasing enrollment in the RIteShare program through a series of enhancements to be delivered across the Major and Patch Releases. In addition, the plan takes into account activities that may be required to fully recover from the system mitigations implemented in response to the COVID-19 pandemic during Q2 and Q3 of 2020.

The FFY 2021 Release Plan will be maintained through the governance structure that is described in detail in Section 7 of this document and should be considered in conjunction with the overall governance structure that was implemented starting in FFY 2019 and remains fully functional today. This governance structure is described in detail in Section 7 of this document. The following table provides a high-level overview of the plan:

Table 4a. FFY2021 Release Plan
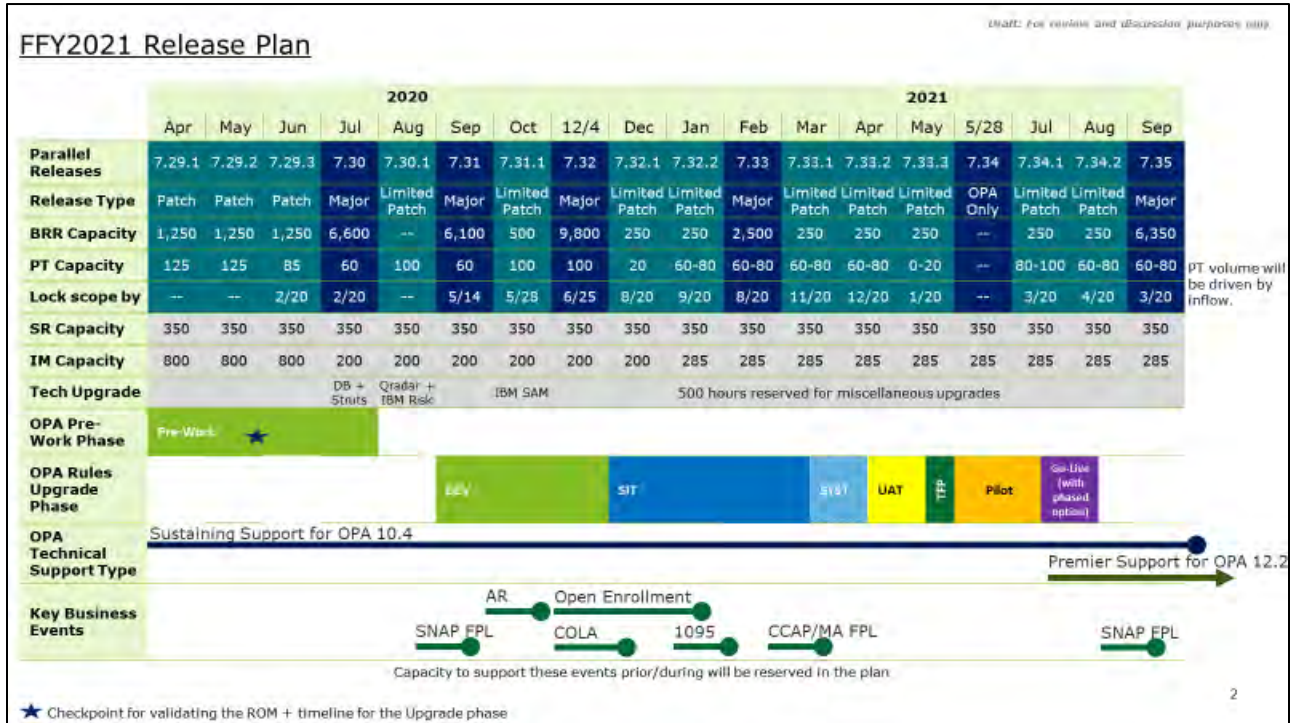
The IT feasibility of this release plan was verified by the Joint IT Team after estimations were completed for each of the outcomes listed in Section 3. Special care was taken to plan around the major OPA Upgrade planned for June 2021 given that eligibility changes made during the upgrade period may carry additional risk and would require duplicative efforts to develop across two OPA versions. The financial feasibility of the plan was verified by the State finance team and is detailed in sections 9 and 10 of this document.

5 COST BENEFIT ANALYSIS

The State of Rhode Island is committed to implementing this project in compliance with federal and State law and regulation for UHIP programs served by the RIBridges system. An overall cost analysis of the UHIP project was conducted at the project inception. The State's commitment to this project has not changed or wavered.

In addition, to the overall cost analysis that was originally performed, the State has also made a commitment to responsible spending and financial management throughout the life of the project. To this end, a robust project governance structure has been developed that allows for prioritization and cost analysis at each step in the project plan and annual budget development. This governance structure is discussed in much greater detail in section 7; however, the following examples are provided as evidence of this structure in relation to cost analysis and sound financial management of the project.

1. Between 2017 and 2019 the State was involved in active negotiation with its System Integrator (SI), Deloitte. This negotiation centered around the delivery issues with RIBridges. During this time the State entertained all the available options for properly completing the system. The State contemplated switching system implementation vendors as part of this assessment. The

analysis indicated that the financial cost and the risk of system failure was too great to change vendors during that time period. Challenges with the system were used in negotiations with the SI, Deloitte, and resulted in contract amendments such as CA 47, which have allowed the project to continue to be financially feasible.

2. In addition to the overarching assessment of the system integrator costs, the State's IT governance process assesses costs of each business request that is brought forward through the governance process in the context of the annual budget and the annual cost allocation plan. The best example of this cost analysis can be found in the major release planning portion of the process. The following diagram demonstrates the overall process:

Table 5a. Major Release Planning Process
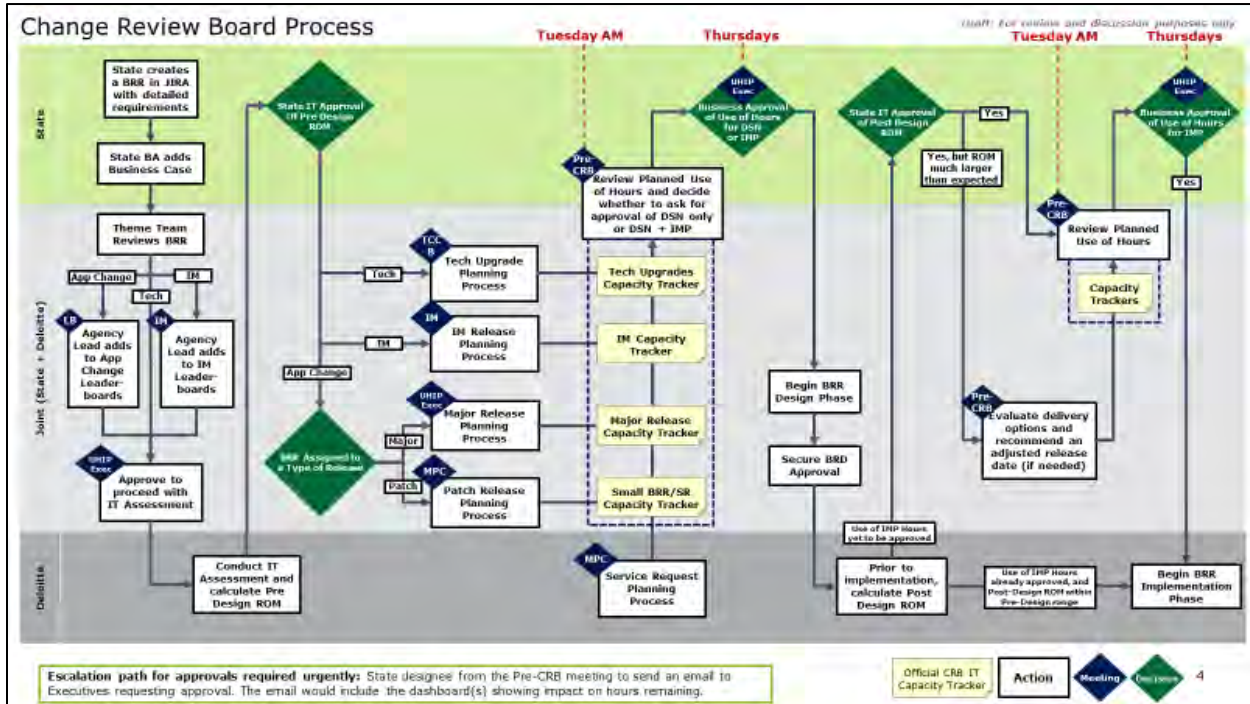
As part of the Annual Plan, BRR scope aligned to the Major Releases has already been approved by the Executive Committee. However, during the planning phase of each Major Release, the Executive Committee will re-confirm their business outcomes for the release. If a change or shift in priorities occurs, the Executive Committee may bring forward a potential scope change and direct the Joint IT Team to assess proposed change(s) to the Major Release in order to determine the impact within the annual budget and the currently approved cost allocation plan. Based on the assessment, the UHIP Executive Committee may approve a change to the Annual Plan for that specific Major Release. This process ensures that when release scope is set for each major release it not only complies with the functional themes that have been funded for the current fiscal year that it also complies with the established budget and cost allocation.

6 NATURE AND SCOPE OF ACTIVITIES

RIBridges is a complex, integrated eligibility system, which combines 8 major programs and more than 15 sub-programs into a single global system. As a result of both the inherent complexity and the initial system delivery issues, contracted resources continue to be necessary to support implementation and operations. These resources will be needed for development support and system stabilization efforts until the system reaches an acceptable level of stability and program operations. The overall goal and objective of the project is to bring the system to a state of maturity that will change both the level of effort and the nature of the resources required. The State is vigilant in its assessment of ongoing contractor needs and in their overall vendor management. As a result of the State's active management, the budget was reduced by 3.6% or $3.1M as compared to the July 2019 submission which is then adjusted for a $0.5M increase for COVID related costs. $65.7M of the overall UHIP increase is related to an additional year of costs in FFY 22.

Contractor support is necessary to ensure a quality product is received from the SI vendor (Deloitte), to mitigate system issues until they can be fully addressed, and support State staff whose primary jobs are not technological, but rather business or program focused. It is critical that the State have appropriate levels of oversight of Deloitte's work to ensure quality. State staffing and internal resource needs are addressed in section 8 of this IAPD-U.

The State continues to review of all contract support for the UHIP project and updates the plans for contractor usage going forward. During FFY 20, the State developed procured IV&V services through a public bid process and developed the M&O RFP in anticipation of the current SI contract ending in 2021. UHIP has utilized the State master price agreement with Knowledge Services to procure staff support for 15 positions. This master price agreement is based on a procurement from the National Association of State Budget Officers. At this time, the 7 positions that support UHIP IT Management and 5 positions that support EPMO have been procured through the State's and Knowledges Services processes. There are 4 positions that will support DHS, 2 of which are in the process of procurement and 2 that are expected to be procured in the next 3 months. Please see Attachment E for a full list of the scopes of work for the Knowledge Services vendors.

COVID work has been included in this request for services that were not planned or in budget for Deloitte system updates and for AHS for call center work. Both are detailed in subsequent sections. The following table shows the mapping of service areas to the IAPD-U project components framework. In addition, Attachment D, provides a mapping of contract components to these respective service areas.

Similar to last year's submission, the contractor support is organized into four service areas: UHIP IT Management; Agency Support; Executive Project Management Office (EPMO); and Finance and Administration. These service areas have also been mapped to the overall framework utilized in this IAPD-U for results, needs, and scope of activities. The following table shows the mapping of service areas to the IAPD-U project components framework.

Table 6a. UHIP Mapping of Service Areas to Overall Framework

Project Components	RIBRIDGES		PROJECT OVERSIGHT	
Sub-Components	Business Functions	Technical (System Functions)	Administration	Process
Service Areas	Agency Support	UHIP IT Management	Finance and Administration	EPMO

RIBRIDGES – Business Functions – Agency Support

The agency support service area encompasses a wide range of activities that include both Design, Develop, and Implement (DDI) related system workarounds, issue identification, and report development as well as M&O activities for contact center and general data management. Table 3a, shown in section 3, lists all of the high-level business function plans for FFY 2021. The following table provides a high-level guide to the scope of services needed for agency support of the business functions during FFY 2021:

Table 6b. Agency Support Service Area Details

Support Description	Expected Vendor(s)	DDI v M&O
IT Services for Agencies (including: incident management, leader board, etc.)	FCG and Knowledge Services (KS)	DDI
Development Operations	FCG	DDI
Report Development	FCG	DDI
Maintenance Operations	FCG	M&O
Contact Center	AHS and FCG	M&O
Data Management	FCG	M&O
Notice Production	State Services	M&O

Faulkner Consulting Group (FCG) and Knowledge Services each provide services such as the establishment of workarounds for functionality that is not yet implemented, validation of releases, and identification of gaps as reported through customer facing channels and determining appropriate solutions for those gaps.

FCG's contract also encompasses activities such as development operations, report development and production, maintenance operations, contact center oversight, and data management.

Contact Center

Automated Health Systems (AHS) provides call and walk-in center services, providing telecom and Customer Relationship Management (CRM) technology to fully support the contact center activities. This includes logging escalations for system related issues and supporting issue resolution efforts, including higher volumes and longer call times related to issues with RIBridges and UAT. FCG provides oversight resources for the contact center.

Data Management

FCG and Knowledge Services split the task of data management for the UHIP project. Knowledge Services focuses primarily on data quality while FCG supports report development.

RIBRIDGES – Technical – UHIP IT Management

Table 6c. UHIP IT Management Service Area

Support Description	Expected Vendor(s)	DDI v M&O
Architecture and Infrastructure	Deloitte	DDI
Hardware & Software	Deloitte	DDI/M&O
Application Enhancements	Deloitte	DDI
Application Maintenance	Deloitte	M&O
Hosting and Maintenance	Deloitte	70% M&O/30%DDI
IT Program Management	KS	DDI
UAT Testing	KPMG, AHS, & KS	DDI

Support Description	Expected Vendor(s)	DDI v M&O
Release Management	KS	DDI
Security	KS & CSG	M&O
IT Production, Batch, and Interface	KS	DDI
IT Infrastructure and Architecture	KS	DDI
IV&V	CSG	DDI
IT Data (DRB)	KS	DDI

Deloitte is responsible for DDI and M&O, including the following:
1. Architecture and infrastructure;
2. Application Enhancements;
3. Application Maintenance
4. Hardware and software;
5. Production hosting;
6. Electronic data collection and rules engine;
7. Plan management;
8. Financial management and health plan reconciliation;
9. Implementation and training support

Delivery, Testing and Release Management

While the State relies on the DDI system integrator for development, UHIP project managers maintain rigorous overall testing and UAT process to ensure that production-ready code is deployed into RIBridges. The process is intended to hold Deloitte accountable for the quality of their code and therefore, their releases. Testing oversight and execution activities include oversight of systems integrator testing activities (unit testing and SIT, and management and execution of user acceptance testing.) Executive oversight for testing is the responsibility of Jim Ritter, as described in section 2.

As of February 2019, the State consolidated testing support for ease of management and cost efficiency. KPMG started providing test execution support, formerly supported by NG. Starting July 2019, KPMG began interface UAT. Knowledge Services will also provide IT staff support for UAT management and reporting. AHS provides 4 to 8 testers.

In addition to code fix and BRR testing, contractors also support the testing of data scripts and fixes required for system stability. Activities in this data support group include management and support for the Data Review Board (DRB), which has oversight and approval authority across data scripts in the system, as well as script review and testing. Management of the DRB and test and script review is provided by Knowledge Services contractors.

Release management consists of release readiness preparation and execution, including release checklists, deployment playbooks, and oversight of deployments and validations. We also emphasize business readiness for release deployment through existing governance committees like the Release Planning Committee (RPC). Management of the RPC and release planning overall is provided by Knowledge Services (KS) and validation execution is supported by KPMG and KS.

Independent Verification and Validation (IV&V)

CSG serves UHIP as the IV&V vendor and provides monthly and quarterly application, database and network security assessments; security source code scan and analysis and Minimum Acceptable Risk Standards for Exchange (MARS-E) 2.0 attestations. An RFP for IV&V and security services for UHIP was approved by CMS and FNS in the spring of 2019. The procurement process is complete and a contract between the State and CSG was in effect May 2020.

IT M&O

IT M&O includes general application technical, security, and architecture maintenance. These activities are performed on a periodic basis and their planning, testing, and execution are supported in part by contract staff. KS staff support these activities as a part of the enterprise architecture group. Details of future plans for these items can be found in sections 7 and 10 of this IAPD-U. The RFP for M&O work was approved and posted July 9, 2020.

System Implementation Support in the Field

Contract staff must also remain in place to provide program support for a few critical areas. This is work that is a result of system issues and will not be necessary once the system is compliant and meeting KPIs.

Project Oversight – Administration – Finance and Administration

Much of the work in the finance and administration service area is currently performed by State employees (listed in Attachment C) as described in section 8. Contractor services are used to support State employees as follows:

Table 6d. Finance and Administration Service Area

Support Description	Expected Vendor(s)	DDI v M&O
Financial Administration and Governance	KPMG	DDI
Finance Budget Management	KPMG	DDI

Financial Administration, Governance, and Budget Management

EOHHS provides staffing for UHIP Finance that is accountable for contract oversight, procurement, budget and finance for UHIP. This internal staffing is supported by a small group from KPMG that provides direct support for UHIP Finance in terms of report development and budget tracking. In addition, this group is supporting the implementation of the target operating model. This contract is currently scheduled to run through the end of FFY 2021 (September 30, 2021).

The State's Department of Administration provides procurement support in this area with a staff person in the purchasing department.

DoIT, the State's information technology, has hired several people who provide expertise in IT vendor procurement, contracting, and oversight. Under the leadership of the State's Chief Information Officer, the Department was reorganized and a Vendor Management Office (VMO) developed. The VMO has a

Statewide IT scope, serving all departments in State government. The VMO is focused broadly on strategic sourcing, contract management, vendor management, and vendor governance across all IT projects in the State. The VMO will coordinate between legal, purchasing, agencies and vendors and is currently developing a three-tiered governance model for executive, operational, and project-level oversight.

With respect to UHIP, the VMO team is working closely with UHIP Finance to coordinate the development of VMO governance in the context of UHIP governance. The VMO is taking an incremental approach as it develops its model and as capacity allows. Examples of VMO and UHIP Finance coordination include: reassignment of contract manager roles for CSG and oversight of the Knowledge Services resource management to VMO staff; agreement on roles, responsibilities, and process related to procurement and contract management; collaboration on contract review and re-negotiation; and VMO-led M&O vendor re-procurement process. In addition, the team has produced a procurement forecast for UHIP for inclusion in ongoing budgetary planning and oversight.

Project Oversight – Process – Enterprise Project Management Office (EPMO)

The following table provides an overview of the EPMO contract support anticipated for FFY 2021.

Table 6e. EPMO Service Area

Support Description	Expected Vendor(s)	DDI v M&O
EPMO Execution and Governance Strategy	KS	DDI – 55%; M&O 45%
Business Prioritization	KS	DDI – 55%; M&O 45%
KPI Measurement & Monitoring	KPMG and KS	M&O
Theme Management	KS	DDI – 55%; M&O 45%

The State EPMO provides project management support to the theme teams, as well as to general EPMO governance activities. The primary responsibilities of the project managers (PMs) include the following:
- Monitor the inflow of new problem tickets
- Align new problem tickets to business capabilities
- Prioritize problem tickets and business capabilities
- Assess patch scope and provide feedback based on timelines
- Ensure all solutions are reviewed and approved in JIRA
- Maintain workplans to be sure tickets are solutioned according to key deadlines
- Manage the review of proposed cancellations
- Review and approve requirements for small BRRs allocated to Patches
- Identify and escalate risks and issues as needed
- Support prioritization of key enhancements
- Ensure all governance requirements are followed

Some of the key deliverables of the PMs include the following:
- JIRA Dashboards maintained for each theme
- Problem tickets aligned and prioritized to business outcomes

- Risks and Issues documented in JIRA and escalated as appropriate
- Solutions for problem tickets documented and approved
- Timely approval of document tickets
- Business cases defined as needed in BRR tickets

In addition, a limited amount of PM support is being leveraged across the PMO to assist in the day-to-day activities in partnership with the DDI vendor's PMO.

PMs are primarily sourced from KS and are aligned to the most critical themes and programs. They partner closely with the business analysts, the IT Agency Leads and the Deloitte Track Leads. The Enterprise PMO Lead, Lori Rota, is contracted through KS, formerly NG. As covered in section eight, our IT lead, Jim Ritter, is also contracted through KS, formerly NG. The State will engage in regular reviews of contract resourcing levels and make reductions to align capacity with demand. We will continue to evaluate existing project management resources.

The State does not currently plan to use contracted Business Analysts (BAs) to support agencies and program administrators throughout the SDLC process, but in the event that needs emerge due to project priorities, they would be aligned to programs within a Major Release.

The primary responsibilities of the Business Analysts (BAs) include the following:
- Determine business goals and success measures for each enhancement
- Document current end-to-end process steps and flows
- Identify design decisions requiring Executive input
- Develop scenarios and use cases
- Document requirements in BRRs and attach relevant documents and workflows
- Assist in prioritization of requirements
- Validate the requirements through "day-in-the-life" sessions
- Facilitate the review and approval of Business Requirement Document (BRD) and Functional Design Document (FDD) changes
- Help to develop the Operational Readiness Assessment
- Assist in the change management activities
- Monitor post implementation issues and facilitate project acceptance

The PMO is also providing resources to assist in KPI support, which includes reviewing samples, researching failures and producing monthly updates.

BAs have been primarily sourced from FCG and KS with certain KPI support provided by KPMG. Most have prior experience working for the State of Rhode Island or in other related roles for State or federal partners. Should the need for BAs arise, the state would procure for services and follow state and federal approval processes.

Planning for Long-Term Support Levels
Since the launch of phase two, significant progress has been made to stabilize RIBridges and ensure Rhode Islanders have timely access to benefits. Further stabilization and maturity continue to be a focus, along with achieving compliance with federal and State requirements. The State developed an overall

framework for resource planning that is based on system development estimates. A process is in place to assess the budget compared to actual spending and to review ongoing project resource requirements. State leadership reviews and controls costs while meeting operational needs on the UHIP project. This requires ongoing analysis and decision-making. The State will continue to explore opportunities to pare down contracts and shift to State resources whenever possible.

7 PROJECT MANAGEMENT, PLANNING, AND PROCUREMENT

As described in Section 2, the State has taken the sound project management foundations laid in FFY 2019 and continued to refine them throughout FFY 2020.   The latest governance forums, artifacts, and processes are described in detail in the remainder of this section. These materials will continue to be maintained in the appropriate SharePoint repository and governed through the standard approval processes.

Project Governance Forums

The project governance structure shown below remains in place. All aspects of the project remain fully accountable to the Executive Committee, for which the Executive Project Management Officer (EPMO) acts as a liaison. The EPMO is responsible for working with both the UHIP finance team and the technical/theme teams to ensure that the Executive Committee is properly informed and able to make educated decisions. The UHIP Executive Committee is responsible for all aspects of Contract Management and now reviews status against Contract KPIs, SLAs, Fixed Price Obligations, Hourly Services Progress, and Key Staff Changes on a monthly basis.

Figure 7a. Attachment C from Contract Amendment C47
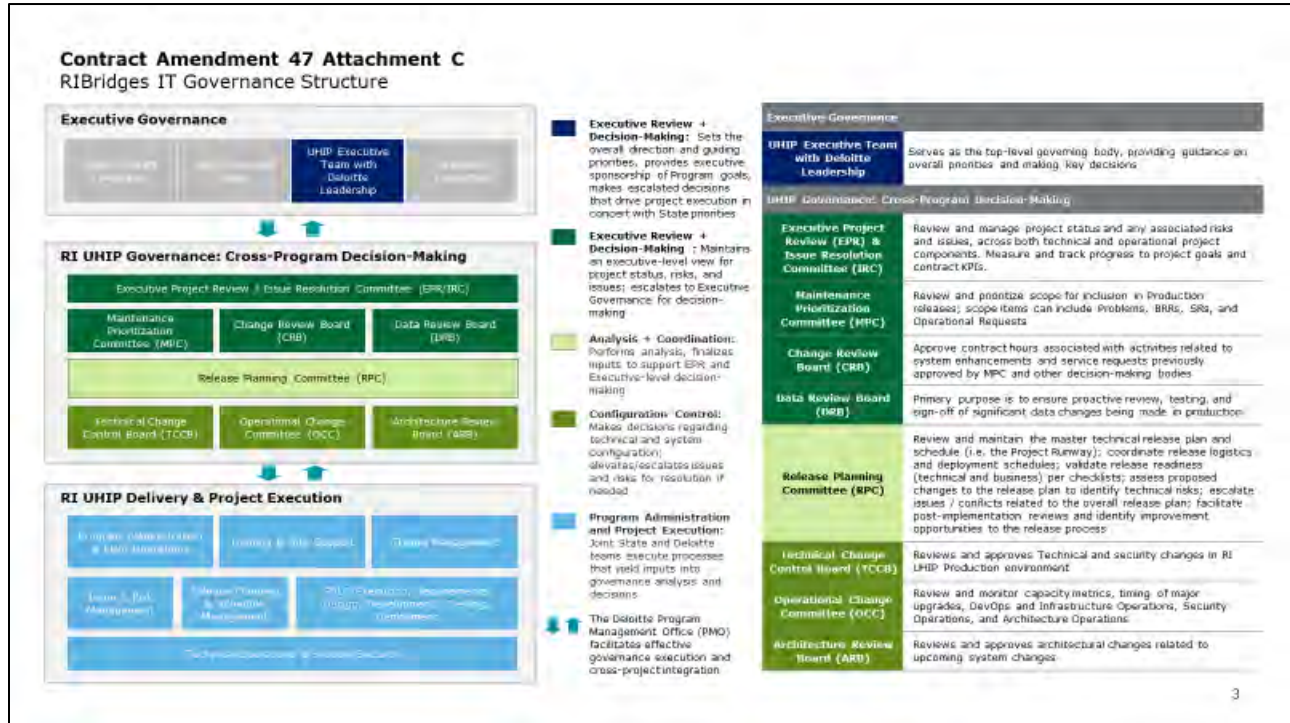
Project Governance Artifacts

The State has numerous means of tracking project status and system health on a daily, weekly, and monthly basis. The following are just a few of the artifacts generated to inform key stakeholders:

- **Executive Status Report:** The weekly executive status report provides a summary-level review of the project and publishes key progress updates for the week including metrics associated with tracking business outcomes, impacted cases, and problem management. It also provides a summary of the status of each release and highlights key action items and risks or issues.
- **Daily, Weekly, and Monthly IT Metrics Reports:** These reports contain the detailed metrics + indicators which give management-level stakeholders the information they need to closely monitor project + system health. Examples include batch execution metrics, page crash + DB error counts, application performance, as well as backlog/inflow/outflow analysis for incidents, problem tickets, and data fixes. The monthly reports are accompanied by executive-level insights into how any why the metric has changed over the course of a given month.
- **Monthly Contract Report:** The monthly contract report demonstrates adherence to every line item in CA 47, lists all work products delivered in the past month, reports against hourly-based services progress within each CRB budget, notes any key staff changes, and provides measurements for all Contract KPIs and Contract SLAs. A summary of this report is presented at the UHIP Executive Meeting with Deloitte.
- **JIRA Release Dashboards:** A JIRA dashboard is developed for each release to track scope proposals + approvals. The dashboard shows real-time changes to any tickets associated with a release. Teams use these dashboards to track the status of every component within the release.
- **Project Runway:** The runway depicts the schedule for all approved project scope. The project

runway is reviewed weekly at Release Planning Committee (RPC).
- **Post-Implementation Evaluation Review:** After each release, Deloitte produces a report that evaluates the implementation and whether the objectives of the release were met. The report references key metrics and contract KPIs to measure the impact to the business.

Project Governance Processes

As discussed in Section 2, the Release Management Plan was developed over the course of FFY2020 in order to document all release management processes in a single location. The following excerpt from this document addresses annual planning, ongoing business prioritization, and scope approval.

Release Planning & Governance

The purpose of this section is to describe the governance and related processes concerning establishment and maintenance of the overall release plan (inclusive of the project runway).

Annual Planning: Extending the Project Runway
The Project Runway defines the available release windows and associated deadlines for all application releases, technical upgrades, and major operational activities scheduled to take place in a given calendar year. The runway reflects the alignment of business needs (mandates, operational improvements, etc.), maintenance activity (scheduled and unplanned) with budget and resources. As such, the management of and changes to the Project Runway are executed through strict governance processes.

On an annual basis, the Joint IT Team works to create the overall release plan, which results in the extension of the Project Runway into the next calendar year. The method by which the plan is developed (i.e. the inputs to the process) are as follows:
- On an annual basis, State executives define strategic priorities inclusive of federal, State and other legal mandates as well as key desired operational efficiencies. The Joint IT Team is then tasked with developing a release plan which, at a minimum, provides the State the ability to implement critical business and tech upgrades/enhancements when required and within the appropriate risk tolerances and defined budgetary guidelines.
- The Joint IT Team revisits the existing release tenets on an annual basis to evaluate whether any have lost relevance, and therefore need to be removed or edited, or whether the events and learnings of the past year have prompted the need for additional tenets.
- The Joint IT Team then consults across the project to identify any critical tech upgrades or system enhancements that must be implemented throughout the course of the next calendar year in order to keep the system operational. These activities are scheduled according to their critical deadlines before other potential upgrades or enhancements are considered for inclusion within the scope of the baseline release plan.
- In accordance with the tenets that have been established and considering both the strategic priorities of the project as well as State + Deloitte + Third Party resource constraints, the Joint IT Team develops a proposal for the type, frequency, capacity, and lifecycle of releases which take place throughout the year. Specifically, the plan determines, for each type of release (e.g. patch or major), how often the release will take place, when it will take place, how many enhancements (in terms of hours) or defect fixes it will contain, the duration of each phase of

the SDLC, and any features of the release which differ from standard Release Management.
- The UHIP Executive Committee reviews and approves the annual release plan (specifically the extended project runway and major release scope and capacity).

Annual Planning: Business Prioritization

In order to determine the application development scope for the Annual Release Plan, Agency leadership, in conjunction with theme teams, defines high priority business outcomes to be achieved in the upcoming fiscal year. The teams then work to document the necessary requirements to deliver these outcomes to the business. By leveraging the business cases to assess the value and impact of each outcome, the Executives make key decisions regarding the top priorities for the team to focus on in each FFY to continue to move the system towards operational maturity while maintaining compliance. Based on these prioritized business outcomes, the joint IT team recommends different scope options based on a variety of factors including available capacity of the IT teams throughout the SDLC process including the State's ability to completely and accurately conduct user acceptance testing and release readiness prior to deployment. Throughout this planning process, cost allocation and State fiscal budgets are also taken into consideration. Final recommendations for major release scope are then brought to the UHIP Executive Committee for review and approval.

During the planning phase of each Major Release, the Joint IT team will provide Agency Executives with an opportunity to re-confirm the planned outcomes and BRRs for the release. The Agency Executives will be asked to assess the Annual Plan against BRRs on their Leaderboards. If there is a change in priorities, the Agency Executives may ask the Joint IT Team to assess potential changes to the planned scope outlined in the Annual Plan. After reviewing the assessment, including any impact on cost allocation, the Agency Executives will approve the final scope of the release. This also includes reviewing and approving problem ticket scope. The focus will be on Problem Tickets related to BRRs in the major release or Problem Tickets prioritized by Theme Teams. Once approved, all scope items associated with the Major Release will be updated in JIRA. The team then proceeds with the requirements phase for each BRR in the release. Once requirements (BRDs and FDDs) are fully signed off, the release scope is reviewed a final time to ensure any significant scope changes are reviewed and approved by the Executives. The scope of the release is considered final and the team moves forward with development of the in scope BRRs.

On an ongoing basis, Theme Teams and Agency IT Leads will manage the intake of BRRs not in scope of the Annual Release Plan by conducting business analysis and prioritizing these BRRs against existing priorities. Executives will then review Agency-Level Leaderboards and validate that the highest priority BRRs merit an IT assessment. If prioritized for an assessment, the Joint IT team will conduct analysis to determine whether the BRR should be deployed in a patch or a major release based on the complexity of the change, the technical feasibility and the testing resources required to perform SIT and UAT. See Section 2 for more details regarding the BRR intake process.

The annual release plan can only be updated with specific approval of the Executive Committee. State PMO will work with the Deloitte to monitor adherence to the Annual Plan to ensure no changes are made outside of the governance process and to report on progress towards the delivery of the plan and achieving the business outcomes.

Release Tenets

The release tenets guide development of the annual release plan – placing constraints upon both schedule and capacity to drive code quality. The tenets are revisited on an annual basis and are outlined below.

Figure 7b. Release Planning – Key Schedule Tenets for Improved Delivery

FFY2021 Release Planning – Key Schedule Tenets for Improved Delivery

1	If a release will impact a given area of system functionality, then the Joint IT Team will endeavor to scope other BRRs and/or problem tickets related to that area of system functionality to create efficiencies for the testing team
2	Regression testing will complete on production-ready codebase prior to UAT handoff
3	The State will review SIT coverage prior to SIT start
4	During final days of UAT (1 week for major and 2 days for patches), any fixes require approval and a joint SWAT team to perform regression testing
5	State will perform UAT on one release of a given type at any point in time. Therefore a major can overlap with a patch but not patch with patch or major with major
6	The Joint IT Team will limit the number of BRRs and problem tickets per major release to provide 10% scope (available capacity) contingency and the SDLC will provide 10% schedule (TFP) contingency
7	The SDLC will follow a waterfall approach wherein each phase must complete according to agreed upon exit criteria before the following phase starts. Any exceptions must be explicitly approved by the MPC or the RPC

Release Types & Definitions

Major Release

A major release is considered the implementation of a large volume of both problem and BRR tickets. A major release includes new or enhanced features and content that will be added to the system beyond resolving known defects. BRR tickets are scheduled for major releases through the release planning process which includes review and approval by the CRB.

Patch Release

A patch release is considered the implementation of a set of software changes and supporting data fixes designed to update, fix, or improve upon current production baseline. Fixes included in patch releases include problem tickets / defects, updates for security vulnerabilities, and select small enhancements approved by CRB. Items to be included in a patch are prioritized and brought to the Maintenance Prioritization Committee (MPC) for approval and scheduling. Larger system enhancements are typically reserved for Major releases, whereas Patches are meant for addressing higher priority system issues.

Off-Cycle Release

An off-cycle release provides immediate relief in response to SEV1/SEV2 business or technology issues. Off-cycle releases are typically planned and delivered within a week's timeframe. SEV3 issues can be included in an off-cycle release with mutual agreement from the State and Deloitte.

Release Naming Convention

The above-mentioned release types are numbered according to the following naming convention:

Figure 7c: Release Naming Convention Slide

- The first digit reflects RIBridges Go-Live.
- The second digit refers to Major releases and is incremented with each major release.
- The third digit refers to the Patch releases and is incremented with each patch release. This number is reset with each Major release. For example:
  - The patch release immediately prior to the March 2019 major release was numbered 7.24.5.
  - The March 2019 major release was numbered 7.25.
  - The patch release immediately following the March release was numbered 7.25.1.
- The fourth digit refers to an off-cycle release. This can immediately follow a Major or Patch release, and resets after each Patch release.

Maintain Project Runway

Within a given calendar year, changes to SDLC deadlines for any given release are reviewed and approved by the Agency Leads at the Release Planning Committee (RPC) on a weekly basis. No changes are made to the runway without them being approved by the committee. The approved version is stored in SharePoint and distributed project-wide on a weekly basis.

Major changes to the overall release plan (such as an increase or decrease in the number of releases proposed to take place) cannot be approved by the Release Planning Committee and must instead be directed to the UHIP Executive Committee.

The Joint IT Team also leverages JIRA Dashboards to manage the release scope and the release schedule. Please refer to the following sample dashboards in the table below:

Figure 7d: Release Scope and Schedule

Release Scope and Schedule

Filter Results: Release Schedule

Summary ↑	Status	Design Start Date	Design End Date	Development Start	Development End	SIT Start	SIT End	UAT Start	UAT End	Production Deployment
7.26	IN PROGRESS	31/Dec/18	15/Feb/19	18/Feb/19	22/Mar/19	25/Mar/19	03/May/19	06/May/19	07/Jun/19	21/Jun/19
7.26.1	IN PROGRESS			29/Apr/19	17/May/19	20/May/19	14/Jun/19	17/Jun/19	12/Jul/19	12/Jul/19
7.26.2	IN PROGRESS			20/May/19	14/Jun/19	17/Jun/19	12/Jul/19	15/Jul/19	09/Aug/19	09/Aug/19
7.26.3	IN PROGRESS			17/Jun/19	12/Jul/19	15/Jul/19	02/Aug/19	05/Aug/19	23/Aug/19	23/Aug/19
7.27	IN PROGRESS	25/Mar/19	10/May/19	13/May/19	14/Jun/19	17/Jun/19	02/Aug/19	05/Aug/19	06/Sep/19	20/Sep/19
7.27.1	OPEN			24/Jun/19	02/Aug/19	05/Aug/19	30/Aug/19	02/Sep/19	11/Oct/19	11/Oct/19
7.27.2	OPEN			12/Aug/19	13/Sep/19	16/Sep/19	11/Oct/19	14/Oct/19	08/Nov/19	08/Nov/19
7.28	OPEN	17/Jun/19	09/Aug/19	12/Aug/19	13/Sep/19	16/Sep/19	25/Oct/19	28/Oct/19	29/Nov/19	13/Dec/19

Two Dimensional Filter Statistics: Approved Release Scope

Fix For Versions (all)	BRR	Problem	T:
7.25.4	1	29	30
7.25.5	1	34	35
7.26	31	156	187
7.26.1	3	63	66
7.26.2	1	68	69
7.26.3	1	0	1
7.27	24	136	160
7.27.1	3	86	89
7.28	24	114	138
Total Unique Issues:	**89**	**686**	**775**

Release Planning Committee

The Release Planning Committee (RPC) continues to remain focused on assessing the readiness of the release(s) from both the systems and business point of view (through the utilization of detailed release checklists), as well as the readiness of technology maintenance activities and operational activities (as dictated by State policy). These activities are documented, tracked, and maintained through the Project Runway and release readiness materials. The primary purpose of this committee is to:

- Review and maintain the Project Runway and release readiness materials to ensure any technical dependencies or issues pertaining to a given release are surfaced and addressed
- Review and maintain the Project Runway and release readiness materials to ensure all technology maintenance and operational activities are properly accounted for and tracked.
- Coordinate release logistics and deployment schedules
- Validate release readiness (technical and business) per checklists
- Assess and approve changes to the release checklist, deployment timeline, and validation plan
- Escalate issues / conflicts related to the overall release plan
- Facilitate post-implementation reviews and identify improvement opportunities to the release process.

The RPC meets weekly and provides a critical role in ensuring release activities are well-planned and coordinated to ensure success. The key objectives of this meeting are as follows:

- Review and approve Project Runway which incorporates all approved system changes including project-based enhancements, M&O code fixes, data fixes, infrastructure changes, and

operational activities.
- Identify and manage risks and issues in JIRA and escalate to IRC when appropriate
- Ensure all aspects of release readiness have been appropriately assessed to inform and facilitate go / no-go decision checkpoints prior to production implementation
- Review and approve release readiness and post-implementation processes (e.g., changes to release checklist)
- Communicate summary release notes and coordinate any findings from the release activity

To achieve these objectives, a standing agenda was developed to facilitate the meeting. The topics covered in each meeting are shown below:
- Review and approve changes to Project Runway
- Validate the release readiness via checklists
- Review and approve release deployment timeline
- Discuss rollback review plan (in advance of every major release)
- For awareness, review technical/infrastructure changes that were approved at TCCB
- Maintain and review calendar of upcoming validation and operational activities

Ongoing Business Prioritization (Release Agnostic)
The key principle of the business prioritization process is that it takes place separate and apart from the planning process for any specific release. For example, business owners are not asked to request tickets for specific releases. Rather, they are asked to list their tickets in order of priority at the agency-level. Business prioritization is an ongoing process that continues throughout the calendar year irrespective of whether annual planning or planning for any specific release is in progress. All prioritization is relative and subject to change from day to day.

The subject of the prioritization processes are primarily BRRs and Problems, as defined below:
- Business Requirement Request (BRR): A code change that will require an update to both system code and system documentation. This is necessary when the system matches the FDD but does not behave as desired. BRRs are created by the State.
- Problem Ticket (System Defect): A code change that will make the system behave as described in existing system documentation. This is necessary when the FDD describes desired system behavior, but the system does not behave accordingly. Problem Tickets are created by Deloitte, typically during the process of triaging incidents that are logged by the State.

Root cause analysis of Problems and the intake and analysis of BRRs results in tickets which are either "Ready for Release Assignment" or "Withdrawal Requested". Tickets in the former status are then considered for inclusion within any given release.

The remainder of this section describes how BRRs and Problem are prioritized and evaluated such that when scoping starts for any given release, the Joint IT Team has all the necessary inputs available to them.

BRRs are subject to a rigorous intake and analysis process to ensure that the business need and requirements are well understood before the enhancement is scoped for a release. The key steps in this process are detailed in the slide below and further described below:

Figure 7e: BRR Intake and Analysis Process Slide
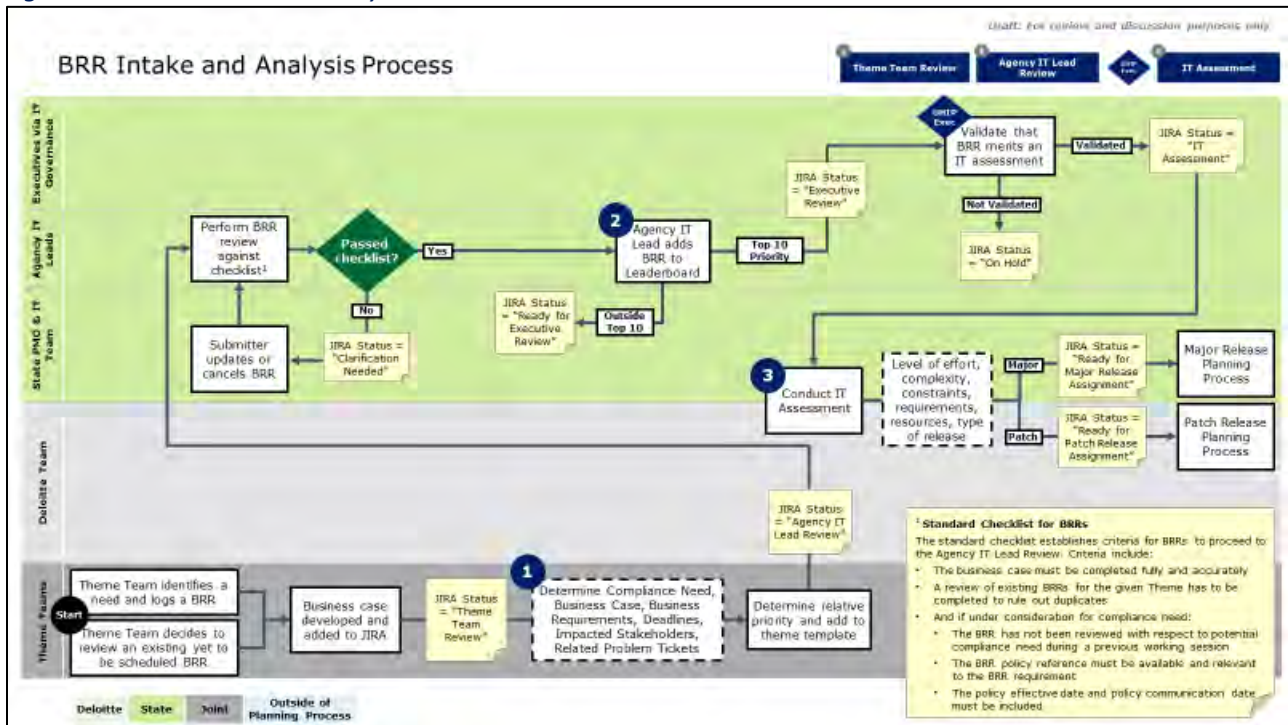
- State business owners identify a need for the system to work differently. They log a BRR, or flag an existing BRR as a priority
- State business analyst (BA) or business owner completes a business case for the BRR and provides initial requirements associated with the requested change(s)
- Theme Team reviews the business case for the BRR and confirms sufficient understanding of requirements to complete an IT Assessment
- Agency Lead reviews the business case for the BRR and then force ranks that BRR against all other BRRs requested by their agency (using Agency Leaderboards in JIRA)
- Agency Leads request top ranked BRRs for an IT Assessment
- Executives approve the BRR to proceed with an IT Assessment
- Deloitte completes an IT Assessment (estimated level of effort)
- State IT Team reviews and approves the IT Assessment (estimated level of effort)

Following the completion of the above steps, the BRR moves into "Ready for Major/Patch Release Assignment" status, depending on whether the Joint IT Team determined if it could feasibly be deployed in a patch.

For problem tickets, the intake and analysis process is more streamlined. After a ticket is created, Deloitte is expected to complete root cause analysis and propose the solution within ten business days. Then the ticket is reviewed and prioritized by the theme team (using business capability sequencing). After the solution is approved by the State, the ticket moves to "Ready for Development" status in JIRA.

The following sections provide more detail regarding specific aspects of this process.

Theme Team Review

Themes are joint State + Deloitte teams tasked with managing the intake of BRRs and Problem Tickets for a given program and/or system functionality. Their primary function is to define business outcomes and then identify the necessary actions to deliver required business capabilities to achieve these outcomes. These priorities are expressed via "business capability sequencing" which is the subject of the next section.

Business Capability Sequencing

Business capability sequencing is a tool which theme teams use to prioritize their work:
- Theme teams define the business outcomes they aim to achieve in a given time period
- Theme teams define which business capabilities will need to be enabled in order for that business outcome to be met
- Theme teams order those business capabilities in order of priority (typically according to the impact that any given capability will have on the business outcome). This ordering is what is referred to as the "business capability sequence"
- Theme teams define which tickets (BRRs, Problem Tickets, Service Requests, and Data Fixes) must be delivered for each business capability to be met
- These tickets are then tagged with their capability's "business capability sequence" in JIRA
- Theme teams also define any operational activities necessary to deliver the business capability, as well as any operational impacts to the business of delivering certain tickets to production

To the extent possible, the Joint IT Team aims to deliver "whole" business capabilities to production in a single release, rather than splitting the tickets associated with one capability across multiple releases. This is to ensure that each release delivers incremental value to the business. The appropriate granularity for a business capability is therefore the lowest level that delivers useful value to the business. This business capability mapping and priority sequencing is stored in JIRA.

Agency Leader boards

After the theme team review completes, Agency Leads are asked to review the business case and assess whether the priority warrants adding the BRR to their respective Leader Board. If the BRR is added, the Agency Lead will force rank the BRR against the other BRRs already on the Leader Board requested by their Agency. This ranking is stored in the "Leaderboard Ranking" field in JIRA and this field is used to drive a dashboard which serves as a visual representation of the leader board. Agency Leads continue to adjust the ranking as BRRs are added or priorities change.

At a weekly review of the Agency Leaderboards, the Agency Leads and the Joint IT Team decide which BRRs (based upon priority as expressed by the Leader board Ranking) should be recommended to executives to proceed with an IT Assessment. When the IT Assessment completes, the BRR remains on the leader board and moves to a "Ready for Release Assignment" status. This indicates that the ticket will be considered (in priority order) by the Joint IT Team for inclusion in a future release, subject to CRB approval from the UHIP Executive Committee.

BRRs are removed from the Leaderboard when they are assigned to a release (after receiving CRB approval) and receive a fix version in JIRA. The "Final Leaderboard Ranking" is stored to assist with

measuring leader board throughput. For a sample Agency leader board, please refer to the below.

Figure 7f: Sample Agency Leader Board

IT Assessment Process

The IT Assessment is the phase where, based upon the understanding of requirements documented in the JIRA ticket and confirmed by the theme team, the Joint IT Team develops an understanding of the technical inputs to deliver a BRR.

As part of this phase, the following assessments are completed:
1. Rough Order of Magnitude (ROM) – This an estimation provided by Deloitte using an existing tool, and subsequently approved by the State
2. Patch Feasibility – Assessed by both Deloitte and the State.
3. Complexity Assessment – Assessed by Deloitte based on the development needed to deliver the specified requirements.
4. Clarity of Requirements – Assessed by Deloitte based on requirements documented by the State.
5. UAT Complexity Assessment – Assessed by the State.

If Deloitte and the State agree that a BRR is patch feasible then the BRR status moves to "Ready for Patch Release Assignment". If not, then the BRR moves to "Ready for Major Release Assignment". If a BRR is especially complex or would require an extended runway to fully deliver the requirements, then the Joint IT Team can also recommend that a BRR be assigned to a long-term track.

Please note that BRRs are not assigned to a release until the Change Review Board (CRB) approves the

use of hours (as reflected in the ROM) that would be required to design and/or implement the BRR.

Prepare & Approve Release Scope
This section of the document describes how tickets are assigned to major or patch releases after the business prioritization process detailed in the prior section is completed. At the conclusion of that process, the Joint IT Team knows for any given ticket the priority assigned by the theme team, the priority assigned by the Agency, the level of effort required, and the feasibility of delivering in a patch release.

Figure 7g: Release Planning Process
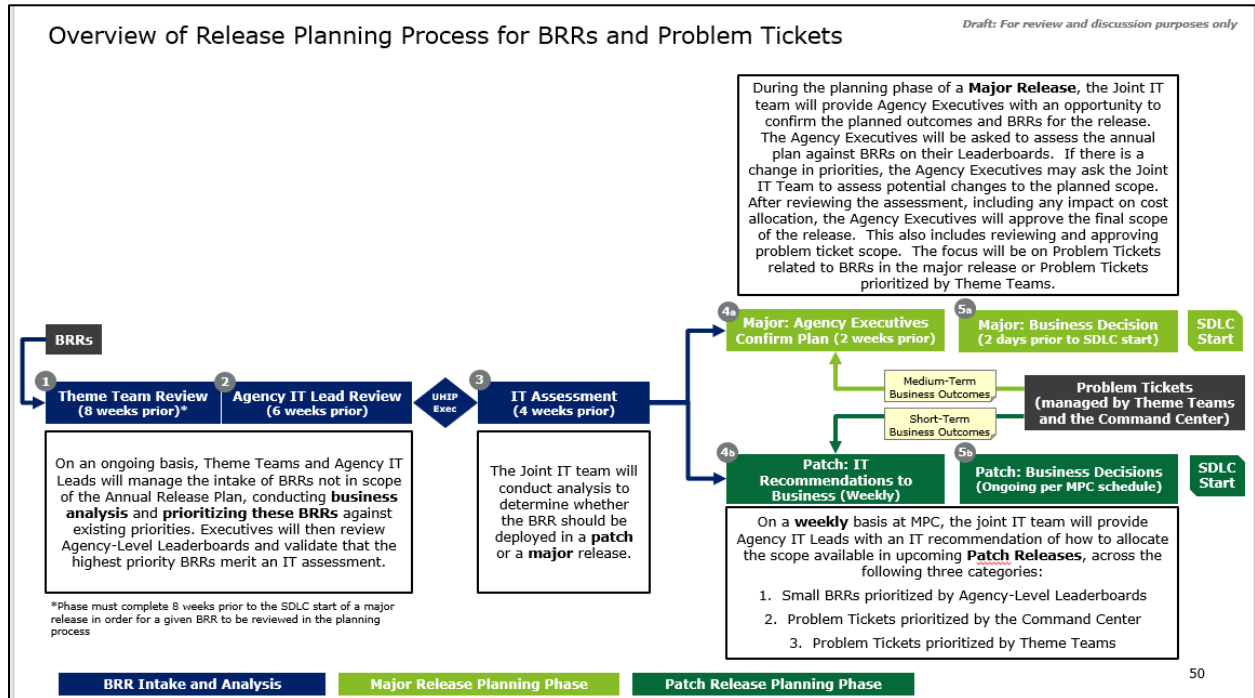
Major Release Planning
The Annual Plan defines the enhancement scope for the Major Releases. Any changes to the Annual Plan will be brought through the formal governance process which will include an impact assessment of any proposed changes on the cost allocation. Problem ticket scope for Major Releases follows the same process as problem ticket scope for patch releases, which is detailed below.

As a part of the Annual Plan, BRR scope aligned to the Major Releases has already been approved by the Executive Committee. However, during the planning phase of each Major Release, the Executive Committee will re-confirm their business outcomes for the release. If a change or shift in priorities occurs, the Executive Committee may bring forward a potential scope change and direct the Joint IT Team to assess proposed change(s) to the Major Release in order to determine the impact upon the annual budget and the approved cost allocation plan. Based upon this assessment, the UHIP Executive Committee may approve a change to the Annual Plan for that specific Major Release. This process ensures that when release scope is set for each major release it not only complies with the functional themes that have been funded for the current fiscal year but also with the established budget and cost

allocation.

Major Release Approval

The Change Review Board (CRB) continues to play a key role in the overall governance of the project by authorizing the use of budgeted hours in support of the release planning and prioritization processes across Major Releases, Patch Releases, Information Management (IM) Releases and Technical Upgrades as illustrated in the table below:

Figure 7h: Change Review Board / Approval for use of Hours
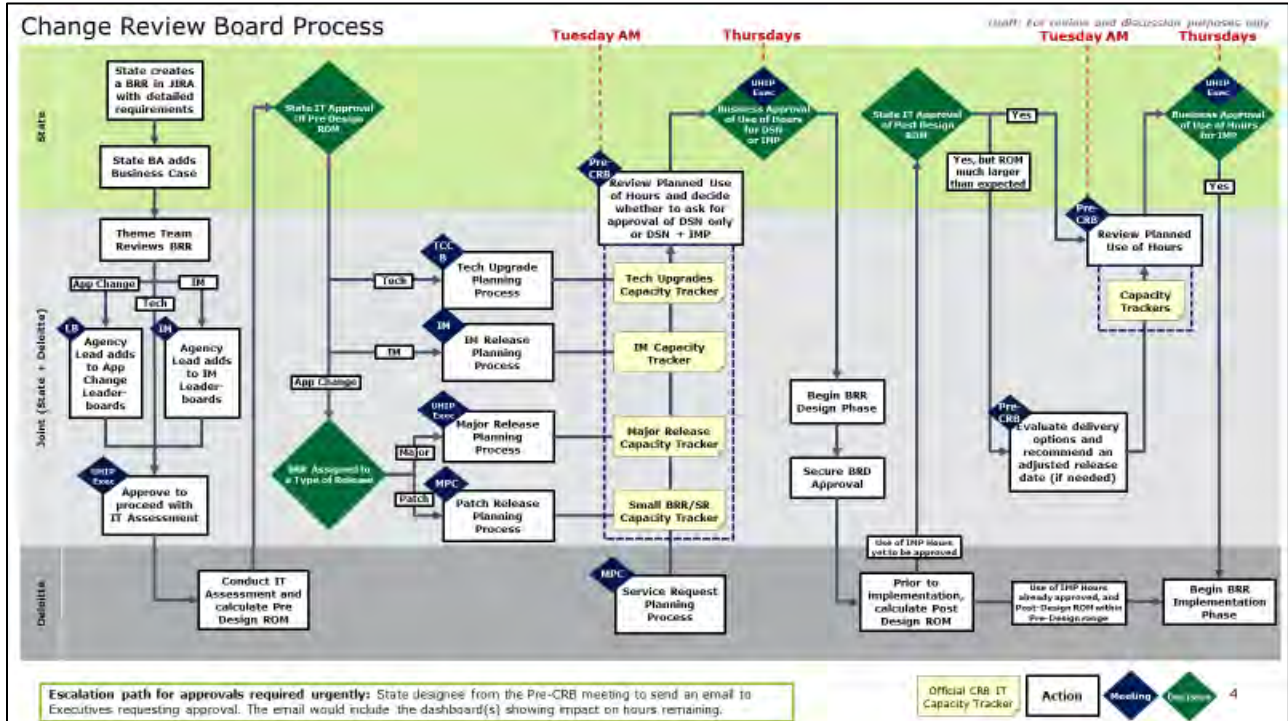
Patch Release Planning

On a weekly basis at MPC, the Joint IT Team provides the Agency IT Leads with an IT recommendation of how to allocate the scope available in upcoming Patch Releases, across the following categories:

- Small "Patchable" BRRs prioritized by Agency-Level Leaderboards
- Problem Tickets prioritized by Problem Management 2.0 + Theme Teams

Theme teams continuously prioritize problem tickets by aligning them to business capabilities and listing them in priority sequence. This is done by reviewing the backlog of Problem tickets to first check whether RCA has been completed. Problems pending RCA are not considered. The backlog is then reviewed considering, but not limited to, the following questions:

- Does it meet the criteria identified below?
    - Issue impacts benefits or payment disbursement for high priority citizen types
    - Issue impacts a high volume of citizens
    - Issue relates to project focus areas
    - Issue impacts eligibility accuracy, payment accuracy, payment accuracy, timeliness,

federal compliance
- Does it impact a high volume of cases, especially aging blocked cases with no workaround?
- Is it contributing to high volume of Incident inflow?
- Will it contribute to the delivery of a key business outcome?

The preliminary list of Problem tickets is curated using the above criteria as a basis and reviewed with the applicable Theme teams to align on priority and solution approach. If additional Problems are identified as high priority, these are escalated to Release Management for consideration to the proposed scope.

As the scope is being iteratively built, the capacity assessment happens in parallel from a development and testing bandwidth perspective given the release runway. 10% capacity contingency is left for additional Problems that may need to be added following scope presentation depending on priority and business impact. If capacity is reached, then lower priority items are proposed for removed from scope.

Small BRRs may be delivered in patch releases if the Deloitte and State IT Teams are comfortable with the degree of complexity and system impact, as well as the level of effort required (the rule of thumb is a total ROM of less than 500 hours). In this case, the hours required to deliver the BRR must receive executive approval of the use of those hours via CRB processes. Specifically, executives will need to allocate hours from a finite monthly budget of hours available for service requests and Patch BRRs.

Therefore, although BRRs will still be included in the proposed patch release scope presented to MPC, the final decision point for scheduling BRRs within patch releases will be the CRB.

Patch Release Scope Review & Approval
Patch release scope is presented, reviewed, and approved in the Maintenance Prioritization Committee (MPC) meeting. This process occurs incrementally over the course of multiple MPC meetings and is summarized below:
1. Proposed scope for a given release is presented incrementally at MPC each week
2. State completes business review and UAT coverage assessment for each ticket proposed
3. State confirms scope additions to or removals from scope at the next MPC meeting

Information Management (IM) Release Planning Processes:
IM Releases will follow a monthly cadence in alignment with the application release timeline, with the exception that there will be no distinction between major and minor releases. Most elements of the regular application release planning processes are followed including:
- Business cases developed in support of IM BRRs
- Top priority IM BRRs added to Agency IM Leaderboards and reviewed weekly
- Joint IT Team reviews priorities and proposes release options
- CRB reviews proposed scope and authorizes hours prior to development
- Problem Tickets are prioritized approved by the business prior to adding to a release

Tech Upgrade Release Planning Process:
The Joint IT Team continues to use the following Tech Upgrade release planning process. Tech upgrades are unique in that they typically coincide with the procurement of additional RIBridges hardware or

software. As a result, this process flow includes contractual steps that are necessary to complete those procurements alongside the tech upgrade planning and implementation process.

Figure 7i: Tech Upgrades Approval Process

8   PERSONNEL RESOURCE STATEMENT

The State is providing an estimate of total staffing requirements and personnel costs in Attachment C. Included are all State staff, their organization and job title, the percent allocation to UHIP, whether they are DDI or M&O, their salary, the cost-allocation applied, and total UHIP allocation. Included in this is a complete list of DHS field staff with an allocation to UHIP based on the Random Moment in Time Study (RMTS) as detailed in section 10.

Please see the table below for a listing of key personnel on the project.

Table 8a. Key Project Personnel Listing

Key Personnel	Agency	Title	Responsibilities
Courtney Hawkins	DHS	Director	Project Sponsor
Lindsay Lang	HSRI	Director	Leadership
Benjamin Shaffer	EOHHS	Medicaid Director	Leadership
Chirag Patel	DOIT	Chief of IT: Agency and Enterprise Applications	UHIP IT Oversight and Leadership Management
Matt Stark	EOHHS	CAO	Finance, Resource & Contract Oversight
Maureen Wu	EOHHS	UHIP CFO	Budget, APD

Key Personnel	Agency	Title	Responsibilities
Lisa Martinelli	EOHHS	In House UHIP Counsel	Legal
Bijay Kumar	DOIT	Chief Digital Officer	Oversight of IT Leadership
Jim Ritter	DOIT	IT Executive Contracted	Lead IT Program Life Cycle and IT Project Execution
Kerri White	EOHHS	Acting Chief Strategic Planning, Monitoring and Evaluation	Communications
Lori Rota	DOIT	UHIP Enterprise PMO Lead	Executive PMO and KPIs

9 PROPOSED BUDGET

For this IAPD update, Rhode Island is asking for federal approval for the full FFY 2021 project budget and related cost allocations. Note the DDI integrated solution allocation methodology that begins January 1, 2021 has been revised as noted in section 10. The DDI allocation for the October 1, 2020 - December 31, 2020 quarter was approved as part of the FFY 2020 cost allocation.

The State understands that this budget request and subsequent approval does not constitute contract or contract amendment approval. Federal funds will not be expended on individual contracts until federal approval is received.

The State affirms that the requested amounts are solely for salaries, benefits, and direct costs listed below. Indirect costs are not included in this budget request. Postage and other non-admissible items are also excluded from this budget request.

Table 9a below shows the overall project budget for federal and State shares, as well as DDI and M&O, requested as of July 31, 2020, with a comparison to the amount submitted on January 31, 2020. The total budget shown includes the FFY 2021 projected budget. The most significant change to the overall budget presented is the addition of FFY 2022 budget for a total of $35.2M and COVID work for $1.7M as well as budget reductions for FFY 21.

Table 9a. July 31, 2020 Submission IAPD Budget Summary

IAPD-U Changes From January 2020 Submission to July 2020 Submission			
	Total Cost	Federal Share	State Share
DDI			
DDI (January 2020 Submission)	395,947,372	332,548,010	63,399,362
DDI (Changes to FFY 2021 submission)	(5,400,008)	(3,795,602)	(1,604,406)
DDI (Addition of FFY 2022 submission)	6,417,097	5,086,151	1,330,946
DDI (COVID Hours FF20 & FFY21)	1,637,140	1,096,443	540,697
Total Updated DDI	398,601,601	334,935,002	63,666,599
M&O			
M&O (January 2020 Submission)	251,046,817	164,192,254	88,488,053
M&O (Changes to FFY 2021 submission)	2,630,132	772,812	1,857,321
M&O (Addition of FFY 2022 submission)	28,790,506	19,257,125	166,584
M&O (COVID Hours FF20 & FFY21)	90,000	55,892	34,108
Total Updated M&O	282,557,455	184,278,083	90,546,066
Total IAPD-U Request	**681,159,056**	**519,213,085**	**154,212,665**

The overall project budget through FFY 2022 is estimated to be $681,159,056, of which $519,213,085 is the expected federal share, and $154,212,556 is the expected State share. Please see Attachment B for a budget summary by federal fiscal year. As with previous IAPD submissions, please see Attachment C for details on personnel, and Attachment D for a breakdown of total budget by quarter for FFY 2021 which has been updated for this submission. Attachment F provides details of the FFY 2021 budget by budget service area and vendor.

The following table provides details of the FFY 2021 budget by service area and category of service:

Table 9b. FFY 2021 Budget by Service Area

	RIBridges		Project Management		
Components					
Sub Components	Business Functions	Technical Functions	Administration	Process	
Service Areas	Agency Support	UHIP IT Management	Finance and Administration	EPMO	Total
FFY 2021 Budget for DDI					
State Personnel	$ 3,081,265	$ 847,841	$ 371,238	$ -	$ 4,300,344
Contractors	$ 3,197,593	$ 12,121,404	1,770,466.00	$ 724,680	$ 17,814,143
Hardware/Software	$ -	$ 248,217	$ -	$ -	$ 248,217
COVID Hours	$ -	$ 491,165	$ -	$ -	$ 491,165
Total DDI Budget	$ 6,278,858	$ 13,708,627	$ 2,141,704	$ 724,680	$ 22,853,869
FFY 2021 Budget for M&O					
State Personnel	$ 8,900,905	$ 92,880	$ -	$ -	$ 8,993,785
Contractors	$ 13,672,648	$ 37,994,157	$ 53,560	$ 426,835	$ 52,147,201
COVID Hours	$ -	$ -	$ -	$ -	$ -
Hardware/Software	$ -	$ -	$ -	$ -	$ -
Total M&O	$ 22,573,553	$ 38,087,037	$ 53,560	$ 426,835	$ 61,140,986
Total Budget FFY 2021	$28,852,412	$51,795,664	$2,195,264	$1,151,515	$ 83,994,855

The following table provides a view of the budget organized by total contractor dollars:

Table 9c. FFY 2021 Budget by Contractor Dollars

Vendor	Sum of Total FFY 21
AHS	$ 11,539,472
CSG	$ 1,413,784
Deloitte	$ 34,221,625
Faulkner (FCG) Ops	$ 2,448,768
Faulkner (FCG) Strategy	$ 1,904,049
Knowledge Services	$ 4,767,242
KPMG	$ 9,404,010
Non-Deloitte Hw/Sw	$ 248,217
Notice Production	$ 400,000
Other M&O	$ 250,000
State Personnel	$ 13,347,689
TBD - M&O Procurement	$ 4,050,000
Grand Total	**$ 83,994,856**

10 COST ALLOCATION PLAN FOR IMPLEMENTATION AND MAINTENANCE ACTIVITIES

Overview of Cost Allocation

Rhode Island has made significant improvements in FFY 2019 in bringing the UHIP system to a high level of effectiveness and reliability. Most, but not all, defects have been corrected by the IT vendor. Overall, during FFY 2019 and FFY 2020, the State has maintained fidelity to the Baseline Compliance Plan, which has resulted in a significantly improved system and operations. RI is requesting a revision to the currently approved cost allocation targets for Rough Order of Magnitude (ROMs) across the entire calendar year, using the Cost Allocation Methodology (CAM) process, which takes into account program size.

CMS and FNS approval of a cost allocation rate for DDI integrated solution on average over the 2020 calendar year was very helpful in providing the State with the flexibility to have some releases be more focused toward one or two programs, and balance out the allocation with other releases in the allocation time period. RI was able to put a system and governance process in place to manage successfully to the agreed-upon cost allocation percentages. This has been very effective in helping RI achieve its business priorities in a timely way, managing to a State share, and ultimately contributing to the maturation of the system.

Rhode Island has updated its business priority focus for calendar year 2021. Therefore, to best meet Rhode Island's upcoming priorities and needs, the State is requesting that the revised cost allocation plan and management processes be approved effective January 1, 2021 for the DDI integrated solutions

cost allocation. Rhode Island will continue to use the tools, governance process, and the commitment of the multiple agency directors to manage successfully to these program allocation levels. For the DDI allocations Allocated Medicaid; Exchange/Medicaid/CHIP Allocation; and All Excluding Exchange Allocation, the State will base the allocation beginning October 1, 2020, and continuing through FFY 2021, on unduplicated recipient count on April 30, 2020. In accordance with the cost allocation update approved effective January 30, 2020, the CHIP Medicaid expansion population is included in the Medicaid unduplicated recipient count effective April 1, 2020. These individuals were previously included in the CHIP unduplicated recipient count.

Rhode Island has prepared the annual plan for CY 2021, which will have to be assessed once the Rhode Island General Assembly enacts a budget for state fiscal year 2021. To support the annual plan, the team will continue monitoring and reporting on the cost allocation rate, as inevitable small modifications are made to the BRR release plan schedule throughout CY 2021 to ensure RI remains at the approved program allocation for the allocation time period. The reporting tools are a part of the overarching governance process that has been discussed in previous sections. The tools ensure that leadership is aware of the budgetary and cost allocation constraints that exist if a new BRR or priority item requires a change to the Annual Plan.

Rhode Island's overarching UHIP Cost Allocation Plan has historically included the following cost allocation methodology components:
1. DDI integrated solution methodology (software development hours)
2. Medicaid/HSRI/CHIP methodology
3. All excluding HSRI allocation methodology
4. Medicaid only methodology
5. Allocated Medicaid methodology
6. DHS field staff methodology (Random Moment Time Study (RMTS) methodology)
7. AHS call action methodology
8. Duplicate recipient count methodology (for M&O)

All of these methodologies will continue to be utilized during FFY 2021. All methodologies with exception of DDI integrated solution will be applied on a federal fiscal year basis. DDI integrated solution will continue to be applied on a calendar year basis. As noted above, the DDI allocation requested is updated based on the annual plan effective January 1, 2021.

DDI Integrated Solution Methodology 1 (Software Development Hours)

With the loss of the A-87 cost allocation exception beginning Jan 1, 2019, Rhode Island was approved by CMS and FNS to move from its previously approved lines of code methodology to software development hours as the DDI integrated solution cost allocation methodology. RI predicted a cost allocation percent for each program over calendar year 2019 (CY 2019) based on estimated ROMs and successfully ended the calendar year on target with the predicted cost allocation percentages and the resulting State/federal allocation share. Basing the cost allocation percentages on an average of all releases for DDI work throughout the calendar year was a key factor to RI's success in achieving the planned cost allocation percentages for CY 2019 and CY 2020, as this enabled the State to have the flexibility to have releases in some quarters concentrated in certain program areas, and releases in other quarters concentrated on different programs. In this way, the State's timing for business needs was met, while also achieving the cost allocation planning values over the calendar year on average, providing

justification for our DDI claiming rates for January 1, 2021 through December 31, 2021 and for planning for the DDI allocation for January 1, 2021 – December 31, 2021 (CY 2021). The DDI integrated solution cost allocation in the approved in the January 2020 submission and the planned DDI allocation for CY 2021 is listed below:

Table 10a. Approved and Proposed DDI Integrated Solution Cost Allocation

DDI Integrated Solutions		
Program	**Approved DDI Allocation (1/31/20-12/31/20)**	**Proposed DDI Allocation (1/1/21-12/31/21)**
Exchange	3.4%	2.9%
Medicaid	86.5%	78.4%
CHIP	0.3%	0.3%
TANF	0.2%	0.2%
SNAP	6.0%	15.2%
Childcare	0.2%	0.2%
GPA	0.0%	0.0%
SSP	3.4%	2.9%
Total	100.0%	100.0%

This IAPD-U requests that the software development hours cost allocation basis be continued from January 1, 2021 – December 31, 2021. This allocation is reflective of RI's ROMs for BRRs to be completed in which all UHIP programs are benefitting programs. Based on the current planned work for CY 2021, Rhode Island is confident that this revised allocation for 2021 will be managed in a very similar pattern as the State's CY 2020 experience and is budgeting to this level of funding. Using the process described below, this will be RI's experience through the end of FFY 2021.

In continuation of a similar overall methodology from CY 2020, it is important that the software development hours methodology is approved over the entire time period requested (January 1, 2021 to December 31, 2020) as this time period allows for the maintenance of appropriate development hours for each program over the course of the full allocation period with flexibility to appropriately schedule releases throughout that time period. RI is on target for CY 2020. The State will maintain the requested apportionment allocated to each benefitting program, in accordance with the Cost Allocation Methodology (CAM). Each department's director has agreed to maintain this program-specific "budget" of hours which will result in the requested average allocation.

The following describes the current governance process of aligning scope to the cost allocation methodology:
- During the process of creating the Annual Plan, the DDI vendor developed ROM estimates for the prioritized scope that was being considered for the plan. For certain BRRs where requirements needed further clarification, Deloitte and State program staff held solution discussions to better understand the business need before creating the initial ROM.
- The Joint IT Team worked with the Joint PMOs to evaluate different versions of the Annual Plan to determine which scope options could be delivered within the budgeted hours while also

maintaining the cost allocation targets. A final version of the plan was achieved by striking a balance between delivering top priority business outcomes while remaining on budget. As described in Section 7, any proposed changes to the approved Annual Plan would be governed by this same process to ensure continued alignment to the cost allocation targets. The state meets weekly to review release planning and guards against cost allocation changes exceeding 10%. In the event that critical business priorities would cause the allocation to exceed a 10% change, the state would work with CMS and FNS to determine if an IAPD-U As Needed is required.

- In the rare event that a requested change makes it through the governance process, the decision of whether to add a suggested new or changed BRR to the approved Annual Release Plan will be made by the UHIP Executive Committee based on two factors: the business need for the BRR and the impact on the cost allocation/budget. The Directors have decided that any new BRR added to the Annual Release Plan must fit into the cost allocation period's approved federal and State budget, maintaining the approved allocation rate. In general, new BRRs are only approved to be added to the release plan if a new BRR or combination of adding and subtracting BRRs results in no change to the agreed-upon cost allocation plan.

The underlying premises for the development of the DDI integrated solution methodology is the federally defined Benefit Received methodology. This methodology is in accordance with the federal CAM Toolkit. The goal for the Benefit Received cost allocation methodology is to distribute shared software development costs equitably among the benefitting programs.

Rhode Island agreed to use the following CAM methodology despite the State's expressed concerns about the equity of this allocation, as it significantly and disproportionately impacts two State-funded programs (HSRI and SSP), each with only slightly greater than 5% duplicated enrollment.

1. **Direct**: Programs which directly and only benefit from a completed DDI request are allocated 100% of these hours, reflecting no change to current practice.
2. **"Common" or Shared**: Business Requirement Requests (BRRs) which benefit multiple programs using the UHIP system are shared as follows:
    - Small programs (under 5% total enrollment) share in costs based on program size. All programs benefitting from each particular BRR are identified. Duplicated program enrollment for each of those programs is calculated in percentages. Small programs are assigned a contribution based on program percentage times estimated BRR hours; and
    - Large programs (over 5% enrollment) are charged by splitting the remaining hours among them equally.

Of the core programs using UHIP (counting Medicaid and CHIP as one program), three are classified as small (under 5% duplicated caseload) and four are classified as large, as shown in the following table:

Table 10b. Duplicated Program Enrollment for Core Programs

Program	Population	Percentage	Program Type
Exchange	34,466	6.3%	Large
Medicaid	319,342	58.2%	Large
CHIP	1,506	0.3%	
RI Works	9,130	1.7%	Small
SNAP	140,849	25.7%	Large
Childcare	9,008	1.6%	Small
GPA	123	0.0%	Small
SSP	34,082	6.2%	Large
Total	548,506	100.0%	

This table reflects updated recipient count data as of April 30, 2020. All Medicaid populations enrolled in UHIP are now included in the enrollment total. Note that Small Business Health Options Program (SHOP) was "decommissioned" out of UHIP in FFY 2019, so SHOP enrollees are not reflected in the HSRI UHIP enrollment counts.

In justifying the requested DDI integrated solution cost allocation for January 1, 2021 to December 31, 2021, the State has calculated the development hours which each program will be allocated for all "direct" and "shared" costs in accordance with the CAM methodology, using the large program/small program process already described in this section. Direct costs include BRRs where one program will benefit, and all the hours are allocated to that one program.

The Duplicated Program Enrollment table above will be aligned to the DDI integrated solution cost allocation, CAM Toolkit calculation for the period from January 1, 2021 through December 31, 2021.

This proposed DDI allocation for CY 2021 will be carefully monitored throughout the year in accordance with the DDI integrated solution cost allocation methodology described below:
- Planned development hours (ROMs) will be identified for potential new BRRs for the period January 1, 2021 – December 31, 2021.
- ROMs will be attributed to benefitting program or programs.
- ROMs benefitting all programs will be divided among those benefitting programs, using the small program/large program methodology described earlier in this section.
- The resulting total allocation of ROM for all BRRs will be combined, and the resulting cost allocation will be monitored if the scope within the annual release plan is updated.

The DDI integrated solution cost allocation methodology will continue to be reviewed on a periodic basis to insure adherence to the overall cost allocation. Due to the fact that releases are planned 6 months or more in advance, it would not be possible to tie the cost allocation percentages to actuals on a timely basis.

Duplicated Recipient Count
Beginning Oct 1, 2020, M&O allocation will be based on the duplicated recipient count seen in the table below, which is based on enrollment counts as of April 30, 2020. Vendors allocated in accordance with

this allocation are listed in Attachment D.

Table 10c. Duplicated Recipient Count Allocation

Duplicated Recipient Count	FFY2021 - % Allocation					Enrollment As of 04/30/2020
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep		
Exchange	6.3%	6.3%	6.3%	6.3%		34,466
Medicaid	58.2%	58.2%	58.2%	58.2%		319,342
CHIP	0.3%	0.3%	0.3%	0.3%		1,506
RI Works	1.7%	1.7%	1.7%	1.7%		9,130
SNAP	25.7%	25.7%	25.7%	25.7%		140,849
Childcare	1.6%	1.6%	1.6%	1.6%		9,008
GPA	0.0%	0.0%	0.0%	0.0%		123
SSP	6.2%	6.2%	6.2%	6.2%		34,082
Total	100.0%	100.0%	100.0%	100.0%		548,506

Medicaid/HSRI/CHIP Allocation

The budget for Medicaid/HSRI/CHIP Allocation is for costs assigned to Medicaid, including both CHIP and Non-CHIP Medicaid, and to HSRI for the QHP population. Vendors allocated in accordance with this allocation are listed in Attachment D. This allocation is utilized for both DDI and M&O for FFY 2021.

Table 10d. Medicaid/HSRI/CHIP Allocation

M&O Exchange, Medicaid, CHIP Allocation	FFY2021 - % Allocation					Enrollment As of 4/30/2020
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep		
Exchange	9.7%	9.7%	9.7%	9.7%		34,466
Medicaid	89.9%	89.9%	89.9%	89.9%		319,342
CHIP	0.4%	0.4%	0.4%	0.4%		1,506
Total	100.0%	100.0%	100.0%	100.0%		355,314

All Excluding HSRI Allocation

This allocation is used for DHS specific work that does not impact HSRI. Vendors allocated in accordance with this allocation are listed in Attachment D. This allocation is utilized for both DDI and M&O for FFY 2021.

Table 10e. All Excluding Exchange/HSRI Allocation

All excl. Exchange	FFY2021 - % Allocation					Enrollment As of 04/30/2020
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep		
Medicaid	62.1%	62.1%	62.1%	62.1%		319,342
CHIP	0.3%	0.3%	0.3%	0.3%		1,506
RI Works	1.8%	1.8%	1.8%	1.8%		9,130
SNAP	27.4%	27.4%	27.4%	27.4%		140,849
Childcare	1.8%	1.8%	1.8%	1.8%		9,008
GPA	0.0%	0.0%	0.0%	0.0%		123
SSP	6.6%	6.6%	6.6%	6.6%		34,082
Total	100.0%	100.0%	100.0%	100.0%		514,040

DHS Field Staff

Prior to considering DHS field staff time for enhanced funding for inclusion in the IAPD-U budget an

assessment is done to determine how staff are spending their time. For staff that work 100% on a program such as Medicaid or SNAP, staff will sign attestations to confirm that 100% of their work has been dedicated to that program. For staff that work on multiple programs, the State is tracking time and working to identify staff who need to time track as work priorities shift to multiple programs. DHS staff who work with clients within the field offices (Economic Services Division) will participate in a Random Moment Time Study (RMTS) as described below. These values are used for cost allocation of field staff.

The purpose of this RMTS is to measure the level of effort spent on various activities performed by the Eligibility Technicians (ETs), Senior ETs, Social Caseworkers and other staff included in Attachment C. in the State of Rhode Island. These staff, who are all State employees, perform program eligibility determination activities on behalf of customers served by the Department of Human Services (DHS). Organizationally, ETs, Senior ETs, and Social Caseworkers work within the Economic Services Division of DHS. The RMTS allocation is applied to all DHS Field Staff employees including supervisors, clerical and interpreters who do not work 100% for a specific program. Field staff hours reported as Medicaid or CHIP are then claimed at 75% federal Medicaid.

The RMTS is administered using EasyRMTS^{TM}, which is a tool developed by Public Consulting Group, Inc. (PCG). The automated RMTS application was developed to comply with all federal rules and regulations related to cost allocation practices and claiming for reimbursement of federal dollars. The software supports accurate reporting of reimbursable administrative activities, which are generally required by federal approving agencies to be measured through a time study. EasyRMTS^{TM} puts the least administrative burden on staff as possible while allowing users to measure their time and claim appropriately for Federal Financial Participation (FFP). The system allows participants to indicate directly, via a series of survey questions in the software, the activities and programs they are supporting.

Below is a chart that averages the RMTS percentages by program for the past 3 quarters. As shown, this is the allocation being used for FFY 2021. Enhanced Medicaid match activities claimed at 75% federal share include the following: eligibility determination or redetermination, case updates or changes, case closures or terminations, follow up on conflicts with self-declaration, and performing an *ex-parte* Medicaid determination for those no longer eligible for MAGI Medicaid.

DHS works with PCG on a continuing basis to review and refine the RMTS process to most accurately assign field staff costs to all DHS programs.

Table 10f. DHS Eligibility Support Allocation - October 1, 2020 – September 30, 2021 (based on average RMTS studies September 30, 2019 – 3/31/2020)

Program/%								
CCAP	GPA	RI Works	SNAP	SSP	Medicaid Enhanced	Medicaid 50%	State Impact	Federal Impact
5.5%	4.3%	3.6%	48.9%	1.0%	30.4%	6.4%	49.6%	50.4%

Only the DHS work identified by the RMT study as Medicaid Enhanced is considered as part of this IAPD-U as that is only a portion of the DHS workers time that is considered to be part of the UHIP project. Once it is determined how much of the DHS field staff time is UHIP-related, the total is then split between Medicaid and CHIP using the percentages associated with each program's duplicated recipient count on April 30, 2020.

Allocated Medicaid

For staff that work 100% on UHIP Medicaid/CHIP, staff sign attestations to confirm that 100% of their work has been dedicated to that program. The allocation to be used for these State staff beginning Oct 1, 2020 is in the tables below. Vendors allocated in accordance with this allocation are listed in Attachment D.

Table 10g. Allocated Medicaid

Allocated Medicaid	FFY2021 - % Allocation					Enrollment
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep		As of 4/30/2020
Medicaid	99.5%	99.5%	99.5%	99.5%		319,342
CHIP	0.5%	0.5%	0.5%	0.5%		1,506
Total	100.0%	100.0%	100.0%	100.0%		320,848

Medicaid Only Cost Allocation Methodology

The OHHS Long Term Services and Supports Unit supports the eligibility determination for Medicaid applications only. CHIP is not included in this work. The staff in this unit work to resolve eligibility issues due to system errors. Therefore, this expense is allocated 100% to Medicaid only with a 90% Federal Financial Participation (FFP).

Table 10h. Medicaid Only Allocation

DDI Medicaid Only	FFY2021 - % Allocation			
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep
Medicaid	100.0%	100.0%	100.0%	100.0%
Total	100.0%	100.0%	100.0%	100.0%

AHS – Call Action Methodology

The budget for AHS, which is contracted to operate the contact center, is allocated by the previously approved call-action methodology.

Calls (and visits) to the contact center are categorized by Customer Service Representatives (CSRs) through a "call action"-based reporting system. The CSRs report the major activities they conducted on the call/visit. A call/visit may have more than one activity reported.

To allocate calls to Medicaid vs. HSRI that accurately represent level of effort, Rhode Island groups calls into three major categories:
1. Primarily Medicaid level of effort: These will be cost allocated to Medicaid
2. Equally Split level of effort between Medicaid and QHP: These will be cost allocated 50% to Medicaid and 50% to QHP
3. Primarily QHP level of effort: These will be cost allocated to QHP

Calls that are unable to be classified will not be cost allocated.

Rhode Island will use an entire calendar year of call data to assign calls according to this proposed methodology. Beginning with FFY 2020, an annual allocation rate will be established for the entire FFY,

based on the call activities in the previous time period May 1, 2019 through April 30, 2020.   Please see
the tables below for the proposed allocation methodology and data for FFY 2021.

Table 10i. Call Action Methodology

AHS - Call Action	FFY2021 - % Allocation			
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep
Exchange	16.7%	16.7%	16.7%	16.7%
Medicaid - FFP (75%)	76.3%	76.3%	76.3%	76.3%
Medicaid - Admin (50%)	6.6%	6.6%	6.6%	6.6%
CHIP	0.4%	0.4%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%

Split between Medicaid/CHIP and Exchange	FFY2021 - % Allocation			
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep
Medicaid / CHIP	83.3%	83.3%	83.3%	83.3%
Exchange	16.7%	16.7%	16.7%	16.7%
Total	100.0%	100.0%	100.0%	100.0%

Split between Medicaid 75% and Medicaid 50%	FFY2021 - % Allocation			
	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 Jul - Sep
Medicaid 75% Claim Rate	92.0%	92.0%	92.0%	92.0%
Medicaid 50% Claim Rate	8.0%	8.0%	8.0%	8.0%
Total	100.0%	100.0%	100.0%	100.0%

Table 10j. Call Action Data

The Medicaid allocated calls will be allocated to the 50% and 75% match rates according to the
previously approved methodology.

Table 10k. Medicaid Matching

Medicaid Matching for Medicaid Allocated Calls					
	Primarily Medicaid	Medicaid portion of Equally Split		Contact Center BASE Claiming Rate by 75% vs 50% based on May 2018-April 2019 Calls	
Month	75% Match	50% Match	Total Medicaid Allocated	% at 75%	% at 50%
May-19	35,383	2,473	37,856	93.5%	6.5%
Jun-19	29,855	2,084	31,939	93.5%	6.5%
Jul-19	33,433	2,254	35,687	93.7%	6.3%
Aug-19	32,363	2,152	34,515	93.8%	6.2%
Sep-19	31,568	2,025	33,593	94.0%	6.0%
Oct-19	30,735	2,494	33,229	92.5%	7.5%
Nov-19	30,126	3,314	33,440	90.1%	9.9%
Dec-19	35,180	3,842	39,022	90.2%	9.8%
Jan-20	35,146	3,661	38,807	90.6%	9.4%
Feb-20	28,206	2,631	30,837	91.5%	8.5%
Mar-20	30,182	3,037	33,219	90.9%	9.1%
April	27,294	3,051	30,345	89.9%	10.1%
				92.0%	8.0%

Attachment D provides a breakdown of every FFY 2020 budget line item attributed to one of the allocation methodologies described above.

COVID DDI Allocation

The COVID work included in this budget request for FFY 20 and FFY 21 was not included in prior budgets. A state of emergency, due to COVID-19 pandemic was declared in Rhode Island March 9, 2020. In order to implement necessary COVID system updates, regular system work was not able to be completed. The total amount of the COVID budget included for both FFY 20 and FFY 21 is $1.7M. The state is proposing to utilize the current M&O allocation that is all excluding the Exchange for estimated $90K of DHS Triage work from AHS. The state is proposing to utilize the Duplicate recipient count cost allocation with a DDI or 90% reimbursement that also includes CARES Act Funding. Table 10L below shows which program allocations will be fully funded with CARES Act funds. The state will provide the 10% required state match for the Medicaid program allocation in order to receive the 90% federal match.

Table 10l. COVID DDI Allocation

Program	Population	Percentage	Funding Source
Exchange	34,466	6.3%	CARES Act
Medicaid	319,342	58.2%	CMS 90% Reimbursement
CHIP	1,506	0.3%	CARES Act
RI Works	9,130	1.7%	CARES Act
SNAP	140,849	25.7%	CARES Act
Childcare	9,008	1.6%	CARES Act
GPA	123	0.0%	CARES Act
SSP	34,082	6.2%	CARES Act
Total	548,506	100.0%	

11 SECURITY, INTERFACE, DISASTER RECOVERY, AND BUSINESS CONTINUITY PLANNING

The State is continuing efforts to advance the UHIP security maturity model in FFY 2020 and FFY 2021. The following themes have been prioritized to improve security and support compliance with MARS-E2 controls.

- Security Monitoring Enhancement
- Automated Scanning Management
- Intrusion Detection and Prevention
- Asset and Services Monitoring
- Data Masking Enhancement
- PKI – Certificate Management
- Static Code Scanning for Developers
- Document Management

IBM QRadar provides the monitoring of security events in the UHIP system. As addressed in section 3 of this document, enhanced bandwidth and capabilities of this tool along with IBM Vulnerability Manager and IBM Risk Manager will provide a platform that will support more network flows and components to automate security scans and risk management. The UHIP system has sensitive PII data as well as FTI data flowing through a subset of servers. These internal servers will be secured with host-based threat detection and prevention through TrendMicro Deep Security for IRS compliance.

An Oracle data masking algorithm is used on non-production environments to de-identify sensitive information in the system. In the last year, the number of non-production environments that contain PII has been reduced to 3, and a perimeter and internal network segregation of the environments has further reduced the PII data exposure in the system.

HP Fortify is currently used to perform static code scanning on each code release. The capability to scan code as it is checked in by the developer will mature the secure-SDLC process by providing immediate feedback on code quality and security to the developers. Corrections will be made prior to production release.

A document management and workflow tool will be needed to track changes and provide a secure location for the copy of record for technical documents that are needed for security and technical staff to support the system.

UHIP has a Cloud Disaster Recovery site in Sacramento, California. The primary site in Warwick, RI, is connected via a dedicated physical line to this disaster recovery environment. Transactional data flows to the DR site with a RPO of 15 minutes and RTO of 48 hours. A disaster recovery test is conducted every year, with the FFY2020 test meeting these objectives within a very large margin. In FFY2020, transactional data replication will be migrated to a new replication product leveraging EMC Xtremio's native replication technology.

12 CONDITION AND STANDARDS

The State worked to incorporate Medicaid Information Technology Architecture (MITA) and Medicaid Eligibility & Enrollment Toolkit/Lifecycle (MEET/LC) into its planning and decision-making. Through the MITA effort, the State's vendor, CSG, completed Rhode Island's portion of a three-State collaborative effort in April 2018, culminating in the MITA State Self-Assessment 3.0.

A separate, related effort was completed by CSG, at the request of Rhode Island's Executive Office of Health & Human Services; it focused on the impact of RIBridges on MITA maturity levels.

As requirements arise per CMS, the State will work with CMS to develop a project partnership understanding and identify the UHIP's correct placement in the Eligibility and Enrollment Lifecycle and establish checklist and gate-based monitoring as appropriate.

13 IAPD FEDERAL ASSURANCES

The State should indicate by checking "Yes" or "No" whether or not it will comply with the Code of Federal Regulations (CFR) and the State Medicaid Manual (SMM) citations.

The State should provide an explanation for any "No" responses.

Procurement Standards (Competition / Sole Source)

SMM, Part 11	☒ Yes ⊻ No
45 CFR Part 95.613	☒ Yes ⊻ No
45 CFR 75, Subpart D, Subject Group 26	☒ Yes □ No

Access to Records, Reporting and Agency Attestations

42 CFR Part 433.112(b)(5) – (22)	☒ Yes ⊻ No
45 CFR Part 95.615	☒ Yes ⊻ No
SMM Section 11267	☒ Yes □ No

Software & Ownership Rights, Federal Licenses, Information Safeguarding, HIPAA Compliance, and Progress Reports

45 CFR Part 95.617	☒ Yes ⊻ No

42 CFR Part 431.300   ☒ Yes ϒ No
45 CFR Part 164   ☒ Yes ☐ No

Independent Verification and Validation (IV&V)
45 CFR Part 95.626   ☒ Yes ϒ No